



North Shore  
Vintage Car Club

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# Progress:

The monthly journal of the  
North Shore Vintage Car Club  
December/January 2019/20



Happy Christmas!! .....And since this is a joint December/January edition may I wish you all a Happy and Contented New Year. "May all your leaks be little ones!". Christmas for Helen and I will be special this year as our daughter, son-in-law and baby grandson are visiting from the UK. Together with our son, daughter-in-law and two granddaughters living in Albany it will be the first time that we've all been together as a family for nearly three years.

I've been hearing more rumbles from around the world about the potential banning of all petrol vehicles (including our qualifying vehicles). It seems to me however that this rush to replace all vehicles with electric vehicles hasn't really been thought through properly. It seems that the world won't be able to make enough batteries for the UK consumption alone, let alone the rest of Europe, Asia and America. Read about this on page 4.

I'm off on my own personal North Island Tour in the MG next week. I'll be winding my way down to Wellington, calling in to visit with long lost friends both on the way down and back. I'm looking forward to the journey and hope that the MG behaves itself on the trip.

I'm beginning to run out of photos and stories of your cars. If just 10% of the membership sent me a few photos and some notes we'd have enough information to fill over a year of Progress magazines. Please don't be bashful, send your photos to me. If you are unable to take decent photos or find it difficult to email them, just drop me an email and Terry Costello or I will arrange to pop over and take some photos. A small contribution from you will do so much to improve the magazine for the rest of the membership.

Finally, please note that I have changed my email address to [battersby56nz@gmail.com](mailto:battersby56nz@gmail.com) I look forward to hearing from you shortly.

*Stuart Battersby*

- \* **Chairman's Message:** Kevin Lord.
- \* **Can you guess what it is yet?** Oddball mix here.
- \* **Club Captain's Report:** Richard Lloyd.
- \* **Christmas at the Club:** The 'Do' and Christmas close down schedule
- \* **Focus on the Marque:** Let's go to commercials and look at the history of Bedford vehicles.
- \* **Upcoming Events:** Club runs and independent events.
- \* **Workshop Updates:** Updates on our project vehicles.
- \* **Mech Eng 101:** Well its PAINT this time.... I hadn't quite realized how complex it is.
- \* **Committee Notes:** A brief synopsis of last month's NSVCC committee meeting.
- \* **About Us:** Who's who and where's where.



*Merry Christmas  
and  
Happy New  
Year !!*

# Chairman's Report November 2019

Kevin Lord

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A lovely sunny 'Ladies Day' brought out a good number of members, wives and partners to visit two beautiful gardens with a nice enjoyable drive between them. The guys even had the bonus of seeing a collection of Vauxhalls.

A welcome afternoon tea in the sunshine gave us the opportunity to meet and talk with the partners and wives we don't see so often.

## Around the clubrooms

The boys have finished putting sealer on the new shed floor and it is now ready for use, after a few tidy-up jobs, insulation of power etc.

The fire engine is now running well after a burnt out valve has been replaced, and the carburettor issues have been sorted.

## Morris 8

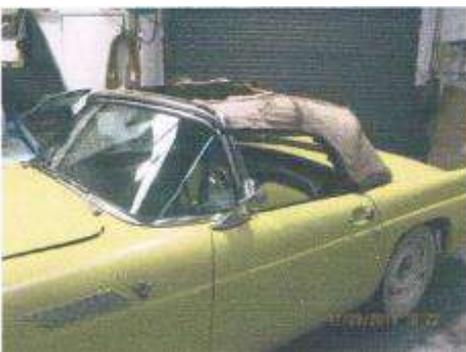
This has now had a new W.O.F. and the brakes flew through with flying colours (to the amazement of the inspecting officer).

## Chairman's Garage

**Thunderbird** -I have replaced and corrected the bows for the convertible top. I have installed a soft top using skills I learnt as a teenager in my early years as a cabinet maker and installing billiard table tops. Forgotten skills come in handy. *(See photos below)*

**Zephyr Ute** – Long suffering and often in everyday use, it did a bit of a sulk and became hard to start, so have replaced the coil, points and condenser. All's well.

**Merry Xmas and a Happy New Year to all from Kevin and the Committee.**



Before



During



..... And After

# Printing the Club Magazine from your Email

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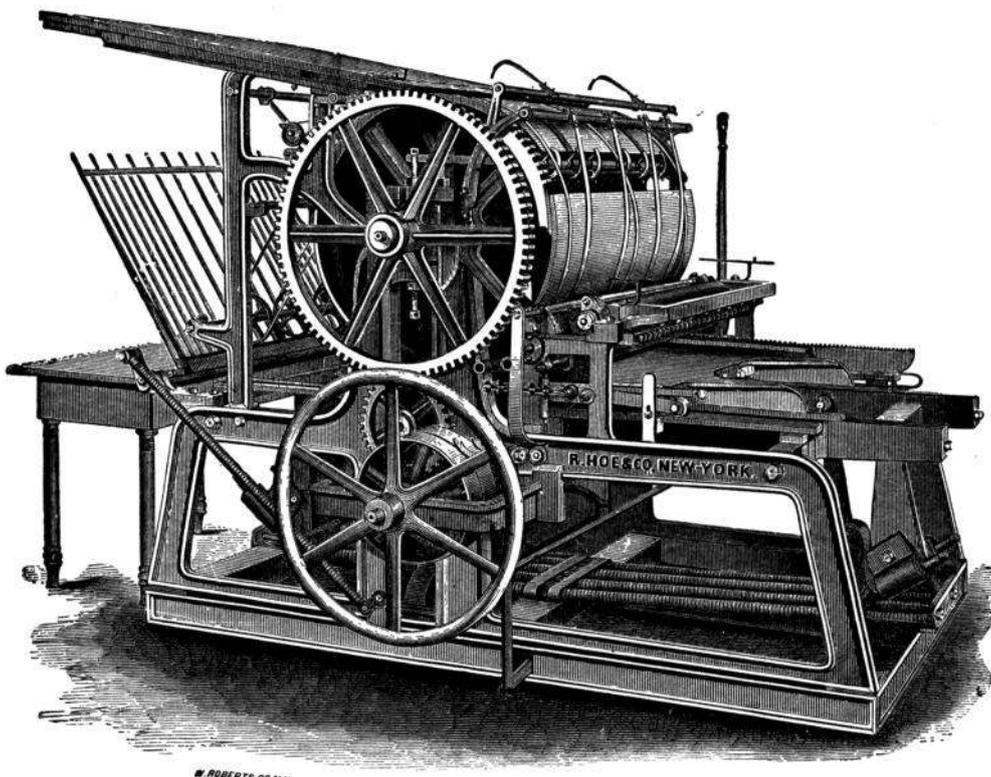
Thanks to Mike Garner

