



**CITROËN CLASSIC OWNERS
CLUB OF AUSTRALIA**
Australia's National Citroën Car Club

FRONT DRIVE

*Australia's National Magazine
for Citroën Owners and Enthusiasts*

August/September 2021 Vol 45 No 2

Postal Address

CITROËN CLASSIC OWNERS'
CLUB of AUSTRALIA Inc.

The address of the Club and this
magazine is:

PO Box 52, Balwyn, Victoria,
3103.

The Club's website is:

www.citroenclassic.org.au

Citroën Classic Owners' Club of
Australia Inc. is a member of the
Association of Motoring Clubs.

The views expressed in this
publication are not necessarily
those of CCOCA or its Committee.
Neither CCOCA nor its Committee
can accept any responsibility for any
mechanical advice printed in, or
adopted from this publication.

The Club cannot accept any
responsibility for, or involvement in,
any business relationship that may
occur between an advertiser and a
member of the Club.

Life Members

The committee awards life
membership to Club members in
recognition of their contribution
to, and support of, the Club. Life
memberships have been awarded to:

Sue Bryant	2017
Brian Wade	2017
Rob Little	2012
Ted Cross	2012
Peter Boyle	2003
Jack Weaver	1991
Nance Clark	1984

Citroëning

Club Permit applications
to VicRoads must be
accompanied by a RWC [pre
1949 cars can be inspected
by a Club Safety Officer],
ownership validation and
VicRoads forms endorsed

by the club including financial
validation.
New Permit holders must
supply the Club with
approved photos, club
permit number and expiry
date.

Club permit renewals can
be sent to PO Box 52
Balwyn, Victoria. 3103 with
a stamped return envelope
or signed at club meetings/
events if the appropriate
officers are present.

Committee

President ~ Ted Cross
[03] 9819 2208 [H]

president@citroenclassic.org.au

Secretary ~ Tim Cottrell
0416 009 297 [M]

secretary@citroenclassic.org.au

Treasurer ~ Ian Macdermott
0419 362 375 [M]

treasurer@citroenclassic.org.au

Activity Coordinator ~ Lee Dennes
0438 286 181 [M]

activities@citroenclassic.org.au

Spare Parts Officer ~ Lance
Wearne
0424 054 724 [M]

spareparts@citroenclassic.org.au

Publication Editor ~ Leigh Miles
[03] 9888 7506 [H]

editor@citroenclassic.org.au

Committee Persons ~

Max Lewis [03] 9372 0921 [H]

Russell Wade 0401 859 704 [M]

Bruce Stringer 0412 342 706 [M]

Marg Towt 0408 373 181 [M]

Membership

Annual Membership is \$35 and
printed editions of 'Front Drive' are
posted to Australian addresses for
an additional \$45 per year.

Meetings

Club meetings are held on the
fourth Wednesday of every month
[except December] at 7:30pm. The
venue is the Frog Hollow Reserve
Rooms, Fordham Ave., Camberwell.

Support

Web Site Manager ~ Bruce Stringer
0412 342 706 [M]

websitemanager@citroenclassic.org.au

Membership Secretary ~
Ian Macdermott 0419 362 375 [M]

treasurer@citroenclassic.org.au

Asset Custodians ~ Ted Cross
Max Lewis

AOMC Liaison Officers ~

Max Lewis [03] 9372 0921 [H]

Russell Wade [03] 9570 3486 [H]

Club Permit & Safety Officers ~

Russell Wade [03] 9570 3486 [H]

Philip Rogers [03] 5944 3091 [H]

Ted Cross [03] 9819 2208 [H]

Librarian ~ Max Lewis

[03] 9372 0921 [H]

librarian@citroenclassic.org.au

Club Shop ~ Vacant

clubshop@citroenclassic.org.au

ICCCR Representative ~

Ted Cross [03] 9819 2208 [H]

Cover Image

The cover image was provided by
CCOCA member Tess Burfurd and
it depicts her father's Panhard Dyna
Z. Unfortunately we have not been
able to locate the photographer's
name.

Deadline

The deadline for the next edition
of 'Front Drive' is Wednesday, 15
September, and for 'démarreur' it is
Monday, 23 August.

Contents

ED SED	PAGE 4
PREZ SEZ	PAGE 5
A-TRACTIONS	PAGE 6
AD LIB	PAGE 12
BOOK REVIEW: DIMITRI SENSAUD	PAGE 14
PANHARD: THE FRENCH ENIGMA	PAGE 16
THE STORY OF A PANHARD	PAGE 32
MEMBER'S MODEL: X45	PAGE 45
YOU DON'T HAVE TO BE...	PAGE 51
AIR-COOLED COOL	PAGE 62
PAN, PAN, PERTH	PAGE 73
A FRENCH CONNECTION	PAGE 78
CLASSIFIED ADS	PAGE 83

Contributors

Contributors to this edition of 'Front
Drive' include Malcolm Bobbitt, Tess
Burfurd, Mel Carey, Les Farrar, John
Fleming, Lloyd Gleeson, Malcolm
Griffiths, Peter and Mary Lynch and
Malcolm Thorne.

SPARE PARTS & TOOLS

Contact Lance Wearne.
Phone: 0424 054 724 [if
you do phone, please do
so at a reasonable hour] or
spareparts@citroenclassic.org.au

CLUB SHOP

Club Shop is presently
not operating. For further
information please contact
the Club's President.

OTHER CLUBS

Vic www.citcarclubvic.org.au
NSW www.citroencarclub.org.au
QLD www.citroenclubqld.org
SA www.clubcitroensa.com
WA www.citroenwa.org.au
Tas www.citroentas.org

Ed Sed

In anybody's language 2021 has not been year to bring a smile to your face. It does not matter which side of the country you are on, we have all been 'doing it tough'.

From lock-downs of significant duration in Melbourne, to shorter [but no less devastating] lock-downs in Brisbane and Sydney to appalling floods in Perth... it has been another tough year.

CCOCA can only hope that having another edition of 'Front Drive' to read provides a little lift for you.

When I started work on this edition, with its focus on Panhard I rather anticipated that there might be a dearth of information to merit a full magazine. How wrong I was!

I do not think I have ever been so inundated with articles from members [and indeed from past-members] for any edition I have ever worked on. To all of



you... thank you!

First to come forward was Andrew Cunningham [Stawell, Vic.] who sent me pictures and some words about Howard Burrage who used to live in St Arnaud [Vic] and owned a Panhard Dyna Z. Andrew did not realise that I had bought Howard's Dyna from his estate and subsequently sold it to the late Geoff Burford. So, we have the reminiscences of three [no, four as ex-member Mel Carey has also contributed] people who have memories of this car. Geoff's daughter [and CCOCA member] Tess has also supplied two superb images of the car. One is on the cover and the other is the centre spread.

Then I was speaking with Perth member, John Freeman, who is writing two articles for forthcoming editions, and he told me of ex-member Les Farrar [Perth, WA] who is restoring another Dyna Z. Les has written an article and supplied some super photos.

I was also in touch with another John Fleming [Loch, Vic.] who used also to be member of CCOCA and at one stage owned a 1924 Panhard X45. So, we have an article and photos from him as well.

Pete Lynch has taken a slightly different direction. Panhard's later cars owed a good deal to

Continued on page 6

Prez Sez

The mid-sixties were a restless time in France and around the world, but the Panhard designers and engineers are credited with developing the Citroën Dyane during this time.

Indeed, according to some experts the engine which was launched with the arrival of the Citroën GS was actually a Panhard design. Developed to power the new 24CT, in 1965, some claim Citroën prevented Panhard making use of it.

Citroën itself was in financial trouble ~ the French car makers were rationalised, with Citroën becoming part of the PSA group of companies in 1974. Nevertheless, Panhard was a brief family member of Citroën during this decade.

Times of economic uncertainty are dangerous for motor car makers. We are going through another series of rationalisations currently, and with electric cars gaining popularity, Citroën

Continued on page 6



Ed Sed

Continued from page 6

the work of Jean-Albert Grégoire and Pete has written about Grégoire's influence on Sir Lawrence Hartnett.

Core to all this is an excellent history of Panhard et Levassor written by noted motoring journalist Malcolm Bobbitt. He wrote this for the CCC UK and he, and they, have generously given us permission to re-publish this feature.

I had hoped to bring you the final instalment of Alan Brown's three part series 'L'Hotel du Tigre', along with an article from ex-editor Russell Wade, but lack of space means these will have to await the next magazine.

Enjoy,
Leigh F Miles ~ Editor

A-Tractions

Please note: To book or RSVP for a CCOCA organised event you must now register on line at the club's website. Do not contact the organiser to register your attendance. Given restrictions can impact events at short notice, please check the Club's website for the latest information regarding any listed event.

• August Auto~Classico

WHEN: Sunday, 22 August
TIME: From 10:00am
WHERE: Maling Rd., Canterbury, Vic.
COST: Gold coin donation
BOOKING: Not required
MORE INFO: Ian MacDermott,
0419 362 375

Continued from page 6

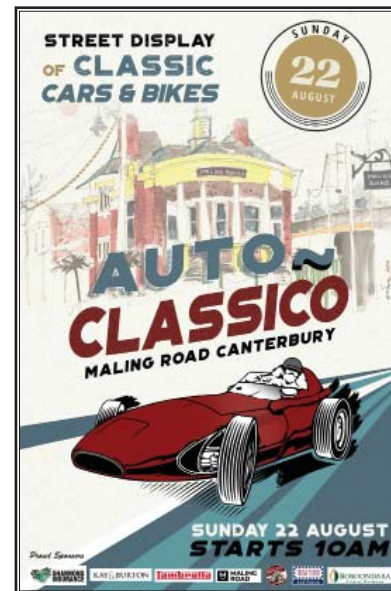
and Peugeot have joined forces with other marques to increase their economies of scale to protect their survival.

Where this leaves our tiny Australian market for PSA is anybody's guess ~ why not take your Citroën for a drive today whilst you can still do so.

Ted Cross ~ President

treasurer@citroenclassic.org.au

Auto~Classico has been running since at least 2018 and while 2021's event was planned for March it has now been moved to 22 August. Over 150 cars have been secured for the display, but there are still some spaces for 'special' cars. If you are interested in displaying



your car contact mailingroadauto@classico@gmail.com with car and photo please.

Monthly Meeting: August

WHEN: Wednesday, 25 August
TIME: 7:30pm
WHERE: Frog Hollow Reserve Rooms, Fordham Rd., Camberwell or via Zoom
COST: Free
BOOKING: Not required
CONTACT: Lee Dennes,
0438 286 181

l.dennes@bigpond.net.au

Lancefield Day Run & Pub Lunch

WHEN: Saturday, 28 August
TIME: 9:00am
FROM: Plane viewing site, northern end of Tullamarine
TO: Lancefield
COST: Market purchases and



pub lunch
BOOKING: Essential by Saturday, 14 August
MORE INFO: Ian MacDermott,
0419 362 375

treasurer@citroenclassic.org.au

Lancefield is about 70km from Melbourne and centrally located for plenty of our regional Victorian members. Perfect for a day run! Our first destination will be the Farmer's Market, held under shady trees along the plantation strip of Main St. You can stock up on locally grown spuds, veggies, organic meat, fresh honey, and olives while listening to great live mu-



A-Tractions

sic. Afterwards we will adjourn to the to the Lancefield Hotel for a meal in their well-regarded dining room.

DO NOT CALL IAN TO REGISTER! You must register/book via the CCOCA website <https://citroenclassic.org.au>

• September

Monthly Meeting: September

WHEN: Wednesday, 22 September

TIME: 7:30pm

WHERE: Frog Hollow Reserve Rooms, Fordham Rd., Camberwell or via Zoom

COST: Free

BOOKING: Not required

CONTACT: Lee Dennes, 0438 286 181

l.dennes@bigpond.net.au

Day Run: Bendigo Bound

WHEN: Sunday, 26 September

TIME: 9:00am for a 9:30

FROM: Queen's Park, Moonee Ponds

TO: Bendigo



COST: Out-of-pocket expenses.

Talking Tram \$10pp

BOOKING: Essential by Friday, 24 September

BRING: Winter woollies

MORE INFO: Max Lewis, [03] 9372 0921

librarian@citroenclassic.org.au

There is a café [Curators Collective] near the meeting point where you may want to top up on fluids. The route north will take us on good C-roads to Lancefield, where we take a diversion so to speak via Burke and Wills Track passing through Baynton, Mia Mia and Redesdale. These are all sealed roads of good pave and the countryside is breathtaking in small pockets. From Redesdale we take another interesting country detour to Bendigo.

To make to most of the day, I have not included a stop as I want to get to Bendigo where we will park our cars [a suitable spot to be arranged] and proceed on foot for those with a



penchant for walking/stretching the legs.

For those who aren't that keen on walking, the Talking Tram will take you close to most places I have selected to take a peek and enjoy what Bendigo has to offer our travel-starved city folks [and others of course]. At the western end of the Tram is the Central Deborah Gold Mine [take the free 'surface' visit], The Bendigo Art Gallery has a free Brett Whitely Exhibition, 'Drawing is Everything', Conservatory/Rosalind Park [the first of the spring daffs perhaps?], Golden Dragon Museum and the Chinese Joss House [travel by the Talking Tram].

The whole idea of visiting Bendigo is to let all you folks loose to go and do whatever you like... on your own or with pals. There are so many attractions... not all will suit everyone, so away you go.

For me at least, the unmissable attraction is a fabulous book

shop on the way to the Golden Dragon Museum. The interior is truly magnificent and the variety of subjects available for sale is mind numbing.

There are many nice cafés and restaurants. One in particular springs to mind as an add-on to the Art Gallery visit: the adjoining Art Gallery Café.

We are at the beginning of Spring and the weather should be milder, but Bendigo being Bendigo, I will take my winter woollies none the less.

I hope to see yo'all there.

DO NOT CALL MAX TO REGISTER! You must register/book via the CCOCA website <https://citroenclassic.org.au>

• October

All French Car Festival



WHEN: TBC

TIME: TBC

WHERE: TBC

CONTACT: Lee Dennes, 0438 286 181

l.dennes@bigpond.net.au

This year the All French Car Festival is being hosted by the Peugeot Car Club and at this

A-Tractions

stage they have still not provided either CCOCA or CCCV with a date, a venue or anything else. Once CCOCA has more details we will update you.

Garage Crawl & BBQ Lunch

WHEN: Sunday, 24 October

TIME: From 10:30am

WHERE: Eric Bishop's 1485 Old Sale Rd., Buln Buln East

COST: Free

BOOKING: Essential by Sunday, 17 October

BRING: BYO everything for a BBQ, including tables and chairs

FURTHER INFO: Eric Bishop, 0409 452 170

We start at Eric's shed which,

besides a Traction, includes a 1930 Wolseley Hornet, Triumph Spitfire, Triumph Vitesse, 1948 Vauxhall Velox and a Vauxhall Caleche. Then it is on for a self-catering BBQ lunch from 12:20 at 44 Mytle Cres., Warragul.

DO NOT CALL ERIC TO REGISTER! You must register/book via the CCOCA website <https://citroenclassic.org.au>



Chit Chat Tuesday

WHEN: 1st Tuesday

3 August

7 September

5 October

TIME: 10:00am

WHERE: Laneway Espresso Café, Dromana

COST: Cheap Eats

BOOKING: Not required

CONTACT: Warwick Spinaze 0407 016 719.

Laneway Espresso Café ~ next door to the Dromana Hotel, 167 Nepean H'way, Dromana. Easy to find, plenty of parking, under-cover seating if weather wet. This is a low key 'DIY' event for like minded Citroën owners to meet and chat.

123ignition Australia

Classic looks with modern performance and reliability.

Suits most classic/historic cars
16 selectable advance curves
Easy timing with built-in LED
Smooth engine torque curve
Stronger spark at all speeds
Lower fuel consumption
Variable dwell-angle
Simple installation
Maintenance-free
Less emissions
Better starting



****Australia's
only authorised
import agent.**

Also available:
NEW 123 / TUNE
Computerised tuning for
even greater control.
Also: Bluetooth control

Ted Cross (Vic.) 0400 592 208 or ted@123ignition.com.au
www.123ignition.com.au

Ad Lib

Surprise, surprise, two missing books have emerged.

One I knew about and the other I didn't which means the one shown below is still out there somewhere.

It is a further surprise to know that neither of the borrowers were at Horsham where I had believed that this was the scene of the 'crime'.

It may still be so for this missing title!!

What a bum steer that was but nonetheless gratifying and more so it was the coloured pics of the titles that caught the borrower's eye.

Can't go past that saying... 'a picture is worth ten thousand words.'

One of the previously missing titles is already back in the library [as is the one from out of the blue!!], the other awaits collection at a clubhouse meeting.

A local laddie had it lying



about and with the colour illustrations and the request for the return spurred on this good lad to ring me.

What came about was a lovely hour or so of chat and not all of it was about our cars.

I have completed an audit on what books are in the library and how many of them are on the library website as pics.

