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Progress:

The monthly journal of the
North Shore
Vintage and Classic Car Club
November 2024

What is this?



The gears with *double chevrons* that reputedly were the basis of the Citroën logo

The origin of the logo may be traced back to a trip made by the 22-year-old André Citroën to Łódź in Poland, where he discovered an innovative design for a chevron-shaped gear used in milling. He bought the patent for its application in steel. Mechanically a gear with helical teeth produces an axial force. By adding a second helical gear in opposition, this force is cancelled. The two chevrons of the logo represent the intermeshing contact of the two. Early Citroën cars used a herringbone bevel gear final drive in the rear axle.¹

The presentation of the logo has evolved over time. Before the war, it was rendered in yellow on a blue background. After the war, the chevrons became more subtle herringbones, usually on a white background. With the company searching for a new image during the 1980s, the

Hello all,

This story took my fancy as my first car was an Austin 35 .

<https://www.msn.com/en-nz/news/other/31-small-european-classic-cars/ss-AA1rUqDf?ocid=widgetonlockscreenwin10&cvid=bfcadd1746d6409081e23c735c7458e5&ei=30#image=1>

It has left me wondering who else in the club may have had one of these cars as their first car. My story is I was brought up on a farm up north, so of course learnt to drive tractors and the old Bedford truck (doing the rounds picking up the hay bales). got my license in an old Morris Commercial van (believe they were the old mail vans used in England) my father chopped down into a pickup, chain for door .It was a wet day when I got my licence, the traffic cop took one look at it and asked if was Rego and wof, which it was. He said go down the end of the street turn around go up other end and come back , i will watch from here.

Not only did I get my licence I got my bike license as well. Those days you could just get it when you got your car license.

My first car was this Austin A 35. Don't you love the paint job. My father drove to Auckland with grandad and my brother



who the car was originally for to pick it up which was no mean feat in those days. Later he wanted a Beach Buggy so I bought the car off him and Dad had painted the Austin this color. Fond memories of learning auto electrics trying to use house wiring to wire something new into car and wondering why there was smoke. The rattly gearbox, the indicator switch up on the dash ,but I was in heaven. My mates had transport and not only that but someone who was big enough to go into the bottle store to get our supplies as we hooned the

roads from Okaihau to Kaikohe, Kerikeri and back again. Alas we all want upgrades in our lives and last seen this was traded in on a Morris 1100 in Whangarei another story. Brotherly love , I ended up selling the Morris back to the brother who had bought the beach buggy but not till after I cooked the motor on my way to work in Kaikohe going up Okaihau hill. Well by time I got to work it was pretty much cooked, and it was given a patch up job before being sold to him. Though one learns from on hand experiences and some of us are still learning.

Tell me your story of your first car. So we can share in our magazine. I am sure there will be some great stories out there worth recording.

Thanks to all contributors for your bits and pieces, appreciated by all.

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The **Bi-Autogo** was a prototype American cyclecar designed and built by Detroit artist and engineer James Scripps Booth between 1908 and 1912. It featured two large wooden-spoked wheels, retractable outrigger wheels, and a 45 hp V8 engine—the first of its kind from a Detroit company. Only one was built, and it resides in the Detroit Historical Society collection, having been restored in 2017 by Mobsteel. Booth, a passionate figure in mechanical engineering and automotive design, was known for inventing many automotive features. He

founded the Scripps-Booth Cyclecar Company and later the Scripps-Booth Company, producing luxurious light cars for wealthy clients.

Although larger models were introduced against his wishes, leading to his resignation, Booth continued to innovate, designing the "Da Vinci" and "Da Vinci Pup," and teaching automobile mechanics during WWII. His significant designs are displayed in prestigious museums.

Chairman's Report: John Higham.

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Hello Members,

Another month has flown by and Christmas is coming, some shops are already gearing up with Christmas themes. And so too are we. On Sunday 22 December 2024 we will be holding our special, Christmas, end of year get together at the Branch. It would be great to see a big turnout of members and their vehicles. Perhaps it would be an occasion to bring along a vehicle that hasn't been out of the shed lately. Get some variety and nostalgia for fellow members to look over and have a discussion about. So that's the challenge, bring along something that hasn't been seen out and about for a while.

Have you ever thought about how difficult it is for the Club Captain to bring forward interesting places to visit, or hold a run to? John Castle puts a lot of effort into doing just that, and sometimes the response from members is a little disappointing. The bus trip to the Hamilton Gardens went ahead even though the numbers were down and cancellation was contemplated. Do you have any suggestions of places of interest that we could visit? Maybe we have been before, some years ago. But we have many newer members that might not have had the opportunity to have visited some of those. Let John know any ideas.

We continue to get requests for visits of members and vehicles to retirement villages and occasionally schools. Sometimes it is just too difficult to visit villages for practical reasons of where to park and the length of time they would like us to be there. Sunnynook (Primary) School recently had a six class project to study the changes in technology and had set up a mini museum to show examples. They asked us for some representative vehicles and were presented with a 1912 Model T Ford, 1929 Model A Ford roadster, the Branch 1935 Chev fire engine and a 1947 Ford Mercury sedan. Four decades of motoring. The eldest of the pupils



checking out the hardware was, say, nine years old, that is, born in 2015! One such young boy

Chairman's Report: John Higham.

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sided up to me, and in a serious tone remarked, "no seat belts".

We intend having a working bee at the Branch 30 November 2024 to do a few jobs. Please keep the day free!

John Higham

This 1959 Hillman Minx sedan has more than a little bit of 1953 Studebaker in its lines, The 1959 Hillman Minx sedan is a fascinating blend of British and American designer's , thanks to its collaboration with Raymond Loewy Associates. Rootes Group aimed to capture the American market with its bold "Audax" style. This Minx was a smaller car by American standards but featured modern independent suspension at the front and recirculating ball steering introduced in 1959. It received annual facelifts, reflecting American trends, and competed directly with popular imports like the Renault Dauphine, priced at \$1849.

