

Country Motor

Australia



Issue 65

**Magazine produced
for Pre-1960
motor enthusiasts**

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Back copies of Country Motor are
available upon request



Citroen 5cv restored by the
late Bernie Jacobson

Country Motor is a E-magazine
created for and by country motor
enthusiasts who have passion for
ancient motor vehicles,
engines, in fact any motor that is
curious and old

Please forward all editorial
enquiries and contributions to
David Vaughan

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Editor's Entries

Welcome to issue 65

A Dodge 4 truck starts the issue; a story from Bill Buys. Watch out for more of his great stories in future issues.

The late Bernie Jacobson's series of stories continue with a Citroen 5cv he built from scratch about 25 years ago.

Keir Whitcher provides a story on his visit to far north Queensland to visit a few MG owners and a military museum.

I have been hanging out to see the completion of Phil Stafford's latest project. A while back he showed me the bare Fiat chassis and a radiator shell. Phil couldn't identify the radiator shell, which I believed was from a 1932 Bedford. It blends in



Bedford radiator shell blended in nicely on the special

perfectly with the new mesh and Fiat badge, giving plenty of width under the bonnet.

I source many worth while stories from newsletters I receive. Several have come from a country we rarely hear about, South Africa. Like Australia they imported cars from all over the globe. Consequently they have a very enthusiastic classic car following and show many fabulous cars.

A variation of the Jaguar not many people would know off is the 'low drag' specially bodied E-type. Darryl Fraser Simpson from South Africa has recreated an exact replica of the low drag model that only a few with four cam V12 engines were ever made.

A brief history of BMW is provided by Steve Woodward along with a story on his BMW 2002.

There were many variations of Fords in the 1930s. An association with Brewster who created coachwork in 1934 on 135 Ford V8 chassis. The odd very pointed grill certainly makes

it very distinctive from the standard Ford designs. The story came from a Ford V8 Club newsletter provided by Trevor Polsen.

Diesel engines have been around for years and in many sizes. Phil Guilfoyle has one for sale that might be useful for a large vintage chassis.

For those who love 1955 cars the Roots Group advert is a show of their range .

Finally Hay Production by Neil Athorn and Bits and Pieces.

David's Miscellaneous Ramblings

Specials

The magazine has often featured specials. In this issue it features three specials. Each one the builders have very different design philosophies.

The late Bernie Jacobson was a keen vintage/thoroughbred sports cars enthusiast. His specials, of which is guessed to have been up to 50 builds were always built to the period of the chassis, usually using parts of the same make and model. He specifically designed the bodies to have a sporting appearance, whether like the Citroen 5cv they had small and not so powerful engines or like the Jaguar shown in a previous issue with 3½ litre engine.

Phil Stafford's specials use a variety of suitable parts from several makes of older period cars. Still with a classic sports look but built for speed and enthusiastic driving.

Finally the splendid Jaguar Low Drag E-type created by Darryl Fraser Simpson was a standard car that was reconfigured to represent an exact copy of an actual rare Jaguar model.

The beautiful E type coupe design you would think was optimal streamline shape. However in the wind tunnel experiments Jaguar found modifications to the body further enhanced its streamline qualities.

In conclusion three very different specials made by three creative owners who sought to make their creations both individual and for their motoring enjoyment.

Motor Shows

Most car enthusiasts have attended a motor show at sometime in their life. I have been to several. The first two when I was boy in the late 1950s my father took me to the Earls Court

Motor Show while my mother and sisters explored the sights of London.

Later in Australia we often went to the Melbourne Motor Show at The Exhibition buildings. More recent I went to the Exhibition Centre, with my son Michael. Interest in the Melbourne Motor Show died, especially after Ford decided it was of no financial advantage to exhibit their cars. The show alternated each year with Sydney, but that never revived enough interest.

Times have changed! The Melbourne Motor Show is back on the weekend of 5/6th April 2025. With the influx of new models, especially EVs from China, it is going to be the biggest yet. 120 automotive business stands and 300 cars on show, plus the usual after market and automotive retail products available. Admission tickets can be bought on line, \$35 adults and children \$19. Several hours of entertainment, a lot cheaper than going to see Kylie Minogue!

Looking back in the catalogue sixty years ago the 1965 show cars are very familiar. Many makes have long gone. Days of the Austin Freeway, Ford Zephyr and Falcon, Hillman Imp, Holden Kingswood, Isuzu Bellett, MGB, Mitsubishi Colt, Nissan Cedric, Peugeot 404, Pontiac Parisienne, Rambler, Studebaker Lark, Toyota Crown, Valiant Regal and Volkswagen 1200 to name a few.

The cover of the catalogue was designed by graphic designer John Walter Ward.



Happy Motoring,

David



Bill Buys

1919 Dodge Four Truck



There was a rarity on display at a recent Antique Automobile Club of America show: A striking 1919 Dodge truck – which was odd, since Dodge was a car maker at the time and had not built trucks.

Yet, there it was, a stunning blue one bearing the famous six-pointed star of the Dodge Bros on its radiator - and a Graham Brothers Truck-Builder name-plate on the tail end.

Still, the builder's plate with the serial number verified it as a Dodge, while the tray was the work of the Graham Brothers.

The owner, Doug Walters said it was a joint effort between the Dodge and Graham brothers. Each had made a mark in industry with their respective products and combined their efforts to produce it in late 1919.

A Coca Cola bottle also gets a mention in this unusual story. John Dodge and his younger brother, Horace, established the Dodge Brothers Co. to make parts for the then expanding motor

industry.

In particular, they not only provided parts for the Ford Motor Company, but also built complete engines for Ford and also became Ford shareholders.

In 1910, they built Model Ts for Ford when demand outpaced Ford's production capacity.

In 1913, as Ford expanded its factories, the Dodge brothers decided not to renew their contract. They wanted to build their own vehicles.

They set up the Dodge Brothers Motor Car Co. and delivered their first car in December, 1914. Things were looking up in a big way. Their factory complex covered 90 acres (36ha), they employed 18,000 workers and by 1919 the five-year-old company had produced

all of 400,000 cars - and not a single truck.

Dodge was the second most popular car on the US market.

Meanwhile, the trio of Graham brothers prospered from their large farm in southern Indiana.

Ray Graham wanted to remain a farmer, but Joseph and Robert Graham were more business and mechanically minded. They acquired a bottle-making business in 1907 and soon became the nation's largest supplier of glass bottles. In 1910 Joseph developed a machine that gave Coca-Cola its famous shaped bottle and that gave them the Coke contract for the next three years.

They sold their bottling success in 1916 and their farming background



Dodge-powered but Graham-branded truck line, which they considerably expanded and their link with the company ended in 1929 when Chrysler took over.

They next decided to enter the car business and bought the Paige-Detroit car company and launched a new line of Graham-Paige cars.

However, the Great Depression, followed by World War II did them no favours and they stopped manufacturing their impressive cars in 1940 to join the war effort.

Post-war, they launched the 1947 Frazer in partnership with Henry Kaiser but that didn't work out well and they sold their manufacturing facilities to Chrysler.

Rather than continue in the motor industry, the Graham-Paige company

invested in real estate – and acquired Roosevelt Raceway and Madison Square Gardens.

What happened to that lovely 1919 Dodge/Graham truck? It now resides in the Washington County Rural Heritage Museum in Boonsboro, Maryland, said to be an ideal venue given the Graham brothers' rural roots and their innovative collaborative efforts with the Dodge brothers.

Bill

had them getting involved in truck tray design.

By that time they'd already developed a unique kit that turned a Ford Model T passenger car into a light-duty farm truck by attaching longer and heavier frame rails to the existing Model T frame with a heavier rear axle, differential, wheels, tyres and cab.

A 1916 advertisement featured an illustration of the cab, chain-drive unit and Express body for US\$350 and "all ready to attach to a Ford chassis." The ad featured a picture of a stake body-equipped version of a one-ton Graham unit attached to a Ford for the same price. Graham Bros. later replaced the chain drive with the Torbensen internal gear drive.

Their "Truck-Builder" kit was essentially a truck conversion tailored for many different brands of cars, including those of the Dodge Brothers.

One ad showed a Truck-Builder on a Dodge Brothers chassis with the caption "The Truck Complete, Graham Bros. Truck-Builder combined with a Dodge Bros. Motor Car."

The ad also claimed "it would be impossible to buy for truck purposes a better power plant than those built by Dodge Bros."

Soon after, Dodge bought the Graham Brothers business and the three brothers took executive positions at Dodge.

It seemed like the ideal business link, especially for the Dodge brothers, but with so much success in their automotive ventures, it was a shock when they both died, within months of each other in 1920, John from pneumonia and Horace from influenza.

Five years later, financial advisors recommended that their widows sell their interests in the company in 1925 and in 1928 Walter P. Chrysler bought Dodge for US\$170 million.

He later said: "buying Dodge was

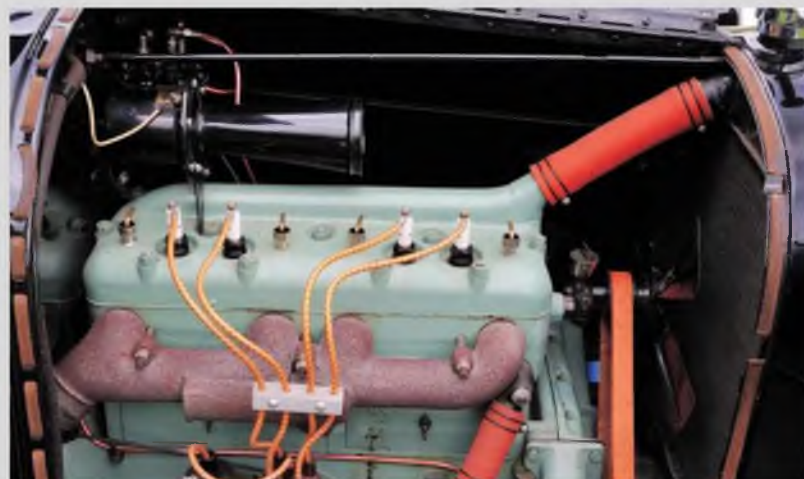


one of the soundest acts of my life. I say sincerely that nothing we have done for the organisation compares with that transaction."

