Peugeot Car Club (Auckland) Peugeot Car Club (Auckland) Peugeot Car Club (Auckland) Peugeot Car Club (Auckland)



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Front cover – 901 Peugeot Concept car Above – Reay Grant





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11 Railside Place Hamilton

Peugeot Car Club (Ak) Inc P O Box 29002 EPSOM. Ak 1023

Patrons

Don Hadfield, Ray Williams,

President

Brent Druskovich, 09 638 9421 brentdruskovich@gmail.com
Vice-president

Secretary

Jeanette Grant, 09 638 8566 jeanette_grant@hotmail.com **Membership Secretary** Soo Land Wong, 09 625 5189 sojewong@gmail.com

Treasurer

Steve Cornwall, 09 402 5006 jensteve@xtra.co.nz

Webmaster

Kevin Hardie, 027 625 0505 kevin@azorah.co.nz

Committee

Liesje Bradley, 027 2897 634 liesjebradley@gmail.com
John Grant, 09 638 8566 jeanette_grant@hotmail.com
Peter Hagglund, 09 280 5737 haggy251@gmail.com
Jayden Hardie, 022 359 3749 jayden@localeyes.co.nz
Immediate Past President

Croa Minkley 00 492 4022

Greg Winkley, 09 483 4023 gregwinkley@hotmail.com

Technical Officers

John Grant, 09 638 8566 Dennis Lowe, 09 267 6461 **Club Shop**

Brent Druskovich - 09 638 9421

Peugeotex Layout

Jeanette Grant, 09 638 8566 jeanette_grant@hotmail.com Printed by CopiesPlus

www.copiesplus.co.nz

COMING EVENTS

peugeotclub.org.nz

For updates on events, keep an eye on our website peugeotclub.org.nz

November 12 – Pride of Ownership

2024

February – Ellerslie Concours

March 3- Brit-Euro car Show

March 17 – Gymkhana – TBC

April 21 - Navigation Trial - TBC

THOUGHT FOR THE MONTH The attention span of a computer is only as long as its electrical cord.



P O BOX 29002 Epsom Auckland 1023

Peugeotex is the monthly magazine of the Peugeot Car Club (Ak) Inc. The Club accepts no responsibility for any views expressed in it.

PRESIDENT'S RAMBLE

I have left this to the last minute hoping for some inspiration, but alas none has come, and I expect this will be more of a short stroll rather than a ramble, though we will all find out by the time I get to the end of it.

Part of me wants to shift on. I think I am ready to sell my 505, but another part of me rebels against the very thought. Maybe I need a half change - ready to sell mine but purchase a manual STI or GTI instead; however finding one is another story, so maybe I do just hang on to what I've got.

This last weekend I have had the privilege, and I do not use that word lightly, of sitting in the passenger seat of Greg Winkley's 405 GTI-6 doing a couple of laps of Hampton Downs. His car began life as a 405 Mi-16, and was owned by former member Shane Popham, who then sold it to one of our patrons, Racing Ray Williams, and has since had a transplant or two, one being I'm told receiving a boot from Jay Hardie, and Greg transplanting a 306 GTI-6 engine and gearbox into it (I think on the gearbox - I didn't actually notice and now wish I had!). One thing that amazed me was how comfortable and smooth the 405 was, well cushioned, didn't throw me around, part of which must go down to Greg's driving, fast and smooth.

I was also taken out by Peter Vuletich in his latest hot hatch, Peugeot couldn't provide a modern option, so he has purchased a Renault, Peter is still learning his way around both the car and the track so every session is getting ever improving times. Whilst I was in the passenger seat I saw the speedo get to 193, I suspect there will be faster times in the future.

This has been written prior to the Pride of Ownership, hope I got to see a few of you there, results no doubt will be out in the December Magazine, I look forward to finding out what Jeanette has waiting for us.

As a reminder I am still after people putting their hands up to display at Ellerslie in February,

Brent

LETTER

On our recent trip to the garden festival, in Taranaki, we experienced something wonderful.