Available in various versions: four-door sedan, station wagon, convertible, and two-door wagon. In 1959, the Hillman Minx saw an upgrade with its 1,494 cc OHV four engine, producing 52.5 hp. Standard was a four-speed manual with synchromesh; semi-automatic was optional, and a fully automatic arrived in 1961. Improvements included a lower rear axle ratio and better soundproofing, making it more pleasant for highway cruising, with speeds topping 80 mph

During an endurance test in March 1959, a Hillman Minx sedan covered 25,000 kilometers on rough pavement, only needing minor replacements like shock absorbers and a few other parts, a testament to its durability. Despite selling over 27,000 units in the U.S. in 1958, it lagged Renault and Volkswagen in popularity. The Minx was known for its bold design and modern engineering, making it a classic in automotive history.

<https://www.hemmings.com/stories/find-of-the-day-britains-miniature-studebaker-the-hillman-minx/> supplied by B.Skinner



NOTES OF COMMITTEE MEETING 29 October 2024

New Members: Graeme Comer

Notes: Outside sandblasting - The question of outside sandblasting was discussed by the committee. The committee voted against the proposal for outside sandblasting and an article is to be placed in the Progress magazine.

Working Bee on Saturday morning 30 November 2024 was discussed. A list of jobs to be done is being prepared along with the necessary equipment that is required to undertake the tasks.

Bedford situation – A large majority of those who answered the survey were in favour of having the truck properly repaired. When we as a committee are ready, we will finalise the necessary work along with the costings. It was noted that some vehicles acquired by the club in the past have had major issues regarding licensing, ownership and now certification.

Wolseley engine to go on Trademe

Storage shed – Leasing agreements are currently being circulated and signed in relation to those using the Storage Shed.



The Michigan Madman!

E.J. Potter, famously known as the "Michigan Madman," was a legendary motorcycle daredevil and mechanical genius. Born in Ithaca, Michigan, Potter earned his nickname for building and riding drag bikes powered by V8 car engines in the 1960s and '70s. His most famous creation was the "Widowmaker," a series of motorcycles fitted with 350- and 454-cubic-inch Chevy V8 engines, designed purely for speed. These bikes, devoid of clutches or transmissions, were controlled by nothing but

Potter's nerve and the throttle. Potter set numerous drag racing records, becoming famous for his outrageous stunts and fearless riding style. His death-defying runs, some clocking over 170 mph, cemented his place as a motorsports legend. E.J. Potter was a symbol of American ingenuity, pushing the limits of both machines and the human spirit.

Upcoming Events: Events through to April 2024.

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Future Events: **Coming Club Events**

5th November (Tuesday) – Visit to the club at 10.30am from the Sands Retirement Village approx. 12 people. They will bring nibbles and we will charge a gold coin for tea & coffee.

17th November – There will be a local run to Devonport Area, mildly competitive, and I have arranged an escorted visit by John Hyde to historic Fort Takapuna at Narrow Neck, picnic lunch at the Fort (if raining) and later a tour of the tugboat “Daldy” located at Devonport Wharf for those that wish to visit. Flyer to come.

30th November - Saturday morning cleanup at the Club details to follow.

19th December – Final Thursday coffee morning session for the Year with some Festive eats.

22nd December – NSVCC club members only. Xmas special - BBQ and Car show and we need to see as many vintage & classics present on the day. Flyer to come.

No club events in January, Club house will reopen on Thursday 9th January 2025



16th February – Posh picnic Chris Field organising.

22nd March – Club public open day and BBQ etc

20th April - A “Zephyr” garage run and picnic at Leigh

May – Run to Mangawhai, places of interest and including a visit to see the schooner “Daring” located next door to the excellent Mangawhai Museum plus a Pub lunch.

Other Events; Takapuna Rocks Saturday 9th November classic and other car display, Registration \$15 per vehicle book on www.takapunarocks.co.nz

Waikato VCC Swapmeet at Cambridge Sunday 17th November

Ellerslie Intermarque Concours D'Elegance Sunday 9th February

Auckland Brit & Euro Classic Car Show Sunday 2nd March 2025 10.00am – 3.00pm

If anyone is aware of any other local car shows, let John Castle know.

Regular Diary

Committee Meetings: Last Monday of every month, 6.00pm. Observers always welcome.

Tuesday Mornings: Restoration shed open. Coffee and tea at 10am.

Wednesday Evenings: Club night. Coffee, tea and banter, 7.30pm.

Thursday Mornings: All sheds open. Why not come along and explore the parts shed? Fantastic experience, even if you don't need any bits! Coffee, tea, cakes and savouries at 10.30am. Gold coin donation please.

...And remember...International Festival of Historic Motoring: Nelson 15-21 March 2026

Upcoming Events: Events through to April 2024.

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Future

Christmas



Events:

Orewa Parade

Saturday 23rd November
Meet at Alice Avenue, around 3.00pm

The NSVCC support Couldrey House at the Santa Parade as a thank you for being the only car club allowed to picnic in the Couldrey House garden. It would be great to see as many NSVCC cars in the parade as possible

Please let Richard Bampton know if you will be attending.

09 947 3042

angelarichard@hotmail.com

Eastern Bay of Plenty VCC 50th Celebration and Summer Rally



Hi, we are celebrating the club turning fifty this year. We are holding the celebration in conjunction with the East Coast rally being held on the first of February 2025.

We hope you can celebrate with us. If there are any members who would like to come but attend our evening activities only, please let me know. The evening meal will be held at the Paroa Rugby club rooms, Huna Road. The meal is \$40.00 pp. I would need to know the numbers of those wishing to have a meal but are not attending the rally.

If I could know by the 15th of January that would be great. Also, a commemorative plaque is available for those that want one. If entrants could indicate on the entry form as it was a late addition, and Joy was having difficulty adjusting the form.

Kind Regards Margaret Leaming

Upcoming Events: Events through to April 2024.