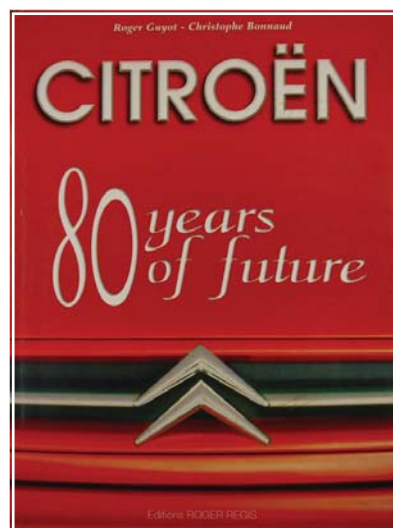
I am overwhelmed with the numbers that are not... both new and old titles.

This transfer of titles onto the web is going to be a bit of a task as Bruce noted that taking pics was a lot of work.

I am attempting to photo them myself with Bruce's suggestion that I use a light box.

It is all work underway aka 'work in progress.'

A number of new/old titles that might be suitable for the li-



brary were sent to me by Leigh [who is a website sleuth of the highest order!!]. [Ed. That is very flattering of you Max, but I rather think you overstate the case.]

The first subject is regarding the Company's history in potted form where Citroën is written around the era of ownership... the Andre years followed by the Michelin years and the PSA years. Limited to just 1,000 copies of each volume. [€65 for each volume, plus postage and they can be ordered on-line from either <http://legrandlivrecitroen.com/commander-le-livre> or <https://laventurepeugeotcitroends.fr/acueil-de-citroen-heritage>.

Four volumes in French only.

The second title which really sounds very interesting

is 'Toutes les Traction Avant ont une histoire. Volume 2: les 11 Légeres 1934-1943.' The price on this one is €46, plus postage and it can be ordered from www.quaidejavel.com.

I wonder why it stops at 1943?

I am not sure more French language books regardless of the attractive titles is worth the expense and if anything is to go by from the survey if I recall... very few agreed to expand the library with 'furrin' tongues.

Regards,

Max Lewis ~ Librarian.



Book Review: Dimitri Sensaud...

...an **Extraordinary Engineer**

I was attracted to this book because of the controversy surrounding the fitment of an automatic gearbox to the Traction Avant of 1934 as the standard gearbox for this model.

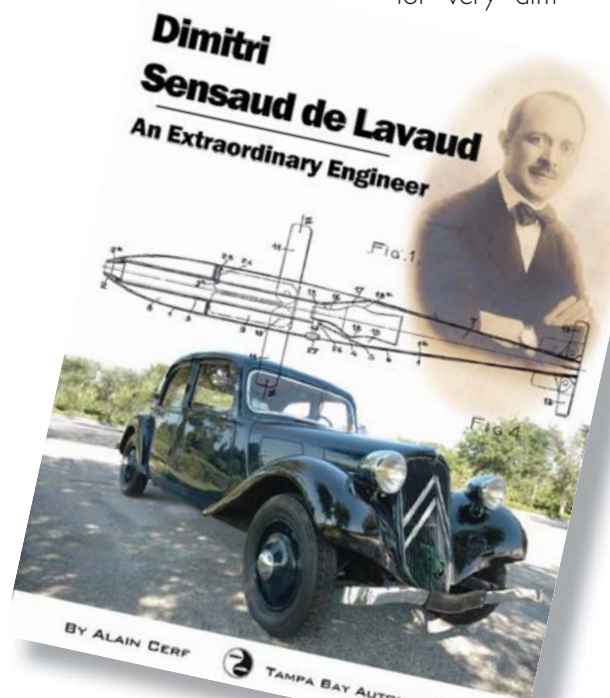
As we all know the Traction ended up with a mechanical gearbox which as just one relatively new Traction owner and a very recent driver [after a few years languishing in my garage] the actions of a well adjusted gearchange is a delight to use. It is a manual gearbox where gear changing is a deliberate and concentrated effort [more effortless than effort] that results in a smooth change of gears. Any rushing the gear lever through the quadrant results in a crunching of teeth. After all it is a 1950s motorcar with a 1930s design. One must respect age and respect for your elders.

This title traces the history of Dimitri [for brevity, I will use this Christian name rather than the full title which although an honourable moniker it is cumbersome. Apologies to anyone who feels slighted.] from birth to his demise.

Early on in Dimitri's formative years he showed a remarkable ability to grasp things mechanical as well as an astonishing bent for invention and innova-

tion right up to his last days. He was a savvy business man who protected all of his inventions with hundreds of patents covering everything from centrifugal casting of iron pipes [this just one invention earned Dimitri entry into the millionaires club in the 19 teens], hand held theodolites, free wheel differentials, hydraulic brake systems, manual automatic and automatic hydraulic gearboxes to torpedoes and jet engines.

None of his inventions that made it from paper to metal reality were manufactured by Dimitri within the confines of his numerous companies. They were all contracted through systems of royalty agreements to manufacturers. It makes for very diffi-



cult reading as Dimitri had more holding companies and similar commercial set ups than you and I have had hot dinners.

An extraordinary man who throughout his life like a cat on a hot tin roof moved his interests with speed and aplomb. It is too complex by miles to even relate just a microcosm of this man's activities in this review. If you are at all interested in diving into these deep waters, please be my guest. I will loan you my copy as the CCOCA library is not in possession of a copy. This could be remedied quickly however.

To get to the nub of this review is to describe the incredible maze through which you must travel to get to anywhere near the truth of the Traction automatic gearbox that failed. And fail it did on the cusp of the Traction 7CV going into production. The rumour has it that André's engineers [who as a unanimous group] decided that after numerous tests this gearbox was destined for the scrap heap. The manual gearbox that we all know and love [with shortcomings I must add before you castigate me too much!] was either waiting in the wings for a fair time or it was cobbled overnight so to speak. You have to make your own mind up here as there is nothing definite to research. Please keep in mind that it was not some jilted

company engineer who rushed to shred all evidence... it was the allied bombing of Citroën's factories during World War II that destroyed all the history to that date.

The Sensaud de Lavaud hydraulic automatic transmission apparently worked well on the Rosalie but when tested on the prototype Traction 7C it failed when a climb up a hill resulted in the 'boxes cooking themselves'. I must quote Citroën engineer André Lefevre who said that 'you put potatoes in the converter at the bottom of the hill, you get French fries at the top.' André was noted for his acerbic wit and uncontrollable temper. André Citroën himself was getting cold feet over this new and novel transmission after a few years earlier having been impressed with its performance with the 8CV & 15CV Rosalies.

I must reread this book with more time to do so [yes, sorry Mr Editor I rushed this one through] as I think I could hint at the truth and the real reason why the automatic gearbox in question was scrapped. It would be 20 years or so before Citroën brought out a model [the ID/DS] with a half decent automatic transmission.

Thank you for taking the time to read this review... the next review will be less grey matter challenging.

Max Lewis ~ Librarian

Panhard: The French Enigma

The Golden Years

The Panhard name is often viewed as something of an enigma. Not only is this French marque frequently overlooked as being inextricably linked with early motoring, it is also forgotten that in the mid-1950s, when the company met with financial difficulties, Panhard was adopted by Citroën.

Panhard's origins are traced to 1872 when Emile Levassor was invited to join his former engineering student colleague René Panhard, co-owner of the bandsaw manufacturing business Périn-Panhard. Three years later the two young engineers successfully bid to construct Otto & Langen gas engines at a purpose-built factory

at 19 Avenue d'Ivry in Paris, and within four years Emile Levassor had become a major shareholder in the company. When Jean-Louis Périn died in 1886, René and Emile acquired Périn's shareholding and, in 1897, they renamed the business Panhard et Levassor, though eventually this was shortened to Panhard. By this time, Gottlieb Daimler in Germany and Armand Peugeot in France had become interested in constructing automobiles, the outcome being that Peugeot would buy Daimler engines built by Panhard et Levassor. Not only had Daimler sent drawings of his new 92cc V-twin engine to Avenue d'Ivry in 1899, a year later Levassor revealed plans for a Panhard et Levassor car. Meanwhile, Peugeot was prospering fitting Panhard engines

to his own machines, thus the French automobile industry had been established.

Panhard's first prototype cars with their dos-à-dos layouts appeared in 1890, and shortly afterwards a modified machine featured a shorter wheelbase and an engine housing that was extended to the rear of the vehicle. With this automobile Emile Levassor undertook a series of daring journeys, some extending as far as 225km and achieving average speeds of 10kph. The successful trials led to an improved specification to include radically moving the engine to the front of the car and installing a four-speed gearbox along with chain drive to the rear axle. With this revised layout, the 'Panhard system' as it was known set the standard in

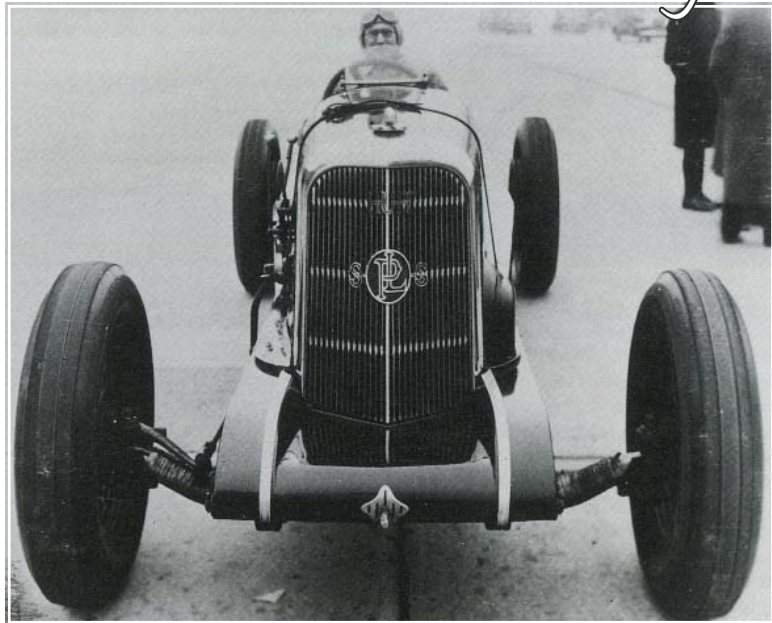
motor car design for the coming decades.

When René Panhard and Emile Levassor began constructing the definitive Panhard et Levassor car in September 1891, and with twenty-one vehicles out of a planned run of thirty completed by the year end, along with some seventy engines, they had aspired to be-

Left to right: One of the first Panhards, the 1893 dog-cart with René Panhard at the controls. [Wheelspin Automedia] Panhards were sold in Britain by CS Rolls & Co, the agent's stand pictured at the time of The Automobile Show of 1903 held at the Crystal Palace. Main Panhard distributor was Harvey du Cross of 14 Regent Street, London SW [Rolls-Royce] Panhard's Avenue d'Ivry factory in Paris, pictured circa 1906 and depicting the hive of activity. [Panhard archive]



Panhard: The French Enigma



During the 1920s and 1930s Panhard aimed at the luxury market producing large saloons. It also competed in endurance trials, George Eyston seen here preparing for his 214.64km marathon in one hour at Montlhéry in 1934. Under the bonnet is a straight eight of nearly eight litres. [Panhard archive]

coming the world's first commercial manufacturer of automobiles. Rival Peugeot, with its Type 2 quadricycle and Type 4 vis-à-vis, was a close contender for the accolade with its first petrol car running in 1890, and production of the Type 4 commencing early in 1892.

International interest in the motor car was heightened through a series of road races, the first being the Paris to Rouen between 7 and 12 June, 1894. This was followed by the Paris-Bordeaux-Paris, a much more demanding event, the following year. Both contests attracted Peugeots and Panhards as well as demanding bravery and skill on behalf of the drivers and their mechanics. The

latter event was an outstanding success for Panhard since Emile Levassor and his riding mechanic Charles d'Hostingue completed the 1,178 km course in 48 hours and 47 minutes at an average speed of 24.54kph. Tragedy struck when Levassor, with d'Hostingue, entered his Panhard for the September-October 1896 Paris-Marseilles-Paris race: swerving to avoid a dog, Levassor sent his car into a ditch and was seriously injured. Though surviving the accident, he died 14 April the following year from an embolism which undoubtedly was a result of his wounds.

Outside France, Panhards became widely known through

The Panhards of the 1930s were largely influenced by American styling. [Wheelspin Automedia]

their popularity with pioneer motorists eager to purchase motor cars of the finest quality. The Hon Evelyn Ellis is believed to be the first person who imported a car into Britain, and is celebrated for taking delivery of the Panhard and driving it from Hampshire to Datchet [near Windsor] on 5 July, 1895. Prominent too was The Hon Charles Stewart Rolls, later associated with instigating the Rolls-Royce name in 1904 and registration of Rolls-Royce Limited in 1906. Not only did Rolls win the Tourist section of the Bordeaux-Biarritz Race in 1899 driving his 8hp Panhard, the following year he drove the car from Paris to Wales. The Thousand Mile Trial organised by the Automobile Club and staged between 23 April and 12 May, 1900 attracted 83 entries, six of which were



Panhards. For Rolls driving his 12hp Panhard it was yet another triumph as he was awarded first prize in the private entry class, giving him the reward of £5. When he established his business as a motor agent in January 1902 at Lillie Hall in Fulham, west London, under the title CS Rolls & Co, Rolls dealt largely in Panhards claiming them to be the best cars then available.

Panhard's Paris factory was, according to The Autocar, a huge enterprise run with great efficiency, the labyrinth of machine tools with their overhead shafts and belts working to capacity. Most of the tools were

Panhard: The French Enigma

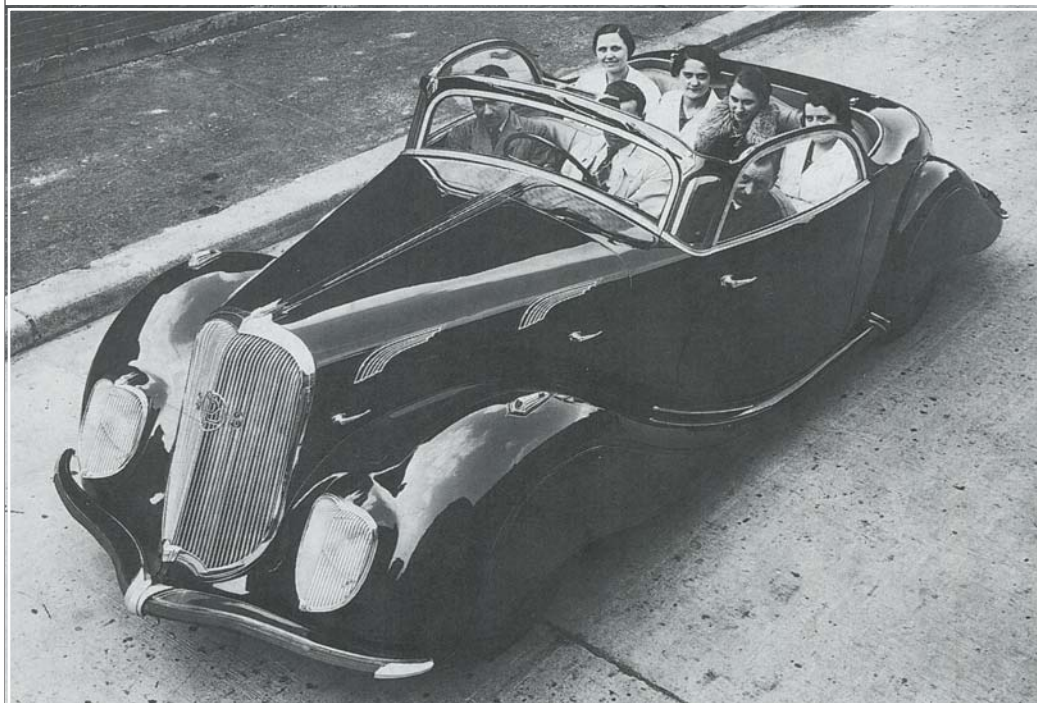
of French manufacture, mostly fabricated by Panhard, with virtually all the cars' components, to include engines, chassis and bodywork, being produced on site.

Throughout the first decade of the twentieth century, Panhard led both Peugeot and Renault in French car output, and in 1902 alone built nearly as many vehicles as the combined figures of its rivals. In addition to private cars, Panhard's production included commercial and military vehicles in addition to industrial and marine engines. Akin to other car makers, Panhard experienced a problem whereby ever more cumbersome coachwork called for increasingly powerful engines to propel cars that were becoming progressively heavier. When Panhard conceded to designing and fitting six-cylinder engines in 1907, it did so four years later than Napier and Spyker, and a year later than Rolls-Royce.