Some investigation found the

builder of that first Dodge/Graham car-turned-truck back in 1919 was Wallace Parry.

The Graham brothers continued with their



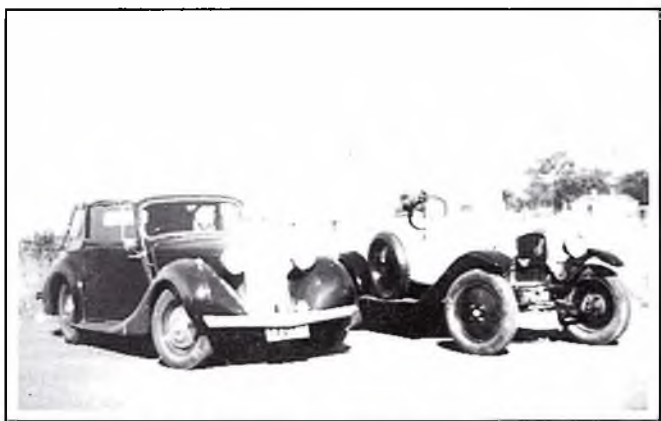
Bernie Jacobson has over the years owned and rebuilt numerous notable vintage and post-vintage cars. If they have lacked character then Bernie breathed character into their otherwise mundane chassis and fabricated an equally interesting body to suit. Following is a delightful account of his recent Citroen 5CV project.

CITROEN

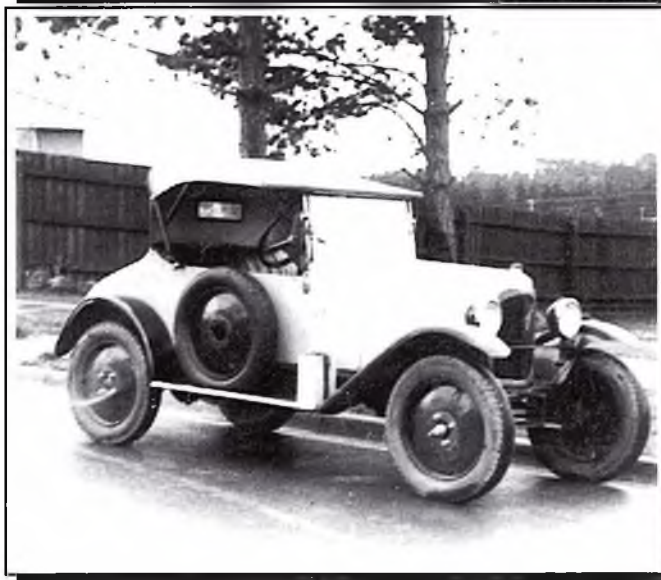
5CV

by Bernie Jacobson

*Sunbeam Talbot
DHC &
Citroen 5CV*



*Citroen 5CV
Roadster*



My first involvement with Citroens goes back to when my father first purchased a new Slough built Light 15 in 1946. As a young teenage schoolboy I taught myself the basics of driving on the pretext that I needed the keys to wash and clean the car early on Sunday mornings.

Following on from this, during the mid 1950's I purchased my first 5CV for \$15 as cheap temporary transport whilst doing an engine rebuild on my Sunbeam Talbot 10hp DHC. This little Australian bodied roadster served as daily transport and then as a dependable backup to the

disaster prone Sunbeam Talbot. Eventually it was given in as part payment on a 1935 Daimler Doctors Coupe, the Sunbeam by now had been passed on to an unsuspecting purchaser. Unfortunately the vendor of the Daimler in turn gave the Citroen to his young son, who promptly destroyed it

Some years and a number of motor-cars later, as a newly married young man. I was bemoaning the fact, that having recently purchased a house, it appeared that vintage car ownership was to be a thing of the past. The friend to whom I was addressing these remarks replied that he had recently been given an old Citroen, which he neither needed or particularly wanted. If I was prepared to collect it, then it was mine. I could not believe my luck and wasted no time in arranging to borrow a trailer on which to bring home the treasure.

Imagine my delight when on arriving at the donor's property that the "Old Citroen", once the cobwebs and dust were cleaned away turned out to be a remarkably complete and totally original little roadster fitted with the same style of Australian built body as my previous 5CV. Even better once I had my new treasure at home and had a chance to assess exactly what I had let myself in for, I was even more pleased. This little gem was almost flawless, everything was intact, with nothing more than a quick check over, cleaning the magneto points and the carburettor, some fresh petrol in the tank, then a few exploratory turns of the starting handle and the motor started and continued to tick over smoothly. Basically all that was needed was the most sympathetic restoration which consisted of mainly careful cleaning and a repaint, the lightest shade of olive green with black wings, then to cap it all off some new fabric for the

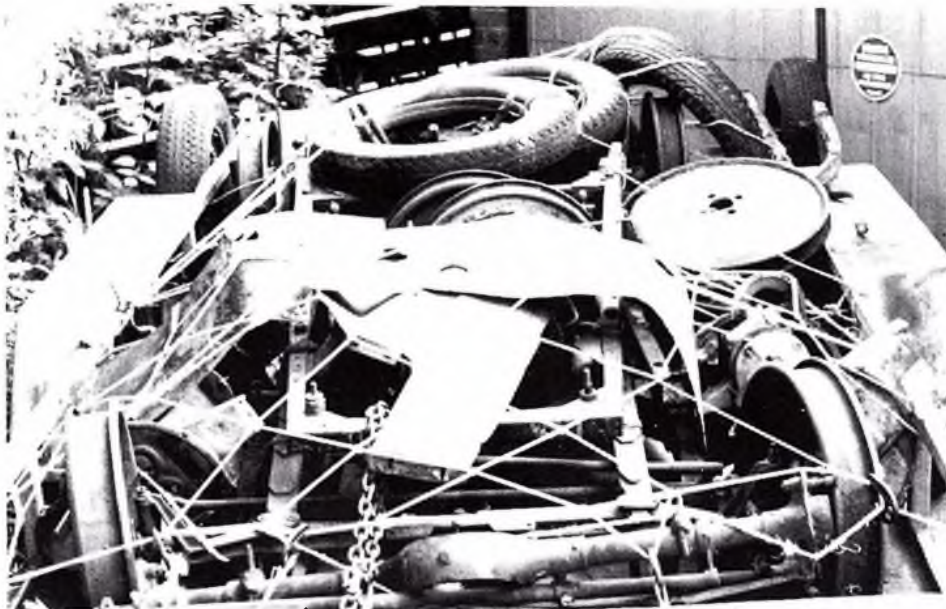
hood. After two or three years of pottering about, it was time for the Citroen to go, to assist in the financing the purchase of my first Lagonda, a rare Colonial Model 3 litre High Chassis Tourer.

A number of years have passed since then, a family of three boys and one daughter have come and grown up, cars have also come and gone, mainly Lagondas, after the 3 litre a series of Rapiers, a LG45, a V12, a Supercharged 2 litre another 3 litre this time a DHC and more Rapiers which brings us to the present. During all this time my wife and I have been lucky enough to have made several visits to the U.K. As a member of both the VSCC of Australia and The VSCC, we attended both the 1984 Golden Jubilee celebration, with the Rapier and the Diamond Jubilee again in 1994 with a SS 3½ litre Special which we were in the process of delivering to its new owner in Switzerland. It was during this latter event that I was to become reinfected with the Light-car and Cycle-car bug.

On our return to Australia, life tended to return to normal for the next year or so, then we had the chance to attend the F.I.V.A. Rally last year (1996) this was stretched out into a visit of almost three months during which we covered almost 3,500 miles in our Rapier.

Once again the Light-car bug caught me, only this time the bite was severe. Once back in Australia the 1934 Crossley 10hp, which I had been rebuilding, albeit without much enthusiasm, was advertised and sold, by coincidence the purchaser mention that he also was the owner of a 5CV, but no, he was not interested in parting with it.

OK what next? I decided that the only thing to do was to advertise that I wanted to purchase an "early Vintage Light-car or Cycle-car. Cycle-cars are fairly thin on the ground here in Australia, but who knows what will turn up. In due course an advert was placed in the local paper. I didn't have long to wait, first thing next morning I received a phone call from a young man living in a country town about 120 miles from my home in suburban Melbourne, no prizes for guessing, yes, he had a basket case Citroen 5CV, almost enough bits to build two cars or to be more correct, two rolling chassis, as there was virtually no body panels except for a very rusty scuttle and one front wing. Well, yes I was interested, but as it was still early days I would wait to see what else was on offer. I received a number of replies for some strange reason, nine out of the dozen cars offered were Fiats, almost every model



A collection of Citroen 5CV assorted pieces that formed the basis of Bernie's light car project

that they made during the 1920's. After a number of long distance phone calls, I decided that it wouldn't hurt to drive down and look at just what the Citroen consisted of.

After a drive of about three and a half hours I arrived only to find that the vendor was not at home, but that his father could show me what was on offer. Firstly there was an early [short] chassis, more or less complete but with the wrong latter type disc wheels with the large centres. Then there was a later (long) chassis frame leaning against the side of a garage.

Next I was escorted to a door leading under the house where, extension lead light in hand, I was shown a number of boxes and crates containing crankcases, cylinder blocks, boxes of second hand pistons, con rods, hubs, brake drums, some brake shoes, springs, two gearboxes, another steering box and steering wheel centre [no rim] etc., etc. Over a cup of tea I was to learn the price asked and permitted to see a photocopied spare parts book and various copies of period magazine articles, road tests and other items of interest to be included in the sale. Then once more under the house to see two fairly battered radiators that had been missed previously. With a reasonable idea of just what was on offer, I returned home, promising to contact the vendor once I had a chance to think about.