The following instructions will enable you to print the club magazine from your home printer if required:-

- To enable printing you must have an up to date version of Adobe Acrobat Reader DC. If your computer has not got this installed you must install it before attempting to print. This App is free to download from: [get.adobe.com>reader](http://get.adobe.com>reader).
- From your email download the magazine. Click on the icon. Then click on the down arrow and Open
- Once this has opened click on Print on the top task bar at the top left on the printer icon
- A new Window will pop up. Here you can change the way you want it printed. Also, in colour or black and white
- Where it states Page sizing and handling click "Booklet"
- On the right hand side of the Window there will be a photo of what the booklet will look like
- Lastly click Print at the bottom of the screen

## ***Please Note:***

***These instructions have been used and checked on Gmail, Xtra and Outlook and work perfectly. However, they may vary slightly for other providers.***



## Club Christmas Schedule

Christmas 'Do', Closing and Re-opening Times

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### ***Christmas Party/Get Together/Do: Sunday 15th December 14.30 Start***

The plan is to get together around 2.30 for teas/coffees and of course the bar will be open all afternoon. We'll sit down and eat together between 5 and 5.30

We won't be organising a run this year. The roads, especially at weekends, are getting very busy and so we'll stay at the club where the Chairman plans to organise 2 or maybe 3 very simple (but timed and competitive) driving games.

*(As an example one game will be to drive up to a traffic cone on top of which will be balanced a ball. You must touch the cone with your bumper, but not knock the ball off. You then reverse away, loop around and reverse into the cone, touching it again...AND not dropping the ball. Your effort will be timed and results tabulated to come up with the winner. Modern cars with "Beepy, Beepy parking sensors or cameras are illegal) There will be just one or perhaps two other similar, simple games.*

This year the club will supply **not only** a fabulous range of tasty **BBQ sausages**, but we'll also be offering the chance to prepare and cook your own **traditional, authentic wood-fired pizzas**. We will supply, bases, toppings and the Pizza oven as well has guidance on how to prepare and cook your pizza.

This is still '*Bring a Plate*' but as we are providing the **feature food** we'd like you to bring along a suitable accompaniments for the main course or cakes, tarts or trifles etc to accompany the club-supplied Artisan Ice Cream for the sweet.

### **Closing Times**

Wednesday 18th will be the last Club Night before Christmas.

Thursday 19th will be the last restoration/coffee/cake morning before Christmas.

### **Re-Opening Times**

Wednesday 8th January 2020 is first Club Night back.

Thursday 9th January 2020 is first restoration/coffee/cake morning back.

# Electric Vehicles

## World Resources

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A interesting data set appeared recently in NZ Classic Car that I thought might interest some of you. In an article on electric vehicles mention was made of the recent UK mandate that it would have 100% Electric Vehicles on the road by 2035. Further the article quotes a few scientists and researchers regarding the feasibility of this target. The rabbit that the magazine was particularly chasing was let loose by a Sarah Maryssael (Tesla, Global Supply Manager) who apparently said in a conference to miners and lawmakers that Tesla sees a shortage of key Electric Vehicle minerals coming in the near future.

The specific facts quoted by NZ Classic Car were based upon the UK stated objective. The UK currently has 31.5 million cars on its roads. These cars travel a total of 252.5 BILLION miles per year. If all those cars were replaced with Electric Vehicles and all those EVs used the very latest, resource-frugal, next-generation batteries then the UK alone would require:

- ◆ 207,900 tonnes of Cobalt (Just under twice the current annual world production)
- ◆ 264,400 tonnes of Lithium Carbonate (Three-quarters of the worlds production)
- ◆ At least 7200 tonnes of Neodymium and Dysprosium (The entire world production of Neodymium)
- ◆ 2,362,500 tonnes of Copper (More than half of the 2018 Copper production)

NZ Classic Car quotes Bernstein Research as stating that increasing Graphite and Lithium from the current modest levels is theoretically possible, but doubling Nickel production over the next 17 years would require an Herculean effort. Doubling the world's Copper production would be nigh on impossible.

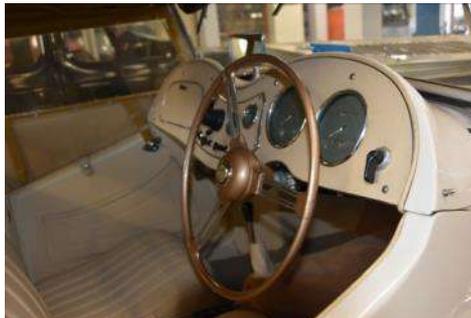
*Editor: New Zealand Classic Car is a very respectable publication (Go out and buy one now!) .. But this data could be 'Fake News'. I'll leave you to do your own research and make up your own mind. For further research on the benefits and sustainability of Electric Vehicles you might want to check out:*

**"The Emperor's New Clothes"** A short tale written by Danish author Hans Christian Andersen, about two weavers who promise an emperor a new suit of clothes that they say is invisible to those who are unfit for their positions, stupid, or incompetent – while in reality, they make no clothes at all, making everyone believe the clothes are invisible to them. When the Emperor parades before his subjects in his new "clothes", no one dares to say that they do not see any suit of clothes on him for fear that they will be seen as stupid. Finally a child cries out, "But he isn't wearing anything at all!" The tale has been translated into over 100 languages.

# Can you guess what it is yet?

Some easy and some rarities

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# Club Captain's Report

December 2019

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Our club run was later in the month than usual because it clashed with several other events running at the same time. However, it turned into our advantage because the weather was perfect and the participation was excellent. There were 33 entrants which was great.

Thanks to Neil who arranged the visit to two different gardens. Unfortunately Mary and I had another event to attend and couldn't visit the first garden, which we heard was beautiful. However we did manage to get to get to Mike Swanton's place at 3.00 pm. Most people had left or were leaving but Mike very kindly took us on a tour of his lovely garden. Both Mike and his wife Christine do all the gardening themselves and it really is a delightful place to wander around.

On arrival we were impressed with the line-up of beautiful Vauxhalls outside their gorgeous house. We stayed with the Swanton's for about an hour along with several members who were still wandering around. This type of event seems to attract more participants so it is worth keeping in mind.

Christmas is almost upon us and plans are in place for a fun-day at the clubrooms with a pot luck dinner to follow.

Finally a big "thank you" to Neil for helping to organise the run and for finding other places of interest for us to have a pleasant Sunday afternoon.

On Saturday four cars took part in the Orewa Santa Parade. A lot of interest was shown by the public and a lot of nice comments were made.