Another predicament experienced by a number of car makers, including Panhard, was exhaust-valve failure on its engines, a malaise caused through wear exacerbated by excessive heat and operating speed. Addressing the issue of extreme engine wear, Panhard in common with the like of Daimler, Minerva and Mors adopted the Knight sleeve-valve engine technology. As good a design as it

was, the sleeve-valve engine was not without its complications, and though Panhard engineered its designs to the ultimate, excessive oil consumption could not be resolved. With the onset of hostilities in 1914 Panhard scaled back its civilian production in order to meet military needs, but once the war was at an end, normal production resumed.

Post-war, Panhard focused on the luxury market and continued its policy of specifying sleeve-valve engines for its cars. The starting point of the model range was the highly regarded 10CV, its huge coachwork contrasting with the surprisingly modest 1,188cc 'four' that was eventually increased in size to 1,476cc. Mid-range was the high-performing four-cylinder 3-4½ litre types, these being outsized by the massive 6.35litre straight eight. It was the latter with its engine stretched to nearly eight litres that was campaigned by George Eyston when achieving 214km in an hour at Montlhéry in February 1934 to create a world record. Increasing power across the model ranges called for stronger braking, applied to all four wheels, while at the same time forays into record breaking saw not only the 1,500cc 'razor-blade' with its narrow body forcing the driver to virtually lay down in the vehicle, but also the bigger 5.5litre



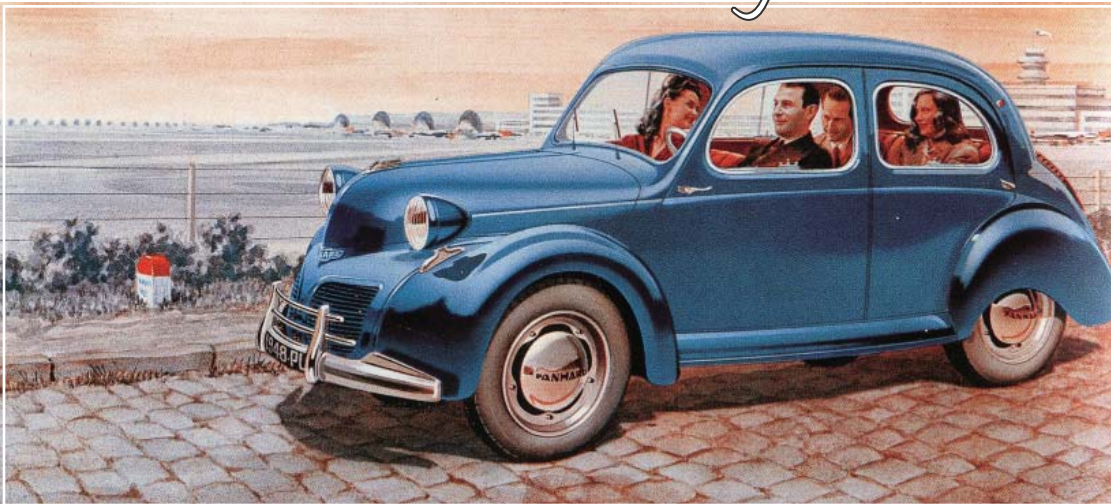
Designed by Louis Bonier, the Dynamic was introduced in 1937 and immediately created controversy through its streamlined styling and three-abreast front seating. Most radical, and seen to good effect with the cabriolet, is the centre position steering wheel, which customers did not like. [Wheelspin Automedia]

machine.

Panhard was at its pinnacle of achievement in the early 1930s with stylish designs created by the talented young engineer Louis Bionier who, in 1927, was promoted to chief body engineer. The sleeve-valve engine cars continued to offer effortless and near-silent power; the

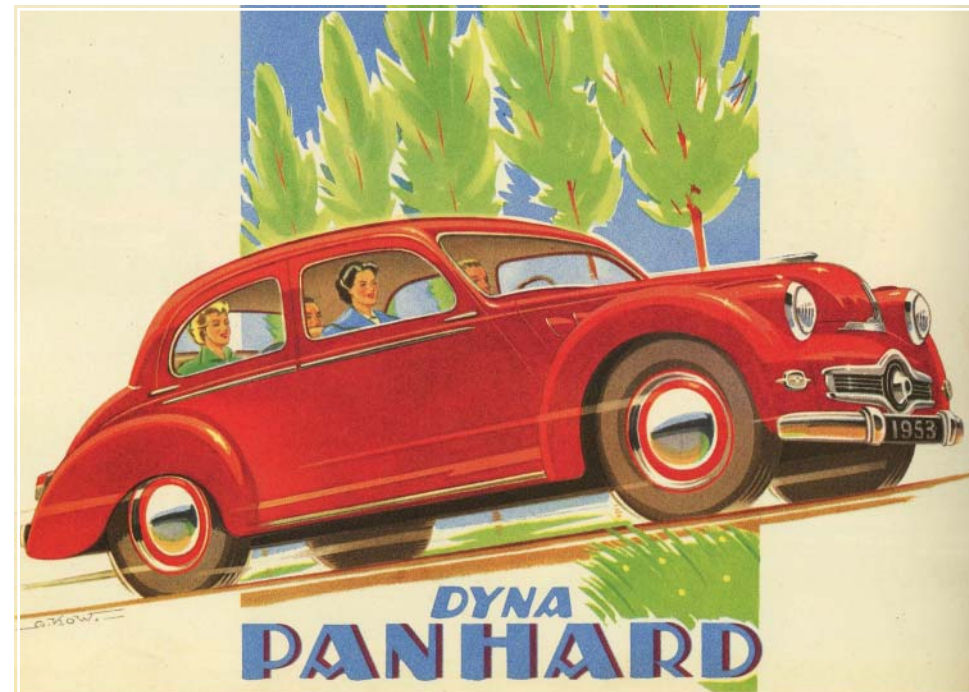
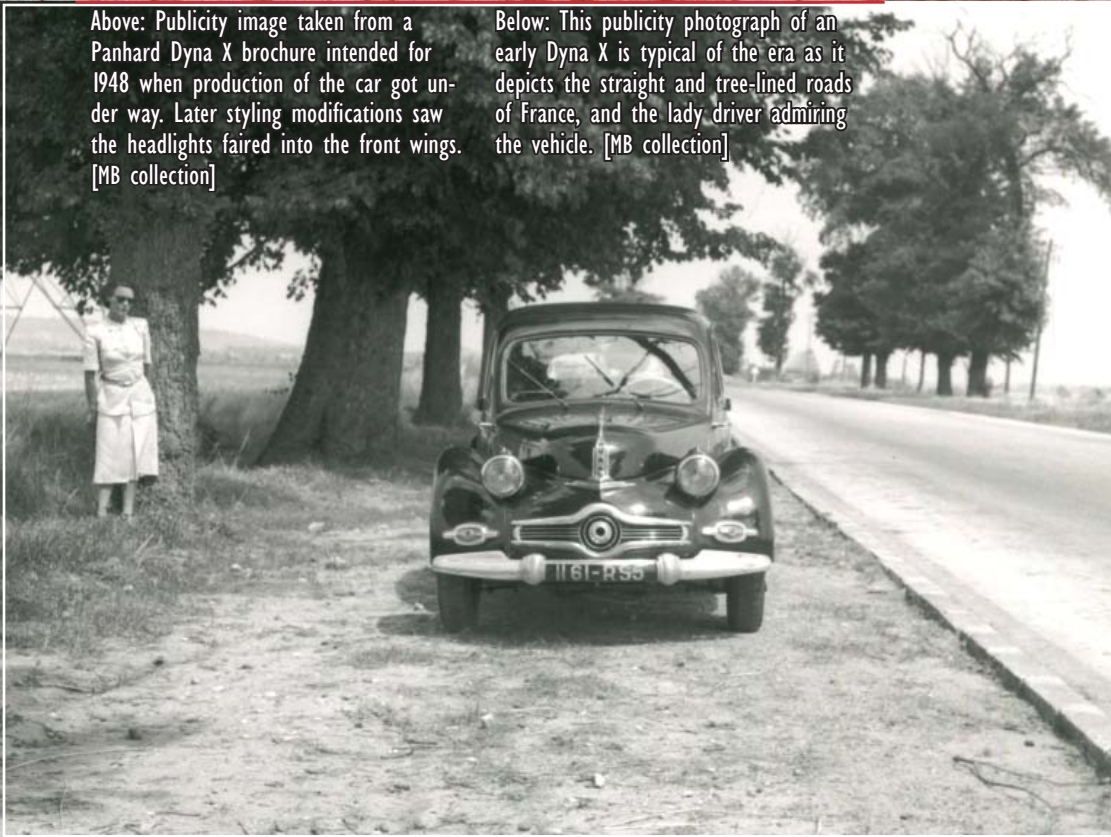


Panhard: The French Enigma



Above: Publicity image taken from a Panhard Dyna X brochure intended for 1948 when production of the car got under way. Later styling modifications saw the headlights faired into the front wings. [MB collection]

Below: This publicity photograph of an early Dyna X is typical of the era as it depicts the straight and tree-lined roads of France, and the lady driver admiring the vehicle. [MB collection]

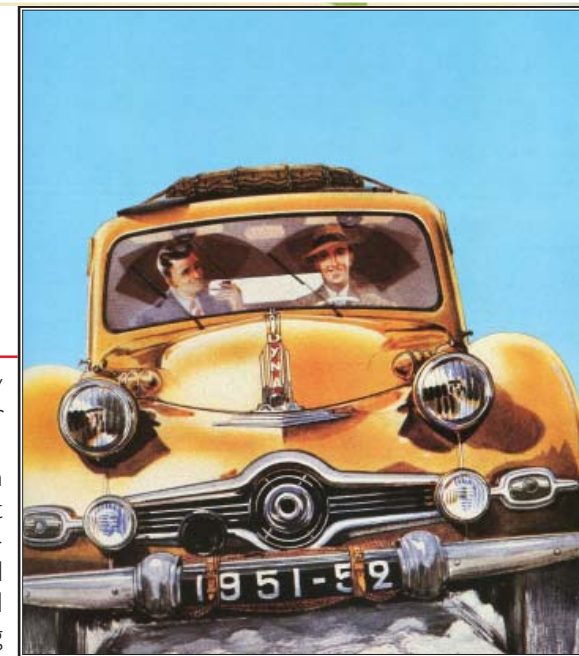


Styling modifications and increases in engine sizes were all part of the Dyna X's career. This publicity illustration depicts the car's redesigned nose. [MB collection]

The Dyna proved itself in rallies and trials, including a privately sponsored run in July 1948 from Paris to Helsinki via the Arctic Circle. This publicity rendering was influenced by the car's success. [MB collection]

trade-off being plumes of oily blue smoke emitting from their exhausts.

Louis Bionier's pre-war design masterpiece was the radical yet exquisitely streamlined Dynam-ic. Introduced in 1937, it featured three-abreast front seating and a centrally positioned steering



Panhard: The French Enigma

wheel while the technical specification included monocoque construction, all-round torsion bar suspension and dual-circuit hydraulic braking. Customers could choose the sleeve-valve engine in two sizes, 2,616 and 2,861cc, though for 1939 the former being underpowered was discontinued in favour of a 3,384cc affair. The central steering arrangement was disliked, so for 1939 the steering wheel was moved to the car's left hand side. Had Citroën not abandoned the Traction Avant V8 22 with its faired-in headlights ahead of it entering production, it would have made for an interesting comparison with the Dynamic.

The Difficult Years

From the mid-1930s to the run-up to war, Panhard's existence had become precarious. In addition to diminishing demand and evaporating export orders, the dire situation was exacerbated when the Popular Front in France, having won favour in the election of 3 May, 1936, instigated strikes to raise workers' pay and improve employment conditions. It was left to Citroën, Renault and Peugeot with their mass production techniques to satisfy France's motoring appetite while Panhard all but abandoned car production, leaving its commercial division to bolster the company

and build for the war effort in the form of trucks and anti-tank gun carriers. Following the declaration of war in September 1939, and France's surrender to the invading German forces in June 1940, Panhard was commanded to manufacture half-tracks for German armoured vehicles. Later the company was ordered to assemble complete armoured vehicles for the Wehrmacht, but subterfuge resulted in a single prototype being constructed. An area where Panhard did succeed was in the production of gas producers for both the domestic and commercial vehicle markets since practically all oil and petroleum was reserved for the occupying forces.

During the conflict Panhard's two principal engineers Louis Bionier and Louis Delagarde were led by technical director Jean Panhard, Paul Panhard's son, to design a car suitable for post-war production. Ideas of updating pre-war models, even if scaled down in size and power, were dismissed. Instead, it would be a small economy car, and to this end a sketch by Bionier in 1941 predicted a two-door, four-seat minimal vehicle designated VP ~ *voiture populaire* ~ with an overall length and width of 3.1m and 1.25m respectively. Delagarde was convinced it should have front-wheel drive and a horizontally-

opposed twin-cylinder water-cooled engine, his initials ideas being for a 250cc or 350cc motor.

Panhard's endeavours mirrored developments at Billancourt and Javel where the 4CV and 2CV correspondingly were progressing. Louis Bionier's VP design was not unlike another development that was being considered by Jean-Albert Grégoire, the engineer behind the Tracta front-wheel drive sports cars of the late 1920s and early '30s. He was also consultant to Adler, Chenard & Walcker as well as being the force behind the rear-engined CGE-Tudor electric car and the Socéma-Grégoire experimental turbine vehicle. Jean-Albert Grégoire's plan for an innovative small car was conceived in the mid-1930s when he was backed by Aluminium-Français, but its development was shelved in 1937 when he introduced his sporty looking monocoque, the 1,185cc front-wheel drive Amilcar Compound. Aluminium-Français nevertheless proceeded with Grégoire's idea for a 3CV four-seater and in 1941 commissioned the construction of four prototypes using mainly large aluminium pressings instead of steel. The AF-G, as the project became known, was the genesis of the post-war Panhard. At its heart was a Grégoire-designed 594cc flat-twin engine driving

the front wheels.

By the spring of 1943 all four AF-G prototypes were thoroughly tested, and with Aluminium-Français looking for a manufacturing partner supplied one each to Citroën, Peugeot, Renault and Simca. Citroën was committed to the 2CV, Renault the 4CV and Simca was involved with Fiat producing the Topolino as the Simca Cinq. Panhard was then approached, and with J-A Grégoire 'selling' the project to Paul Panhard who was immediately impressed with the design, contracts for developing the car ~ but not necessarily getting it into production ~ were signed. The arrangement allowed for Grégoire being paid a retainer, and royalties for using his patents should the car go into production. Significantly, the contract allowed for Paul Panhard to make any modifications he considered necessary to the AF-G design. Quite separately, Panhard continued developing its own small car, now the VP2, for which Louis Delagarde had designed a 610cc flat-twin air-cooled engine. The evidence is that Grégoire was critical about Delagarde's engineering, and more so about Bionier's design for the car's bodywork.

The essence is that Panhard did not take up the AF-G design, leaving J-A Grégoire to hawk his idea elsewhere. Suitors includ-

Panhard: The French Enigma



The Dyna X was produced in a number of guises including commercial variants, a Découvrable, Cabriolet and a two-seater sports car attracting the Dyna Junior appellation. Behind the Junior is a Dyna Z. The location is the 1955 Nice Motor Show. [Wheelspin Automedia] The Dyna X replacement was the Dyna Z, the styling cues of which were influenced by Louis Bionier's strikingly aerodynamic Panhard

Dynavia prototype car which was first exhibited in 1948. [Citroën]

ed Denis Kendall in England, Sir Laurence Hartnett in Australia and two British engineering dignitaries, Edward Hives of Rolls-Royce and Colonel Devereux both of whom had interests in Renfrew Foundries. Panhard therefore had a clear route introducing its VP2 as the Dyna X84 at the 1946 Paris Motor Show. J-A Grégoire who saw the car at the Salon was infuriated and claimed it as being a copy of his AF-G prototype. Ensuing legal action acquitted Panhard of plagiarism, though



The Dynavia is indicative of Bionier's forward thinking ideals. [Citroën]

This Dyna Z12 makes for an intriguing picture when photographed in an otherwise car-free boulevard in France. Only the cyclist seen standing with his machine behind the Panhard appears to be taking any interest. [Wheelspin Automedia]



Panhard: The French Enigma



Replacing the Dyna Z, the PL17 was officially introduced in late June 1959. Here the new Panhard is being closely scrutinised by journalists and motor agents at the Paris Motor Show held in the autumn of 1959. [Citroën]



A similar Dyna Z is pictured at Malo les Bains near Dunkerque on the occasion of the 70th anniversary of the Traction Avant in 2004. [MB]

it was found that the AF-G had influenced the Dyna, the outcome being that Grégoire was owed a modest indemnity.

It was not until 1948 that the Dyna X went into anything like full production. It soon proved itself in rallies and trials, and with ongoing development there were styling modifications while a Découvrable along with a Cabriolet were introduced at the 1949 Paris Motor Show. Early publicity material shows the saloon being described as a six-seater, but in reality it presented a squeeze even for four adults. Increases in engine size to 745cc and later 851cc improved performance, giving a top speed of 125kph for the latter configuration. A commercial variant was made available, along with the two-seater X85 Cabriolet. For the truly sporting customer Panhard offered the slab-sided Dyna Junior open two-seater sports car.