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SPEED EVENT TRAINING SEMINAR



Members who participate or wish to enjoy VCC Racing and VCC Hill Climb events and wish to become more involved with these special VCC events

We are offering a Training Seminar in the positions of

EVENT (SPEED) STEWARD

CLERK OF COURSE

SCRUTINEER

This training seminar will be held at our North Shore Clubrooms on Sunday 10th November @ 9.30 am

Please note these 3 comprehensive seminars will take several hours

Neil Beckenham 021 588 536 registrar@vcc.org.nz

OR

Ray Sanders 021 632 563 speedsteward@vcc.org



LOOKING FORWARD TO SEEING YOU THERE

Future Events:

ART DECO FESTIVAL NAPIER

Hi everyone,

Entries are now open for the Art Deco 2025 rally and associated events. The entry form is here: [Art Deco 2025 Entry Form](#)

As with previous years, we expect the Thursday night dinner to fill up fast. We have limited capacity at our clubrooms (the dinner venue), so make sure you get your entry in quickly so you don't miss out.

All payment details are on the entry form. You will get an automatic email as soon as you send in your entry, but I won't be sending out your rally number and confirmation of your payment until after Labour Weekend, as I am currently out of the country for a couple of weeks.

In the meantime, for any general enquiries regarding the entry form please contact our Treasurer, Paul Eager at hbdecorally@gmail.com

Thanks for your support.

Regards,

Larry Morgan

Event Secretary

Arnold Von Zon with his winning 1942 WLA Harley at the Auckland Motorbike show

Supplied by Gavin Welch



A year ago, It all went wrong when the our club decided to incorporate the Hamilton Gardens Tour with a visit to two Waikato car museums and the Cambridge Vintage Car club. Petrol heads won the day, and the ladies part of the day was postponed due to time restrictions.



That cramming of four events was a tall order from the get-go.

This dedicated "Hamilton Garden Tour" only event was a truly remarkable day. We were chauffeured down in a luxury bus under the capable hands of Peter L.



These gardens are the only gardens in the world where so many garden themes are in one area. A unique experience.

Hamilton Gardens is a public garden park in the south of Hamilton owned and managed by Hamilton City Council. The 54-hectare park is based on the banks of the Waikato River and includes enclosed gardens, open lawns, a lake, a nursery, and a convention Centre.



Each garden is themed e.g. Ancient Egyptian, Indian, Italian Renaissance, Chinese Scholar, Japanese Zen, English flower, Kathrene Mansfield Garden party theme, Māori horticulture, Tudor, kitchen garden, etc., etc.

It's like stepping into a very large room with each garden totally separated from any other. Well placed seats give visitors time to soak up the ambiance.



A tremendous amount of work and thought has gone into each themed garden and the plantings are rotated to have blooms coming in all seasons. The different smells from all the plantings are an olfactory overload.

A truly mind-boggling experience and one I personally will be keen to revisit.

Thanks to John C for persevering and making this trip a memorable one.

If you ever get the chance to visit -take it.

The Hamilton Garden Tour.-Gerald.M continued

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Thanks to Gerald M for Item ,photos and Terry Costello for the photos of Hamilton Gardens

Have lens will snap: Captured by Terry Costello.

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Jim repairs the mower shaft



Bruce tidied up the mower bracket



Pete on the drill press



Colin lining the BSA



Tony cutting leather for the BSA seats



Stuart test drives Julie's MGB

THE EAGLE HAS LANDED

After many Thursday visits to the parts shed, slowly, the naked Overland engine was beginning to look reasonably dressed, considering her age. With her fresh coat of two-pack red paint, she was ready for all the extras. What was great was that various members of the team would suggest an idea and we would run with it. The spark plugs were cemented in



and

HT wiring was hooked up to the mag.

Someone found an old gutted out generator which was soon bolted on to the engine. God knows what the rusty seized up fan boss came off, but we soon fashioned a set of blades that fitted. Believe it or not, we had the correct fan belt in stock. Now she was looking like we might even be able to start it.

With Arnold back from his mad bike ride through Europe, and our vehicle inspector

Neil B. hovering in the background, we soon had all the appropriate written documentation completed for its VIC. Yeah, right! She was ready for her final journey.

The construction team, consisting of Coxie, Gerald, Pete, Bill, Arnold and myself, plus a bunch of hangers-on, set out to dig a simple hole, make up some boxing, mix a few stones with some cement, and Bob's your uncle. No, wrong! There was a "down tool", and a site meeting had to be called. Arnold sorted out the



problem and soon had the team all digging furiously - in the same direction this time. The only other hiccup we had was when someone didn't measure the legs of the engine correctly, only to find one was shorter than the rest. Nobody owned up, but Arnold used all his engineering skills and experiences to rectify it by adding five extra washers and the job was completed. That man's a legend.

Finally, I would like to use this space to say thanks to all the “Team” who assisted me with this silly idea in the first place, and in particular to Brendon of “Car Colors” in Albany, who supplied valuable advice and the paint systems. We all agree that this was a load of fun and a catalyst that bought out the true value our special club has to offer.

Thanks, Team. David Lane



JOHNSONXXF-C-12JUN01-MT-MAC

Arlen Ness with a custom bike he calls "Ness Stalgia" inspired by a 1957 Chevrolet. Famed Custom Motorcycle designer Arlen Ness has been building cycles for the past 31 years out of a shop in San Leandro.

The World's Most Expensive Motorcycle

This is the Cyclone Board Track Racer, a 1915 motorcycle that sold for \$520,000 in July 2008 at the inaugural Monterey MidAmerica auctions. Yes, what you see here is The World's Most Expensive Motorcycle. <https://www.bikeexif.com/worlds-most-expensive-motorcycle#:~:text=This%20is%20the%20Cyclone%20Board,The%20World's%20Most%20Expensive%20Motorcycle.>



Thanks to everyone who took time to reply by email or complete the survey form that has been in the clubhouse for 3 or so weeks. Overall, 38 members responded to the survey and a significant percentage, in fact 32 of the 38 respondents were in favour of doing a "Proper Job" and going down the path of fabricating two brand new chassis rails and then retaining the truck after completion.

In order not to spread ourselves too thinly we will focus on the 39 Chevrolet Master and push that over the finishing line prior to starting work on the Bedford.