At the first set of traffic lights north of Whangarei we stopped next to an electric Hyundai.

Soon we stopped at the next petrol station where we filled the car with petrol, under a canopy, went into to the shop to buy some chocolate and in less than 10 minutes we were on the road again.

At Kaiwaka we saw the same electric Hyundai, hooked into an electric charger, in the rain, without a rain canopy and with no other services around.

I don't know how long they would be there, but it would have been a miserable experience, air conditioner off to recharge the battery and no shop to buy chocolate.

What a wonderful experience it would have been; not!

*Jen and Steve Cornwall,*Paihia

COMING EVENTS

February 11	Ellerslie Car Show & Concours d'Elegance	
March 3	Brit-Euro Car Show	
March 17	Gymkhana; venue TBC	
April 21	Navigation Trial – start 1.30pm; venue TBC	



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JEANETTE'S JOTTINGS

Only one quartz watch today is accurate enough to be certified as a marine chronometer – the Omega Megaquartz.

The name 'Wendy' was invented by Sir J M Barrie for that character in his 1904 play 'Peter Pan'.

Aerial photography has helped change the world. The first photography drone was invented in 1882, when an inventor pioneered a kite that had a timed explosive charge attached to it that triggered a camera. Now, drones are a million times more high-tech.

More than 5 billion people, roughly 63% of the world's current population, would die of famine in the aftermath of a full-scale nuclear war, according to a 2022 study. In fact, there would be a 97% reduction of food production in China, France, Russia, the United Kingdom, and the United States.

A famous weird law is Singapore's ban on chewing gum to avoid littering.

They also have a \$500 fine for feeding pigeons.

According to travel security firm Global Rescue, wearing camouflage patterned clothes is illegal in several Caribbean countries, like Jamaica, Antigua, and Barbados. It even extends to luggage or bags.

New Zealand's score of 0.8 parts per million means
Kiwis are at a significantly lower risk of
encountering fake money than citizens
of many other English-speaking

Believe it or not, there is a law in New Zealand that states you cannot fly with a rooster in a hot air balloon.

In Switzerland, it's against the law to flush a toilet after 10 p.m. in an apartment building.

In the Kanata neighbourhood of Ottawa, residents cannot paint their garage doors and house doors in purple.

Alaska is both the westernmost and easternmost state in the US
This is because a small, uninhabited island called Semisopochnoi stretches so far west that it actually enters the Eastern Hemisphere.

The definition of a desert is actually just an area of land that doesn't get more than 10 inches (254 mm) of precipitation a year. With that definition in mind, the world's largest desert is Antarctica!

Today there are more than eight billion people living in the world, of which 90% are in the Northern Hemisphere.

The world is divided into four hemispheres based on the Equator and the Prime Meridian. While some continents fall into two hemispheres, Africa lies between all four.

Istanbul is the only city in the world that is spread across two continents.

Damascus is the oldest continuously inhabited city in the world

– at least 11,000 years.

The world record for the number of puppies born in one litter
– is 24!

FROM THE HISTORY BOOKS

The French have been building cars since the dawn of motoring (or even before, if you count Nicolas-Joseph Cugnot's steam-powered dray of 1770), and a great many of them have been very significant in one way or another.

A group of Peugeot employees came up with such a radical idea for a racing car that they became known within the company as the Charlatans.

At a time when car engines were very simple by modern standards, they devised one with twin overhead camshafts and four valves per cylinder. There is nothing remotely surprising about this today, but in 1912 it was revolutionary.

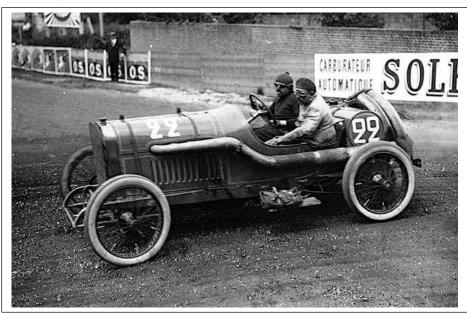
Georges Boillot won the French Grand Prix that year by just over 13 minutes – 11 months later, Jules Goux was victorious at the Indianapolis 500 by a similar margin, also in a Peugeot L76.