It is always a lot of fun and the Club Morris 8 behaved well.

Christmas is coming so driving is becoming more hazardous. Watch out for the other idiots and drive safely.

Richard Lloyd

Club Captain



*Two 'Richards' take a 'Timeout' on Ladies' Day*

*(It's a good job that I don't use nicknames!)*

# Workshop Updates

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A brief update on all the current workshop projects.  
Achievements last month and plans for coming months.

**The Chev : Tony Sparkes:** Not much progress this month. There is still an electrical fault to sort out and work on the upholstery continues.

**The Bedford AA Truck: Tony Sparkes:** The front wings are still being worked on. They now have the first coats of Hi-Build primer applied but will need a bit more sanding and finishing prior to a top coat spray of black gloss (a notoriously revealing colour). Stuart and I went to look at Michael Dorbeck's very original Bedford truck for ideas and photos as a consequence we have decided to retain the YELLOW front cowl (and not 'Go Black') which is more in keeping with the original favoured colour schemes in New Zealand.

**The Bus: Clive Sandham:** All seats now removed. Heavy duty floor lino acquired. We are looking to fit the lino ASAP, but are looking for an experienced fitter to help/advise/do the job.

**The BSA Van: Neil Beckenham:** Progress is happening slowly on the BSA with the rear curved wooden frame supports being cut and machined. This frame will determine the tail gate size and support the rear roof cross beam.

The fan hub has now been fully reconditioned with new seals, new bearings and support housing being welded and machined so it looks like new.

The differential has been cleaned and examined and all appears to be in a very good condition, which is more than we can say about the axles! When the axles and bearings were removed and cleaned, the true extent of wear and damage was revealed. The right-hand axle appears to have been welded and straightened previously.

The rear brake drums are now all cleaned and appear to be in very good condition, with only a small amount of machining needed.

Hopefully, we will start on the front valance panel work over the next month.



*Doorstep measurement from Mike Dorbeck's Bedford*



*Original Bedford sidelights. Do we still have ours?*

## Focus on the Marque: Bedford Vehicles

*Having been working on our Bedford AA Truck since I joined the club, I thought it time to research the marque; especially as it was built just 21 miles from my home town of Aylesbury in the UK.*

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**Bedford Vehicles**, usually shortened to just **Bedford**, was a brand of vehicle manufactured by Vauxhall Motors. Established in April 1931 and constructing commercial vehicles, Bedford Vehicles was a leading international lorry brand, with substantial export sales of light, medium, and heavy lorries throughout the world. Bedford's core heavy trucks business was divested by GM as AWD Trucks in 1987, whilst the Bedford brand continued to be used on light commercial vehicles and car-derived vans based on Vauxhall/Opel, Isuzu and Suzuki designs. The brand was retired in 1991.

**1930s:** The AC and LQ models were produced at Luton from 1929 to 1931, and styled as the "Chevrolet Bedford", taking the name from the county town of Bedfordshire, in which Luton is located. The AC was bodied as a light van (12 cwt), and the LQ in a wide variety of roles, including a lorry, ambulance, van and bus versions. The name "Chevrolet" was dropped, and the first 'Bedford' was produced in April 1931. This vehicle, a 2-ton lorry, was virtually indistinguishable from its LQ Chevrolet predecessor, apart from detail styling of the radiator, and was available as the WHG with a 10 feet 11 inches (3,330 mm) wheelbase, or as the WLG with a longer wheelbase of 13 feet 1 inch (3,990 mm). However, the original Chevrolet LQ and AC continued in production alongside the new Bedford product for a further year. In August 1931, a bus chassis was added to the range, and was designated WHB and WLB.



*Chevrolet LQ Truck*

A large part of Bedford's original success in breaking into the UK and British Empire markets lay in the overhead-valve (OHV) six-cylinder Chevrolet engine, now known as Chevrolet Stove Bolt 6, this smooth running inline six-cylinder engine formed the basis of Bedford and Vauxhall petrol engines almost until the marque ceased building trucks and buses. In April 1932, a 30 cwt lorry was introduced, together with a 12 cwt light delivery van, designated as the WS and VYC models respectively. Bedford continued to develop its share of the light transport market, with the introduction of the 8 cwt ASYC and ASXC vans, a close derivative of the Vauxhall Light Six car. The AS series of vans continued in production until 1939.

Bedford introduced the 3 ton WT series in November 1933. Again, a short wheelbase WHT (9' 3") or long wheelbase WLG (13' 1") version was offered. A change in design of the WLG produced the WTL, with its cab, internal combustion engine and radiator moved forward to allow a 14 feet body length. In 1935, the WTB bus version appeared, and the WS and VYC models were updated. The 5–6 cwt HC light van was introduced in 1938, based on the Vauxhall Ten car, and the WT and WS acquired a newly styled grill.



*1934 Bedford WS*

Mid -1939 saw a complete revamp of Bedfords, with only the HC van continuing in production. The new range consisted of the K, the M and the O series, and the OB bus. Many of the trucks sold by Bedford between June and September 1939 were requisitioned for military use on the outbreak of World War II; many were abandoned after the retreat from Dunkirk, rendered useless to the enemy by removing the engine oil drain plug and running the engine. Because the German armed forces in 1940 were, contrary to their popular image, desperately short of motor transport, many of these captured Bedfords were repaired and pressed into service alongside Opel Blitz trucks by the German armed forces. Production of the new range ceased, apart from a few examples made for essential civilian duties, when Bedford went onto a war footing. Production resumed in 1945.

## Focus on the Marque: Bedford Vehicles (cont.)

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**World War II:** In 1935, Bedford began the development of a 15 cwt truck for the British War Office. This entered service as the MW in 1939, and 65,995 examples had been built by the end of the war in 1945. The MW appeared in a bewildering range of roles, as a water tanker, general duties truck, personnel carrier, petrol tanker, wireless truck and anti-aircraft gun tractor – among others. The War Office designated 15 cwt vehicles, such as the MW, as trucks, and larger vehicles as lorries.

The 1939 K-, M-, and O-series lorries were quickly redesigned for military use. This was largely a matter of styling, involving a sloping bonnet with a flat front with headlights incorporated and a crash bar to protect the radiator in a minor collision. The military versions were designated OX and OY series, and again were put to a wide range of tasks, including mobile canteens, tankers, general purpose lorries, and a version with a Tasker semi-trailer used by the Royal Air Force to transport dismantled or damaged aircraft. Bedford supplied numerous trucks and tanks to the Soviet Union during World War II.