There will be a huge amount of work on Bedford and if anyone is keen to help then please call in on a Tuesday or Thursday. In broad terms we must strip down the vehicle completely. So that's Rear deck off, Cab off, Engine out, all wiring connections labelled and disconnected, Rear Axle off, steering/front wheels off and the list goes on. Over the next few weeks, we will pull together a project plan to guide us through this mammoth task and allow us to allocate tasks to our volunteers.

Recently we have encountered three huge issues on compliance testing and certification with our project vehicles. We decided to let the Wolseley go. We are nearly there with the Chevrolet but are still encountering extra delays and costs around certification as body, engine and chassis numbering does not match original records held by NZTA. You are all aware of the issues with the Bedford. We have not seriously considered certification and testing of the bus and so there are undoubtedly challenges ahead of us, if we want to use the bus on public roads.

Unfortunately, that's not the end of potential problems as we still have an unregistered Lanchester in the back left corner of the storage garage. There is a growing feeling on the committee that we should not invest any effort in the Lanchester or any other new project unless it is registered or has registration on hold. No doubt this will come to a head over the next few months, and we will be asking the membership for their views in due course.

Stuart Battersby



1934 Ford Brewster Town Car Cabriolet! It's not just a car, it's a piece of art. The Brewster was immortalized in the Cole Porter song, You're the Top and is the only American to ever win the Gold M

They were an after market front end to jazz up your Ford, most wicked front end ever

History-Timeline: Yet another marque that you've never heard about.-Detroit Automobile Company



The Detroit Automobile Company (DAC) was an early American automobile manufacturer founded on August 5, 1899, in Detroit, Michigan. It was the first venture of its kind in Detroit. Automotive mechanic Henry Ford attracted the financial backing of twelve investors, Detroit Mayor William Maybury, William H. Murphy and others. As with many early car ventures, the company floundered, and it was dissolved in January 1901. Twenty vehicles were built and \$86,000 (\$2.61 million in 2019) of investment was lost

Foundation

The company was founded with a paid-up capital of \$15,000 (\$455,490 in 2019). Henry Ford managed the manufacturing plant at 1343 Cass Avenue and Amsterdam in Detroit; initially with no pay until he left his job at the Detroit Edison Company, after which he was given a monthly salary of \$150 (\$4,555 in 2019). He refused to put a car into production until he had perfected it to his satisfaction, infuriating investors who quickly began to lose confidence in Ford's ability to bring a product to market. The company's primary objective was to make a profit for its investors, who had seen the Oldsmobile plant, where the Curved Dash Oldsmobile was built, which was profitable for its owner Samuel Smith.



The company's first product was a gasoline-powered delivery truck engineered by Ford and completed in January 1900. It received favorable coverage in a local newspaper but was not without its flaws; it was slow, heavy, unreliable and complicated to manufacture. Later in life, Ford recalled this period as one that was driven by profit rather than innovation.

A catalog produced by Detroit Automobile Company in 1900 showed, with a cost analysis, that the automobile was cheaper to maintain and operate than a horse and vehicle.¹ Little is known about the company's designs

Detroit Automobile Car Costs

Automobile

Original cost \$1,000 Cost of operating, $\frac{1}{4}$ cents per mile, 25 miles per day \$114, New tires \$100,

History-Timeline: Yet another marque that you've never heard about.-Detroit Automobile Company continued

Repairs \$50, Painting vehicle four times \$100. Total =**\$1,364**

Horse and Vehicle

Original cost, horse, harness and vehicle \$500. The cost of keeping a horse for five years is \$1,200. Shoeing the horse for \$180. Repairs on vehicle, including rubber tires \$150. Repairs on harness, \$10 per year \$50. Painting vehicle four times \$100. Total =**\$2,180**

Demise

The Detroit Automobile Company was reorganized into the Henry Ford Company on November 20, 1901, after Ford gained further backing from investors because of his racing success. It later became the Cadillac Company under the ownership of Henry Leland, who came in subsequently after Ford had left. The factory location for the Detroit Automobile Company is less than a mile away southeast from Mr. Ford's Piquette Avenue Plant, which opened four years later.



The 1952 Hughes Torpedo was a real concept car developed by the Hughes Aircraft Company, founded by Howard Hughes. The car was designed to demonstrate advanced automotive technologies, especially in the areas of safety and aerodynamics ?



1949 Opel Kapitän 2.4 L

This is a luxury car produced by Opel from 1938 to 1970 ,made in several different generations . Known for its elegant design and advanced features, the Kapitän featured a 2.5-liter inline-six engine and a three-speed manual transmission¹. It was available in various body styles, including a 4-door saloon and a 2-door coupe cabriolet. The Kapitän was notable for its unitary body construction and was reintroduced after World War II as Germany's first post-war six-cylinder car.

The Beatles Return Again –Stuart Battersby

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Some more nonsense about the Beatles refitting John 's Gearbox

The Fab Four ride again



So here we are again with John, Paul, George and Ringo as they refit the gearbox on the 1960's Sunbeam. You will recall that the lads removed the gearbox last month and since that time it has been in the workshop for repair.

As a first job, the boys needed to drag the Sunbeam out from the storage shed where it had been stashed. As usual, John was missing. *"He's a real nowhere man, living in his nowhere land"* whispered George. So without John, the other three pulled and pushed the car out of the doorway. Paul, the owner of the Sunbeam said *"You steer, and I'll tow you out."* In fact, *"Baby you can drive my car"*.

Paul hooked up the tow rope and pulled the Sunbeam in reverse up the slope, ready to roll downhill onto the hoist. Handbrake off, tow rope off, as George and Paul pushed the car, steered by Ringo up onto the ramp first time. *"I'm good at this"* said Ringo, *"in fact, they're gonna put me in the movies"*. The three lads were standing around the hoist congratulating themselves on the work so far, when John finally turned up. *"How are you Mr Lennon? You don't look wonderful,"* said Ringo. *"I feel fine"* replied John.