Thanks to the designers considered mad by some of their peers, Peugeot had got motorsport absolutely right, at least for a while.

More recently, the 504 may have faded from public memory to a large extent, but it was one of the most remarkable cars Peugeot ever produced.

There were many body styles, including saloon, estate, pick-up, convertible and coupé (the last two being remarkably beautiful), along with four-cylinder petrol and diesel engines and a 3.0-litre petrol V6.

One of the car's best features was its apparent unbreakability, which made it very popular in Africa. Competition versions won five rounds of the World Rally Championship on that continent in the 1970s.



Peugeot 205 (1983)

Peugeots of the early 1980s were not particularly exciting, and certainly nowhere near as innovative as Citroëns of the past.

It was therefore quite a shock when the 205 arrived and was immediately hailed as one of the most splendid superminis on the market.

Blessed with a design which still looks reasonably fresh four decades later, the 205 did just about everything right, especially in GTI form.

Fitted at first with a 1.6-litre engine and later a long-stroke 1.9, the GTI could be tricky to drive on the limit, but even now it is held up as an example of what a hot hatch should be.



Peugeot 205 T16 (1984)

The T16 homologation special was similar in concept to the Renault 5 Turbo, with a turbocharged engine mounted where the back seats would normally be.

But while the Renault's power was sent only to the rear wheels, that of the Peugeot was delivered to all four. This made all the difference. While the 5 Turbo won only five World Rally Championship events in six seasons, the 205 won 16 in just three.

It took over from the Audi Quattro as the dominant car in the sport, winning the drivers' and manufacturer's titles in 1985 and 1986. It might have gone on to do more, but the Group B class it was built to compete in was dropped in 1987.



Peugeot 905 (1990)

Peugeot's very long motorsport history reached one of its peaks in the early 1990s, thanks to the excellence of the 905.

With an F1-style 3.5-litre V10 engine in a carbonfibre monocoque, the 905 was one of the greatest sports cars of its day, winning across the world.

The Le Mans 24 Hour race is by far the most famous event in the world for this type of car, familiar even to people with minimal interest in the sport.



The 905 won it twice, first in 1992 by a margin of six laps over the best of the second-placed Toyota. A year later, 905s took all three of the podium positions.

3008 UPDATE

by Lael Lee in Oct TORQUE

The October 2023 issue of TORQUE from the Peugeot car Club of Victoria, contained more comments about his 3008 Hybrid.

"What do I like about the car so far? The smoothness of the transmission, the quietness, the impressive get up and go from start to stop, the regenerative braking allowing you to traverse the roads almost without touching the foot brake.

I recharge mine each time I stop at home. If it has a flat battery it takes 5-6 hours but if it is less, maybe an hour or three.

I drove our E 100 Cabriolet today and to be honest I am starting to prefer the Peugeot. I've just got to sort out the accelerator and brake pedals with my big wide feet which overhang from brake to accelerator."

MY 504 LEARNING EXPERIENCE

by Trevor Wilkinson.

The full version of this article was written for The PUGILIST and has been shared in TORQUE.

In June last year I saw an advertisement in PCCV Torque magazine for a 1972 504 Ti sedan for sale in Forbes, NSW. My twin brother bought a 1973 Ti new and found that it was an outstanding car. I had the pleasure of a test drive not long after he purchased it. In a demonstration of how forgiving the suspension was, I didn't see a rather big hole in a wooden bridge we crossed. It was only after we stopped to inspect for any damage, did we see a rather bent front wheel rim. We had hardly felt the bump going over the hole.

My brother owned the Ti for a great number of years. All his children learned to drive in it and it made many long trips...

...Curiosity got the better of me and we took a trip down to have a look see. The 90 plus year old gent who owned it, decided to sell because of his restricted licence. He had long been a Peugeot enthusiast and was still driving around in a 505 GTi with a monstrous cow catcher bull bar on the front. The Ti was always a country car originally from Canberra before becoming a Forbes resident. I was keen from the outset as there was no evidence of rust.