After several days of procrastination and considering the alternatives, I really did not want a Fiat, a marque that had never given me anything but heart-ache in the past. I made the fateful phone call and after some discussion, agreed to pay the asking price, arranging to return the following week complete with my tandem trailer to collect my purchase.

Since then I have been rather busy, to say the least, the initial sorting

out revealed a few surprises, some pleasant and some not so. Firstly there were enough correct bits to build an early [coil ignition] engine, and then whilst there were a full set of early [small] hubs, brake drums and shoes, the early type wheels were rusty, very rusty, to the extent that not one was completely round! Not easily put off I was determined to rebuild the earlier chassis complete with the early, coil ignition, engine. From among the various photocopies, there was one chart explaining the differences and changes made over the four or five years that the 5CV was in production. From this I learnt that only the first 500 cars produced in 1922 had coil ignition, making my car rather rare.

The work of cleaning and sorting was started and before too long I had a painted and assembled chassis frame complete with springs, axles, steering box etc., on stands in my little workshop. While this was happening a collection of engine bits were delivered to Crankshaft Rebuilders, the engine reconditioners and a gearbox sent off to John Needham be overhauled, including a full set of new replacement gears.

Next thing to be done was to sort out and clean up a set of brake shoes, fortunately I was able to scrape together enough for just one set with none for spares! These were delivered to B.G.T. the local brake specialist with a dire warning not to lose or damage any. Back at home it was my turn to get busy again cleaning hubs and fitting new wheel bearings, the steering box was dismantled, cleaned, found to be in good order, reassembled and painted. On inspecting the petrol tank it was discovered that it was unfortunately far too rusted for it to hold petrol again but it was at least sufficiently complete to be used as a

pattern and so it was taken to the same sheet metal workers that had done an excellent job in building the petrol tank for the SS Jaguar Special a few years earlier.

With all this work well under way it was time to think about the body! As mentioned there was virtually no body-work included in my purchase, however, after some forty five years of messing about with old motor cars I have managed to develop something of a technique in building passable sporting bodies on a variety of chassis. Whilst the purists amongst us will not approve, I have found that I am a much better welder than I am carpenter. As a result most of the bodies I have built from scratch have steel tube frames. These are not only much lighter (to be considered with only 10 bhp available) but also tend to be considerably stronger. At the same time I prefer to use aluminium for the panels rather than steel being, in my experience, easier to work and in some cases able to be left "au naturel" rather than painted and of course also marginally lighter. After some consideration it was decided that in this instance a skiff-tailed two seater would be most suitable for a number of very good reasons this was to be built sans doors. Without any further debate work was commenced!

While all this was going on there was one niggling worry at the back of my head, WHEELS, despite a huge number of enquires, telephone calls etc., it was quite clear, there were just no available early type Michelin disc wheels! Now it so happens that at various times in the past I have owned no less than three Singer Juniors, all early "Two Wheel Brake" cars, one with disc wheels the others with wire spokes. Something told me that these were about the same bolt pattern as the "small" Citroen hubs, a couple of phone calls later and having borrowed a wheel, I was certain. What was even better, there were almost any number of Singer wire wheels to be had, especially if I wasn't too worried about the condition of the rims. The one thing I wanted to do was to keep the car looking as light and petite as possible. After some further discussion with both my friendly wheel builder and the local vintage tyre supplier, the decision was made to opt for set of wire spoke wheels, using the Singer centres spoked into some 21 inch motorcycle rims, to be fitted with 2.75 x 21 tyres. Whilst this is something of a compromise, I believe that very few people will argue about the end result.

Now with the body shell virtually completed and all the out worker/sub contractors beaver away happily it was time to start thinking about the interior trim and upholstery. By this stage the

chassis and wheels had been painted the particular shade of green, commonly referred to, by my less kind friends, as Irish Racing Green, while for reasons of economy the body was to be left unpainted aluminium. A visit to the leather whole-salers made the decision easy, they happened to have a oddment half hide, just enough for one rather small bench seat, which they were happy to discount, some matching vinyl, to trim the less important surfaces, a few metres of piping cord, a spool of dark green thread and a couple of other sundry items and the deal was done. Too many years ago to remember, I completed a hobby course in motor trimming, this has given me the confidence and ability to tackle the straightforward bits and the knowledge and sense not to waste expensive materials attempting jobs beyond my level of skill. With this in mind I proceeded to cover the vertical inside surfaces and the padded roll around the top of the cockpit and having made up the seat bases, then left the tricky business of making the pleated seat covers to an expert, professional trimmer. In turn he has supplied me with a matching deep green carpet, which I have managed to fit and edge bind without too much fuss.

Among the various containers of small parts I was delighted to find both an original Amp Meter and a Headlamp switch, these together with a small glove box comprised the entire contents of the dashboard when the cars left the parent factory. This brings me to the one facet of woodwork in which I believe I am reasonably proficient - dashboards. My preference is to use natural Australian timber whenever possible, for this 5CV I have chosen Victorian Mountain Ash, this is a beautiful straight grained wood which has over recent years gained popularity with the office furniture manufacturers. The light switch and amp-meter are mounted on a small engine turned aluminium panel recessed into the centre of the dash with a small glove box in front of the passenger to the left. The timber is its natural colour and protected by a clear finish then polished with a wax to a satin/gloss.

Keeping in mind the 5CV reputation for being totally devoid of both power and performance, particular attention has

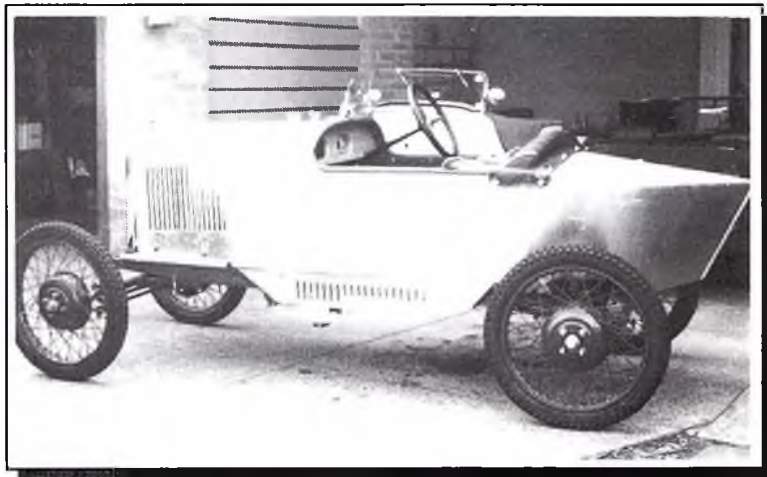
been taken with the engine, without going crazy. The original valve timing tended to be extremely conservative, so as the camshaft was showing some signs of wear, it has been built up and reground to a slightly more sporting profile. At the same time, as the valves had become quite badly recessed, the seats have been recut and new fractionally larger valves fitted. Having been reground the crankshaft has been carefully balanced together with the fly wheel and clutch assembly. Likewise the cylinders have been rebored and new oversize pistons fitted and close attention to detail taken with the final assembly of the engine, using a shim copperhead gasket together with careful resurfacing of both the cylinder head and block has resulted in a compression ratio mildly above standard at 6.5:1. The temptation to fit a larger carburettor has been resisted and the original 22 mm Solex has been retained. Once the engine is run in it should be interesting to see just how the car will perform.

These delightful little cars have provided me with a number of memorable moments of motoring. The first car in particular, I remember rushing along the road to Geelong, absolutely flat-out, no doubt emulating Poo's little friend Piglet, with "cars streaming out behind me, like bananas". The 5CV reached a terminal speed of 38 mph, calculated by taking the time between mile posts with the sweep second hand of my wristwatch.

The second Citroen sticks out in my memory bank for the shameful occasion, when it became trapped in a valley on a particularly hilly stretch of road, when it was unable to climb out over the steep incline, in either direction. Ultimately to be rescued by my wife, worried by my non-appearance, in our modern car complete with two ropes. If the current car provides half the fun previously enjoyed with its two predecessors I will be more than satisfied.

An impecunious enthusiast,

Bernie Jacobson.



12½ weeks later waiting for its engine

Part II
 an Impecunious
 Enthusiast takes
 you on a
 quiet Sunday
 morning drive
 in his 1922
 Citroen 5CV....

Just getting into
 the car is
 different. To
 enter, you
 approach the
 car from the left
 hand side, as
 there is no door
 you are obliged
 to swing your
 leg over the
 side, rather like
 mounting a
 horse.



ROAD IMPRESSIONS OF A VINTAGE LIGHT CAR



Above: "Crackle" the
 1922 Citroen 5CV

Left: Dashboard,
 sole standard
 issue instrument,
 an amp meter.
 Rev-counter disguised
 as alarm clock is a
 modern addition.

Facing the rear of the car you put the left foot on the conveniently placed step and grasp the 'grab' handle, on the top of the scuttle, with the right hand. From this position it is a simple matter to swing the right leg over the side into the car, then bring the left foot up and over to join the right foot and sit down. Once seated it is easy to slide across to the driver's side.

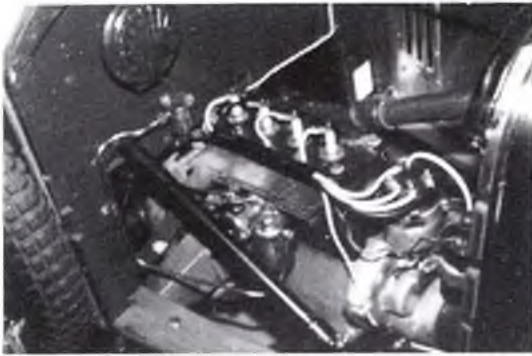
Having reached the driving position a number of things become apparent. The first impression is that you are sitting 'on' the car rather than in it. Next, you will notice how comfortably the hands rest on the rather high mounted steering wheel. Looking at the dashboard, this is

remarkable for the almost total absence of instruments, apart from an amp meter, sharing a small oval panel in the centre, with the headlight switch and the ignition switch. The latter is a simple brass pull/push switch. Although not original, this particular 5CV also boasts the modern addition of a rev counter, in this instance cleverly disguised by a period alarm clock case, complete with a brace of dome bells on top.