WW2 Bedford QL "Queen Lizzie"

A radical departure from Bedford's design norms came in October 1939, with the development of a four-wheel drive, forward control lorry, which entered service in March 1941 as the QL, quickly nicknamed the "Queen Lizzie". As with the MW and OY / OX models, the QL went on to serve in a large number of roles, such as artillery tractor, gun porter, command vehicle, wireless lorry and petrol tanker, as well as the troop-carrying QLD, the most common variant. An experimental version used the track unit of a Bren gun carrier, or Universal Carrier, as an answer to the German half-track vehicles, which had superior cross-country capability. Production ran at around 12,000 units per year between 1942 and 1944. Many QLs and other Bedford World War II military vehicles served with the British Army, and other forces into the 1960s, and many others were purchased for civilian use after the war.

After the evacuation of Dunkirk in June 1940, the British Army had around 100 tanks, most of which were obsolete and inferior to the German tanks of the day. Vauxhall Motors was given one year to design and produce a suitable heavy tank. In May 1941, the **Churchill** tank went into production at Luton, some 5,640 units and 2,000 spare engines being produced at Luton, and other sites under contract to Vauxhall. The resultant need to continue truck production brought about the development of the new Bedford Dunstable plant, which came online in 1942.

**Bedford O Type Truck** like ours: Note the K, M and O types were basically the same front-end, engine and cab, but differed in their load capacity and wheel base. Our Bedford AA Tow Truck is an M Type (2-3 ton). In fact it's an MSC (S = Short Wheelbase, C = Chassis and Cab). Initially I thought ours was an O Type but I believe the longer bonnet on ours and no engine ingress into the cab defines it as an M Type. The 10 ft wheelbase confirms that it's an MSC 1946



## Focus on the Marque: Bedford Vehicles (cont.)

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1952 saw the launch of the Bedford CA light commercial, signifying the end of the road for the outmoded HC and JC models. The CA was a range of vans and pick-ups similar in concept and size to (although pre-dating) the Ford Transit of 1965. These were semi-forward control, having a short bonnet with the rear of the engine protruding into the cab. Engines were the Vauxhall-based 1,508 cubic centimetres (92.0 cu in) OHV in-line four petrol engine, with the option of a Perkins 4/99 or 4/108 diesel engine later on. Performance was adequate for the time, a maximum speed of 60 miles per hour (97 km/h) being attainable with the petrol engine, and offering fuel economy of 25 miles per imperial gallon (11 L/100 km). The van initially featured a three-speed column gearchange, changing later on to a four-speed column change.



*1954 Bedford TA: Note the American Chevy styling*

The CA was a huge seller both at home and in various overseas markets. The standard panel van was available in short- and long-wheelbase forms, and was also sold as chassis cab / chassis cowl, and became a popular basis for ice-cream vans, ambulances and camper vans. Known affectionately as "the Tilley", the CA enjoyed a very long production span, with only minor tweaks throughout its life, including the replacement of the two piece windscreen of earlier models with a single sheet. The CA was replaced by the CF, a completely unrelated vehicle using new overhead camshaft (OHC) engines, which was to have a much harder time proving itself thanks to the Ford Transit



*The Bedford CA: I remember in the late 60s travelling to away games with my soccer team in the Dormobile version of this.*

The 1950s also saw the launch of the popular S type trucks, the so-called Big Bedfords, which brought Bedford into the 7-ton range. The S series was immortalised in RL form – a four-wheel drive, high ground clearance version, as the Green Goddess emergency fire tender, used by the UK Auxiliary Fire Service until 1968, then until 2004 over 1,000 were held in reserve by the Home Office for use in the event of fire-service industrial action or other serious emergencies. They were disposed of by the Home Office in 2005. Several have found new homes in African countries that lack a developed fire-fighting service, such as Kenya. The C series of 1957 was a forward-control derivative of the S series, and outwardly very similar to it.



*The Bedford S-Type*

These vehicles were available in rigid and tractor units, with either petrol or diesel engines. The UK military were a huge customer for Bedford RLs using a 4.9-litre straight six petrol engine. Many RLs found their way into the armed forces of Commonwealth countries and later into civilian use.

## Focus on the Marque: Bedford Vehicles (cont.)

*(I'm sorry this has gone to a 4th page but all these trucks are so iconic that it felt wrong to curtail the story)*

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Alongside the S series trucks, the SB bus was released in 1950, and immediately became a big seller in India, Pakistan, Australia, New Zealand and Africa, as well as in the UK. The SB chassis was also used as a basis for specialised vehicles, such as mobile libraries, fire engines, and civil defence control units. The largest fleet of SB buses in the world belonged to **New Zealand Railways Road Services**, with 1,280 SB buses built between 1954 and 1981. The Bedford TK range replaced the S type in 1959, but the RL continued in production until 1969, when it was replaced by the M type, which used the basic cab of the TK and the mechanicals of the RL with minimal changes.



*Bedford SB Bus as used by NZ Railways Road Services*

The pre-war K, M and O types continued in production alongside the heavier S types until 1953. Vauxhall had already gone for a transatlantic styling with its E Model Wyvern and Velox saloons, and Bedford followed suit with its mid-range of trucks in 1953. Designated as the TA series, the new range were mechanically very similar to their predecessors, but featured a new Chevrolet-inspired cab. The 'T' designation meant "truck", so the range is generally referred to as the A series. Numbers 2, 3, 4 and 5; as in A2, etc., identified the weight rating. A factory-fitted Perkins diesel engine was an option. The TA (A) series was updated in 1957, and became the TJ, or J series. The Bedford TJ normal control light truck was introduced in 1958, available with either petrol or diesel engines. Although never a big seller in the home market (with the exception of Post Office Telephones), it was a big export earner in developing countries, due to its basic layout and specification, and remained in production (for export markets only) until production of Bedford vehicles ceased.

**1960s and 1970s:** The Bedford TK range was produced in large numbers since 1959, and served as the basis for a variety of derivatives including fire engines, military vehicles, horse-boxes, tippers, flat-bed trucks, and other specialist utility vehicles. A Post Office Telephones version used for installing telegraph poles was known as the Pole Erection Unit. The British Armed Forces still use four-wheel drive Bedford MKs – a variant of the TK. Available with four and six-cylinder petrol and diesel engines, the TK was the quintessential light truck in the UK through most of the 1960s and 1970s, competing with the similar Ford D series. It was available in rigid form, and also as a light tractor unit, normally using the Scammell coupling form of trailer attachment.