This was a problem in early 504s. As this car had spent its life in drier, less humid conditions and garaged, it was well preserved.

The owner told me that the car had sat idle for at least 12 months. It took quite a bit of effort to start and keep running. I was prepared to take a risk and buy it for the advertised \$5000 – unregistered, and try to address the starting issue...

...After taking delivery of the car, I started to investigate why the car wasn't happy starting. I drained the tank of the little fuel it contained. It was quite putrid and old. I flushed the tank with new fuel, changed the rear and front filters and checked the priming jet located at the rear of the inlet manifold which sprays a fuel mist whenever the starter is engaged. (This checked out OK.)

The fuel injection system in the car is a mechanical type (Keugelfischer) with an injector pump driven off the camshaft and using conventional injectors.

A rotary pump located near the spare tyre and fuel tank supplies regulated pressure fuel to the injector pump, with excess fuel returned to the tank. The Keugelfischer system has proven to be very reliable, fitted to Mercedes and BMW as well as Peugeot (as long as untrained people don't fiddle with them.)

After correcting the much retarded ignition timing, a new set of spark plugs, tappet adjustment, clean fuel and filters, the engine was much better starting and continuing to run.

It was time to give the rest of the car a good look over. the radiator was cleaned, new thermostat. a new water pump and hoses as well as heater and fuel enrichening water recirculating hoses fitted.

It was then that I found that the water fuel enrichening housing was badly corroded and the device inoperative. Luckily for me, Lewin Partridge of Peugeot Spares in Brisbane had a new one as well as the thermostatic plunger that operates the enrichening lever according to engine temperature.

The seller of the vehicle had used soluble oil as a coolant additive. This might be OK with a cast-iron cylinder head but useless stopping corrosion in an alloy cylinder head. The engine mounts were also replaced.

Next on the list was the suspension. I replaced all the rubbers including the anti-roll bar and radius rod rubbers which naturally perish after 50 years. I found the left-hand ball joint may need replacing but left this till later."

This was not the end of the saga. But as far as we are concerned, perhaps the most interesting point was the fact that it did prove possible to get the parts — particularly for the engine.

There are not many 504s left in NZ, but this article does give hope that the remaining ones may be kept running.

WORLD PETROL PRICES

Extracts from ©NataliaCatalina.com/Shutterstoc

Oil prices jumped earlier this month amid fears the Israel-Hamas war could disrupt supply in the region. While prices have since fallen back – Saudi Arabia has announced that it's working with regional and international partners to stabilise oil markets – investors remain cautious and prices could very well surge again if the conflict escalates across the region.

With motorists around the globe gearing up for the possibility of higher prices at the pumps, read on to discover the average cost for a litre of petrol in 30 countries, including the UK, ranging from the cheapest to the most expensive. Price data is from GlobalPetrolPrices.com and is correct as of 9 October. Globally, the average cost of petrol per litre is \$1.35 (£1.10), but prices vary wildly around the world. Although there are several notable exceptions, petrol tends to be more expensive in affluent countries, where goods and services are charged at a premium and fuel incurs higher taxes.

Consequently, petrol tends to be cheaper in oil-rich developing nations where the cost of living is lower, and governments often subsidise the commodity more.

Here is one extreme case -The price of petrol in Venezuela, which boasts the world's largest oil reserves, is set at a minuscule 0.84 bolívar per litre. This works out at a fraction of a US cent, making it the most affordable country to fill up in by a long shot.

However, the country's massively subsidised fuel is reportedly in short supply and middlemen often add on hefty surcharges. Meanwhile, more easily obtainable "international" petrol is far more expensive. This means relatively few Venezuelans pay the rock-bottom price that the government fixes. In any case, petrol shortages. both in terms subsidised and "international" fuel, have been plaguing the country for quite some time now.

These examples are from the 9th of October - in US dollars.