However, before switching on there are a number of starting up procedures to go through. Reaching down beneath the dash, you find the bottom of the twenty litre fuel tank. Slightly to the right of centre is the petrol tap. Swinging the

lever to a horizontal position turns the fuel on. Now check that the gear lever is in neutral. Having done that, you must now get out of the car. This is so you can 'flood' the carburettor. As the car is not equipped with a mechanical choke it is necessary to do this so there is a sufficiently rich mixture for a cold start.

Walk around the front of the car to the right hand side, where you will find a hand hole located in the side of the bonnet. This is to save opening and closing the bonnet every time you wish to start the engine from cold. Placing your hand through the hole, you readily find the tickler, located on the top of the carburettor float bowl.



Above: Diminutive 4 cylinder side valve engine produces a surprising amount of torque for only 850cc



Above: Absolute simplicity, front axle without the complication of messy things such as brakes

Below: Rear wheel brakes. 150mm drums operated by the hand brake.



the hole, you readily find the tickler, located on the top of the carburettor float bowl. By depressing this for a few seconds, the fuel level in the float bowl is increased to a point where the intake duct is flooded. Returning to the front of the car engage the crank handle and turn the engine over a couple of times. Now you can return to the driver's seat.

Back in the car, safely behind the steering wheel, note the little brass plate on the dashboard illustrating the position of the gears, they are in the reverse of most modern gear changes ie. first is towards the driver and down somewhere under his/hers knee. Second is away to the left and forward. Top gear is found directly back from second on the left. Reverse should you need it, is forward from first, on the right hand side of the gate.

Now, the only other thing before you start is the position of the various pedals. The small pedal in the centre is the accelerator, the large pedal to the left is the clutch, to the extreme right is the foot brake, only to be used in emergencies! The handbrake to the left of the gear lever is normally used for slowing down and stopping (gracefully). While on the subject of brakes, the foot-brake acts on a drum directly behind the gear-box. It tends to be rather harsh in its action, as it stops the drive shaft rotating, because of the normal action of the

rear axle, one back wheel continues to roll forward at the same pace while the opposite wheel commences to spin in the reverse direction, often with alarming results. Having frightened you silly, let us get on with the business of driving.

The starter switch is a foot button found on the toe board just in front of the gear lever and next to the clutch. Turn on the ignition. Press the button and the starter quickly swings into action, spinning the motor over briskly. Do not jiggle the accelerator, keep your foot away from the pedal. Even with the slightest throttle opening and the engine will fire spasmodically but not start. Having learnt that lesson, press the starter button again and the engine will start almost instantly, continuing to tick over quietly at about 600 rpm. Let it run like that for a minute or two, then you can give the accelerator a couple of blips, the engine will respond willingly. Now you are ready for the 'off'.

Depress the clutch pedal and move the gear lever towards first gear position. If you are lucky it will slip easily into gear, however, more often than not it will balk. Continue to put some slight downward pressure on the lever as you very slightly release the clutch, not forgetting to release the handbrake as you do. As you move off you will be immediately struck by how high geared the Citroen is for such a small car.

There is no need to wind it up through the gears, this is a particularly 'torquey' little engine and you can safely change into second, once the car is rolling, at about 1500 rpm, not forgetting to double declutch. Once again second gear is quite high and you can feed it some more revs, this time taking it up to around 2000 rpm. Maximum power is developed at about 2100 revolutions. You double declutch and again the gearlever will tend to

engage top gear. Gently ease the clutch pedal up as you continue to apply some slight pressure on the gearlever, once more the gear will engage with a slight clonk and you are on your way.

Applying some more gentle pressure on the accelerator, the willing engine responds smoothly until the rev counter indicates around 2250 rpm. This is the car's cruising speed, approaching 60 kilometres per hour. Life was less frenetic in 1922. You can now sit back and enjoy the scenery. Once more you are impressed with the torque characteristics of the motor, as you climb a rise in the road without any discernible change in the engine's note, the exhaust chortling away to itself.

Normal sweeping bends on the road can be taken without any drama except perhaps a slight swooshing from the knobby 2.75 x 21 motorcycle tyres. Now you are approaching a sharper corner, simply steady the car with some gentle application of the handbrake, remembering of course to keep your thumb on the ratchet button. No need to change down, as yet again you are surprised by the pulling power from such a small engine, a whisker over 850 cc. Your next corner is a 90 degree left hand turn into a side road, over a bridge, then up a long hill rising sharply from the river. Use the handbrake to wash off speed, then judiciously apply the footbrake.

You reach the corner, double declutch, giving the throttle a generous blip while you lift the clutch momentarily in neutral, changing from top directly into first gear. Now you can give the motor its head winding it up in first, reaching 2500 rpm, crossing the bridge. This time you let the revs die slightly as you double shuffle into second and start the steep climb, foot hard down. The exhaust takes on a more purposeful growl as the



Above: "Tickler" on bronze Solex carburettor is easily reached through hand hole in bonnet side.

revs climb towards the maximum of 3250. No need to wring its neck, change into top gear as the road rounds a bend and the hill starts to level out slightly. The husky little horses under the bonnet seem to thrive on hills as they continue to work away, happy to pull 4.88:1 top gear, over the crest and down towards the next corner.

This one is a T junction with a sharp turn right and a roundabout to negotiate. From your elevated riving position you have a clear view of the road in both directions, so you merely have to slow down on the handbrake and as you won't be coming to a complete stop, second gear will be fine. The exit from the roundabout is downhill, so you can drop back into top gear quite quickly.

Now the road sweeps down into the valley then straight on, up the next hill. Foot down, the rev counter needle sweeps around to just over 3000, you are really flying almost 100 kph. Despite the very basic suspension, quarter elliptic springs front and rear, without any suggestion of dampers or shock absorbers, the baby Citroen is rock steady. You even have time to acknowledge the waves, from the group of bemused on-lookers standing on the store verandah, as you speed past.

On over the brow of the hill and along a short level piece of straight roads towards another sharp right hand turn. This one has an island rather than a roundabout and the road climbs sharply as you leave the corner. Some oncoming traffic means that you must come to a stop, before making the turn. Once more use the handbrake to slow down, before applying the footbrake to come to a complete standstill. First gear takes you around the corner and then it is back into second for the long climb up towards the lookout tower. Much to your surprise you can engage top again well before the crest.

Now there is a lovely downhill run, firstly with a sweeping left handier, ever so slightly off camber. Once again you can hear the swoosh of those knobby tyres as they make their protest. The road continues to wind its way down the valley, your confidence increases and you find that you can actually accelerate, as the little car sweeps through the bends. You start to enjoy yourself as you learn to anticipate the little sideways

hops as the tyres loose their grip on the patches of loose gravel, that seems to accumulate on the apex of some of the corners. You are probably not doing more than 70 or 80 kph but it feels fast and you are having fun. Another group of people outside the antique and old-wares shop, look up in surprise as you rush past, waving gaily.

Next, you are cursing the driver of a camper van for holding you up! No point in pushing past as you can see the next turn off. This one is a nasty sharp, downhill left handier onto a gravel road. Use the handbrake to slow right down, giving the accelerator a generous blip, you double declutch and change back to second. This time you allow the car to roll down the hill and across the rickety bridge, running against the compression. The exhaust emits the cackle that gave the car its name. You hold it in second as you trundle up the road, not wanting to raise too much dust or eat that from the MG in front of you. Not too far to go now, turn in through the gate and along the track past the falling down sheds, then up that final hill, for as long as you can remember, this hill has had loose screenings on its surface. The tail of the car gives an excited little wiggle as the wheels spin on the slippery surface.

Finally you pull up, grinning from ear to ear, several laughing friends emerge from the scrutineering shed, you have arrived at **ROB ROY** Historic Hill Climb.

~ CM

More on the Citroen 5cv

From 'Vintage Motor Car Pocket Book'

'The vintage Citroen was a pure hack that went about its nameless duties with all the uncomplaining philosophy of a donkey and frequently as brutally misused. Many of them in France are doing (1959) so to this day. The French use old cars simply because they are cheap; no sentiment is allowed to enter the business'



Year: 1922. Maker's H.P. and R.A.C. Rating: 7.5 h.p. Number of Cylinders: 4. Bore and Stroke: 55 x 90 mm. Engine Capacity: 0.9 litres. Valves: side. Wheelbase: 7' 4½". Forward Speeds: 3. Final Drive Ratio: 4.8 to 1. Tyres: 650 x 65. Illustration: 1922, 7.5 h.p.

THE FIRST MOTORIST TO ENCIRCLE AUSTRALIA BY MOTOR CAR

From 'The Complete Encyclopaedia of Motor Cars 1885-1968'

'The 1922 Citroen range included an improved type B of 1½ litres and the 856cc 5CV with cloverleaf bodywork, detachable head, quarter elliptic springing all around, a foot transmission brake and coil ignition. Though neither a brisk goer nor a brisk stopper, it was indestructible and remained in production until 1925, in which year Noel Westwood used one to drive all around Australia.

From 2nd James Flood book of Early Motoring



Missionary N. R. Westwood and his 7.5 h.p. Baby Citroen, completed a tour Round Australia. Mr. Westwood left Perth on August 4th, 1925, with the object of touring Australia. He attained his object, passing through Meekatharra, Broome, Derby, Hall's Creek, Emungalan, Lake Nash, Longreach, Morvin, Brisbane, Sydney, Albury, Melbourne, Adelaide, arriving back in Perth on December 29th. The total distance covered was 10,700 miles through all kinds of country.

A Visit to Far North Queensland

While living in regional Victoria and enjoying proper cars has it's benefits. Winter and the current state of our roads can be challenging.