*The Bedford TK: Deployed in huge numbers throughout the world and New Zealand*

The Bedford KM was a similar vehicle, using the same cab, but with a slightly restyled front end, and was marketed for heavier-duty applications than the TK, i.e. 16 tons and over. Many developing countries still use ageing Bedfords every day, their robust nature and simple engineering endearing them as highly useful vehicles in demanding terrain. In Australia, the GM subsidiary of Holden began assembling the CF series with in-line six-cylinder engines borrowed from their passenger car range, in competition against Ford Australia's version of the Transit van which had been re-engineered to accommodate in-line six-cylinder engines from the antipodean Ford Falcon. *(Ed: The story goes on, but we are going to have to leave it there.....)*

# From the sublime to the ridiculous !

## Bedford to “Thor”

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Excuse me for this article, but as I was researching for the previous piece on Bedford I received this email from regular contributor Bruce Skinner. It's not veteran it's probably not P60, but if you like your Hot-Rods ...And a number of you do! How about this?



This is “Thor”, a gigantic (nearly 40 feet in length) semi-style tractor truck that not only carries a pair of marine V12 engines but tops them with 12 superchargers and adds a jet engine from a Hawker 800 business aircraft behind the cabin just to power the truck’s electronics. And, believe it or not, it is street legal. Built by movie stuntman Mike Harrah, this truck is of course living in the USA. (Only in America!)



*Thor superchargers*



*Thor Pipes*

## Upcoming Events:

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### December 2019:

**December 11: Auckland VCC Midweek Run:** (*Note, A week earlier than usual, it's Christmas*). Starts from The Warehouse car-park at Westgate. 10-00am for a 10-30am departure. Jack will be taking us to Wenderholm for our annual picnic run. BYO everything. BBQ's available.

**December 15: Club Christmas Do and Fun Driving Trial:** Clubhouse 2.30ish. Food at 5.30ish. Bring a Plate; Club providing BBQ Sausages, Artisan Wood-Fired Pizzas and Ice Cream. Can you please fill the gaps in the menu?

**December 29: Caffeine and Classics** at Smales Farm: 9-12

### January: 2020:

**No club event this month**

**January 4: Taipa Car Show,** Northland (See poster in this edition)

**January 26: Caffeine and Classics:** Smales Farm 9-12

### February 2020:

**February 13,14,15,16:** Brits at the Beach, Whangamata

**February 16: Club Event?? :** Watch this space!

**February 19: Auckland Midweek Run** The Warehouse car park, Westgate. 10-00am for a 10-30am departure.

**February 20,21,22,23:** Art Deco Weekend: Napier

**February 23: Caffeine and Classics:** Smales Farm

### March 2020:

**March 1: Brits and Euro Show:** Lloyd Elsmore Park, Pakuranga, Club Stand

**March 15: Target Date for Posh Picnic:** Watch this space

**March 29: Caffeine and Classics:** Smales Farm

### Regular weekly timetable (*Note Club closed from 1pm 19th Dec to 7.00pm 8th January 2020*)

- Every Wednesday Club-Night: coffee, tea and banter.
- Every Thursday Morning 9am—Noon : Restoration shed, Spares Shed and Library all open. coffee, tea and cakes at 10.30. Over 40 members now regularly attending at 10.30.

### Longer term dates for your diary

- **March 13, 14, 15** Lake Taupo Country Roads Rally (See advert in this edition)
- **2020 National Easter Rally:** Organised by Horewhenua Branch, Levin. Expressions of interest required ASAP michael@gaffanay.com or 04-905-2402
- **April 26: NSVCC NORTHERN RAID:** This is our annual headline event. Mark your diary.



*A few of Mike Swanton's Vauxhalls adorn the drive of his place on our Ladies' Day Run*

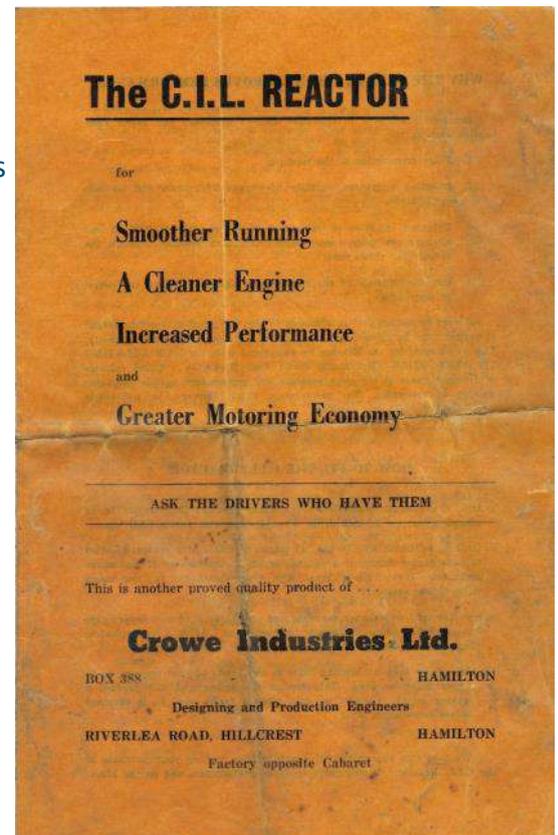
## Couple of Puzzles

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**Number 1:** Some of you may know that Richard Ellis is restoring an Austin 7 at the club. It's generally in pretty good shape but there's been a few shenanigans going on in previous repairs to the floor panels. In particular Richard has uncovered an rather interesting pop-riveted repair panel from the floor. At first sight its part of an ESSO advert, but the characters don't quite work. So.. Where is this panel from?



**Number 2:** Club member Colin Austen sidled up to me in the restoration shed and handed me an ancient looking cardboard box containing a very professionally produced "CIL Reactor" by Crowe Industries in Hamilton. Have you ever seen one before? Did it work as promised? Have you seen anything similar? Please contact me at [battersby56nz@gmail.com](mailto:battersby56nz@gmail.com).



*The Instruction Sheet*

*The REACTOR!*

# Brit and Euro Classic Car Show

Lloyd Elsmore Park, Pakuranga

1st March 2020, 10am—3pm

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We are wondering whether there is interest in supporting a club stand at the above show. It's a HUGE event (last year there were well over a thousand cars). All fine examples of British and European Classic Motoring.

We have a large number of qualifying vehicles in the club and thought it might be worthwhile seeing how many members would bring their cars along and support the club. Last year the Auckland Branch had a stand, but given that many attendees came from North of the Bridge we thought it might be useful to display a few of our cars. Let's fly the flag for our club!

Once you are in the park and your car is lined up with the rest, your time is your own to relax under our gazebo or wander around the stands and take in all manner of British and European cars. Bring your own lunch, or visit the huge range of coffee and catering stands. Talk to the 'Punters' about your car, talk to other members and just have a pleasant relaxing Sunday in the sun. (Guaranteed apparently).

The drive down to Pakuranga is quite easy, especially on a quiet Sunday morning.