Malaysia	.43c
Russia	.56
UAE	.91
USA	\$1.05
Australia	\$1.18
Japan	\$1.21
China	\$1.24
India	\$1.25
Canada	\$1.30
NZ	\$1.91
UK	\$1.92
France	\$1.98
Denmark	\$2.07
Switzerland	\$2.09
Norway	\$2.10
Netherlands	\$2.23
Iceland	\$2.31

ULEZ THREAT

by Charlie Underwood/Aaron McKay

If you can get hold of a copy of the July 2023 issue of CLASSIC & SPORTS CAR magazine, you will like to read the full article from p 13 titled 'ULEZ threat to modern classics.'

I had never heard the term before – but it stands for 'Ultra Low Emissions Zone' and from the 29th of August has been expanded to all of Greater London.

What does it mean? Well the subtitle of the article is 'Greater London emissions zone expansion hangs a whole generation of cars, enthusiasts and businesses out to dry.'

In essence, all non-compliant cars – which includes all of those aged from 22-40 years old – are charged £12.50 a day to use the city's roads.

The original Congestion Charge was first introduced in April 2019 but only covered Central London's existing 8.1 square miles. Unlike this, the new ULEZ is enforced 24 hours a day, every day of the week – except Christmas. This affects an area of over 600 square miles where nine million people live.

Regardless of their actual emissions, all cars in the 22-40 years age range are considered non-compliant. 'Historic' cars over 40 years old are exempt while almost all petrol cars with published NOx figures comply - i.e. those made after 2001. The cut-off for diesel engines is more recent - at 2012's stricter Furo V1 standards. Electric vehicles are ULEZ exempt but electricconverted classics will have to re-register to be recognised by TfL [Transport for London]

While the aim is to improve air quality, TfL itself admits that the policy will have a minor to negligible effect as only 15% of the cars in the zone are not compliant.

The annual £18 billion of revenue generated by the UK's classic car industry is therefore under real threat. It will be a very hostile environment for the many classic car businesses based in London. In fact, by restricting the hobby of classic car ownership, the whole future of historic vehicles in the UK would seem to be being put in jeopardy.

PS. The High Court has now ruled that expansion of the zone is lawful, after five Conservative-run councils had challenged the Labour mayor of London's plans.

WHAT DOES IT MEAN IN PRACTICE?

I asked our son Reay Grant who lives in London, what ULEZ meant in daily life. This is his reply.

"Righto. Driving in London is pretty much a waste of time; you can usually get around much quicker on the Tube.

According to the Mayor of London, "Weekday (07:00 to 19:00) speeds from 2008 to 2018 have changed from:

- 8.7 mph to 7.1 mph in central London
- 12.5 mph to 11.6 mph in inner London
- 20.3 mph to 19.3 mph in outer London

There are very few parking spaces anyway, especially in central London. As an example, when we had the house in Barking (which isn't central at all) there were 13 houses on the road and seven parking spaces in total. There was no possibility of off road parking either. Most of the petrol stations have long closed too. What we do have instead are things like Zipcar. They have dedicated spaces which you can find online, and rent one of their cars for 16/hr (or a van for a bit more.) If I was still driving, that's what I'd probably do.

London has an odd system where there are two kinds of taxis. The traditional Black Cabs are still here. You can wave them down and they know London backwards. They have an incredibly tight turning circle, take wheelchairs and the new

ones are all electric. Alternatively, there is Uber and various similar taxis; they are all hybrids these days. Quite often they are owned by two or three drivers who share them, as while they are expensive to buy, they are very cheap to run. That's how I often get home at 4am on Wednesday morning. I can usually get home for around £25. My employer will pay £15 towards it and I can claim the whole thing off my tax bill. The only thing is, sometimes you have to wait 15-20 minutes so it can make more sense to get a bus they run 24hrs and there's far less traffic in the early hours. For example, to get from one of the museums in South Kensington to my flat in Turnpike Lane at 4am, a taxi would take just over half an hour plus waiting. A bus would take just under an hour. During the day the tube would take around 45 minutes plus a ten minute walk.