By 1953 demand for the now dated Dyna X was falling away. Its replacement was the smooth-looking six-seater Dyna Z which made its debut in June 1953, its styling cues taken from Louis Bionier's 1948 study in aerodynamics which morphed into the Dynavia prototype. Beneath the Dyna Z's svelte aluminium exterior much of the Dyna X running gear remained. The Z was a gamble: Panhard's precarious finances meant that

whilst it had not been possible to design a new car from the ground up, the Z had to appear wholly novel. Furthermore, it had to satisfy customer demand for the trend towards larger models, with performance to match and capable of accommodating six people. Panhard's trick was to fulfil such preferences while maintaining reasonably low running costs.

The design process of the Dyna Z was flawed inasmuch that a fundamental error was made in the production costing process regarding the aluminium offcuts that remained after the pressings were made. The amount of material left over was in effect Panhard's profits, and the situation worsened when, in an effort to reduce losses, the decision was made to use steel for the Dyna Z's bodyshell, but not the bonnet, doors and boot lid, which remained formed in aluminium. Steel being heavier than aluminium, this had a disadvantage when it came to the car's expected performance, which was little better than that of the Dyna X. From a shaky start, sales of the Dyna Z eventually picked up, especially when minor styling modifications were instigated. Model variants were also introduced, such as the Z15 Cabriolet and the much admired Dyna Z commercial vehicle. The main technical advance was the fitting of the

Panhard: The French Enigma

Aerodyn engine in 1958 which at last afforded proper heating, cooling and demisting thanks to the design of the motor's tangential fan and cowling. When in 1959 the Z was offered with an optional Zenith twin-choke carburettor, modified manifolds and compression, performance was greatly enhanced.

Panhard's perilous finances had meant that in April 1955 the firm was committed to seek support from another car manufacturer. The response came from Citroën, the arrangement being that Panhard would undertake fabrication of Citroën's 2CV vans which had previously been built at Levallois. In time Panhard also produced the Ami 6, thus Citroën had gained control over Panhard's affairs. When it came to replacing the Dyna Z, Panhard was greatly limited on what it could spend in way of development. The new car, the PL17, was therefore largely seen as a re-clothed Dyna Z when it was introduced in late June 1959, though in fact it sported a new frontal appearance and an enlarged boot. Early modifications included adopting front-hinged front doors and adoption of a four-seat cabriolet. It won outright the Monte Carlo Rally in 1961, and a commercial model became available in 1963, the same year as the saloon received a styling make-over and minor trim enhance-

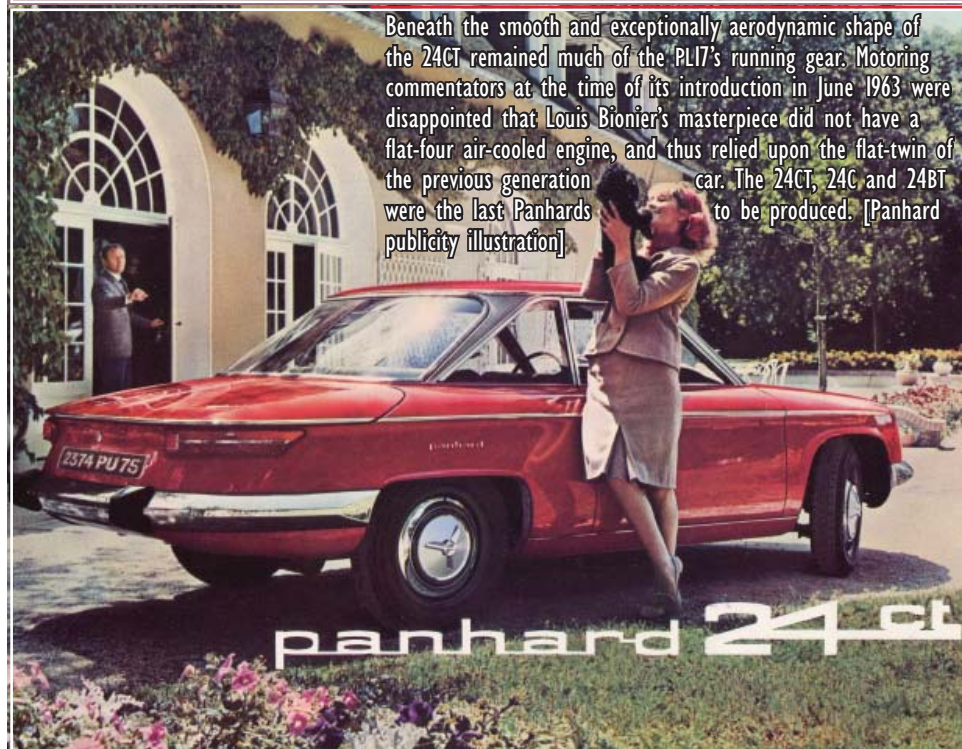
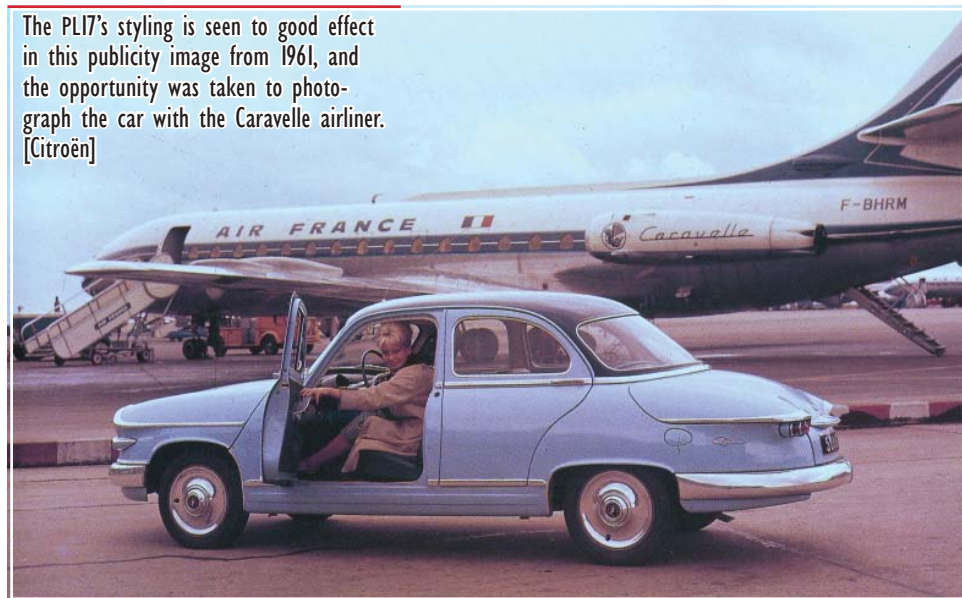
ments.

The PL17 was withdrawn in April 1965, by which time the exquisitely styled 24CT had been in production for nearly two years. Such was the design of the car that it won whole-hearted praise from throughout the French motor industry. The 24CT with its PL17 running gear was joined by the less expensive and pared down 24C, the latter available only a year before being replaced by the 24B, a lengthened 24C affording four passenger status. It was joined by the 24BT sharing the 24CT's top specification. Criticism of the 24CT and its siblings was that it should have had a flat-four engine rather than the flat-twin engine to afford the performance it justified.

Panhard was fully absorbed into the Citroën empire in April 1965. Within two years it was all over for Panhard, and on 20 July, 1967 its production line was closed, the Avenue d'Ivry works given fully over to building 2CV vans.

This article, by renowned motoring journalist and author Malcolm Bobbitt was written for 'The Citroënian', the magazine of the Citroën Car Club of the UK. It originally appeared in September and October, 2020. It is re-printed here with the permission of both CCCUK and the author.

The PL17's styling is seen to good effect in this publicity image from 1961, and the opportunity was taken to photograph the car with the Caravelle airliner. [Citroën]



Beneath the smooth and exceptionally aerodynamic shape of the 24CT remained much of the PL17's running gear. Motoring commentators at the time of its introduction in June 1963 were disappointed that Louis Bionier's masterpiece did not have a flat-four air-cooled engine, and thus relied upon the flat-twin of the previous generation car. The 24CT, 24C and 24BT were the last Panhards to be produced. [Panhard publicity illustration]

The Story of a Panhard

This little tale has more than the usual number of contributors to it: four in total. Some of you will remember that I did a bit of digging into the history of the early GSA which is now owned by Dave Rogers. We were able to track back over a number of owners and the story of this rare Panhard is similarly intriguing and in common with the GSA, it only goes back so far. And no further.

It starts with Howard Burrage. Well, the ownership starts with Howard, but we do not have any knowledge of how he came by the car or indeed when. Unfortunately, Howard died not long after he entered our story. The Dyna Z in question first came to the attention of CCOCA member Andrew Cunningham who lives in Stawell; not far from St Arnaud where Howard lived.

The car that started the story: Howard's Fiat 850. He thought Andrew might be interested in buying it.



Andrew takes up the story...

I cannot find a photo of Howard Burrage whom I must have known for a year or so in 2006 era. He lived in St Arnaud which is 70km from my home in Stawell and somehow he came to hear that I was a soft touch for old cars/classics! He may have been right! I reckon I first met him when he bowled up to my home and tried to tempt me with the Fiat 850. He obviously knew I had a Fiat XI/9 so presumably that was the catalyst.

He also knew I had a Citroën 2CV and a GS and that was the reason I went too visit him over in St Arnaud in 2006 and hence the photos of that visit, in late December of 2006. I took over

my car-mad best man who was visiting from Sydney at the time and another Stawell friend.

I had the impression that Howard was a great trader and loved fixing up cars, hopefully for profit.

When we visited him, he showed me a 1977 GS Pallas identical to my Gladys, colour included! [Readers will recall that Andrew wrote about Gladys for 'Front Drive', Volume 44, No 4.] Around that time he swapped the headlights over to single headlight configuration of most GSs! That car I think he sold to Boronia but my memory is fading fast.

When we were there we did see his Panhard, a BX and the 1953 2CV as well as the GS! I think he told me he acquired the 2CV from Bendigo.

He offered to take us for a drive in the 2CV but let us know once we were on the road that

it had no, or virtually no, brakes! He was a bit of a character but we were glad to alight!

I never saw him again and heard on the grapevine that he had died within a year or so.

Leigh, I can think of nothing else re Howard. Sadly my photos are tiny so although he was backing out the 850 when I first met him, it really is impossible to see him. I reckon he must have been in his 60s. I have no idea what work he had done prior to retirement. [Mel Carey, who is the next player in our story, has told me he had been a pest exterminator.]

And that is where Andrew leaves the story and I arrive.

I have to confess that my memory fails me at the very first hurdle. I cannot remember how I heard that there was a Panhard for sale. I had thought that Mel Carey [more of whom shortly] had passed

Left to right below: The GS with Howard just visible. The BX which Leigh eventually bought. The 2CV with the Panhard behind. Just visible under the carport is a DS, but your editor is unable to identify the other red car largely obscured by the 2CV and the hat-wearer.



The Story of a Panhard

the information to me as both Mel and the vendos [Howard's son Glen] and the car were in Bairnsdale. But, Mel assures me it was me who first contacted him about the car.

Anyway as I said Mel and Colleen Carey arrive into the tale. Howard Burrage's son, Glen lived/lives in Bairnsdale, which is where ex-CCOCA members Mel and Colleen hale from. By this stage they were living in Melbourne and running Citro Motors in Smith St., Collingwood. Here is how Mel remembers the contact...

Mel first met Glen when he was the Service Manager at The Big Garage in Bairnsdale. The Big Garage was the Holden

main dealer for East Gippsland and as at that stage Mel was running a mobile mechanic business based there, although clients came from as far away as Melbourne, so he and Glen saw a bit of each other. Anyway, Mel heard from Glen that his father [Howard] had a CX 2400 Pallas for sale. Howard's description made it sound like the very best CX Mel had ever seen and he and his father-in-law drove from Bairnsdale to St Arnaud [that's about six hours of driving each way] to see, and buy, this car. It turned out to be rather less appealing than had been described and Mel returned to Bairnsdale without a CX.

However, that is merely an

Andrew Cunningham and his best man visited Howard Burrage on December 29, 2006 when this photo was taken. Andrew's GS, Gladly, is in the background.



29.12.2006 11:31

aside.

It was via me that Mel renewed his contact with Glen and followed up on the Panhard.

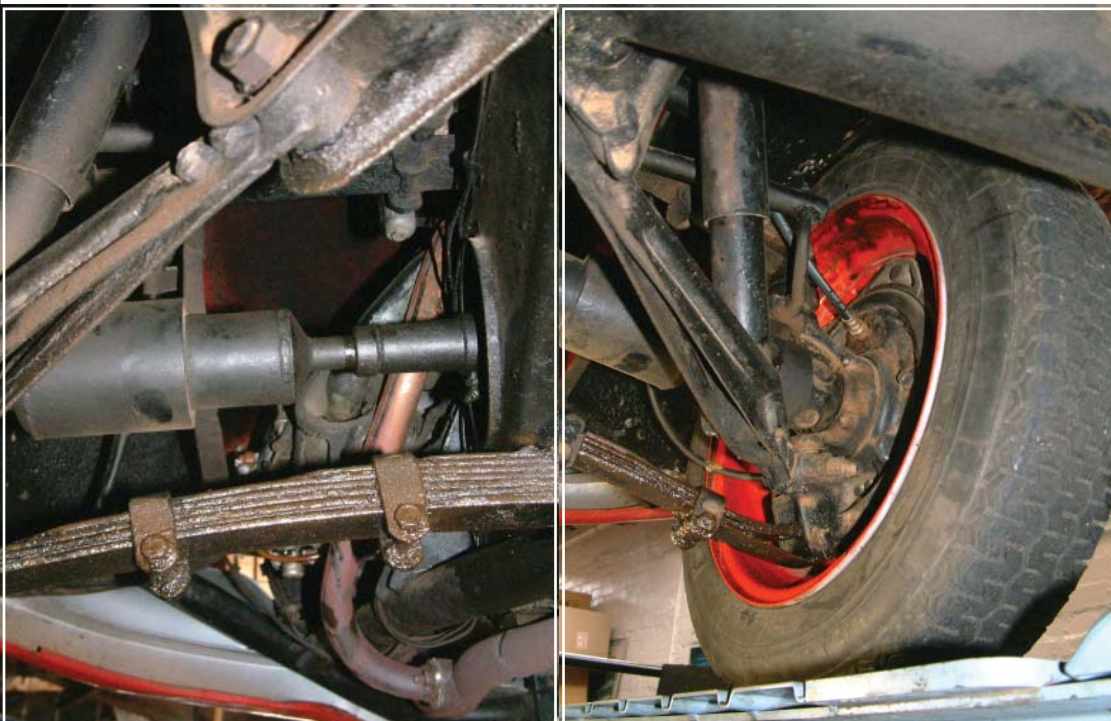
Just for a moment I need to go back to the 1958 Melbourne Motor Show, when Mel was just a lad. He had been taken to the show by his mother, Bertha. Bertha has a lot to answer for: back then she drove a Citroën Big 6. Not the typical car of the 1950s, not the sort of car you might expect a lady to drive... but it was the car that gave Mel his first real love of cars in general and Citroëns in particular.

Bertha, rather to Mel's disdain, spent a good deal of time [rather more than Mel thought reasonable] at the Joubert

stand. Joubert were the Melbourne agents for Panhard and they were displaying the Dyna Z: their newest offering. Eventually Mel became sufficiently bored he decided he should take a look at what it was that was clearly captivating his car-loving mother. He tells me he changed tune when he realized that the Dyna sported the same cap on the oil filler as the Big 6 used on the radiator. [The fact that it was probably a stock item in the catalogue of some French parts manufacturer did not occur to him!]

This gave Mel a soft-spot for the marque, and the model, which has never left him.