With the Sunbeam up on the hoist and the refurbished gearbox on the floor, John glanced at the height of the car and the gearbox on the ground and slipped into a wistful version of

Some more nonsense about the Beatles refitting John 's Gearbox

Continued

"She's so heavy". Nevertheless, with George and Ringo at the heavy end and Paul at the back the boys lifted the gearbox and offered it to the rear of the engine. It's flippin' heavy" said George. At that point the still hazy Mr Lennon started to sing, *"Boy, you've got to carry that weight..... a long time"*. This annoyed the straining Ringo who grunted, "No we don't. Put some planks under it: you eejit!"

Time for a breather, the gearbox was balanced on planks up at the right height and all that was needed was to engage the drive shaft into the flywheel. Now if you have done this before, you will know how hard it is to manhandle a gearbox into place and get all the splines lined up. After three or four attempts the lads were losing confidence (and energy) but then in the background they heard Paul mumbling *"Jojo left his home in Tucson Arizona, for some California grass. GET BACK! GET BACK! To where you once belonged"*. That seemed to do the trick; the drive shaft, starter cog and bolts magically aligned and the gearbox slid gently into place. "We could write a book about this", said George, just as John pulled out his guitar and whispered, *"Dear or sir or madam, will you read my book....."*.

With the most difficult tasks now finished, the lads moved onto the simpler stuff. I will sort out the prop-shaft and UJs said John. The front bolts fitted easily but the back end was more of a challenge as the bolt holes didn't line up. "I need to turn the shaft through ninety degrees," said John. *"You say you want a revolution?"*, snickered George, as Ringo, in his strongest Scouse accent said *"Number 9. Number. Number 9"*. The simplest way to align the holes, was to release the handbrake, knock the car out of gear and gently roll the car back and forth, turning the differential input flange until the holes aligned with those on the prop shaft. *"Let me roll it to you!"* sang Paul.

The last difficult job was re-fitting the rear engine mount. The problem here was pushing the bolts up far enough to engage with the threads. "How are we gonna do this?" Wondered Paul. *"Shake it up baby now. twist and shout"*, sang John and George in unison.

So, with just a quick check over all the bolts and the car was ready to be driven out into a glorious Oteha Valley day. George and John burst into a quick chorus of *"Good day sunshine"* as the Sunbeam drove away.

Finally, the lads settled down on the villa steps as Paul quietly strummed *"And in the end, the love you take is equal to the love you make."*

Rust and more Rust

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And not so Rusty

Speed record- Mercedes-Benz T80

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The **Mercedes-Benz T80** is a six-wheeled vehicle built by Mercedes-Benz, developed and designed by Ferdinand Porsche in the late 1930s. It was intended to break the world land speed record, but never made the attempt, due to the project having been overtaken by the outbreak of World War II.

Names of the T80-Official name:1939 Mercedes-Benz Weltrekordwagen T80 . Nickname: Mercedes-Benz T80

Background



World-renowned German auto racer Hans Stuck's pet project was to take the world land speed record, and he convinced Mercedes-Benz to build a special racing car for the attempt. Officially supported by Adolf Hitler (a race car fan influenced by Stuck), the project was started in 1937. Automotive designer Dr Ferdinand Porsche first targeted a speed of 550 km/h (342 mph), but after George Eyston's and John Cobb's successful LSR runs of 1938 and 1939 the target speed was raised to 600 km/h (373 mph). By late 1939, when the project was finished, the target speed was a much higher 750 km/h (466 mph). This would also be the first attempt at the *absolute* land speed record on German soil, Hitler envisioned the T80 as another propaganda triumph of German technological superiority to be witnessed by all the world, courtesy of German television The same Autobahn course had already been proven ideal for record-breaking in smaller capacity classes, Britain's Goldie Gardner having exceeded 200 mph (322 km/h) there in a 1,500 cc MG.

Power



The massive 44.5-liter Daimler-Benz DB 603 inverted V12 was selected to power the record-setting car. The engine was an increased displacement derivative of the famous DB-601 aircraft engine that powered the Messerschmitt Bf 109 fighter in production at the time, with the DB 603 ending up as the largest

displacement inverted V12 aviation engine in production for Germany during the World War II years. The DB-603 fitted was just the third prototype (V3) engine of this variant and tuned up to 3,000 hp (2,237 kW; 3,042 PS), roughly twice the power of the Bf 109 or the Supermarine Spitfire. The engine ran on a special mixture of methyl alcohol (63%), benzene (16%), ethanol

Speed record- Mercedes-Benz T80 continued

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(12%), acetone (4.4%), nitrobenzene (2.2%), avgas (2%), and ether (0.4%) with MW (methanol-water) injection for charge cooling and as an anti-detonate.

Construction

The difficulty of the challenge was met with money and engineering genius. By 1939, the T80 was fully completed at a cost of RM 600,000. The car was over 8 m (26 ft) long, had three axles with two of them driven, weighed over 2.7 metric tons (three short tons), and produced 3,000 hp (2,237 kW; 3,042 PS) together with the aerodynamics of specialist Josef Mickl to attain a projected speed of 750 km/h (466 mph). Aerodynamically, the T80 incorporated a Porsche-designed enclosed cockpit, low sloping bonnet, rounded wings, and elongated tail booms. Midway down the body were two small wings to provide downforce and ensure stability - these wings were inspired by the wings of Fritz von Opel's Opel-RAK from 1928. The heavily streamlined twin-tailed body (forming the fairings for each pair of tandem rear wheels) achieved a drag coefficient of 0.18, an astonishingly low figure for any vehicle.

Projections for the 1940 land speed record attempt

As ambitiously planned, Hans Stuck would have driven the T80 over a special stretch of the Reich autobahn Berlin — Halle/Leipzig, which passed south of Dessau (now part of the modern A9 Autobahn) between the modern A9 freeway's exits 11 and 12, which was 25 m (82 ft) wide and almost 10 km (6 mi) long with the median paved over as the *Dessauer Rennstrecke* (Dessau racetrack). The date was set for the January 1940 "Rekord Woche" (Record Week), but the war begun on September 1, 1939, prevented the T80 run. In 1939, the vehicle had been unofficially nicknamed *Schwarzer Vogel* (Black Bird) by Adolf Hitler and was to be painted in German nationalistic colors, complete with German eagle and Nazi swastika, but the event was cancelled and the T80 garaged.