Barry Thomson has registered our interest in reserving a plot upon which to base our display.

If you are interested in attending please contact:

**Barry Thomson on 09-959-0206** or email: [pambarry@xnet.co.nz](mailto:pambarry@xnet.co.nz)

or

**Stuart Battersby on 022 471 2759** or email [battersby56nz@gmail.com](mailto:battersby56nz@gmail.com)

and we'll take you through registration

Alternatively you can register now at <https://www.briteurocarshow.nz/>

Please let Barry or me know if you register online so that we can track numbers.



*Stunning Jowett Jupiter at last year's Brits and Euros.*

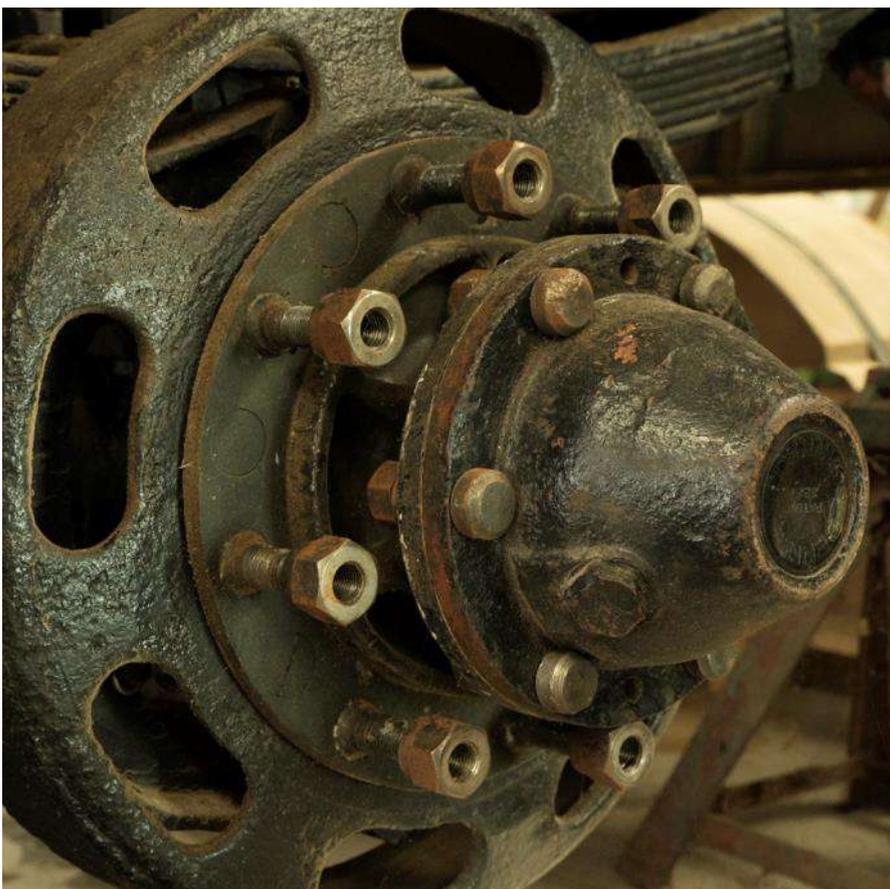
## Some preview shots

Some of you may recall that we had a visit from 4 members of the above club on the last Thursday in October. As I expected their photographs are NOT traditional 'snaps' of cars, rather they have, with the eye of an artist, spotted something different. I expect to get a full selection of photos at some time in the future, but in the interim here's a few from just one of the team.



### **Hubs:**

*Who would have thought that there is art in the wheel hub of an old bus? The bottom photo is from the hub of the bus as it stands now. I 'think' that the top photo is of a hub that may belong to the old bus chassis in the storage garage.*



(Continued)

The top shot here captures the mischievous side of Trevor Larsen as he sorts the latest arrival of spares stock. The second shot is a nice group of speedos, again in the spares shed.



# The New Shed Floor Preparation

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Huge thanks to the team of club volunteers, led by Terry Costello, who have recently sealed the floor of the new shed. The team have dedicated a huge amount of their personal time to vacuuming, cleaning, neutralising and painting sealer on the floor. The new surface should dramatically reduce dust as well as remaining impervious to oil and other nasty automotive stains.

Note also the club's new 4-post lift, in place but not quite fitted or operational yet.



*Terry Costello doing what he does best ;-)*

When finished the lift should be much more convenient to use (straight in and out) than the old lift, which will remain operational, in the restoration shed.



*A "Wheeze" of English Ford Sidevalves*

# Taipa Show and Shine

(Always a great show)

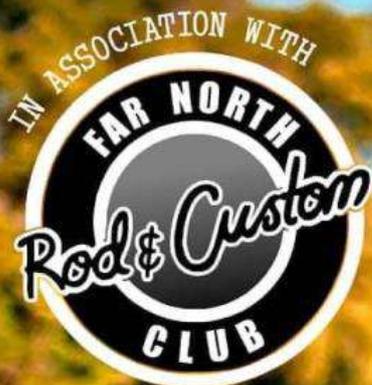
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**HOTRODS, CLASSICS, VINTAGE CARS & BIKES**

# **TAIPA SHOW & SHINE**

**EASTERN RUGBY GROUNDS**



**4TH JAN 2020 - 9 TILL 2PM**

CALL NIK 021 118 1370

# Ladies' Day Photographs

Thanks again to Jan Woods and Mike Swanton for allowing such a rabble onto their gardens and to Mary Lloyd and Terry Costello for the wonderful photos

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# Any colour you want as long as it's black

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## The history of automotive paint technology

The oft-quoted statement above of Henry Ford may seem funny today, but Ford was serious when he said it. In 1908, Ford thought that black car paint was the only practical automotive paint for the Model T, as it provided him with a coating that was both durable and cheap in cost. Of course, the black car paint that Ford put on his Model T actually was not “automotive” paint at all, but just the existing paint technology available at the beginning of the 20th century: a paint based on natural linseed oil resin as the binder. Ford’s black paint was applied by hand brushing to the Model T in multiple coats, a process that, in the end, took about a week to complete. This caused a terrible production bottleneck for Ford’s innovative mass production process, even though the black paint dried faster than all other available colours. Model Ts undergoing the painting process at the end of the assembly line jammed warehouse floors of the automotive plant.

This process bottleneck was the motivation for the first paint specifically developed as an automotive coating: DuPont Company’s “*Duco*” paint. This new coating technology made a step change in productivity by reducing the painting and drying time from many days to a few hours. Being a lacquer, this coating dried (merely through solvent evaporation) in about two hours. Some formulation development work by the paint chemists found that this new synthetic lacquer resin provided an excellent basis for a paint that had improved appearance, toughness, and durability versus natural oil resin paints, and also could be easily pigmented with a wide variety of colour pigments, besides just black! After a couple of years of testing, in 1924 General Motors introduced the use of *Duco* finishes on almost their entire automotive line.