Keir Whitcher

1937 MG TA

Staying in Palm Cove north of Cairns recently allowed me to catch up with other Pre War MG enthusiasts Michael O'Brien (MG TA) and Tony Basham (MG PA). Meeting at Michael's home in Port Douglas we spent time going over the history of his 1937 TA.

Imported into Australia by Lane's Motors, the car was sold to a Victorian owner in 1938 before emerging in Port Fairy in the 1960s in different ownership. From there the car went to Allan Lim Joon in Belgrave who owned the car for the next fifty years restoring it himself in that time. Allan then sold the car to David Godwin and the car moved to the Gold Coast.

Michael purchased the car in 2021 and TA Chassis no 1553 now resides in Port Douglas having received a full

engine rebuild since.

Tony Basham arrived soon after with his 1934 PA Chassis 0437 in it's two tone green livery. A beautifully restored car, Tony has owned the PA for several years and it shares it's garage space with an earlier MG M-Type.

Since meeting Tony on this occasion he has brought the PA down to Victoria for a multi day rally organised by members of the MG Pre War Register. He has to be one of the most enthusiastic members of the Register.

The mechanical differences between these two cars demonstrates how much development occurred at MG in a very short period of time.

Leaving Port Douglas in the TA it was easy to enjoy the mild weather and



1934 MG PA

the tropical views. Passing disused rolling stock used for transporting sugar cane to local mills along with tropical flora makes for a unique experience. The roads are in excellent condition considering the volume of rain that those in FNQ have had to put up with in the last twelve months or more.

Stopping for coffee in Mossman allowed us to have a good look over both cars, taking in all the details. With good coffee on board and the potential of a afternoon rain we made our return to Port Douglas returning by a different loop road we drove on a superb regional road with sugar cane fields on either side. It was almost like a tunnel with the reverberation of the TA's exhaust.

If the opportunity arises to head up to this very special part of the world I highly recommend you visit.

From diminutive sports cars to enormous weapons of war. The Australian Armour and Artillery Museum is located at Smithfield a short drive North of Cairns. The array of displays at this museum encompasses one of the world's greatest collections of military vehicles and weaponry. Tanks, armoured personnel carriers, field guns, anti-aircraft guns, self



propelled guns and other specialist vehicles are all featured and it isn't just the quality of the exhibits but the volume of exhibits. There is even a Kettenkrad, the German half-track motorcycle, a Schwimmwagen and a Kubelwagen. Any of these would surely put you in the "Box Seat" at any car show or "Cars and Coffee". Whilst the history of many of the exhibits is sobering considering the conflicts they were involved in, the history and demonstration of engineering is staggering. Even if you're not a fan of

military vehicles or history there is plenty to be fascinated by and to me it was the range of WWII vehicles I found so interesting. Examples from Germany, the UK, USA, Russia, China and Australia are all on display. Whatever your interest might be from different areas of conflict there is something to see.

There is a sectioned film set from the movie "Fury" starring Brad Pitt where interior footage of the Sherman was filmed near the entry, cafe and

museum shop then you can look at a real Sherman. The museum also has open days with a large proportion of the exhibits being used on their "proving ground".

A lot of restoration goes on at the museum and their YouTube channel has fantastic regular updates detailing their restorations. Far North Queensland as a holiday destination has a lot to offer but that doesn't mean you need to restrict it to diving on the reef. **Keir**



Exhibits at the Australian Armour and Artillery Museum, Smithfield north of Cairns

Phil Stafford's Back Catalogue and His Latest Creation

My Hobby of building "Vintage Specials" began shortly after I joined the MGCC and was introduced to Peter Thomas who built some amazing early MG Specials.

I started with an MGA Powered MG TD "Boy Racer" which I competed in for some years.

Then came the Blue Streak 6 powered MG Y Type special with an aluminium roadster body, followed a pre-war

Wolseley Boat Tailed Roadster special Another Y Type Special, this time with a



Pre-war Wolseley

fabric body and "Improved" Torana GTR XU1 motor which my daughter and son-in-law drive in MG and Historic

events.

I came across a very good 1924 Fiat 501C chassis and suspension in 2020 so decided to build a tribute to the Fiat 805-405 "Corsa" Factory Grand Prix car of the 1920's.

As the 2-litre supercharged straight 8 that powered the original race car would be impossible to find I decided to go down the often used "Special" route of fitting a Holden 6 engine and running gear. The Motor is a standard 3.3 Litre "Red Motor" with Aussie 4 Speed gearbox, HSD Head, Twin Stromberg "X2" Carburettors and Exhaust Extractors.

A pre-war Chevrolet front axle with Holden brake drums and MGA 1500 internals and early Holden rear axle are fitted with pre-war Chevrolet wheels and vintage tyres.

An all-aluminium Boat tailed body including cold riveted frame was fitted

with a little help on the more complex panels from a coachbuilder.

The car has been built to comply with the Modified Vehicle Regulations and is fitted with modern seatbelts, indicators, dual circuit brakes and a collapsible steering column.

I am also currently building an MGA Powered Pre-War Standard Flying 8 Special for my daughter to use in Club events in the future.

Some suspension parts in Bendigo at the moment for machining so once they come back and I can get it onto its wheels I should be able to take some photos and start writing it up.

Phil



MG TD 2002



MG Y Type Special, Wolseley 24/80 engine



MG Y Type special with Holden motor

1924 Fiat 501C Corsa Tribute

Phil Stafford



The bare FIAT 501C chassis and radiator shell



Engine fitted along with firewall and steering box



Trial fitting of the 3.3 litre Holden engine into chassis



The chassis well under way with front axle and springs fitted and structure to support the body



Handbrake lever is a combination of the top section of the original 1924 Fiat lever and Model T

Having completed the body frame and fitting of all the single plane pedals I needed to find a coachbuilder for the more complex components of the body work. This included the top and bottom parts of the boat tail, the cowl and the bonnet.

I contacted Owen Jackson of Land Speed Fabrications who had made my cycle-guards and he agreed to undertake the construction of the more complex panels. I delivered the partly completed car to him at his workshop in Deniliquin, along with a set of instructions and a big box of Cleco fasteners.

Ready to go to the Coachbuilder

Emails and messages backwards and forwards plus a couple of personal visits during the coach work ironed out all the minor issues and the body panels were completed ready for me to pick up after about 5 months.

Coachbuilder finished panels ready to be Cleco'd on

After trailering the car home with all the panels Cleco'd on, I spent a few weeks fastening the panels to the body frame. I originally planned to use solid aluminium rivets as I had on the body frame but found that in many places I did not have enough access for hammer to complete the riveting.

I changed the body fastenings to stainless steel button head machine screws which closely matched the shape of the rivet heads. This required drilling and tapping hundreds of holes and in some cases fitting rivnuts where I could not use tapped holes. Once the body panels were fitted, I then spent a couple of weeks filing, finishing and polishing the body panels, fitting the aero screens, mirrors, fuel filler, breather and rear spring covers.



it was time to start road testing prior to engaging the VASS Engineer to inspect and certify the car to VSB14. Initial road tests were encouraging although at speeds above 80 kph the car was quite unnerving to drive as it totally lacked directional stability.

I removed the original Chevrolet 3-degree caster wedges used on the front axle and replaced them with 7-degree wedges and at the same time installed a hydraulic steering damper to the tie rod to increase "feel" as the Hilux steering box I used, having been designed for a much heavier vehicle, felt very light without it.

The last thing to fit was the speedo cable from the Holden gearbox to my modified vintage Smiths gauge fitted with HR Holden speedo internals, only to find that the small speedo drive gear retainer clip in the gearbox had broken and the only way to replace it was to remove the gearbox, dismantle it and fit the new clip.

Finished product!

Finally, off to the VASS Engineer for inspection and certification where only a small number of items required rectification.

One was the turning circle which was fixed by adjusting the steering stops on the front spindles.

Another was that the tyres I had bought did not have speed and load ratings on the sidewalls. (A requirement of VSB14 is definition of speed and load ratings for the tyres)

An email to Lucas Tyres in the USA who are only one of 2 brands that make the correct sized tyre for my 17-inch wheels and the specification was sent back and forwarded to the engineer.

It turns out that in the USA, tyres destined for cars built before 1948 do not require ratings shown, only the manufacturing date. The last item was that one front wheel had the tendency to lock under hard braking during the braking test. This was finally isolated to a badly profiled brake shoe where one high point on the shoe engaged well before it should have, causing an

All of this bodywork and moving of the car had been done with only a handbrake as I was still sorting out the design of the braking system, which I had originally planned to be mechanical to keep the period look of the car but ran into issues of complying with VSB 14 which the car is required to be assessed to, to enable it to be registered for road use.

I settled on Hydraulic brakes all round using a Wilwood dual in line master cylinder, the original 1934 Chevrolet backing plates from the front axle I adapted to the Fiat front springs, HK Holden front Brake drums as they have the same stud PCD as the Chevrolet hubs and are much better quality than the original Chevy drums. These

were fitted with MGA-1500 wheel cylinders, shoes, adjusters and return springs which are the same diameter as the Holden drums but twin leading shoe rather than single.

Residual pressure valves and adjustable proportioning valve on the rear brakes completed the compliant brake system.

This took far longer than planned as when I went to bleed the system, I could not get one circuit to work. This was due to a faulty master cylinder and as the Australian supplier did not have a replacement in stock, required negotiation with Wilwood to eventually ship one directly to me from the USA.

Once the braking issue was resolved

accelerated self-energising effect on that wheel. A new set of shoes were fitted and the braking performance is impressive. The car stops very quickly in a straight line with no tendency for lock up.