War and after the war

The DB 603 aircraft engine was subsequently removed during the war while the vehicle was moved to safety and storage in Kärnten, Austria. The T80 survived the war and was eventually moved into the Mercedes-Benz Museum in Stuttgart for permanent display.



Current status

The T80 is currently on display at the Mercedes-Benz Museum in Stuttgart-Bad Cannstatt.

Technical data

Total weight: 2,896 kg (6,385 lbs.)

Speed record- Mercedes-Benz T80 continued

Progress
November



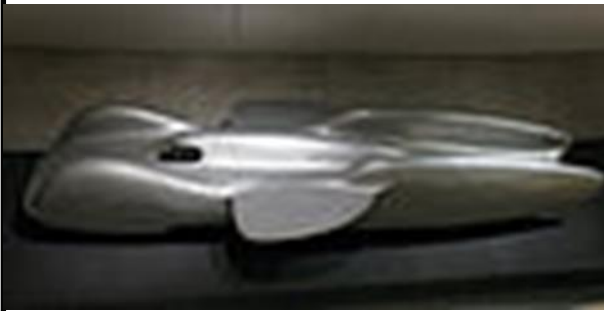
Power: 3,000 hp (2,237 kW;
3,042 PS) at 3200 rpm

Engine: 44.5 liters (2,716 cu in)

Wheels: (6) 7 X 31

Length: 8.128 meters (26 ft 8 in)

Width (body without wings): 1.753 meters (5 feet
9.0 inches)



Width (body with wings): 3.20 meters (10 feet
6 inches)

Height: 1.245 meters (4 feet 1 inch)

Drag Coefficient: 0.18

Speed: 600 km/h (373 mph)



1934 Packard Twelve Model 1106 Sport Coupe by LeBaron

The American manufacturer Packard offered discerning consumers the opportunity to buy high quality, large and powerful automobiles. These were often conservative in styling, but this changed with this V-12 powered Model 1106 Sport Coupe of 1934, which, except for its vertical and high-shouldered grille, looks little like another Packard's. It's French-sounding name was as American as New York, Bridgeport, and Detroit, where the company was variously based.

It embodied many design hallmarks attributed to the Art Deco style: a sloping roofline was echoed by the curves of the voluptuous pontoon fenders, while the curved upper shape of the full rear fender skirts matched the contour of the fenders themselves. Continuing the theme, the trunk opening was almost circular. Distinctive almond-shaped motifs were used for the rear quarter windows, backlight, and many smaller details. Other distinctive visual features include the triangular rear quarter interior lamps, bold chrome windshield moldings, curved hood louvers, and the stylized emblems for the fender skirts.

The style of this Packard—streamlined, sleek, and modern—appealed to affluent buyers far more than Chrysler's more radical Airflow. Yet, this relatively bold car was ideal for someone who wasn't afraid to be seen and talked about.

Citroën is a French automobile brand. The "Automobiles Citroën" manufacturing company was founded on 4 June 1919 by André Citroën.

In 1934, the firm established its reputation for innovative technology with the Traction Avant. This was the world's first car to be mass-produced with front-wheel drive, four-wheel independent suspension, as well as unibody construction, omitting a separate chassis, and instead using the body of the car itself as its main load-bearing structure

In 1954, they produced the world's first hydropneumatic self-leveling suspension system; then the revolutionary DS, the first mass-produced car with modern disc brakes, in 1955 and in 1967 they introduced in several of their models swiveling headlights that allowed for greater visibility on winding roads. These cars have received various national and international awards, including three European Car of the Year awards.

History-Before Citroën

Born to a Dutch father and a Polish mother, both of Jewish heritage, André Citroën was born in Paris on February 5, 1878. At the age of 7 his father committed suicide because of a failed business venture.

Citroën was a graduate of the École Polytechnique in 1900. In that year he visited Poland, the homeland of his mother, who had recently passed away. During that holiday, he saw a carpenter working on a set of gears with a fish bone structure. These gears were less noisy, and more efficient. Citroën bought the patent for very little money, leading to the invention that is credited to Citroën: double helical gears.

In 1901, at the age of 23, André Citroën partnered with André Boas and Jacques Hinstin, whom he had known since their days at Lycée Condorcet. Together, they invested a significant portion of Citroën's inheritance to find the company "Citroën, Hinstin et Cie," a manufacturing business specializing in gears, particularly V-shaped helical gears. The company started

with about ten workers in the Faubourg Saint-Denis area and moved in 1912 to 31 Quai de Grenelle.

Early years

André Citroën

André Citroën (1878–1935) built armaments for France during World War I; after the war, however, he realized that unless he planned, he would have a modern factory without a product. Citroën was already experienced in the automotive business, thanks to a successful six-year stint working



with Mors between 1908 and the outbreak of war. The decision to switch to automobile manufacturing was taken as early as 1916, which is the year when Citroën asked the engineer Louis Dufresne, previously with Panhard, to design a technically sophisticated 18HP automobile he could produce in his factory once peace returned.

Long before that happened, however, he had modified his vision and decided, like Henry Ford, that the best post-war opportunities in auto-making would involve a lighter car of good quality, but made in sufficient quantities to be priced enticingly. In February 1917 Citroën contacted another engineer, Jules Salomon, who already had a considerable reputation within the French automotive sector as the creator, in 1909, of a little car called Le Zèbre. André Citroën's mandate was characteristically demanding and characteristically simple: to produce an all-new design for a 10 HP car that would be better equipped, more robust and less costly to produce than any rival product at the time.