So when I told him about

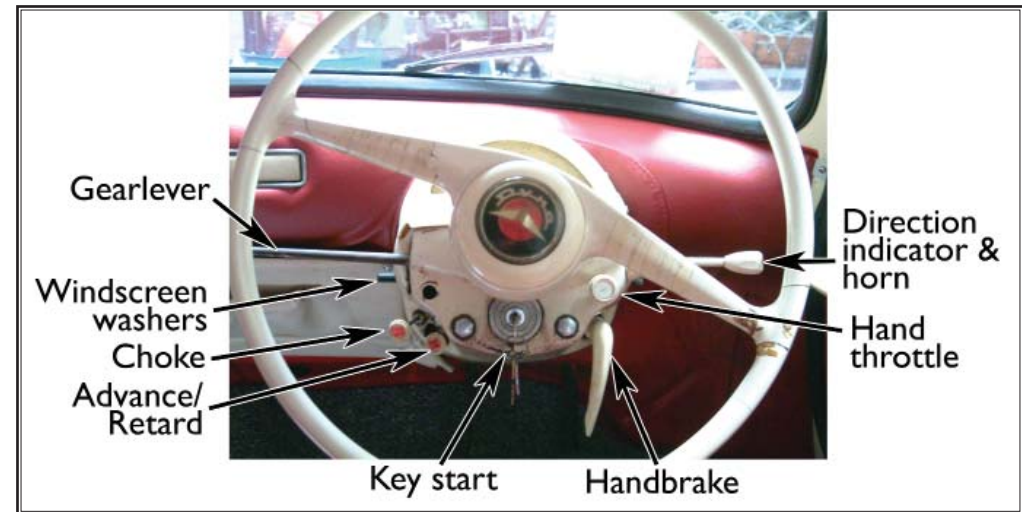


The Story of a Panhard

Glen's late father's, by now un-registered, Dyna Z languishing in a shed, Mel's ears pricked up. He went to look at the car and while he was only able to drive it around the storage shed he was very impressed with the car's the overall state. The body, despite its appearance of having been hand-painted with a paintbrush, was in excellent condition. He could find no traces of rust [of course a good deal of the body was aluminium, although by this stage many of the panels which had originally been aluminium had been supplanted by steel in an effort to

lower the cost of production, although not the weight, at the notoriously inefficient Panhard factory]. Clearly the interior had been re-upholstered... and done so to the correct pattern. Indeed this pattern of the two-tone upholstery was only available for that one model year!

French plastics [let alone cream French plastics] from the 1950s do not have a good reputation for longevity, especially in the Australian sun. Some might suggest that French plastics of the '60s, '70s and indeed the '80s share this reputation. But, while by no means perfect the



The Story of a Panhard

extensive, and complex-shaped, plastic of the dash was also in very fair condition. The car was clearly complete [trim pieces and all] and was a 'runner'.

Mel is a good judge of character. And he almost instantly agreed that I was just 'Patron Saint of Lost Causes' enough to be interested in this rare and potentially extremely desirable car.

I did attempt to contact Glen for this article in the hope that he could add to the story of how Howard ended up with such a rare car but to no avail.

I did subsequently take the

trip to St Arnaud although by then both the GS and 2CV had gone elsewhere.

At the time I also owned a Series I BX 16TRS and so I took the opportunity to buy Howard's BX as well. I thought that it might prove to be a suitable source of parts to keep my BX on the road. In the end, neither BX still exists: a fact which today brings me nothing but grief. While the general perception might be that later BXs were better built and sturdier than the early models I remain a devotee of the early cars with their 'Darth Vader' dashboards. But, I



digress, again.

I remember that the BX was not a runner and Sue Bryant's brother John [who is even more car-focused than his sister!] kindly trailered it back to Melbourne with me.

At this point Mel and my memories do not align. He believes the work for the road-worthy was done in Bairnsdale, but I am certain that Mel trailered the car to Melbourne and the work was undertaken at the Smith St. premises of Citro Motors.

While the Dyna was a 'runner' it was clearly not in a state that would enable it to get a roadworthy certificate.

Once Mel got to work on the Dyna he was even more impressed with the model than he had been either at the motor show or when looking at it at the shed. His impression was that the motor had been built to aircraft standards! The drive shafts were miniatures of those of a Big 6 being splined into the brake drums with Bibax joints to cushion the uptake of the drive. Very sophisticated. Many of the gears in the gearbox were herringbone cut: how very Citroën. And how very expensive to manufacture. The car's massive flywheel imparts a degree of smoothness in the motor which is unheard-of in a 2CV and which is essential in an 800cc motor which is de-

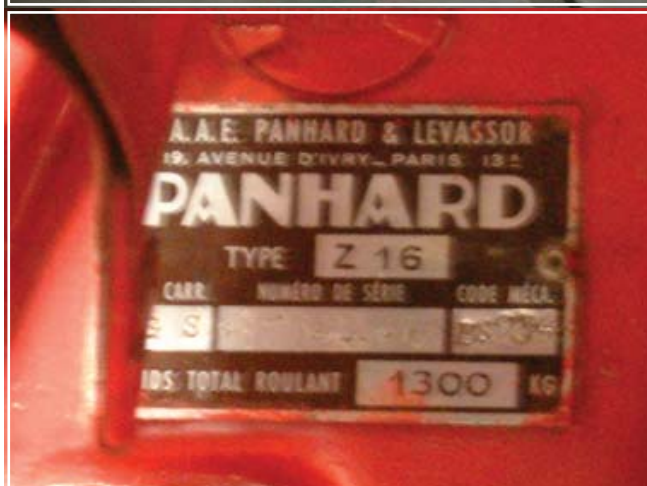
The Story of a Panhard

signed to cruise the Dyna along at 120kph.

Of course, with any car such as this there is excellent support available via the various specialist clubs around the world. I had great help from the French Panhard club [including parts simply arriving on the doorstep from France, without charge!] and I have recently been told that the US and UK Panhard Clubs are very helpful as well. But when you are simply wanting to get a car back on the road and obtain a Roadworthy Certificate, short-cuts can be the answer. So, Mel fitted a carburettor from a six-cylinder Holden [suitably modified] in place of the original [and very odd] unit that was in situ. The air-cleaner came from a VW.

Actually getting the car ready and through the roadworthy process was not as difficult as we had imagined as so much of the car was in such good condition. Work was carried-out on the brakes and wheel-cylinders and electrics needed attention to ensure the lights and other ancillaries, worked. But, other than that it was not too bad.

Unfortunately, we did realise that the motor was going to need work at some time as it was bit 'fumey'; it was suffering from 'by blow' with compression going past the piston rings into the crankcase ventilation, usually due to worn piston rings



or pistons. Having said that I have lovely memories of driving the car [at a very fair pace!] on a number of occasions. But, they are stories for another time.

When I took the car, and the necessary paperwork, to VicRoads for registration I had high hopes to be able to renew the car with its original number-plate ~ HMJ 009. The car still wore the original registration plate and on the passenger side front quarterlight the car's last registration label [January, 1979] was still attached. One of those old waterslide transfers which were so difficult to remove after they had been exposed to a year [or more] of Australian sunshine. For all I know it could still be there!

To my regret VicRoads had long ago disposed of their records from the 1970s and so I was issued with a new plate with the rather more pedestrian WHP 395.

I first had dealings with Geoff Burford in late 2013. I had discovered that Geoff was the owner of one the very rare RHD SMs that had been converted by Middleton Motors. Geoff kindly supplied an article detailing the history of his car; or at least as much as he knew of it and it was published in Volume 37, No 6 in November 2013. It was as part of this interaction that Geoff 'discovered' I owned the Panhard and he expressed

The Story of a Panhard



The Story of a Panhard

a strong desire to own the car. While I was not keen to part with a car which was so special and so rare I also realized that I was not in a position to give the Panhard the overhaul it really deserved. I had neither the mechanical skill nor the money to return it to a great state. Selling it to Geoff seemed a wise decision for both me and the car. I have subsequently gathered that Geoff did not have a strong mechanical bent either. But that, also, is merely by the way.

So, Geoff took on the ownership of this rare car.

And now it is over to Geoff's four daughters, Ingrid, Tess, Sophie and Eloise, to tell the story from 2013 to today.

The Panhard found a new home in October 2013 with Citroën enthusiast and sucker for punishment Geoff Burfurd.

[Ed. Sucker for punishment... it's a technical term and a synonym for 'Patron Saint of Lost Causes'. Actually neither term is valid. Yes, taking on the challenge of a car such as the Dyna is no small undertaking, but the satisfaction it can provide knows no bounds.]

Geoff's love of Citroëns started in the '80s with a new CX and grew over time to incorporate all cars associated one way or another with Citroën. Despite this 30year passion and collection, 'The Panhard' was to

be his first 'project'.

In November 2013 the car went straight to the mechanics [Swedish Prestige] but further work was needed. The car was carefully disassembled and given an immaculate paint job in keeping with its original red. Geoff had grand ambitions for 'The Panhard', including Sunday drives and making a spectacle of his early morning trips to the local swimming pool.

However, Geoff unfortunately fell ill soon after acquiring the vehicle, which sadly put the brakes on any further work. Fast forward to today and Geoff's wife, four daughters and sons-in-laws care for and carry on Geoff's passion for his beloved French cars. The Dyna is still disassembled and carefully kept in storage, and would need significant work, love and attention to get back on the road. The family want this show-stopping character to be given the time and passion that the car deserves, and will consider selling to a loving home if there is interest.

Please contact Geoff's daughter Tess on 0412 251 928 if you would like to get in touch.

Vehicle:

1958 Panhard Dyna Z

Last roadworthy issued:

October 31, 2013

Registration Expired:

21 February, 2016

Odometer Reading: 33,990

Member's Model: X45

I have been interested in the old car hobby since childhood, when we drove our Dinky toys along cliff-side roads carved into the side of the tabledrain, on the hill outside the family home on country Victoria. The tabledrains have long since gone: replaced by neat concrete curbside gutters and the Dinky toys have developed into a collection of French motorcars of which the Panhard is

one.

Panhard at Levassor were at the forefront of the early motor manufacturing industry in France, having vehicles sold and on the road by 1895. By 1900 they were building 630 vehicles a year with 18 of them exported.

This car is of 109 X45s built for export in 1924, a year when Panhard at Levassor produced 5.132million cars.

This car was ordered from the Paris factory by The Paris Deluxe Car Co of Bank Place, Melbourne and assembled on April 23, 1924. As Australia used imperial measurements at the time, the speedo was ordered in miles per hour and appears on the factory manifest as such. It came in as a rolling chassis. Martin and King, off High St, Malvern built the tourer body. Martin and King built bod-



Member's Model: X45

ies for several other Panhard and Levassor as well as Delage, Alvis, Rolls Royce, Daimler and other English and Continental chassis.

As an aside, Martin and King made railway rolling stock and the VW Beetle in Victoria and when the Company was split up Clyde Engineering took the railway work and VW Germany purchased the body building enterprise. Mr WJ King became the Managing Director of Volkswagen Australia.

The car's first owner is listed as Mr George Long of Ascot Vale.

To the best of our knowledge 77 Panhard et Levassors of various models were imported to Australia between the wars, sadly very few remain; there is one in NSW belonging to a CCOCA member, two in Victoria and one in Tasmania. We know of four exported back to Europe and several other bits and pieces. Which takes the

tally to 11 cars accounted for. If anyone has information about the whereabouts of any of the other 66, parts or whole cars, please let us know.

I stumbled on the Panhard while searching for a rear wheel drive Citroën: the hunt was not bearing fruit and as the Panhard company was purchased by Citroën in 1965, this car seemed a good second choice.

In about 1960 what is now 'our' car was in the possession of its fifth owner: Brian Dean. He simply stored the car for about 35 years. The late David Mills purchased the car from Brian in 1996 and it then underwent a complete restoration. Unfortunately, David never experienced the car's full potential, as he died before the motor was properly tuned and able to run for more than a few minutes.

Tricia and I purchased the car from the estate in 2005.

When we got it home the

first job was to get information about the engine so we could complete the restoration. We joined 'Les Doyennes de Panhard et Levassor', a French group of enthusiasts among whom,



like in our Citroën club, we found people with an intimate knowledge of the vehicle so it was not long before we had enough information to complete the restoration of the engine.

The motor is a four-cylinder, double sleeve valve configuration of 2,297cc capacity. The sleeves are lightweight steel. It has a cross-flow aspiration and a dual-throat carburetor, with a cold-start valve, which can be used to alter the mixture for heavy pulling. The lubrication is splash fed with about one litre held in small wells in the sump and saddle tanks to hold the rest of the oil, which is injected into the number four cylinder sump

1] General view of the motor dismantled to reset timing etc.

2] View of Engine with exhaust manifold removed showing the two concentric reciprocating sleeves.

3] Crown wheel in the differential housing.

4] Pinion and broken teeth.



Member's Model: X45

well according to the position of the throttle opening. From there it is splashed onto the crankcase walls and runs forward to number three and so on until it arrives at the front of the crankcase where it runs into the timing case and is lifted by the chain back into the saddle tanks at the top of the engine. The spark is by magneto with an auto advance.

It has a four-speed gearbox with the gear and handbrake levers on the right of the driver. A torque tube is used, with the thrust being taken by a cross-member behind the gearbox. Four-wheel brakes are activated by rods attached to the foot pedal and a cross shaft.

The tasks to complete the restoration were to reset the sleeve valve-timing, find the right heat range spark plugs, set up the magneto

and get the dynastart correctly wired. The fuel is delivered to the carburettor by pressurizing the fuel tank via a hand pump prior to starting and then by a small air pump mounted on the side of the motor, driven by the secondary crankshaft.

Unfortunately, there were two and a half teeth broken off the pinion and I suspect it was left in gear when it was freighted from Coffs Harbour to Melbourne. We found them in the bottom of the diff housing with metal filings around.

After replacing and machining the teeth, it was time to change the oil throughout the car and test it on the road. After several runs, we decided that it could undertake a rally so we entered in the Bairnsdale to Ensay Centenary Run in October 2005. The car ran faultlessly and was much admired.

This event commemorated the centenary of the first car trip from Bairnsdale to Ensay, made by an Argyll car on October 1, 1905.

Our local historical car club organised the rally, and was lucky to

find an Argyll to lead the cars from Bairnsdale.

Of the 250 entries there were:

- 15 veteran cars, including 1906 Argyll, 1904 De Dion Bouton, 1913 GWK, 1902 Curved-dash Oldsmobile, 1912 Star [Doyennes members Colin and Maxine Kiel] and a 1914 Talbot.
- 36 vintage cars, including 1927 Bean, Fiat 509S bateau, 1928 Lea Francis, 1926 Rugby and of course our 1924 Panhard at Levassor X45.

The rest of the cars were built between 1931 and 1980.

The weather was fine and warm: all participants gathered a 7am, at a big parkland in Bairnsdale. The cars were despatched in order of age to allow time for the slower veterans to complete the 80km by lunchtime. Colin Keil's Star got away early with the Panhard et Levassor leaving soon after. We stopped 30km along the way for a drink break and to change passengers.

The road climbs from the coastal plain through farming land into the southern dividing range and through many kilometres of native Australian bush with large gum trees and wild flowers along its edge. As the sun flickered through the trees and the old cars chugged up the hills we agreed how lucky we are to live in such a

beautiful place.

Then the scenery opens out as the road follows a river into the grazing land of the Ensay district with many cattle and sheep grazing in the fields.

Our destination was the Ensay sports field. Lunch was served to the 500 people taking part in the rally. Ensay has a population of 60 people, so it was quite a job.

When all the cars arrived they filled the field to capacity and made a remarkable sight.

The return journey was without incident and from two breakdowns all cars were back in Bairnsdale in time for a grand dinner in the evening.

In February, our X45 was voted Car of the Year at our annual Gippsland Historical Automobile Club get-together and now is featured on the front of our monthly newsletter. It also went to the 2006 French Car Festival.

The car was on display in the foyer of the RACV Club in Bourke St, Melbourne from August 24 to September 23 as part of the RACV heritage car series.

John very kindly has provided an update to this article.

Since this article was first published the car has gone on from strength to strength.

The car has been in two museums, gone to several 'French Car Days', had many private day trips travelling many kilometres.



A Day to Remember

There have been a few rallies the most recent a Federation Rally at Yarram. It was a hub run to all points including through the Tarra Valley to the top of Bulga Park. Very enjoyable.

As we have now moved into Loch Village there is little room for all the fleet. The old vehicles don't suit ageing ex farmer bodies, so with much sadness, they have been replaced with one more modern sports car that we will enjoy for many years to come.

The Panhard and Levassor has gone into an extensive collection in Melbourne where it will be cared for with de-

votion, and may occasionally appear in the most unlikely places!

Tricia and I still remember our times at CCOCA with affection and wish all of you many years to enjoy your Citroëns.

John and Tricia Fleming.

This article by John and Tricia Fleming first appeared in 'Front Drive' Volume 30, No 4 [August/September, 2006].



You Don't Have to be...

...but it helps

1965 Panhard 24CT Purchased Dec 2010 by Lloyd Gleeson, New Plymouth NZ [Arrived in NZ Feb 2011]

Zut alors! Tomorrow's styling and yesterday's technology... this paradoxical '60s creation could only be French!

Panhard [pronounced P'nah] of France was there alongside Daimler and Benz at the dawn of the Motoring Age ~ selling their first car in 1889. At that time they were known as Panhard & Levassor ~ still acknowledged by the 'P&L' on the Panhard badge.

[You're no doubt familiar with the 'Panhard Rod' suspension stabiliser bar? Yes, these are the guys who invented it ~ masters at devising simple solutions to tricky problems.]

By the '20s and '30s their cars were the epitome of style, privilege, prestige and refinement, and favoured by the aristocracy ...but World War II put an end to that.