The 1924 original and the tribute, 100 years later

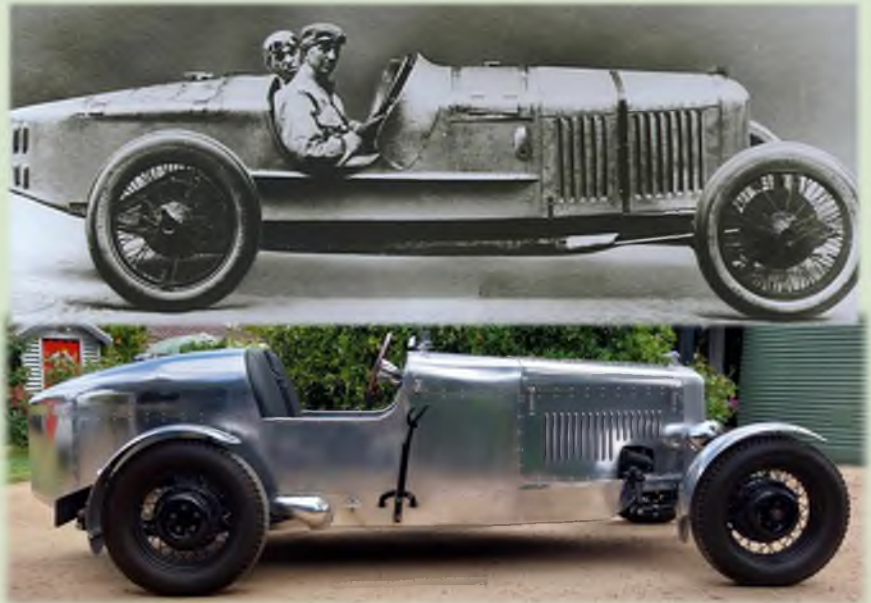
There are many differences in the final bodywork etc. compared to the original. Some of these, such as the height of the boat tailed rear to accommodate a frame which mounts the inertia reel 3-point seatbelts at the correct buckle height and the fitment of cycle guards, lights and Aero Screens are required of VSB 14.

The wheels were a compromise between maintaining wire wheels and fitting the hubs and brakes on the 1934 Chevrolet axle which was used, as equivalent early Fiat axles and wheels would not have been easy to convert to hydraulic brakes if I was able to even source them.

The external handbrake lever is a combination of the top section of the original 1924 Fiat lever and Model T ratchet.

Phil

Original Fiat Corsa Grand Prix car my 501C "Tribute"



More on the GP FIATS

(from Vintage Motor Car Pocket Book)

In 1921 FIAT returned to racing with an unsuccessful 3-litre straight-eight of 65 x 112 mm. for Grand Prix racing, but though technically very good it was not fast enough.

In 1922 they made a much more successful car for the 2-litre Grand Prix Formula, this being a 6-cylinder of 65x100 mm. with neat racing body that influenced Grand Prix design for a number of years.



Hilux Steering box



While a lot of people were copying this car for 1923, Fiat built an 8-cylinder of 60 x 87.5 mm. which was supercharged.

The Wittig vane-type super-charger was not successful and was replaced by a Roots-type, and in this form the car won the 1923 Italian Grand Prix, being the first supercharged car to win a G.P., but not the first to use super-charging, Mercedes already having raced with forced induction.

Specifications: 8 cyl in line, b x s 60x87.5mm, 1,979cc, supercharged, inclined overhead valves with two overhead camshafts. Max : 115mph





Replica/Restomod 1972 Jaguar E-Type Low Drag Coupe



What is a 'Low Drag Coupe'?

Darryl Fraser Simpson

The body is all-aluminium. Jaguar's Low Drag Coupes had different panel shapes to the standard E-Type, thanks to the work of Jaguar in testing the E-Type in a wind tunnel and shaping the body to reduce aerodynamic drag and increase the car's speed. The shape of the air intake in the

flip-forward bonnet is the biggest visual difference and clue – it's higher and more oval than the regular E-type and is flanked by two inset driving lights. Other details include a more bulbous turret and the doors' window frames are laid into the car.

Just to introduce, Neville Swales is a brewer by profession and worked at SAB Newlands for some years. It was there that I met him selling filter sheets! Neville then frequented Killarney and other events and became very attached to my XJ13, that I had completed 1998.

Around 2000 Neville resigned from SAB, to go back to UK to pursue his dream of building an Ali XJ13 for himself.

Once he had completed his first Ali XJ13 he was pestered by an American

to build an XJ13 for him to race in the US. This was an all Polished Ali car, not painted. This is when Neville decided to

start Building the Legend specialising in the build of replica XJ13 Jaguar cars.

Only one original XJ13 ever existed and is now in Jaguar Heritage



Jaguar XJ13 replica



Jaguar XJ13 at Gaydon



US Donor car, 1972 V12 E-type



A donor car, 1972 V12 E-Type Coupe that Neville had recently imported from the US, was to be my car for the project.

The donor car was stripped bare, to expose anything and everything in terms of rust. Basic steel tub and sills are the main component from the donor car.

Sills beefed up to take the torque of the new much more powerful V12. Then across to RJ Panels next door to BTL workshop for complete ali fabrication of body. In fact, at the time, they had the only 1 original Low Drag still in the UK in their workshop. The owner of this car had commissioned them, to replicate it in every way, to make a replica he could use more regularly, as his was getting too valuable to drive/or race. So, not a better place and time, to build my car too.

The four Cam V12 Engine that Neville builds, is referred to as his Terra V12. Terra, in Terrabyte, is 10 to the power of 12 and Terra in Greek is "Monster" with Neville coming from Greek origin!

Peter Lindner did an enormous amount of work in promoting Jaguar and

he was their German agent for many years. He was Coventry's third largest sales country at the time. In 1952 at the age of 22 he was a car salesman for a Wiesbaden Auto Dealer. One day he sold a Jaguar and was hooked on the

manufacturer. He was determined to own his own business and in 1955 he became an independent Jaguar Dealer in Germany. With his success in selling Jaguars, in 1957 Lindner approached Sir William Lyons with a personal visit and convinced him to make him dealer principal for Germany. He was now selling to British and American servicemen stationed in Germany.

A couple of years older than Peter



Museum, Gaydon, UK. The original XJ13 had a four cam V12 with mechanical fuel injection. Only three such engines were built. One in the original car, one as an experimental unit and the third as its where about, is a mystery.

Around 2015 Neville spotted an engine that looked like the 4 cam Jaguar V12, but thought nothing of it as they were so rare, but he contacted to seller from the EBay advert, to find in fact it was one of the three original four cam Jag engines. He immediately drove across to Holland with his bakkie (utility) and a mate to go buy it and load it immediately before anyone else noticed the find.

Over the next five years Neville tooled up to replicate the engine for the XJ13's, he was building.

In 2018, when I visited him at his small factory on a farm just outside Coventry we were chatting over a beer or two and I asked if the four cam would fit into a Series 3 V12 E-Type? It was at this time, we were also bouncing around the build of a Low Drag, that I was keen on doing as a project in South Africa. It was always going to be way out of the pocket of a poor South African! All my previous replicas had been GRP (fibre glass), as that was my limit in terms of funding.

In January 2021 Neville gave me a call and said he had an offer to build a very authentic ali Lindner Nocker four Cam Terra V12 Low Drag E-Type, that I could not refuse and he would email this to me right away. My heart was pounding with the thought, but never even imagined he could get anywhere near my affordability, but I said send it and I will have a look.

I had just sold my business and the property in Paarl. I needed to find a suitable investment, so timing was perfect for both of us. The offer was extremely interesting and part of the deal was that he could use the finished car for exhibitions, photos and general marketing of his company for a period of six months, before shipping to me in CT. I consulted with my financial adviser, to see if I was doing the right thing at this

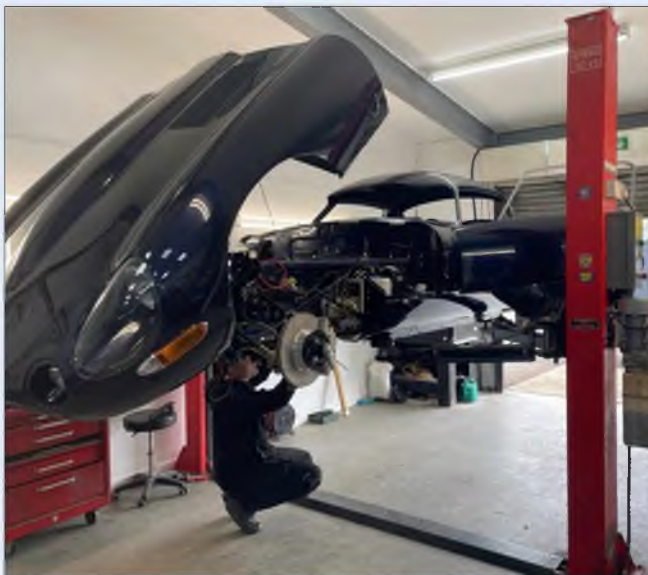
stage of my life? He gave me the thumbs up, if that was what I wanted, considering it as an investment too!

I was then backwards and forwards with Neville to agree on an "On the Button" build, using his now developed Jaguar 4 Cam Terra V12 and all the detailed Lindner Nocker (that I had already researched over time) spec I required. Within a week we had a deal and production started in earnest.

Lindner, and the better driver, Peter Nocker, who came from a moneyed background and was racing a 300SL Mercedes and in 1962 graduated to a 250GTO. It was after seeing Lindner racing his Mk2 that he became interested in Jaguar and took over the Mk2 with success.

It was now that the two Peters got together with a bright young London mechanical engineer student Dr Sammy Klek to try to streamline the E-Type for Le Mans with support also coming from Malcolm Sayer. This was the birth of the Low Drag with only two such cars produced and unfortunately never raced in anger, largely due to Le Mans regulation changes regarding engine power.

Darryl



Various stages of the rebuild of the 'Low Drag' Jaguar and the 6.8 litre four cam V12 engine.



Darryl Fraser Simpson's '72 Jaguar E-type Low-Drag replica expertly remodelled from a V12 E-type

The BMW 2002



Steve Woodward

The story of BMW began on 21 July 1917 when 2 well known aircraft engine manufacturers, Gustaf Otto and Karl Rapp, merged to form BMW and began to make a 6 cylinder, 19 litre aircraft engine, designed by Max Fritz. Incidentally, Gustaf Otto was the son of Nicholas Otto who is credited with the invention of the internal combustion engine.