Nitrocellulose paint was highly productive, but the final coating required polishing to achieve high gloss. Paint chemists in the 1930s wondered if somehow they could find a binder system for paint that provided both productivity and the inherently better appearance of a natural oil resin. What resulted from this work was the development of the first alkyd paint system. In this way, the chemistry combined both synthetic monomers and natural products, providing a coating resin system that gave intermediate performance between synthetic lacquers and natural oils. Given that this technology provided outstanding film properties, this new alkyd paint was first commercialized as an automotive primer.

It was not until the 1950s that the next major automotive coatings advance occurred: the use of thermoplastic acrylic lacquers. By this time, the car was no longer just a means of transportation; they had now become a personal showpiece that owners wanted to show off to their friends. That meant that the coatings had to look better and accentuate the new curved styling body designs of the times. Rohm and Haas Co. had developed a new synthetic polymer as a glass replacement based on poly-methyl-methacrylate, and the coatings industry investigated whether that technology could be used in coatings. This would be the first all man-made resin technology to be used in automotive coatings.

It turned out that thermoplastic acrylic resin technology dominated the automotive topcoat market in automotive coatings for about two decades, from the 1950s through the 1970s. The reason for this was the excellent topcoat appearance that could be obtained with these finishes. Coatings based on this technology needed to be sprayed at relatively low solids of about 20%. In the automotive plant, this meant multiple coats of the topcoat were applied to reach the desired film build. By today’s standards, this sounds like a disadvantage, but at the time, this acrylic lacquer technology had one critical advantage over previous automotive paints: it provided an excellent binder system for the newest pigment colorant technology—metallic pigments.

Metallic effect pigments provide brilliant, shiny car colours that enhance the perception of curvature of the car body. These pigments took automotive colour styling to a new level. However, to achieve the maximum visual effect of the flat, plate-like metallic pigments, the pigments must align parallel to the painted surface. The rheological profile of an acrylic lacquer paint is perfect to obtain this effect: a low initial viscosity (given the low solids) to allow the metallic flakes to lay flat, and then a fast rise in viscosity to keep the flakes in place. This coating technology had such an advantage for colour styling that by the 1960s General Motors painted virtually every car with acrylic lacquer topcoats.

# Any colour you want as long as it's black

## The history of automotive paint

**Protecting the Automotive Body:** Topcoat technology was steadily improving for automotive coatings systems, but cars still had a major issue—rusting of the automotive body. A major coatings advance in the 1970s resolved this issue: electrodeposition primers, commonly known as “e-coat.” The first automotive electrocoat was an anodic product developed by Dr. George Brewer at Ford around 1957. However, there were drawbacks in the technology and PPG Industries introduced the first cathodic e-coat system for automotive bodies in 1973. Because these coatings essentially stop the automotive body from rusting, this new primer technology one was of the biggest breakthroughs in automotive coatings technology.

Modern electrocoat automotive primers are applied by totally submerging the assembled car body in a large tank that contains the waterborne e-coat, and the coating is applied through cathodic electrodeposition. This assures nearly 100% coverage of all metal surfaces by the primer. The coating chemistry is a waterborne enamel based on epoxy, an amino alcohol adduct, and blocked isocyanate, which all crosslink on baking to form an epoxy-urethane resin system. This resin technology, combined with the excellent coverage provided by electrodeposition, delivers one of the most effective coatings for corrosion protection known. Virtually all cars use e-coat technology as the foundation of their coating system today.

Although e-coat provides excellent corrosion protection, it does have two weaknesses for an automotive coating system: inadequate appearance and poor photostability. To remedy these issues, new enamel automotive primers were developed in the 1980s. These primer-surfacers were designed to be applied to the cured e-coat to give a smoother surface for improved topcoat appearance, while also providing opacity to protect e-coat primers from UV degradation. Primer-surfacers often provided improved impact resistance to reduce stone chipping of the coating as well. The combination of electrocoat plus primer-surfacer provided a total automotive primer system with excellent corrosion protection and an outstanding surface for top coating. That set in motion the next major breakthrough in automotive coatings technology: basecoat/clearcoat topcoats.

**Basecoat/Clearcoat Automotive Topcoats:** As previously discussed, thermoplastic acrylic lacquer automotive coatings, given their excellent appearance, were the major automotive topcoat used in the 1950-70s. However, these lacquer topcoats did have one significant drawback: they had weak exterior durability. After about one to two years' exposure, the coatings would begin to degrade, and aggressive waxing was needed to “bring back the shine” of these systems.

By the 1980s, the car manufacturers were requesting better durability for automotive topcoats, as consumers were now expecting their cars to last at least five years, and they wanted the car to continue to look like it did when they first saw it in the showroom. At the same time, the environmental lobby began to promulgate new volatile organic compound (VOC) regulations that limited the amount of solvent that an automotive facility could emit into the atmosphere. The high VOC content and weak durability of acrylic lacquer coatings were no longer acceptable in the automotive marketplace.

So how did the automotive coatings formulators achieve higher solids, better durability, while even improving the appearance of the coating? The answer is the next step change advance that occurred in automotive coatings: basecoat plus clearcoat enamel topcoat technology. Now, instead of a single layer topcoat, formulators designed a two-layer system consisting of a basecoat that contained the pigments to provide the beautiful colour effects, followed by a clear polymer coating layer that protected the basecoat. Both the basecoat and clearcoat were enamels, which were based on hydroxyl-functional acrylic resins crosslinked using melamine chemistry. This new concept of basecoat/clearcoat enamel topcoats had many advantages: (i) reduced solvent, (ii) the coating cured to a high crosslink density on baking (iii) the unique basecoat layer allowed the use of even more effective pigments by the colour stylists, and (iv) the clearcoat layer was formulated to provide both better appearance and the ultimate in protection for the coating system below. These basecoat/clearcoat systems were able to achieve a previously unattainable balance of properties for the automotive coating system, providing stunning visual appearance and long-term durability.

# Any colour you want as long as it's black

The history of automotive paint

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## **Waterborne Basecoats, New Crosslinking Chemistries, and New Application**

**Processes:** In the 1990s, another major development occurred in the formulation of automotive coatings: the use of waterborne basecoats. The chemistries of these basecoats can vary from water-reducible acrylics and polyesters, to acrylic latexes, to polyurethane dispersions, but the common factor is the use of water as one of the main volatile components. Typically, the motive to use waterborne technology is to obtain lower VOCs and reduce the environmental footprint of the coating process, but that is not the only benefit of using waterborne basecoats in automotive. It turns out that waterborne automotive basecoats, given their lower formulated solids and unique rheology profiles, can often provide improved appearance and metallic effects. Thus, in some ways, the move to waterborne basecoats in automotive can be thought of as a return to the low-solids acrylic lacquer topcoats of the 1950s.