In the aftermath, the French socialist government set about trying to resurrect their war-ravaged country. They imposed a new order of austerity [The Pons Plan] which among other things, tightly rationed the supplies of steel to the country's industries ~ and in the automotive field, they demanded the

production of 'utilitarian motor vehicles only'. Panhard, having no such vehicle to rush back into production, were simply instructed to use their steel allocation to produce trucks and military vehicles only!

Although Panhard complied, they refused to meekly concede, and set about developing a utilitarian car of their own ~ not from tightly rationed steel, but from un-rationed but expensive aluminium! [France had been producing aluminium from its own bauxite deposits since the early 1800s, so it was not subject to import controls.]

Their new car would bear no resemblance to its illustrious predecessors.

There's an interesting story that illustrates their sheer bloody-minded attitude to being told what to do. Even [quite literally] with a gun to their heads:

When the Germans occupied France during World War II, they commandeered numerous engineering plants [including Panhard] and had them manufacture military components to support the Nazi war effort. Panhard were instructed to turn their skills to manufacture V12 engines for German Naval vessels. The work was undertaken at a painfully slow pace, with every instruction capable of misinterpretation being misinterpreted; every plan and

You Don't Have to be...

blueprint being studied minutely and argued over at great length, resulting in every possible delay, miscalculation, machining error or inexplicable equipment failure being encountered. The only workers who performed with dedicated zeal were those in Quality Control ~ who ensured that anything usable was destined for the reject bin!

Not a single fully operational marine engine was delivered.

[Panhard could never be accused of collaborating with the enemy!]

In 1948 they introduced the Dyna, a small, all-alumini-

um, four-door sedan powered by a fuel-efficient [50+ mpg] and technically fascinating air-cooled flat-twin OHV engine of 610cc, driving the front wheels through a 4-speed gearbox. This engine, with its roller-bearing crankshaft and torsion-bar valve springs, was ~ in various capacities up to 850cc ~ used in every Panhard from then on.

Unfortunately, their formula [light, uncomplicated, economical, individualistic] was achieved with expensive materials and expensive pre-war [labour-intensive] construction methods totally inappropriate for the

mass production of cheap motorcars. They could only compete with Citroën, Renault and Simca by cutting profit margins to an unsustainable minimum; in fact their very survival was reliant on their profitable truck and military vehicle sales! When steel rationing was relaxed in the mid-'50s, they moved from expensive aluminium to all-steel [necessitating an increase in engine size to 850cc to cope with the extra weight] and the Dyna grew into a large comfortable 6-seater, but they still did not have the capital to invest in modernising their assembly lines.

Whilst their step up to a larger 4-door 6-seater found favour with French taxi drivers and those with modest incomes and large families, theirs was a dwindling market, and there was no significant interest internationally. Their attempt to woo American buyers unfortunately coincided with VW's; the Panhard chiefs had looked at the US car market and decided that 'Those Americans ~ look at their ridiculous cars! They buy anything!' [Not appreciating that Americans buy anything '... with a made in USA label, and a sales and service garage in every town.'] They simply shipped over a few of their new upgraded roly-poly Dynas [now called PL17s] and waited for the buyers to queue up!

Meanwhile VW had hired a US Advertising Agency who launched a full-on assault with their clever tongue-in-cheek 'Think Small' marketing campaign. ['The most successful Ad campaign of the 20th century' according to Advertising Age's 1999 publication *The Century of Advertising*.]

As we all know, the Beetle became a reverse-status-symbol best seller, and the Kombi a hippie icon. And Panhard, [whose cars had 4 doors, were roomier, more comfortable, more economical, better handling, and had more luggage space] just packed up and went home ~ unable to compete with the powerful influence of big-budget advertising.

Besides, Americans might accept a 4-cylinder economy car ...but 'Only TWO cylinders? You're kidding me ~ right?'

In the affluent '60s, potential customers perceived Panhards as being too old-fashioned [not to mention just too plain weird to impress the neighbours!] Instead, they were opting for the cheaper [but more glitzy] products on offer elsewhere. Sales plunged further, which ~ along with ongoing increases in production labour costs [Panhard's workers were always relatively well-paid], put an even greater strain on profitability, meaning their days were numbered.

Citroën by then had taken a



You Don't Have to be...

controlling interest in the ailing company, and promptly vetoed funding for the proposed 4-cylinder boxer engine intended for a brand-new Panhard ~ the PL24 [ostensibly because projected sales figures did not justify the tooling costs]. No doubt their intention was that, by doing this, the whole PL24 project would be dropped... but as we have seen, Panhard never did take kindly to being told what to do, and went ahead with 'plan B' ~ to build their new car anyway, but use their trusty old 850

twin, now cranking out 44.8kW in optional 'Tigre' tune.

[Conspiracy Theorists may well ponder the fate of Panhard's 4-cylinder engine, given Citroën's introduction of a remarkably similar air-cooled boxer 4 in their GS a few years later ~ a lovely smooth high-revving unit unlike any previous offering from Citroën...]

The stylishly avant garde 'PL24' Coupe ~ their swansong ~ was unveiled in 1963.

Compared with their previous offerings, it looked like a

space-ship straight out of the then-popular French science-fiction comic series *Barbarella* ~ but fitted with the antiquated flat-twin 850cc engine, it sounded more like a ride-on mower!

At only 800kgs, it was obvious that weight-saving was still being vigorously pursued ~ for example, the 'wheels' were just a rim bolted around the edge of the elegantly finned aluminium brakedrum!

Citroën dealers ~ somewhat reluctantly ~ had found themselves expected to sell Panhards [previously their competitors] in the same showrooms alongside their Citroëns, and the old-established loyal Panhard sales and service centres sadly found themselves being increasingly marginalised.

It was never going to work out.

So the countdown had begun, and the chic 24 [even the Tigre-engined 160kph 'CT' version], failed to attract international interest as it was just too... well ... too quirky... too French to be taken seriously on the world stage.

And it was simply too expensive, [said to have been the most expensive 2-cylinder car ever built!] But the problem was it just did not sound expensive, thus having little appeal to the nouveau riche buyers; yet it was far too expensive for economy-car buyers, and even

the longer wheelbase version [the 24 Berline] was not really roomy enough for the family man ~ even if he could afford it.

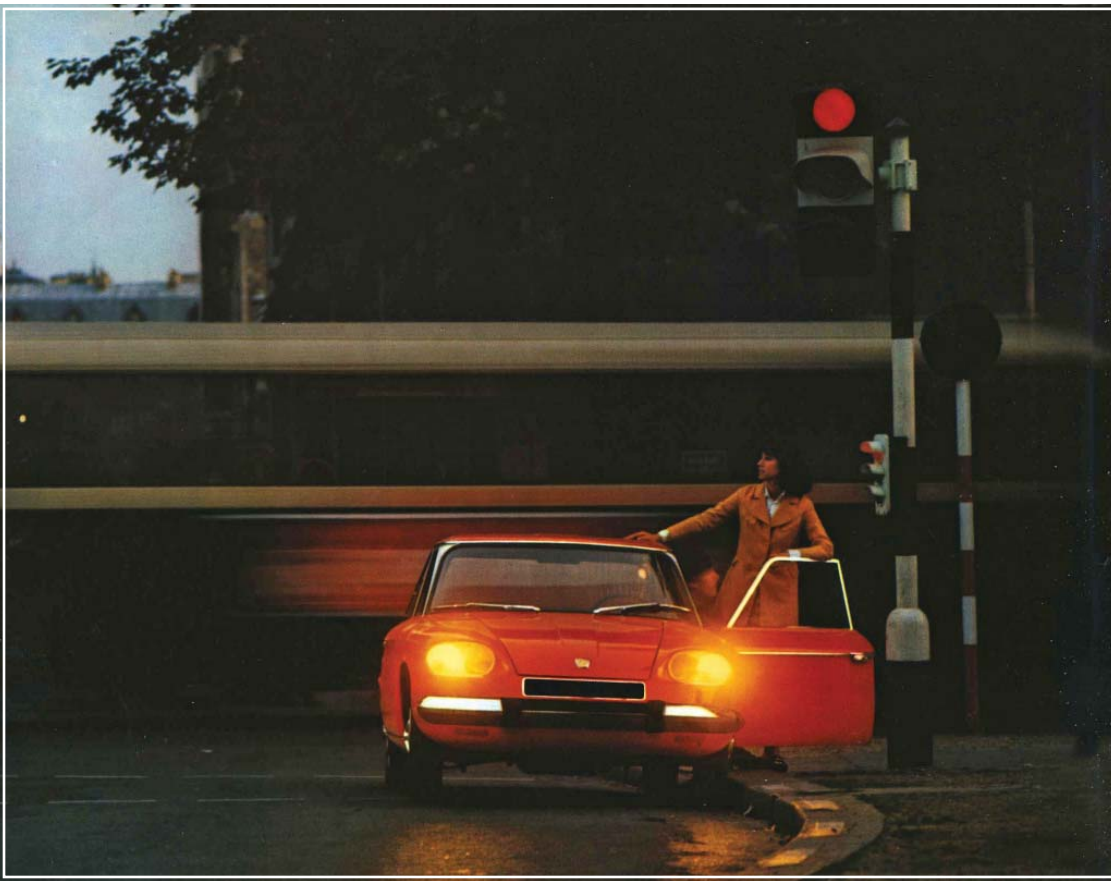
A right-hand-drive version appeared briefly in UK Citroën showrooms, but you had to be seriously mad to be one of the handful of buyers!

To get things in perspective, in 1965, Americans could buy a Mustang, and the British a Jaguar [or both a Mini 850 and a Lotus Cortina!] for much the same outlay!

By 1965, Citroën had complete control, but sales of the PL24 just did not justify the [costly] retooling to suit a modern automated assembly-line. In spite of a half-hearted attempt to cut costs by introducing a cheaper version using assorted parts from Citroën's corporate parts bin [disc brakes, 'normal' wheels, sundry electrical components, and less luxurious upholstery and trim], their intention all along had not been to save the company... they simply wanted the factory space.

The end finally came in 1967; Citroën axed the 24 and converted the Panhard factory solely for the assembly of their own range of small [2CV-based] commercial vehicles.

So after 78 years, Société des Anciens Établissements Panhard et Levassor ~ one of the great pioneering names in the auto industry, was uncere-



You Don't Have to be...

moniously relegated to the pages of automotive history.

[As an aside, the still-profitable military vehicle arm was subsequently on-sold by Citroën to the Auverland Company who [at the time of writing] continue to manufacture Panhard armoured scout cars and personnel carriers.]

Form combined with Function in the PL24, and it really must be viewed in the context of the 'Swinging Sixties' when Style was everything. [Those were the days of Brigitte Bardot, Jackie Kennedy, Jean Shrimpton, James Bond... John Steed and Emma Peel... Carnaby St, Mary Quant miniskirts, flared hipster jeans... trendy motor scooters... great music...]

Looked at in this context, it becomes obvious that putting the PL24 into production without its new engine was never intended to be a serious attempt to save the Company ~ nor should the PL24 be viewed as a failure because it did not.

They knew it was the end and they simply wanted to go out the 'Panhard way' ~ with a flourish; with an 'Art for Arts sake' Grand Finale.

And as far as Grand Finales go, they do not get much grander than this.

[Frank Sinatra's 1968 hit 'I Did It My Way' could well have been dedicated to Panhard!]

The PL24 would never have

SPECIFICATIONS	
ENGINE	
• Type:	Air-cooled, flat twin with alloy crankcase and cylinders [with non-removable heads], roller bearing mains and big-ends
• Cylinders:	Water cooled, four in line
• Bore×Stroke:	94.8×75mm
• Cubic capacity:	848cc
• Valve gear:	Pushrod operated, with torsion bars instead of coil springs
• Compression ratio:	8.3 to 1
• Carburettor:	Weber 28/36 DDE twin-choke compound
• Fuel system:	Zenith 38 NDIX twin-choke carburettor
• Maximum power:	44.8kW @ 5,750rpm
• Maximum torque:	76.2Nm @ 3,300rpm
• Electrical system:	12volt
TRANSMISSION	
• Gearbox:	Four speed and reverse manual. Synchromesh on all forward ratios. Cable operated floor shift
• Ratios:	1st: 2.99; 2nd: 1.509; 3rd: 1.0; Top: 0.736; Reverse 2.919 to 1
• Clutch:	Automatic, single dry plate
• Final drive:	Spiral bevel 6.148 to 1
CHASSIS	
• Construction:	Tubular frame with bolted-on steel body panels
• Body style:	Two-door Coupé 2+2 [or the 10cm longer two-door, 5-seat Berline]
• Layout:	Front engine, front-wheel drive

featured in the traffic-light Grand Prix [the wee engines' low-speed torque was abysmal], but it most certainly was not lacking flair and elegance. It turned heads even in the most

BRAKES	
• Type:	Finned aluminium drums [changed to discs all round mid-'65], unassisted.
Suspension	
• Front:	Independent, twin transverse leaf springs, lower diagonal links, telescopic shock absorbers.
• Rear:	Beam axle linked to the subframe at the centre, transverse torsion bars, telescopic shock absorbers.
• Wheels:	Pressed steel rims bolted around the edge of brake drums [NB: 'Normal' wheels of disc-braked cars.]
• Tyres:	145×15
WEIGHTS & MEASURES	
• Length×Width×Height [m]:	4.26×1.62×1.22
• Wheelbase:	2.30 [Coupé], 2.54 [Berline]
• Ground clearance [cm]:	10.9
• Track [F/R, m]:	1.30/1.30
Weight [kg]:	818
CAPACITIES [L]	
• Fuel tank:	42
• Crankcase:	2.64
• Transaxle:	0.96
PERFORMANCE	
• Standing ¼miles:	20.5sec
• Top Speed:	160kph
PRICE	
• Base Price:	F11,900 or ~US\$2,410
A new 6-cylinder Ford Mustang was just \$50 more!	

exclusive and expensive of company [none of which could get anywhere near its 100km on less than 4 litres economy!]

But alas ~ amongst the Jet-Set, vroom vroom performance was de rigueur, not pan economy.

[Note: Generations of French children [whose parents owned post-war Panhards] affectionately called the car 'Pan Pan' ~ mimicking the idiosyncratic exhaust note!]

Auto historian Paul Niedermeyer summed it up nicely in his 'An Illustrated History of Panhard':

'But the fuel crisis was still years away, and the affluent motorist was moving on to bigger engined cars.

Panhard's unique approach had become irrelevant, and the 24 was its swansong, and a lovely one at that.

It's a sought after collectible now, and a tribute to a time when a radical approach to the efficiency/performance equation was pursued with an unswerving passion.

It reflected the French approach to automobile making perfectly; innovative, unconventional, stylish, and all too often, just too far out of the mainstream to attract enough buyers to ensure financial success.

But Panhard's efforts foreshadowed the cars of today and possibly the future. They say History repeats itself, so perhaps next time the 'Panhard formula' appears, it will be more enduring, and we may all be driving updated versions of their small, ultra-light and super-efficient 850cc

You Don't Have to be...

two-cylinder cars.

And if this delightful and sporty coupe is anything to go by, it may be something to actually look forward to.'

So, what is it like to drive?

It's easy to get comfortable behind the [optional extra] lovely Nardi wheel as the big softish seats go up and down as well as fore and aft, and the backrest has an infinite recline adjustment [all the way from vertical to flat back]. The engine starts with that typical air-cooled noisy clatter and idling is not what you would call smooth ~ the whole car rocks like a washing machine with an out-of-balance load. The gear change is via cables from the short floor-mounted gear lever, and has a very imprecise shift pattern that takes a bit of getting used to. However, once you do, it's just a matter of shoving it in the general direction you expect the desired gear to be, and that's it! All very... French ~ especially the way the movement encourages you to caress the passengers leg when selecting 4th! [Of course, it may be possible to adjust the play out of it ~ but mon dieu! what Frenchman would even think of such!]

Fourth is a very tall overdrive [0.736:1], so do not even consider using it around town. Third [at 1:1] is fine as long as you can keep the revs over 3,000, otherwise second will

do nicely, albeit somewhat noisily. Get out on the open road, caress it into fourth, and everything settles down to a happy and effortless 4,000rpm whirr at 100kph. [The redline starts at 6 and goes up to 8!]

Ride and handling? Only way to describe it is 'Typically French' ~ soft but well controlled; soaking up the bumps, and hanging on amazingly well considering it's skinny 145x15 tyres! Body roll is not excessive, although more than you would get in a car from any other country in 1965.

Steering is light and direct with no power-assist. The drum brakes ~ also unassisted ~ require a hefty push but work well.

Although technically a 2+2, the rear seat squab is very low, requiring a knees-up attitude by adult passengers back there ~ somewhat tiring and not too comfortable on a longish trip. Fine for youngsters though. The back of the seat can be folded down to provide extra luggage space, but the boot itself is huge enough for most occasions.

It really all comes down to accepting the fact that a] it's quintessentially French, and b] it's 46 years old, ...and once you've done that, it's not bad ~ not bad at all.

Vive la difference!