The story of the BMW badge representing a turning propeller is an unproved myth. The colours used on the badge were the official colours of Bavaria.

After the end of WW1, BMW was no longer allowed to manufacture aircraft engines and turned to manufacturing engines for trucks, ships and farm equipment. They also started manufacturing and selling motor bike engines to manufacturers such as Victoria, Corona and Helios.

In 1923 BMW produced its own motorcycle, the R32, with a 494cc, 8.5hp boxer engine. It had a driveshaft like all their future motorcycles. This is indicative

1929 BMW Dixie 3-15 DA2 saloon



of their philosophy of producing quality products which was grounded in their aircraft roots. Also in 1923 BMW decided to enter the car market and began producing the Austin 7 under license, which they called the Dixie. Eventually in the 1930s they started manufacturing their own cars, such as the 303 and 327/8 models.

When the Nazis came to power in 1933, they decided to ignore the restrictions on armaments manufacture as per the Versailles treaty and re-arm the country. BMW restarted the manufacture of engines for aircraft such as Junkers and Focke-Wulf. This engine was a 41.8 litre radial piston engine, model 801C,

1928 Dixie roadster that initiated the BMW characteristic grill



1939 BMW 327 sport cabriolet

producing about 2,000 horse-power! They made about 61,000 units. They also manufactured a turbo jet engine, model 003.

During the war BMW also produced motorcycles for the military. These were mainly sidecar units. An interesting point is that these sidecar units were 2-wheel drive, with a side shaft to the outboard wheel. This gave them remarkable traction in loose sand and mud. By 1943 they ceased manufacturing motorcycles for the

military as they were more expensive to produce than the Kubelwagen.

When Germany lost the war, all the BMW factories were badly damaged. What was left of the equipment was mostly carried away by the Russians. The UK got the rights to plans of BMW's twin cam engine as part of their war reparations. These ended up being fitted to various cars such as the AC Ace, Aceca and Bristol.

In the early 1950s BMW started producing some cars such as the 230, 501/2 and the 507, but these proved to be very expensive and did not sell well. Soon BMW was in serious debt. With no money to develop new products they were forced to produce cheap cars such as the Issetta, an Italian design from Iso, which had a motorcycle engine. This turned out to be a lifeline for BMW, selling over 137,000 units! It was extremely popular in the UK as you did not need a car licence to drive one. They also went on to produce the BMW 700 series which was a small 2-door with a motorcycle engine in the rear.

In 1959 there was a financial crisis in Germany with many companies, including BMW, facing closure. They looked for someone to merge with and in fact even approached Mercedes-Benz, but with no success. Fortunately, a German industrialist, Herbert Quant, stepped in and saved the company from bankruptcy. Under Herbert's direction, a decision was taken to produce a new mid-size car. The first model produced was the Neue Klasse 1500cc, 4-door saloon. 24,000 were produced in the first year. It was eventually followed by the

02 series in 1968, which had a 1600cc, 1800cc or 2 litre engine, type M10 engine, and was a 2-door vehicle (hence the 02 designation).

The M10 engine was used as a basis for the M12 Formula 1 turbo engine. It was used by Brabham, Arrows and Benetton. In 1983 Nelson Piquet won the world championship in a Brabham. The engine produced about 850hp at that time but, ultimately, it is estimated that it produced up to 1,400hp. This couldn't be verified as the dyno registered only up to 1,280hp. It was the most powerful F1 engine ever produced!

Folklore has it that the blocks used for these turbo engines were old and had to have done at least 100,000km. They were then left outside to weather for a time. It is also said that the staff used to go and pee on these blocks from time to time! This was all in an attempt for the metal to be stronger. It does sound a bit ridiculous, but sword makers used to quench their swords in urine after subjecting them to extreme heat, which caused a nitriding effect on the metal. Believe what you will!

The 2 litre 2002 was available in four models - the standard single carb model (100hp), the Ti with twin carbs (120hp), the Tii with fuel injection (130hp) and ultimately the turbo charged model (170hp). Only 1,672 turbo charged models were produced. By 1977 they had sold over 837,000 units across all the models.

As an owner of British cars as well, my opinion is that the 2002 is more modern and better engineered than other 60s cars such as Triumphs, MGs, Fords,



etc. The 2002 played a significant role in establishing BMW's reputation as a manufacturer of performance-oriented, driver focused cars. It also paved the way for future BMW models, including the 3 series.

Details/specs/info on my BMW 2002

Purchased in 2019 and spent about a year doing improvements. It is a 2 litre, with approximately 100hp, maybe a little more due to having fitted a twin-choke Weber. Rear wheel drive, 4 speed transmission MacPherson strut front suspension, semi-trailing link arm rear suspension, weight 995kg.

It is really fun to drive with good, responsive handling and at the same time it is comfortable. Feels very modern for a 1960s car, in fact when Megan, my daughter, first drove it she said she didn't like it as it didn't feel like an old car!

Steve

BMW 2002

SAY goodbye to the sports cars. A smooth flexible single-carburettor 2-litre engine wafts this neat little saloon from 0 to 50 mph in 7 seconds, gives a relaxed 100 mph cruising speed and uses less petrol than the sporty 1600 TI. There's simpler trim and less family space than in the bigger BMWs but it's a natural for the busy man who has to travel fast on crowded roads.

CLOSE-UP

Four-cyl.; o.h.c.; 89x80 mm.; 1,990 c.c.; 100 b.h.p.; 8.5 to 1 comp.; Solex carb.; 4-speed, 13.98, 9.46, 4.91, 3.64 to 1; cen. lvr.; susp., f. and r. ind. coil; 2-door; 4-seat; hyd. servo brks. disc front; max. 106 m.p.h.; cruise 95; m.p.g. 24-26; whl. base 8ft. 4in.; track f. and r. 4ft. 4in.; lgth. 14ft. 1½in.; wdth. 5ft. 2½in.; ht. 4ft. 7½in.; g.c. 6½in.; turng. cir. 31ft. 6in.; kerb wt. 19 cwt.; tank 10 gals.; 12-volt.

£1,249 + £348 p.t. = £1,597



From the 'Daily Express Motor Show Review 1968' Earles Court

The Fusion of *Elegance* & Practicality

By Guy Generaux
Puget Sound Regional Group



1935 Brewster Ford Town Car
Owner Lee Harman - Camano Island, WA

In 1919 Rolls Royce established its first U.S. production plant in Springfield, Massachusetts. Brewster was one of a handful of companies supplying custom coachwork for the luxury brand. Working in a close relationship for several years, Rolls Royce eventually acquired Brewster in 1925.

Meanwhile in Dearborn, Edsel Ford was consummating a deal for the purchase of the Lincoln Motor Company from engineer Henry Leland. It's well-known that Henry Ford was stubbornly resistant to change and many historians have concluded that Edsel's receptiveness to modern design and innovation is what saved the company from ruin.

As president of Lincoln, Edsel Ford brought style and quality, building the division into one of the premier automobile lines of the day. During the Great Depression Rolls Royce of America sales plummeted, and the company ceased U.S. operations. Brewster left the partnership with 135 designated bodies and was kept alive under the guidance of J.S. Inskip. In 1934, he struck a deal with Ford Motor Co. to purchase 135 Ford V8 roadster chassis. These units would be fitted with custom Brewster coachwork.

The Brewster Ford was a hit at the 1934 New York Auto Show. Edsel so admired the graceful lines, he commissioned the builder to create a one-off custom on a stretched 127-inch wheelbase: designated as a 1934 Brewster Town Cabriolet DeVille. The signature Brewster heart-shaped grill was replaced with that of a '34 Ford. It also sported a '34 dash and banjo steering wheel. Today it's one of the few of Edsel Ford's personal use drivers to still exist.

2022 National V8 Meet: *Featuring the* **1935 Brewster Ford Town Car**

We are fortunate to have such a rare Ford specimen at our 2022 Western National Early Ford V8 Meet here in Wenatchee. The 1935 Brewster Ford Town Car is owned by Lee Harman of Camano Island, WA. These iconic vehicles were manufactured in four different

Brewster & Ford

body styles from 1934-1936. It is speculated that less than 50 survive today. Lee purchased the car in February, 2021 in LaFayette, Indiana, then promptly placed it in storage until the time was right to drive it home.

In May 2021, Lee enlisted friend and fellow touring enthusiast Bill Ward, to embark on a 2500 mile road trip from Indianapolis, IN to Camano Island, WA. No strangers to challenge, the two successfully piloted Lee's Model A Ford on the 2019 Peking to Paris Vintage Auto Rally. That event would be a cupcake compared to their adventure with the Brewster Town Car.

As V8 Club members, we are familiar with narratives of the generosity and hospitality of our brethren. Lee and Bill were about to discover it firsthand. Before hitting the road, the Town Car had been treated to new brake shoes, freshly packed wheel bearings, new carburetor, all fluids changed and a general flathead tune up. Lee drove the Brewster on the first leg of the journey with Bill following in a support car. A mere 80 miles into the excursion, they encountered their first obstacle: a faulty generator. Utilizing the V8 Membership roster, a call went out to Scott Willis, president of the Indianapolis Regional Group. In short order, Scott furnished a rebuilt generator and the team was back in business.

After traveling another 80 miles, the right water pump failed. Soon the pair connected with Josh Conrad, director of the Early Ford Foundation & Museum in Auburn. Collections coordinator Nate Fluke spent the next morning replacing the water pump and fan belt and supplied two spare back-ups for the remainder of the journey.

Reaching eastern Iowa, a raucous sound and vibration brought the car to a screeching halt. The generator had broken free from its mount. Untethered, the fan had ripped a large hole in the radiator body and upper tank. AAA was summoned to transport the Town Car to Grant's Auto Repair in Bettendorf, the nearest local town. After no luck finding a V8er in the area, Lee contacted Nate Fluke who offered to lend a '35 radiator out of the museum display. 300 miles later the two parties met near Chicago for the pass-off of the NOS unit.