The result was the Type A, announced to the press in March 1919, just four months after the guns fell silent. The first production Type A emerged from the factory, located at Quai de Javel, Vaugirard, Paris, at the end of May 1919 and in June it was exhibited at a show room at Number 42, on the Champs-Élysées in Paris which normally sold Alda cars. Citroën persuaded the owner of the Alda business, Fernand Charron, to lend him the showroom, which is still in use today. This C42 showroom is where the company organizes exhibitions and shows its vehicles and concept cars. A few years later, Charron would be persuaded to become a major investor in the Citroën business. On 7 July 1919, the first customer took delivery of a new Citroën 10HP Type A. In the same year, it produced 30 cars daily, totaling 2,810 vehicles, with 12,244 produced in 1920.



1919 Citroën A 8CV Torpedo



1921 Citroën B Torpedo



1923 Type C 5CV

That same year, André Citroën briefly negotiated with General Motors a proposed sale of the Citroën company. The deal nearly closed, but General Motors ultimately decided that its management and capital would be too overstretched by the takeover, thus, Citroën remained independent until 1935.

Between 1921 and 1937, Citroën produced half-track vehicles for off-road and military uses, using the Kégresse track system. In the 1920s, the U.S. Army purchased several Citroën-Kégresse vehicles for evaluation followed by a license to produce them. This resulted in the

United States Army Ordnance Department building a prototype in 1939. In December 1942, it went into production with the M2 Half Track Car and M3 Half-track versions. The U.S. eventually produced more than 41,000 vehicles in over 70 versions between 1940 and 1944. After their 1940 occupation of France, the Nazis captured many of the Citroën half-track vehicles and armored them for their own use.



The Eiffel Tower served as a billboard for Citroën from 1925 to 1934.

Citroën used the Eiffel Tower as the world's largest advertising sign, as recorded in *Guinness World Records*. He also sponsored expeditions in Asia (Croisière Jaune), North America (Croisière Blanche) and Africa (Croisière Noire), demonstrating the potential for motor vehicles equipped with the Kégresse track system to cross inhospitable regions. These expeditions conveyed scientists and journalists.

Demonstrating extraordinary toughness, a 1923 Citroën that had already travelled 48,000 km (30,000 mi) was the first car to be driven around Australia. The car, a 1923 Citroën 5CV Type C Torpedo, was driven by Neville Westwood from Perth, Western Australia, on a round trip from August to December 1925. This vehicle is now fully restored and in the collection of the National Museum of Australia .



Share of the S. A. André Citroën, issued 30 September 1927

In 1924, Citroën began a business relationship with the American engineer Edward G. Budd. From 1899, Budd had worked to develop stainless steel bodies for railroad cars, for Pullman in particular. Budd went on to manufacture steel bodies for many automakers, Dodge being his first big auto client. At the Paris Motor Show in October 1924, Citroën introduced the Citroën B10, the first all-steel body in Europe. These automobiles were initially successful in the marketplace, but soon competitors who were still using a wooden structure for their vehicles, introduced new body designs. Citroën, who did not redesign the bodies of his cars, still sold in large quantities nonetheless, the cars' low price being the main selling point, which factor however caused Citroën to experience heavy losses.

In 1927, the bank Lazard helped Citroën by bringing new much-needed funds, as well as by re-negotiating its debt—for example, by buying out the Société de Vente des Automobiles Citroën (SOVAC). It went even further by entering in its capital and being represented on the board; the three directors sent by Lazard were Raymond Philippe, Andre Meyer and Paul Frantzen. André Citroën perceived the need to differentiate his product, to avoid the low-price competition surrounding his conventional rear drive models in the late 1920s and early 1930s. In 1933 he intro-

duced the Rosalie, the first commercially available passenger car with a diesel engine, developed with Harry Ricardo.



1931 C4 based Citroën P17
C Kégresse track

Traction Avant and Michelin ownership

Traction Avant

The Traction Avant is a car that pioneered the mass production of three revolutionary features that are still in use today: a unitary body with no separate frame, four-wheel independent suspension and front-wheel drive. Whereas for many decades, most motor cars were similar in conception to the Ford Model T – a body bolted onto a ladder frame which held all the mechanical elements of the car, a solid rear axle that rigidly connected the rear wheels and rear wheel drive. The *Model T school* of automobile engineering proved popular because it was considered cheap to build, although it did pose dynamic defects as automobiles were becoming more capable, and resulted in heavier cars, which is why today cars are more like the Traction Avant than the Model T under the skin. In 1934 Citroën commissioned the American Budd Company to create a prototype, which evolved into the 7 fiscal horsepower (CV), 32 hp (24 kW) Traction Avant.



1933 Citroën Rosalie Coupe 15CV



Citroën 8CV



1933 C4 based Citroën P17
C Kégresse track

Achieving quick development of the Traction Avant, tearing down and rebuilding the factory (in five months) and the extensive marketing efforts, were investments that resulted too costly for Citroën to do all at once, causing the financial ruin of the company. In December 1934, despite the assistance of the Michelin company, Citroën filed for bankruptcy. Within the month, Michelin, already the car manufacturer's largest creditor, became its principal shareholder. However, the technologically advanced Traction Avant met with market acceptance, and the basic philosophy of cutting-edge technology used as a differentiator continued until the late 1990s. Pierre Michelin became the chairman of Citroën early in 1935. Pierre-Jules Boulanger, his deputy, became the vice-president and chief of the engineering and design departments. In 1935, the founder André Citroën died

from stomach cancer.

Research breakthroughs



Pierre-Jules Boulanger had been a First World War air reconnaissance photography specialist with the French Air Force; he was capable and efficient and finished the war with the rank of captain. He was also courageous, having been decorated with the Military Cross and the Legion of Honour. He started working for Michelin in 1918, reporting directly

to Édouard Michelin, co-director and founder of the business. Boulanger joined the Michelin board in 1922 and became president of Citroën in January 1938 after the death in a road accident of his friend Pierre Michelin remaining in this position until his own death in 1950. In 1938, he also had become Michelin's joint managing director.