Automotive coatings using many new crosslinking chemistries have also been developed over the last two decades. Clearcoats have been the focus for these new chemistries, so in addition to the original acrylic resin/melamine systems, there are now acrylic/silane/melamine, acid/epoxy, carbamate/melamine, and acrylic/isocyanate systems. Important new properties for clearcoats can be achieved with these new crosslinking chemistries, such as improved appearance and durability, better acid etch resistance, and scratch and mar resistance.

The final major step change in automotive coatings technology occurred in the 2000s, and this advance focused on process efficiency. In the typical automotive assembly plant, the painting operation can take up to half the space of the entire facility, account for approximately 40% of the capital cost of an assembly plant, use 80% of the energy, and produce the vast majority of CO<sub>2</sub> and VOC emissions! OEM manufacturers have asked the paint suppliers to find a way to reduce this footprint and the cost of applying the coating system. This has required paint formulators to develop coatings that can be applied more efficiently, in fewer steps, and with a lower energy requirement.

Many new processes are now in place at the automotive plants that meet these criteria. The typical process for a waterborne primer, waterborne basecoat, and solvent borne clearcoat system includes two oven bakes and a heated flash, all of which take time and energy. Compare that to the new "3-Wet" process at Ford, where solvent borne primer, solvent borne basecoat, and solvent borne clearcoat are applied one after the other, and a single bake is performed after the application of all three layers of the coatings system. This 3-Wet application method reduces the footprint of the coatings line, shortens the overall time of the painting process, and saves energy costs. Interestingly, most of the energy savings arise from the elimination of the primer booth not the primer oven. The movement of up to several hundred thousand cubic feet per minute of conditioned (temperature and humidity) air through a paint booth consumes much more energy than the natural gas used to heat an oven.

*The huge progress and changes made in paint technology since the Model T pose some tough questions for the owners and restorers of vintage and cars. Do we use the latest and best paint systems for our cars? Undoubtedly the new systems deliver improved appearance and durability but do we compromise these benefits for originality? I'd really love to know your thoughts on this. What paint system did you use on your car? Why did you choose that approach? Please drop me an email [battersby56nz@gmail.com](mailto:battersby56nz@gmail.com)*

One for the calendar

Lake Taupo Country Roads Rally

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Dec- Jan 2019/20



**KIRK Automotive**

**LAKE TAUPO**

# COUNTRY ROADS RALLY

*13th, 14th and 15th March 2020*

Enquiries to Rally Secretary – Heather Duncan  
Email - [heatherduncan@xtra.co.nz](mailto:heatherduncan@xtra.co.nz)  
Phone 027 232 4866 | P O Box 907, Taupo 3351



**Entries close on 24 February 2020**

**New Members:** Nil

**Repayment of expenses** – Questions have been raised about late payments of accounts and expenses because of the Committee needing to approve amounts over \$100.00. One example related to a gas bottle refill costing \$146.00 needed for current work. It was discussed fully and it was decided that in order to provide more flexibility for urgent requirements a subgroup comprising any three committee members will now be able to approve purchases up to the value of \$250 without the need for full committee approval. Purchases under this new process MUST use the Purchase Order Book to record and approve (three signatures) the purchase.

There is a need to remind members that they cannot make purchases on their own account without reference to the committee. It is planned to re-implement budgets for each of the restoration projects and these will be tabled at the next committee meeting in January.

Falling interest rates on term deposits have reduced the annual income to the club considerably.

**Honorary Life Members** – A discussion took place around the appointment of branch Honorary Life Members and questions regarding criteria need to be set out by the branch. To be discussed further at a later date.

**Welfare Officer** – The appointment of a Welfare Officer to keep tabs on members' health and wellbeing has been suggested and was discussed by the committee. This matter is to be followed up.

**New Shed** – Matters left to be attended to in relation to the shed include electricity to be installed, partitions, Code of Compliance certificate with just under \$1,500.00 left in the budget. The concrete apron and concrete between the sheds would be done later.

A discussion took place regarding the new compressor and it was agreed that it remain in the current position of the old one.

**Proposed Museum** - Suggestion that two bays be set aside for the museum. To be checked on Thursday. Bus and fire engine to be retained in the Museum with stationary engines and wall memorabilia around it. Hoist may need to be realigned.

**Security** – It was suggested that a review of the security system of the entire site needs to be made with recommendations and costings to the committee. Also need to consider whether the museum area should be fire alarmed.

The discussion extended to Tuesday and Thursday mornings when on several occasions sheds have been left open while members take a break. Also concern was expressed about items 'disappearing' (being stolen) from the sheds. Everyone needs to be alert to this happening.

**Fridges** - The bar fridge is to be replaced, possibly with using one of the fridges from the kitchen. The Parts Shed are taking over the bar fridge to use a secure display cabinet.

**Computer printers** – Two Club printers have failed. Currently checking on prices for replacements.



*The Committee and Officials  
wish all members and their  
families a very Happy  
Christmas and a Peaceful and  
Prosperous New Year.  
Thankyou for all your support  
in 2019*

# About Us

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Dec– Jan 2019/20

**Club Address:** 40 Masons Rd, Albany, 0632

**Phone:** 09-4792779: **email:** [northshorevcc@gmail.com](mailto:northshorevcc@gmail.com)

**Website:** [www.vintagecarclub-northshore.co.nz](http://www.vintagecarclub-northshore.co.nz)

**Club Nights:** Every Wednesday from 7.30pm

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

**Committee Meetings:** Last Monday of the month, 7.30pm

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

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

## Main Committee

**Chairman:** Kevin Lord 09-413-9157 or 027-235-0142

**Vice Chairman:** John Higham 09-478-7973

**Immediate Past Chairman:** Paul Collins 09-422-0500 or 027-292-2204

**Secretary:** Maurice Whitham 09-627-0310 or 027-296-9293

**Treasurer:** Ross Moon 09-426-1508

**Club Captain:** Richard Lloyd 09-420-5048 or 027-483-2898

**Assistant Club Captain:** Neil Beckenham 09-426-5831 or 021-588-536

### GENERAL COMMITTEE Members:

**John Tombs** 09-478-5677 or 027-378-5590

**Clive Sandham** 09-486-6047 or 021-903-548

**Tony Sparkes** 09-473-5828 or 027-499-5588

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