[And if it's entertainment you want, do not look for the radio

~ just flick the wiper switch...]

Owner Lloyd Gleeson of New Plymouth says ~

I've been afflicted by MCD [Mad Car Disease] all my life. As a young dude in Thames, from the seat of my Vespa I coveted the MGTFs of John Slack and Keith Kerr; the big Healeys of Cliff Judd, Morrie Larsen, and Pat McLaughlin ~ and his brother Roger's supercharged Sprite; David Chan's TR, or the Daimler Dart of his brother Gilbert; and Les Fraser-Jones' Berkeley... and Dr Kirker, who had monthly clinics at Thames Hospital, more often than not came down from Auckland in his superb AC Greyhound 2+2 coupe [with the factory-option Zeph-

yr 6 engine that had the special Raymond Mays head and triple-SUs]. He always parked outside my office window... suffice to say my work output dropped significantly whenever that happened! And later, when Dr Anderson was through from Paeroa in his delightful Fiat 850 Spider the effect was the same!]

I eventually became the proud owner of an M-type MG; then a J2, [TF prices kept rising faster than I could save!] They were followed by a couple of Sunbeams, a Renault Floride, a brace of Morgans, and a succession of sporty Fiats [including the glorious Gilroy Cisitalia that I sold to a friend, and still curse myself for being an idiot



You Don't Have to be...

for parting with it. I mean, it's bad enough being a car nutter ~ but being a b ... y stupid one is inexcusable!]

Then there were those cars I should have bought when I had the opportunity, but did not ~ Les Lowrie's SS Airline, that white Lancia Flavia 1800 coupe I saw in a Wellington car yard, Ken Moses' Gordon-Keeble, Ewan Mitchell's Fiat Dino Coupe... [Sound familiar? You've got MCD too huh?]

In 1974 when my late wife and I did a 3 month tour of GB and the Continent, I'd had dreams of bringing something exotic back, and in my colonial naivety I'd drawn up a shortlist of 'possibles' to chose from; ASA Mille, De Tomaso Vallelunga, Alpine Berli-

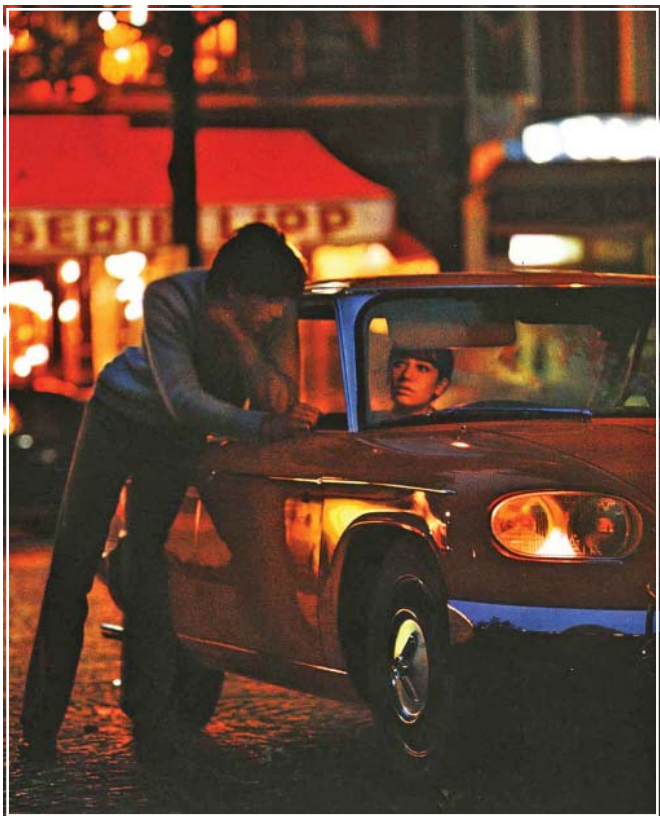
nette, Alfa GSZ/4R, any sporting Abarth, Siata or Moretti... or a Supersports Morgan +4!

[Feel free to laugh!]

I had to settle for a five-year old no-frills [apart from a luggage rack and a bonnet strap]

Cortina-engined Morgan 4/4 1600 roadster ~ bought from a UK Morgan Club member in Manchester who'd just taken delivery of the brand new four-seater 4/4 that he'd ordered the day he picked up the roadster! We loaded it with a pup-tent and camping gear

and drove 13,500 highly enjoyable miles. Two wide-eyed young Kiwis on the holiday of a lifetime. We ended up bringing the Morgan back to NZ [but not without some frustrating importation dramas... there were



some crazy import restrictions in the '70s!]

And of the cars on my short-list? ... the only one I even saw was an Alpine Berlinette! It was racing at the Nurburgring on the day we were there ~ it looked [and sounded] gorgeous! 'One day I'm going to buy a Berlinette like that!' I said to myself. [And 30 years later, I did! ... but that's another story.]

But another car I saw there also left a lasting impression on me ~ a stylishly charismatic Panhard PL24. To me, it just had that 'wow' factor, and when it started I thought it must have been Wankel-powered! [Talk about a pop-corn machine on steroids! Although not a 2-stroke, it reminded me of Brian Crosby's crackling DKW Junior saloon that I'd enjoyed seeing racing at Teretonga a decade or so earlier!]

It had been raining, and just before driving off, the wipers started... you just have to see them in action ~ each one doing its own thing and totally ignoring the actions of the other! A truly unique party-trick mentioned by most contemporary road-testers with varying degrees of humour or bewilderment! Only the French would take something so basic and uninspiring as windscreen wipers and make a cabaret act out of them!

The more I read about the

PL24, the more my interest grew ~ the upshot of which was another addition to my 'One day I'm going to own...' list.

Then last year, whilst browsing on the web I saw a very tidy 24CT for sale in California [its owner finally getting the opportunity to buy a one-owner Giulia SS he'd been waiting years for].

There she was ~ a stunning little red number twitching her wipers at me... and whispering 'I'm available... I could be yours... you know you want me ~ I can tell.'

You want me bad? I can be BAD.' And my MCD flared up again big-time!

Fortunately, importing a 46 year-old car is a breeze these days [even if it is left-hand-drive], although the VIN inspection process can be a tad tricky to negotiate ~ especially when the 'Big Brother' computer refuses to acknowledge Panhards even existed!!

[Now ~ where can I find an affordable Alfa GSZ/4R, hmmm?]

This article, largely written by Lloyd Gleeson was passed to Geoff Burfurd by another Kiwi, Hugh Fraser, who passed it to me back in 2013. It had been my intention to publish it at the time, but... well, things happened and this little tale, with its detailed background never saw the light of day.

Air-Cooled Cool

*Horizontally Opposed.
Air-cooled adversaries*



Panhard 24CT battles Karmann Ghia. Quirky coupé shootout Panhard 24CT vs. Volkswagen Karmann Ghia. The Panhard 24CT and VW Karmann Ghia offered a quirky yet stylish alternative for image-conscious mid-'60s motorists, but which wins today?

In the world of contemporary car design, certain ideas and formulae have been indoctrinated as 'the right way of doing things'. Today's compact mass-produced models almost invariably adopt a transverse, water-cooled engine driving the front wheels, so it's a natural progression ~ dictated by economies of scale ~ that any coupé derivative will follow the same pattern.

Back in the mid-'60s, though,

two European firms ~ founding-father Panhard and relative newcomer Volkswagen ~ were stubbornly shunning mainstream expectations. In so doing, they produced a pair of intriguing designs that are almost obstinately different from the crowd.

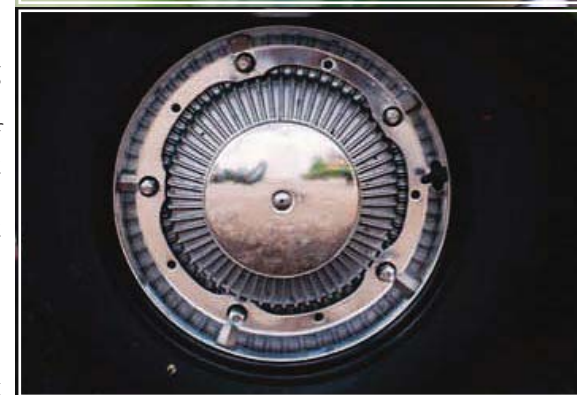
There is a fascinating convergence in thinking between the two. Occupying a near-identical footprint on the road, they both embraced aircooled horizontally opposed power units and running gear from small family saloons. Performance was perhaps secondary to looks ~ nobody ever bought a 24CT or a Karmann Ghia to smoke the tyres ~ but, to paraphrase a Rolls-Royce idiom that served so well in less vulgar times, it is adequate. Yet for all the cars' similar-

ities, the way in which that performance is achieved ~ indeed, the whole ethos of the two vehicles ~ could hardly be more different.

Where our French contender relies on a sophisticated, highly strung 848cc flat-twin pulling at the front, its German rival employs a lazy 1,192cc flat-four pushing from the back. And where one enjoyed an illustrious, 19-year career ~ helping its constructor on the road to global dominance ~ the other fizzled out after just four years, its once-proud maker starved of investment by an unsympathetic parent.

The less well known of our pairing, of course, is the Panhard. Unveiled to the press in Versailles on 24 June 1963 ~ fittingly, the day after that year's Le Mans 24 Hours ~ the car's name paid homage to a string of class wins at La Sarthe. It was the swansong of a long line of models from one of the oldest motor manufacturers. The final car to wear the Panhard et Levassor name, it is an endearingly enigmatic machine that today only the keenest of enthusiasts will recognise.

Its origins can be traced back to a flat-twin, front-drive economy concept of the early 1940s. Known as VP [or Voiture Populaire], the design would morph into the 610cc, aluminium-bodied Dyna X of 1947, which in



Top to bottom: slim pillars ensure superb visibility in 24CT; wraparound lights are a modern touch; super-rare early wheel showing finned drum looks superb but brakes were upgraded to all-round discs from '1965.

Air-Cooled Cool



Sharing the PL17's mechanicals, the 24 series was conceived to fill a niche in an increasingly prosperous market and ~ of equal importance ~ to avoid any overlap with owner Citroën's range.

The Double Chevron had acquired a 25% stake in Panhard in 1955, which increased to 100% by '1965. The new model was offered as a long-wheel-base Berlina or a short-wheel-base Coupé, with the standard 37.3kW engine or the high-performance 44.8kW Tigre unit. Panhard was restricted to using existing running gear to contain costs and the result was an appealing small car that is wonderfully and determinedly weird in a way that only the French could ever countenance.

If you take outlandish to mean



Oval wheel and well-stocked dash. Big seats are really comfortable. Heater duct in the 24CT's door trim and red light in the armrest.

turn would give way to the bulbous Dyna Z of 1954 and the similarly styled but steel-bodied PL17 of 1959.

'Looking or sounding bizarre or unfamiliar', I can think of few more fitting adjectives to describe this extraordinary vehicle. You like to embrace the unusual and stand out from the crowd? You lean towards the eccentric? This is the car for you.

Nothing rejects the mainstream with such uncompromised zeal: a Citroën DS is mere titivation compared to this hardcore device.

Cast your eyes over the slippery Louis Bionier-penned skin. From the covered headlamps ~ they pre-date the lookalike units that would adorn the DS from 1967 ~ to the outboard finned aluminium brake drums that double as the wheel centres, the avant garde shape represents the mid-century school of futuristic at its very best. There's logic

to that design, though. The finned drums aid cooling while reducing unsprung mass. Then there's the bizarre clap-hands wipers that flap across the screen in a seemingly random yet truly hypnotic dance. This beguiling, diminutive machine turns heads wherever it goes.

The Volkswagen, too, draws attention but for rather different reasons. Put simply, it is an achingly pretty thing. As instantly familiar as the Panhard is mysteriously alien, the Type 14 Karmann Ghia took the platform and running gear of the Beetle and mated that car's proven durability to a seamlessly beautiful body.

The idea of producing a sleek new model on the VW base was a long-held dream of German coachbuilder [and father of the Beetle cabriolet] Wil-

helm Karmann, although it materialised only when his son and namesake approached Italian carrozzeria Ghia to produce a prototype. Depending on who you ask, the car was styled by Mario Boano or Virgil Exner, but whoever was responsible for this amalgam



Air-Cooled Cool



of delectable curves, it seduces with an effortless ability.

Unsurprisingly, when Volkswagen managing director Heinz Nordhoff was shown

the finished prototype, he readily agreed to put the model into production. Wolfsburg would provide the rolling chassis, Karmann would build the bodies at its factory in Osnabrück, and VW dealers would sell the finished product.

Unveiled at the Kasino Hotel in Westfalen on 14 July 1955, the Karmann Ghia rapidly became a strong seller and was produced to the tune of 444,300 examples between 1955 and 1974, with a convertible version offered from 1957. By way of comparison, a meagre 28,651 Panhard 24s left the Paris factory between 1963 and 1967.

To anyone who has ever piloted a Beetle, the interior of the Karmann Ghia will be a familiar environment. The subtly

Floorhinged pedals are pure Beetle ~ as is the familiar clunk when changing gear. Simple fascia with only three gauges.

wider platform places the seats further outboard compared to the Wolfsburg saloon, making the floor-hinged pedals feel even more offset than in the bug, but the cockpit is otherwise similar. It's comfortable and inviting and, to its credit, you soon forget your contorted lower limbs.

The simple, body-coloured metal fascia provides the driver with a few odd knobs and switches, plus minimal instrumentation. It features a large, chrome-rimmed VDO speedometer and clock sandwiching a smaller fuel gauge, and that's it. There is a refreshing austerity to the design, and certainly no pretence of it being a sports car, which is fine by me. This is a Beetle in a party frock, after all, not a cut-price Porsche, so you



Period-style BRM alloys on 'our' car; rear lights evolved over the years, with this type used from 1959-1969;

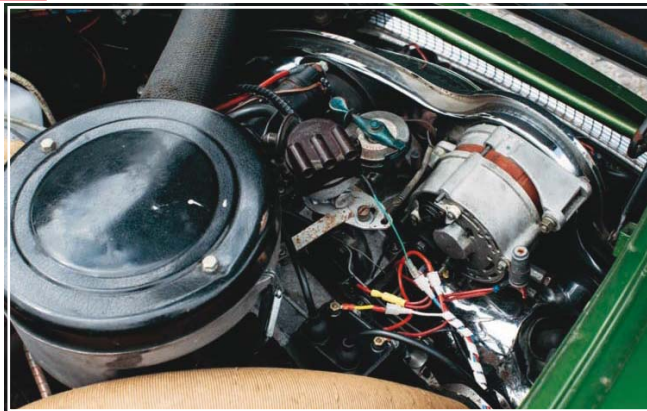
Gorgeous profile with minimal brightwork, but sloping roof means less headroom for rear passengers. [Ed. Not too sure that if was driving a Karmann Ghia I would be giving that much thought to the rear seat passengers.



Air-Cooled Cool

won't find anything as superfluous as a rev counter or an oil-pressure gauge. What you do get is understated and beautifully crafted. From the vast white Bakelite wheel ~ typical of West German designs of this era ~ to the frameless windows and delicate winders, it's a pleasant and evocative place to be, although the architecture and furnishings unsurprisingly feel rather more 1950s than '60s.

Climb down into the low-slung cabin of the Panhard and, beginning with the big squashy chairs, the ambience is that of a sporting coupé. The matt-black fascia boasts a broad range of Jaeger dials, the large hooded



Sharp-edged Panhard meets curvy VW.

speedo and rev counter [calibrated to a heady 8,500 rpm] flanked by a fuel gauge to the left and ammeter to the right, with a clock taking centre stage.

In the inimitable French fashion, the switchgear ~ far more



of it than there is in the VW ~ is scattered haphazardly across the dash. A seemingly random array of unlabelled rockers plus a pair of oddly angled stalks control most functions, while a couple of additional knobs lurk beneath the thin-rimmed oval wheel to add to the confusion. It pays scant regard to ergonomics, but the fascia lends the Panhard the feel of a glamorous GT. Lovely details abound, from the clever rotary dial that controls heating [ducts running through the doors channel warm air to the rear screen for demisting], to the red warning lights integrated into the trailing edge of the armrests. The 24CT feels upmarket and sophisticated. Until, that is, you fire up the engine.

Such a novel, wind-cheating shape looks as if it should house a gurgling, rasping twin-cam 'four' or even a silky little 'six', so when the feisty Louis Delagarde-designed flat-twin clatters into life, it comes as a rude shock. With

its lightweight alloy construction, roller-bearing crankshaft and non-detachable hemispherical heads housing valves operated by tiny torsion bars, the Panhard's engine was born of the most noble engineering, but it is no paragon of refinement at tickover.

Alongside the French motor, the Volkswagen's flat-four appears a bit lacklustre with little to commend it to scholars of alternative thinking, but the lightly stressed unit feels unburstable. It also wins hands down at low revs.