So you'd be unlikely to want to drive a classic car into London. But if you did, in terms of ULEZ, according to Classic and Sports Car UK, "What this means in practical terms is that if your classic is more than 40 years old and is registered for the historic vehicle tax class, you will not need to pay the ULEZ charge."

On the other side of it, air pollution is much better than it was. The biggest issue here really is that there aren't enough charging points for electric cars, and running cables across footpaths isn't really practical.

There's been a lot of political nonsense about ULEZ this year. It was actually legislated for by the current Conservative government (the mayor is legally obliged to make it happen) when Conservative Boris Johnson was Mayor of London (and an absolute disaster for everyone except property developers). Now we have a Labour mayor the government has reneged on its promise to buy older cars and finance newer ULEZ compliant models and are blaming it all on the current mayor (who has actually been far better for everyone and is very popular). When B Johnson resigned as MP and there was a byelection, the Conservative party's majority in his old constituency went down from around 25,000 to around 500. This was portrayed as a disaster for Labour (eh?) and the fact that a very small minority had been protesting against ULEZ was supposedly the reason that Labour didn't win an historically Conservative seat! Even though most people in Uxbridge (like most of London) don't actually own a car. Absolute nonsense, But enthusiastically pushed by a Conservative right wing press which is entirely owned by helicopter owning billionaires that don't live in London (or typically even the UK).

I hope this clears it up! Lots of love, Reay

[Does anyone else have any comments they would like to add? Ed]

ACCIDENTS IN INDIA

India is the top country in the world for road accident injuries and, sadly, deaths. Around 450,000 accidents happen in India every year and 150,000 of those are fatal. There are 53 accidents an hour in the country, meaning that there is a death, on average, every four minutes. According to the Anadolu Agency, weak traffic law enforcement, bad road user behaviour, and lack of rapid trauma care are the reasons the traffic situation in India is so bad. We think this photo falls under the category of "bad road user behaviour."



DON'T over fill your petrol tank.

The automatic shut-off valve is there for a reason. Petrol needs room to expand, so topping off can cause pressure to build up in the fuel tank and lead to a dangerous leak. It is better to just stop when the pump does.

901 v 901

We take the Peugeot numerical system for granted. It is logical – the first number indicates the size, the last the number of models in that size – and the two numbers are separated by one - or maybe two – noughts. However, the system has had its moments. For instance....

Possibly the most storied arrangement of three digits in motoring history, 9-1-1, was never meant to be. Instead back in 1964, sports car manufacturer, Porsche, fully intended the iconic moniker to read "901".

As production of the 356 came to an end, Porsche switched to building the 901. That is until French carmaker, Peugeot, raised its hand claiming to hold the rights to any 3-digit array where the numeral zero takes center stage.

So, just weeks into production in 1964, Porsche had to pull the plug on its 901 halo-car, renaming it the 911.

Obviously, this close to the launch of such an important product, the seemingly minor hiccup threw the company's plans into disarray. Amongst the problems was what to do with the 9, 0, and 1 numbers that had already been cast in volume, ready for series production. These were to be prominently displayed on the deck-lid and dashboard of the 901 – signifying that this was a new generation of cars unrelated to any

previous design like the earlier 718 and 804.

So, in order not to waste their gold-plated badges, once they had decided to honour the French request Porsche simply used a pair of 1s to end up with 911.

An eloquent solution? Maybe – but would it not have made better economic sense to just rearrange the numerals to read 910? Of course, there was the 910 race car that debuted in 1966, so perhaps the company already had the name reserved.

While it's unclear whether Porsche ever challenged Peugeot's claims in a court of law, the company did retroactively rename some of their other models such as the Porsche 904 (renamed the Carrera GTS) and the Porsche 906 (now called the Carrera 6).

However, Porsche did not change the names of many of their race cars like the Porsche 907 that, in typical Porsche fashion, actually followed the 910 in the production sequence. Using closed, long-tail bodywork for the first time, the 907 achieved Porsche's first 24hr race win with a 1-2-3 finish at Daytona in 1968.