During the German occupation of France in World War II Boulanger refused to meet Dr. Ferdinand Porsche or communicate with the German authorities except through intermediaries. He organized a "go slow" on production of trucks for the Wehrmacht, many of which were sabotaged at the factory by putting the notch on the oil dipstick in the wrong place, which resulted in engine seizure. In 1944 when the Gestapo headquarters in Paris was sacked by the French Resistance, his name was prominent on a Nazi blacklist of the most important enemies of the Reich, to be arrested in the event of an allied invasion of France.

Citroën researchers, including Paul Magès, continued their work in secret, against the express orders of the Germans, and developed the concepts that were later brought to market in three remarkable vehicles – a small car (2CV), a delivery van (Type H) and a large, swift family car (DS). These were widely regarded by contemporary journalists as avant garde, even radical, solutions to automotive design. Thus began a decades-long period of unusual brand loyalty, normally seen in the automobile industry only in niche brands, like Porsche and Ferrari.



1955 Citroën 2CV

2CV

Citroën unveiled the Citroën 2CV or *Deux Chevaux* signifying two tax horsepower and initially only 9 hp (6.7 kW), at the Paris Salon in 1948. The car became a bestseller, achieving the designer's aim of providing rural French people with a motorized alternative to the horse. It was unusually inexpensive to purchase and, with its small two-cylinder engine, inexpensive to run as well. The 2CV pioneered a very soft, interconnected suspension, but did not have the more complex self-

levelling feature. This car remained in production, with only minor changes, until 1990 and was a common sight on French roads until recently; 9 million 2CV variants were produced in

Marque: Citroen continued

the period 1948–1990. was a common sight on French roads until recently; 9 million 2CV variants were produced in the period 1948–1990.



1989 Citroën 2CV, with



Citroën type H / HY van



Citroën Ami



DS Sedan (1955–1975) and Cabriolet (1960–1971)

DS

1955 saw the introduction of the DS, the first full usage of Citroën's hydropneumatic self-levelling suspension system, tested on the rear suspension of the Traction in 1954. The DS was also the first production car with modern disc brakes. A single high-pressure hydraulic system was used to actuate the power steering, the suspension and brakes; the brakes were fully powered, not power assisted, as pedal force was not a component of braking power. The gearshift, (semi-automatic transmission) was also powered by the hydraulic system through a control valve, with actuating pistons in the gearbox cover to shift the gears in the transmission, and the clutch was operated automatically by the system, so there was no clutch pedal. From 1957 the ID19 model offered a simplified hydraulic system, with manual steering and conventional manual gearshift, and a significant price reduction. From 1968, with revised front-end style, the DS also introduced auxiliary driving lights, that moved directionally with the steering, improving visibility at night. Production from 1956 to 1975 totalled almost 1.5 million cars. The streamlined car was remarkable for its era and had a remarkable sounding name – in French, *DS* is pronounced [de.es], which sounds the same as *déesse*, which means *Goddess*. It placed third in the 1999 Car of the Century competition.

High pressure hydraulics

This high-pressure hydraulic system would form the basis of over 9 million Citroën cars, including the DS, SM, GS, CX, BX, XM, Xantia, C5, and C6. Self-levelling suspension is the principal user benefit: the car maintains a constant ride height above the road, regardless of passenger and cargo load and despite the very soft suspension. Hydropneumatic suspension is uniquely able to absorb road irregularities without disturbing the occupants and is often compared to riding on a *magic carpet* for this reason. These vehicles shared the distinguishing feature of rising to oper-

ating ride height when the engine was turned on, like a "mechanical camel" (per *Car & Driver* magazine). A lever (later replaced by an electronic switch) beside the driver's seat allowed the driver to adjust the height of the car; this height adjustability allows for the clearing of obstacles, fording shallow (slow-moving) streams and changing tires.

Since Citroën was underfunded, its vehicles had the tendency to be underdeveloped at launch, with limited distribution and service networks outside France. Consequently, the early DS models experienced teething issues with the complex hydraulic system, eventually, the hydraulic seals and system component design were sorted, becoming reliable. Licensing such a technological leap forward was pursued to a limited extent: in 1965 the Rolls-Royce Silver Shadow used this type of suspension, while the 1963 Mercedes-Benz 600 and Mercedes-Benz 300SEL 6.3 tried to replicate its advantages with a costly, complex and expensive to maintain, air suspension, that avoided the Citroën-patented technology. By 1975, the Mercedes-Benz 450SEL 6.9 was finally produced with this proven system and Mercedes-Benz continues to offer variations on this technology today. During Citroën's 1968–1975 venture with Maserati, the Citroën high-pressure hydraulic system was used on several Maserati models : for power clutch operation (Bora); power pedal adjustment (Bora); pop-up headlights (Bora, Merak); brakes (Bora, Merak, Khamsin); steering (Khamsin) and the entire Quattroporte II prototype, which was a four-door Citroën SM under the skin.

Aerodynamic pioneer

Citroën was one of the early pioneers of the now-widespread trend of aerodynamic automobile design, which helps to reduce fuel consumption and to improve high-speed performance, by reducing wind resistance. The DS could happily cruise at 160 km/h (100 mph) without any discomfort for the occupants. The firm began using a wind tunnel in the 1950s, helping them to create highly streamlined cars, like the DS, that were years ahead of their competitors, and so good were the aerodynamics of the CX model, that it took its name from the mathematical term -cx- used to measure the drag coefficient.

Expansion and financial challenges

In the 1960s, Citroën undertook a series of financial and development decisions, aiming to build on its strength of the 1950s with the successful 2CV, Type H, and DS models. Nevertheless, these maneuvers were insufficiently effective, and Citroën went bankrupt again in 1974.

<https://en.wikipedia.org/wiki/Citro%C3%ABn>

(For more information visit above link)

About Us

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Club Nights: Every Wednesday from 7.30pm.

Restoration Shed: Every Tuesday & Thursday morning 9am - 12pm.

Committee Meetings: Last Monday of the month, 6.00pm.

Club Runs: Normally 12.30-1pm start, 3rd Sun. of month. Always check the 'Upcoming events'.

VERO Branch Reference Number: HO0300144 (Quoting this number when renewing your insurance gives a small commission back to the club).

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