Upon return and rejuvenated, Lee and Bill were in for a surprise. It turns out the unique front end of the Brewster will not accommodate a stock '35 Ford radiator. Back to square-one. After several inquiries, a local radiator shop agreed to tackle the damage and completely rebuild the original. Two days later, the shop had engineered a perfect fit. At the next stop in Harrisburg, South Dakota, Lee and Bill met V8 member Craig Floyd to tour his impressive collection. That evening the Town Car made it only ten miles to Sioux Falls, when it became clear the electrical system was not charging. Backtracking to Craig Floyd's shop, a

new generator cut-out did the trick.

Advancing across the state to Pierre, an unusually high heat wave caused the flathead to boil over frequently, impeding progress. With a severe thunderstorm looming, cover for the evening was secured. Weathering the storm, Lee and Bill were greeted with a flat rear tire in the morning. A nearby tire shop remedied the flat and a long drive ensued to Hardin, Montana. Yet another problem surfaced the following day: with no spark, the Brewster cranked vigorously but refused to start. Employing the rope-tow method, they guided the car a half mile to Bob Smith Ford. A long-time Ford mechanic on staff replaced ignition wires under the dash and noted the carburetor choke was stuck partly open. Additionally, the left front tire was leaking air at the valve stem.

With another tire store visit and repairs in place, it was off to Helena, Montana. Nearing the city, the Town Car was having trouble pulling hills. Definitely something was wrong and the fuel pump was the prime suspect. An electric pump was installed: issue resolved - temporarily. A second non-spark issue had stymied Lee and Bill again. Replacing the coil offered no help, but inserting a fresh condenser in the distributor seemed to work.

600 miles later, Puget Sound and Camano Island were finally on the horizon. Our weary travelers reached home by midnight, May 29. What was anticipated to be a ten day sojourn had morphed into a 17 day expedition. "Absolutely no regrets!" claimed Lee. "And the best part was meeting all the fine people along the way!"

1934 DIESEL ENGINE - DORMAN-RICARDO - \$1,800

4 cylinder, 4.2 litre, 58HP (Clydesdales) @ 2,000RPM, OHV, 17.5:1 compression. Model 4JUR.

This is a very early high-speed diesel engine, designed by Sir Harry Ricardo for Dorman (Stafford, England) for the express purpose of replacing petrol engines in large cars and medium trucks. It is complete, original and runs. With original Instruction Manual. No radiator or gearbox.

It features Ricardo spherical pre-combustion chambers, Bosch injectors and pump, and CAV accessories. It is actually quite compact (1,150L X 920H X 535W), but is too heavy (despite all the aluminium) for my vintage car project due to its robust construction and overly massive flywheel. But it will fit a large vintage car chassis as intended. I am getting rid of a very early and unusually

complete automotive diesel engine. I thought that it might potentially be of interest to your readers, either to take it on as part of a project, or simply for interest sake.

It is a 1934 Dorman Ricardo "high speed" diesel, 4 cylinder, 4.2L, 58hp. This Dorman Ricardo is very early, one of the first "high speed" diesels, and certainly the oldest automotive diesel I have ever seen. And it is complete and it runs. I want \$1,800 for it.

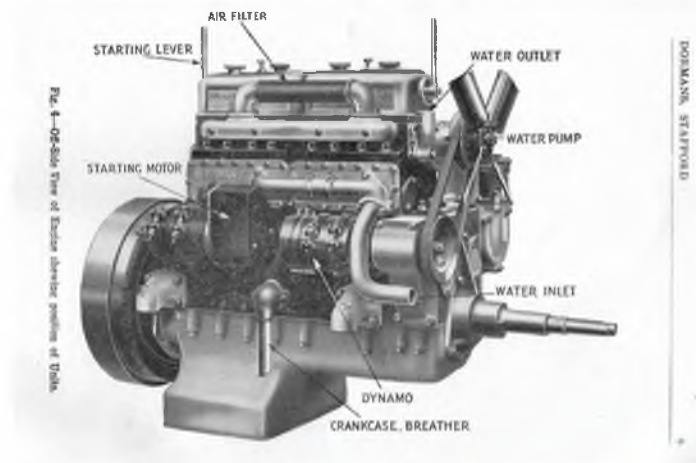
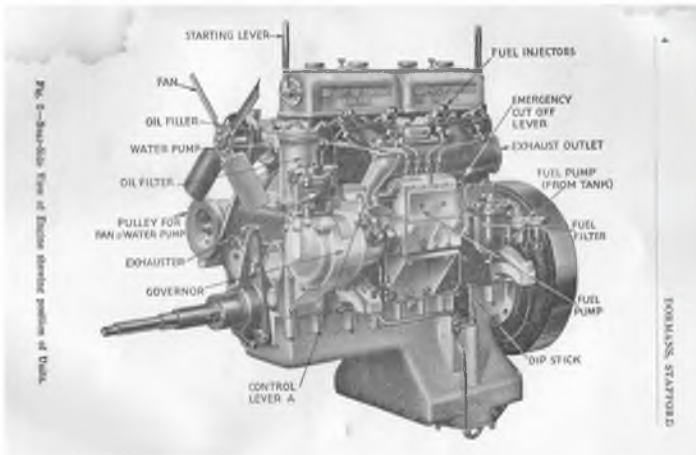
These engines were designed (Ricardo) and manufactured (W.H.Dorman) to replace large inefficient side valve petrol engines in large cars, charabancs and buses, and mid-size commercials. Diesel replacements were

done to large car chassis but few, if any, survive. However, it was probably more common in commercial vehicles.

I would love to see it preserved, preferably in a running vehicle. It is an historic, rare and beautiful piece of engineering. I have seen it running and it sounded OK to me once it digested the "Start You Bastard". (I was a diesel mechanic, Diesel Fitter Construction and Heavy Earthmoving Equipment.)

Complete engine on a stand. Pick up Oberon region NSW.

Email Phil Guilfoyle
Guilfoyle.vrm@gmail.com



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From the 'Humberette' The Humber Car Club of Vic is celebrating their 50th Anniversary this year

CENTRAL VICTORIAN RESTORATION GROUP - HAY PRODUCTION



Neil Athorn

After a lot of effort by a number of club members over 2024 the hay is now all gone from the Huntly block and the Clubs bank account is looking healthy again, as we broke even on our income against costs

It all started with a thought that CVRG members can do this. Land was found at the Echuca end of Huntly. New gateway was installed. Some historic farming equipment was purchased, fixed and used to prepare the ground. The repairs to the machinery were carried out on Saturday mornings by members at Midstate Machinery workshop in Huntly.

Weeds were cultivated out with 50+ year old tractors and made into piles and burnt. Rocks collected and removed by hand by members. The paddock was worked up three times by members and those not involved with the use of the tractors were on hand to prepare BBQ lunches and refreshments for members.

This job was harder as there is no building or power on site. Seed and fertilizer supplies were obtained and delivered to site. This was not a cheap exercise and used up a large proportion of the clubs funds.

Members were having a great time and were keen to be out there more with their tractors and equipment and tools for repair work. A grouper was borrowed to mix the seed and fertilizer and the seeding was done with the help of a neighbor's equipment. Sadly the seeder that members fixed only lasted two rounds of the paddock and the real reason it was cheap was found. We have another one now so hopefully that will go ok in 2025. Then the prayers for rain at the right time were

answered. Oats were growing well.

It was decided to turn it into round bales. We ended up with 122 of them weighing over 350kg's each. A contractor bailed it up after club members mowed the oats and formed them up into rows. Good going from 70 acres of land.

Tony went out with the Ford 4wd tractor and lined the bales up making it easier for Steve with the loader to load his drop deck trailer. I believe around 40 in each load went to Daylesford to one buyer who took the lot. The club account is looking better again now. Thank goodness as it was a gamble to undertake with Club funds.

A huge thank you to everyone involved. I know there was a lot of fun had over the year doing this but at the same time a lot of work and worry to achieve at least a breakeven point for the club. It is amazing the depth of knowledge members have and those who have not



been involved in farming can come and learn just how hard the work on the land is and the worry you have if you will break even or run at a loss.

Next step is to have the property sprayed to stop the weeds and then wait till March and then work it all up ready for sewing again at the end of April. Again a huge thank you to everyone involved.

Neil



*Ready to plant
Bit damp for
ploughing
Load going*

Bits & Pieces



THE EGG TRUCK – very popular idea in the 1930.s to build special bodies on standard truck chassis. for advertising purposes. *From the Queensland Early Ford V8 Club newsletter.*

Eric McQuillan of South Africa sent in this photo of his 1933 Ford built V8 convertible bakkie LDV (utility)



Here are two pictures comparing the 1934 Roadster and Cabriolet. While they are both single seaters, the Roadster has a detachable windscreen and side curtains. The Cabriolet has a fixed windscreen and wind-up windows. Trevor Poulsen

Austin 18/24 Model and Discovery of a Survivor



Austin launched the 18/24 model in 1907 and this highly successful 4.4 litre car continued in production through to 1913, although in 1911 the engine size was upgraded to 4.9 litres.

Longbridge quality became legendary, Austin quickly establishing his new company amongst the upper echelons of quality British manufacturers.

Austin catered for the full spectrum of the market with early production embracing a single-cylinder 7hp model, a commercially highly successful four-cylinder 10hp car and further models right through to the 40hp car which was aimed firmly and successfully at the market dominated by Rolls-Royce, Wolseley and Napier.

The 18/24hp model has survived in small numbers, only five examples being recorded in the current British Veteran Car Club Members Handbook.

Recently found here in Australia this magnificent 1909 Austin 18/24 Chassis number 705 Now in the care of Adam Francis He is looking to correspond with any other Veteran Austin owners particularly 18/24hp owners. After any manuals, literature or pictures. Adam Francis - alfrancis@optusnet.com.au