Peugeot apparently also had no problem with the 908, which succeeded the 907. Starting life as a closed coupe in 1968, the 3.0-liter flat-eight 908/01, was reconfigured as the 908/02 open Spyder, with bodywork that evolved into the 908/03.

Extracts from https://www.hotcars.com/this-is-how-peugeot-thwarted-porsches-original-plans-for-the-911

You never know what you will find for sale on-line. Here are some examples of the model Peugeots available ...



ixo 1:43 Peugeot 404 1968 Diecast Car Model Metal Toy...



1:43 Atlas Dinky Toys 25BV Fourgon Postal Peugeot D.3.A...



IXO 1:24 Peugeot 204 1968



ixo 1:43 Peugeot D3A Aspro Diecast Car Model Metal Toy...



Solido 1/43 Peugeot 504 Coupe V6 - Rally Car - Diecast Model...



Ixo 1:43 Peugeot 403 Break Spar Diecast Car Alloy Toy Model



IXO 1:24 Peugeot 204 1968 Diecast Car Model Metal Toy...



PEUGEOT 404 MODEL CAR PARIS TAXI 1962 FRENCH 1:43...



SOLIDO 1998 Peugeot 20 Coeur (Silver) 1/43 Scale Diecast...



Ixo 1/43 Peugeot D3A Labo Diecast Car Metal Toy Model



Otto 1/18 Scale Resin - OT142 Peugeot 405 Pikes Peak 1988 ...



IXO 1:24 Peugeot 104 ZS 1976 Diecast Car Model Metal Toy...



ixo 1:43 Stock Car Peugeot 408 Marcos Gomes 2013 Carlos...



Peugeot 504 1969 green metallic diecast model car...



REVR RETROFIT

his year's Australian national Dyson Award winner tells us more about the bolt-on REVR retrofit kit he's developing, that aims to convert ICE cars to practical, efficient hybrids for less than US\$3,200, taking less than a day to install.

It sounds like a bonkers proposition from the outset, but RMIT University design student Alexander Burton is well into prototyping the most mechanically complex part of the system: the flat, power-dense, liquid-cooled 50-kW motor designed to sandwich in between your wheel and brake disc.

It's a pancake-style axial flux motor; the stator is a flat plate that bolts to stationary points on the back of the wheel hub. The rotor is a second flat plate that delivers torque through the wheel bolts. There'll need to be an adapter plate built to suit each car model, but it shouldn't be complex, and motor installation should be a 10 minute job requiring no specialist knowledge.

The battery pack, along with the motor controllers, will go in the well in the trunk where your spare tire would normally fit. "Similarly to new electric vehicles such as Teslas," Burton tells us over email, "we see the spare tire being removed entirely – however, it's up to the customer what they want to do."

That round space should allow room for about a 15-kWh battery pack, which Burton says is enough for more than

100 km (62 miles) of all-electric range at stop-start city driving speeds, using regenerative braking. So it'd handle the vast majority of daily driving for most folks.

The REVR (Rapid Electric Vehicle Retrofits) kit leaves the vast majority of the car as it was; it's designed to run either in parallel with your combustion engine, or without it turned on. You'll turn the ignition key as far as "on" and hit a separate switch to enable the electric drive, or turn the key a little further if you want to start the combustion engine as well.

If the ICE engine isn't running, the big battery pack will keep your regular 12-V battery topped up to run your headlights and 12-V electrics. And where there's things like air con, heating, power steering or brake boosters running off belts from the engine, the kit will include electric replacements or augmentations.

How will it plumb in to read the accelerator pedal? Burton isn't 100% sure yet.

"The simple solution," he tells us, "is a potentiometer or similar device that reads the accelerator input. From this data, both acceleration and regenerative braking is decided, similar to existing hybrid vehicles. We leave the hydraulic braking alone so this is always available to the driver."

The system will likely need some way to shut off the electric motor when the car's put in reverse, as well, or make it operate in reverse.

Will there be some kind of dash display showing your battery level?