Plant your right foot in the Panhard and your initial impression will be one of disappointment. At first it feels uninspiring and underpowered, barely more than an agricultural anomaly and certainly not the gem that you were expecting. Don't despair, though. Wind the eager flat-twin towards 5,000rpm and the 24CT reveals its true colours. Sounding like a 2CV on steroids, it picks up its skirts and will barrel along with remarkable and deceptively rapid pace.

The Karmann Ghia, in comparison, is far more laid-back in its power delivery and performance. Where the French machine chatters [1,500rpm], growls [3,000rpm] then whines like a turbine [5,000rpm], the German is noticeably quieter, leaving the characteristic rasp of the flat-four in its wake. The

22.4kW 1,192cc 'four' may lack poke but it feels utterly unburstable and has better low-down torque than the Panhard.



Air-Cooled Cool

fussy, frantic Panhard begs for revs, but the stolid, no-nonsense Volkswagen encourages a leisurely approach, relying on its greater capacity and torque to push you along.

The result is more relaxed, less manic. In the 24CT, you have to keep the crank spinning, stirring the car along with the gearbox. The Karmann Ghia demands far fewer changes ~ each one is accompanied by a distinctive clunk-clonk that Beetle owners will instantly recognise ~ and feels as though it will take you to the end of the earth and back again, but it lacks the Panhard's urgency.

In period, the 24CT was praised for its chuckability. You could apparently step the tail out at will and let it drift [the inner rear wheel invariable a couple of inches off the ground], bringing it back under control just as easily. That's not something you would be inclined to try in the rear-engined VW, but Autocar's testers actually found that it was eminently controllable, and far



Karmann Ghia also came as a chic cabriolet. A soft-top was proposed for the 24CT which was launched in Versailles.

from the wayward tail-snapper that you might expect. In any case, at the sort of speeds most classic owners will stick to, both

JOHN PASSFIELD

'I was working as a milkman and spotted it in a customer's garage,' says Passfield who has owned his 24CT for 30 years, having fallen for the model after seeing one at a Citroën event. 'I asked him several times if he would sell the car but the answer was always no until, in 1981, he emigrated to Portugal. I love its shape, comfort and individuality. Plus, it attracts a lot of attention: we were once stopped by the police so that they could ask what it was. I've done a fair bit to it over the years and, in 2014, a friend, Pete Baxter, helped me to fix some rust and re-sprayed it. The colour is a Chrysler one called Grasshopper Green, and I get lots of comments on how much it suits the Panhard. I'm proud to own a car that is so different and that was the last of the line from an innovative maker. In the '80s, I also ran a PL17 as an everyday car and have had a 2CV4 and an Isetta, but would never sell the 24CT.'



weighting up noticeably through bends, while the Volkswagen also provides far superior braking. The Panhard's finned drums look lovely, but they were regularly criticised in period road-test reports and gave way in 1965 to an improved four-wheel disc set-up.

cars feel utterly benign in their manners. The German car does offer lighter steering, though, the wheel of the front-drive Panhard

JOSEPH DENNE

'The Ghia had been a favourite of mine for many years,' says Denne, CEO of a London-based technology firm. 'It was the aesthetics that I fell in love with. It took me several years to find a car meeting my criteria ~ 1962-1969, RHD, rust-free and as original as possible ~ but the wait was worth it. I found her in Guernsey in 2014, in one of the largest and most diverse collections I've ever seen. I've had the engine out to be cleaned, but she is otherwise exactly as found. Soon after buying her we drove to Wales, which took in every type of road and some stunning scenery. It was the only time she's been out in the wet, albeit unexpectedly, when we were caught in a snowstorm! We've since been as far as Cornwall in the south and Argyll in the north. The Ghia is the most comfortable car I've ever been in and driving it is totally relaxing. It forces a more considered pace, taking you out of the day-to-day rush.'

After spending a day with these delightfully offbeat designs, I'm torn between the two. As a practical proposition, the Karmann Ghia wins hands down and so its commercial success is more than justified. It's not particularly quick, although it's a delightful thing and is bestowed with genuine beauty. It really is gorgeous and I could never tire of its voluptuous curves.

But it's a travesty ~ if not a surprise ~ that so few Panhards found buyers. It was an expensive oddity in the UK ~ thanks to import duty, in 1964 it cost £200 more than a Big Healey! ~ but, with greater investment from Citroën, it could surely have achieved greatness.

What we are witnessing here

Air-Cooled Cool

is the handing over of the baton from one generation to the next: the death throes of the world's first series motor manufacturer, alongside the eager newcomer that was carefully eyeing up the global market. Which car would I take home? In a sense, they complement each other rather well.

The Panhard is perfect for flashing along routes nationales, where full advantage can be made of its admirably high cruising speed. But when the traffic builds up, give me the more user-friendly Volkswagen. With

its greater flexibility and lighter steering, it would make far more sense to city dwellers than the peaky Panhard, which would struggle to maintain its dignity. Ultimately, though, I dearly want both.

Thanks to John Passfield, Panhard et Levassor Club GB; Joseph Denne, Karmann Ghia OC. This article originally appeared on the website <https://drive-my.com/> who were contacted to seek their permission to re-publish. No reply was received. The article was written by Malcolm Thorne with photography by Malcolm Griffiths.

TECHNICAL DATA	PANHARD 24CT	VW KARMANN GHIA
Sold/Number Built	1964-'67/28,651	1955-'74/444,300
Construction	Tubular steel chassis, steel body	Steel platform chassis, separate steel body
Engine	All-alloy, air-cooled, OHV, 848cc flat-twin	Alloy crankcase/head, iron-barrel, air-cooled, OHV, 1,192cc flat-four
Max Power	44.8kW @ 5,800rpm	22.4kW @ 3,700rpm
Max Torque	73.5Nm @ 2,600rpm	76.2Nm @ 2,000rpm
Transmission	Four-speed manual, FWD	Four-speed manual, RWD
Suspension	Front independent transverse leaf springs rear dead axle, torsion bars, Panhard rod; telescopic dampers F/R	Transverse torsion bars, parallel trailing arms, telescopics; front anti-roll bar
Steering	Rack and pinion	Worm and roller
Brakes	Drums all round [discs from '65]	Drums all round
Dimensions		
L×W×H [mm]	4,273×1,916×1,245	4,140×1,630×1,325
Weight [kg]	825	810
Top Speed [kph]	144.8	117.5
Fuel Consumption	6.3L/100km	8.1L/100km
Price New	£1,329 [1964]	£1,010 [1964]
Value Now	£7-12,000	£ 8-25,000

Pan, Pan, Perth

ran well with no smoke or rattles or knocks. It was then decided to strip the car down and begin the restoration.

A few months later Fritz was diagnosed with terminal cancer.

As found! These pictures show the Dyna Z as found by Fritz. The previous owner is shown holding the Owner's Manual to a Panhard PL17. He believed that is what he had. The Dyna Z, sometimes called the PL16, was replaced by the PL17. Why 17? It is the sum of its French fiscal horsepower [5CV], the number of people it could carry [6] and its claimed fuel consumption [6L/100 km]=17! So, calling the Z a PL16 makes no sense at all!

In 2012 a friend of mine bought a 1959 Panhard Dyna Z16. He was like me a Citroën enthusiast. I had never seen a Panhard of any model before.

It was a country car from the South West of Western Australia. When it arrived in Perth and I had a look at it, it looked in rough condition but was complete, it was last licenced for the road in 1977.

Fritz that was my friend's name and another friend Johnny Mac who is a mechanic got the engine running, I was told it



Pan, Pan, Perth



1



2



3



4



5



6



7



8



9



10

- 1] The accumulated dirt from inside the sills.
 2] The remains of the rat's nest after it had been removed.
 3 and 4] The biggest problem when you buy a car in boxes is being sure everything is actually there!
 5] The engine, after having being put back together.
 6] Another view of the body; panels removed and awaiting work to commence.

- 7] Undercoated and 'just' needing a top-coat.
 8] Les chose a shade of French Racing Blue. Perhaps not an 'original' colour, but it appears to work well.
 9] Just one of the areas of the floor that needed attention due to rust.
 10] The interior stripped to the bare essentials.

Pan, Pan, Perth

He told me he would give me the car on the condition that I would restore it before he died. Three months later he died.

At that time I did not have a workshop to work on the car, so I stored it in my daughter's shed for nearly two years. Another friend Martin, who is a collector of vintage cars and a restorer, had space in one of his workshops. So the Panhard was ready for restoration.

I must mention that when the car was stripped down none of the parts were boxed or tagged and when I went to get the car everything was strewn all over the floor and I thought this is going to be a nightmare. Do I really want to restore another

old car?

Of course I do!

Having a good hard look at this car, I thought this is something different. I decided to get as much information as I could: buying as many books on this car and joining the US club who have been very helpful. That was in 2015.

Cutting out the rust, cleaning everything and of course finding a rat's nest in the rear cross member with rags, fruit stones, paper and lots more and the carcass of a rat, I thought at first maybe someone who worked on the car had left some rags behind, not so.

After cutting out the rust, welding new metal, filling and

priming, rubbing down and finally painting the car in a nice French blue. It is not such a sight for sore eyes.

The next step is the engine, gearbox, clutch. It's like that tired old story 'yes the engine runs well, you don't have to touch it', only to find later...

All it needs to finish it is... a new brake system, one front brake was missing, a rewire plus lights. I think I can save some of the upholstery, patch it and then paint it with vinyl paint.

Oh, and five new tyres.

One of the jobs I am not looking forward to is cleaning and polishing all the brightwork.

Over the years of working on this car I keep promising myself

'Finished by Christmas'. Alas as we all know Christmas comes and goes.

I have worked on this car in a casual way so I could enjoy the work, which I have. Of course I really do look forward to the day I can drive it.

Leslie Farrar

PS: Finished by Christmas. 😊

Editor's Note: As you will be able to tell some of the older photos which accompany this article are scans from old photos while others are more recently taken digital images. Unfortunately, the scanned images reflect the age of the photos from which they have been taken.



A French Connection...

*...or why Australians
drove Holdens not
Hartnetts.*

When visiting the National Motor Museum in March 2021 club member Peter Lynch came across this Hartnett Pacific car awaiting restoration and was intrigued by its construction. Hartnett cars were built in Melbourne during the early '50s and intended to challenge the market dominance of locally built Holdens.

The Hartnett venture was lead by Sir Laurence Hartnett [Managing Director of General Motors Holden from 1934 to

The rare Hartnett Pacific Tourer awaiting restoration at the National Car Museum [Birdwood SA]. Two door sedans were more common and there was also a three door vanette version.

1947] who played a key role in the introduction of the first Australian built Holden car in 1948. After leaving GMH Hartnett looked for a smaller and more fuel efficient car which would appeal to many Australians unable to afford the £730 [two years average salary] price of the Holden. With strong support from then Prime Minister Ben Chifley he travelled to Europe reviewing the latest vehicles and production methods.

Hartnett's final choice was a technically advanced two door

Engine and front end assembly of the Hartnett. The air cooled 594cc Alpin engine produced a modest 19bhp at 4000rpm into a four speed transmission. Electrics were six volt while the braking system used hydraulic operation for the front drums and mechanical to the rear. Petrol was gravity fed from a 24 litre tank on the firewall to a Solex down-draft carburetor.

sedan developed by French engineer Jean Grégoire in great secrecy during World War II. This was known as the 'Aluminum Francais – Grégoire' [AF-G] design and made extensive use of aluminium to produce a four seater car weighing under 400kg, capable of 100kph and excellent fuel economy. It had a chassis-body frame comprising six light alloy castings bolted together, rack and pinion steering, a 594cc air cooled two-cylinder engine and four-speed gearbox driving the front wheels via Grégoire's patented Tracta joints. Independent suspension was fitted all round with traverse leaf springs at the front and variable rate coils [another Grégoire patent] at the rear.

The AF-G design had attracted great interest from other manufacturers such as Renault, Citroën, Peugeot, Simca,

Panhard and Kendall [UK] with only the latter reaching formal agreement with Grégoire for production. Kendall Cars [at Grantham near Nottingham] purchased jigs and tooling but never went into mass production so Hartnett was able to buy these at a discounted price. He also reached agreement with FM Aspin & Co of Bury and Meadows of Wolverhampton to supply engines and transmissions respectively. At the time, importing components from anywhere outside the British Commonwealth would have incurred crippling tariffs.

By 1951 things seemed to be coming together. The Hart-

Hartnett badged AF-G car also on display at Birdwood. This is understood to be one of the four aluminum bodied prototypes built by Grégoire in the late '40s and has more attractive styling than the production Hartnett cars.



A French Connection...

nett Motor Company Ltd had been launched, a factory established at Seaford near Melbourne, components were arriving from England, agents had been appointed and publicity was under way to attract buyers. Ambitious plans were for a sale price of £450 and production volumes up to 10,000 cars per annum.

However Hartnett had decided to use steel rather than aluminum body panels, simplified the shape somewhat and contracted Commonwealth Engineering Company of Dandenong [Comeng] to press these panels. Mass producing car panels is a specialised process which requires huge presses, carefully designed dies and considerable skill. Comeng had experience in other areas of heavy engineering but failed to deliver the panels in time.

Hartnett ended up using other contractors and hand built panels to produce around 120 cars but bills were mounting and the Hartnett Car Company ended in bankruptcy in 1956. It is believed around 500 sets of components had been received however the fate of these is unknown.

Hartnett was down but not out. A court settlement was eventually reached with Comeng paying damages of £37,000 for failure to meet contract obligations.



1] Few Hartnett cars have survived into preservation. Terry Dowel of Beaconsfield has a nicely restored 1951 coupe and was of great assistance in the preparation of this article.

2] Bolted joints were used to join the six castings of the Hartnett chassis together. This photo shows the firewall to side member connection.

3] Interior photo of Terry's car showing the simple dash, floor mounted gearshift and pistol grip handbrake to the right of the steering column.

4] Rear suspension showing the tubular cross member, brake linkages and horizontally mounted coil springs under tension. Each rear wheel was carried on a trailing arm with the spring following it on a different radius providing more resistance as load increased. The complex chassis sections were cast from Alpax, an aluminum / silicon alloy developed by Dr Aldar Pacz during the 1920s.

5] Front suspension showing traverse leaf springs, driveshafts and lever action shock absorbers.

6] Pete found clues to the location of the Hartnett factory at Seaford but not the actual building.



A French Connection...

He went on to establish an operation in Brisbane to assemble the Lloyd 600 car, which was sold here between 1958 and 1961 as the 'Lloyd Hartnett'. He was later involved in the importation of Nissan cars, knighted in 1967 for his contribution to the automotive industry and passed away in 1986 at age 87.

There are obvious similarities between the AF-G and Citroën's 2CV. Grégoire, with backing from his friend Pierre Fenaille, had been producing front wheel drive cars under the Tracta nameplate since 1927 and was a highly regarded

engineer. He was apparently offered a job by Citroën in 1934 but turned it down. Citroën Vice-President Pierre Boulanger, who took the 2CV idea from concept to mass production, was more pragmatic, making many changes to keep production and ownership costs down.

Bean counters and customers had the final say, with over 4million 2CVs sold compared with around 200 under the Tracta brand and only 120 AF-G [Hartnett] cars.

This article by Pete Lynch, with photos by Mary Lynch., was written for 'Front Drive'.

For Sale



UNLESS OTHERWISE STATED ALL PRICES SHOWN EXCLUDE RELEVANT GOVERNMENT TAXES AND CHARGES.

1924 Citroën 5CV

I purchased the car in 1970 when it was living in a deserted fowl shed. The owner had been given the car by his spinster aunties who had owned it from new. The car was was totally complete ~ nothing missing. I took the car home, changed the plugs, changed the oil and filled the tank with fuel. Two or three turns on the crank handle and it fired into life. The question was should I restore the car or leave it in its basically good original state [there was some surface rust]. It has undergone a total rebuild including paint, new hood, new steering wheel and radiator badge, new leather upholstery with the original door pockets with the embossed leather Citroën logo and new beaded edge tyres. I have a lot of books on early Citroëns and some 5CV parts which I am happy to sell with the car. I am asking \$25,000 or near offer. By arrangement I could deliver the car. Registration is 49146 [SA registered]. Contact Richard Fewster; richard.fewster@arran.com.au or 0418 820 209 [D02/01]

**SPECIALISTS IN SUPPLY
OF UNIQUE AND
HARD TO FIND TYRES**



**STUCKEY
TYRE
SERVICE**

RACING SINCE 1972



828 Sydney Road Brunswick Victoria 3056 Phone (03) 9386 5331 www.stuckey.com.au

Looking Forward

*Next issue of 'Front Drive...
Traction Avant takes centre stage. Was this
the car responsible for bankrupting Citroën
or the car that created a legend?*

Why not share your Traction stories with other members? Send your contribution, no matter how brief, to Leigh Miles at editor@citroendclassic.org.au by Wednesday, September 15. Got a picture that merits sharing? Send it as well.



CITROËN CLASSIC OWNERS CLUB OF AUSTRALIA

Australia's National Citroën Car Club