"For a basic conversion, we aren't planning one," says Burton.
"Diagnostics may be accessed through your phone, but simplicity is the key here."

"The goal is to offer a zero footprint retrofit," Burton adds. "Our target will be about 20% of all mainstream car models, starting with the biggies: Corolla group, Accord group and Civic group. We're looking at a popular BMW. We see installation being carried out by local mechanic workshops that have been trained by us. REVR is a largely bolt-on solution with minimal actual mods to the car."

Target pricing for a fully installed dual-motor, 15-kWh kit is under AU\$5,000 (US\$3,200) – which, if it works, would be an absolute no-brainer for a lot of car owners.

"This is an optimistic future price point based on wide rollout and falling materials prices," cautions Burton, "but we see the kit being installed for under AU\$10k (US\$5,400) sooner."

Will it be a legal modification to your car? "This needs to be navigated,"
Burton tells us, "but updated legislation should allow it, some engineering certification will be needed which we may provide in house."

The first car to be converted will be Burton's own 2001 Corolla, within a few months. Right now, he's still working on prototyping the motor. "Development-wise, we're aiming for a kit to be available in Q3 next year," he tells us.

"The company has a patent pending," he continues. "We have had a lot of people reach out asking for opportunities to invest and crowd-fund so we are hoping to take them up on that in the coming months. Converting the Corolla is the top priority at the moment but we are looking at possible partnerships and directions REVR can go in as well. The stretch goal is to convert one million cars!"

Burton doesn't see the REVR as a performance-boosting modification, despite the fact that it'll clearly deliver a meaty torque boost.

"It is exciting to contemplate how REVR can make a poor man's Koenigsegg and combine torque from all motors," he tells us, "but this will be explored later as it has safety implications."

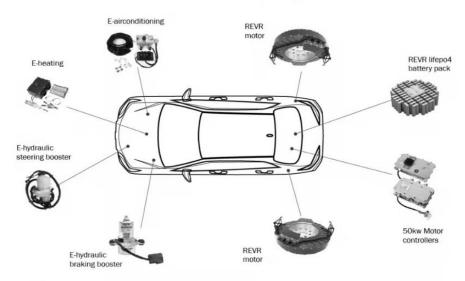
While a minimally-invasive 15-kWh kit is first priority, Burton hopes to expand things down the track to the point where drivers could choose to completely remove their engines and go fully electric. A full electric conversion with a larger battery pack would of course cost more – but thanks to its modular, minimalist structure, it should be a ton less costly than your average EV conversion.

And that's the point; creating a quick and relatively easy way for people to decarbonize their driving without dropping a stack on a new EV or hybrid.

It's a noble idea – but Burton's clearly got some challenges ahead developing this into a system that's reliable, safe, functional and legal, and that works across a useful range of existing car models. We look forward to following his progress.

Source: REVR

REVR concept





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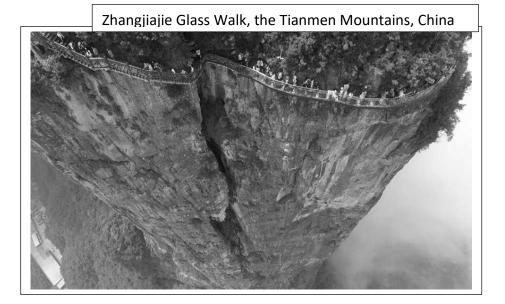
Alice Ball was a young chemist at Kalihi Hospital in Hawaii who focused on leprosy. She researched how to cure it by injecting chaulmoogra oil directly into the bloodstream. Sadly, Ball became sick and died in 1916. Arthur Dean took over her study, and she became forgotten until a medical journal referred to the 'Ball Method' and gave her credit.

JOKE OF THE MONTH

When the Old Colonists Museum opened in Auckland in 1916, many interesting curios and mementoes of our colonial past went on display before a fascinated public. None was more curious than the extraordinary contraption labelled "A FORM OF EARLY RABBIT TRAP."

Red-faced officials swiftly removed the device however, when informed they had been hoaxed.

It was a chastity belt!







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