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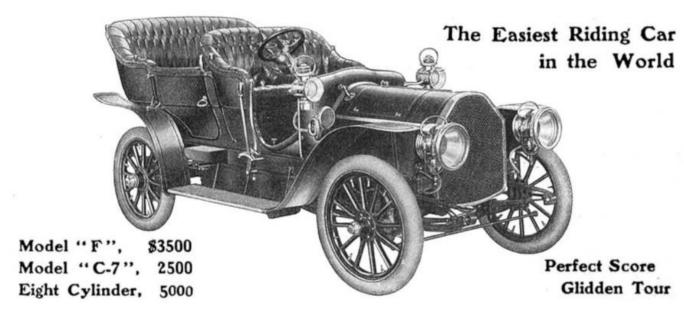
The monthly journal of the North Shore Vintage Car Club November 2021

North Shore
Vintage Car Club

- > Your journal
- > Your stories
- > Your photos
- > Your cars
- > Your ideas
- > Your committee

THE MARMON

"A Mechanical Masterpiece"



Editorial

Progress November 2021

Hi All,

Well this blessed virus is certainly putting us through the wringer. It has played havoc with my fitness regime and the alternative to the gym (i.e. walking) has challenged my dodgy knee joint. Apart from physical effects, I realise that lockdown is frustrating, boring, annoying, stressful and will undoubtedly take a toll on the mental wellbeing of our members. Sometimes it helps to talk. For privacy reasons we cannot publish everybody's phone numbers, but all the committee have their numbers published in the back of this magazine and I'm sure we'd appreciate a chat if anyone wants to call.

As anticipated there is little news in this edition, but thank you to all the contributors, many of whom have had to wait until this edition to see their articles published. Keep the articles coming. The pessimist in me can't see the club opening again this side of Christmas. Having said that we still have December 5th marked down as our Christmas BBQ with an interesting run from our clubhouse to a beautiful park for our picnic lunch. At this point in time assume the run is on and make appropriate plans.

Despite the lack of contact with friends and neighbours I took the MG out for a few hours during last week. A gentle drive across the Kahikatea Road for a takeaway coffee in Helensville and then a cruise north and across Woodcocks to Warkworth. Another coffee and this time a piece of cake sitting beside the river was a splendid break, before heading back south, through Orewa and back out to Manly. Very pleasant!

Stay safe everyone and as they sing in Iceland ... "Whale meat again, don't know where, don't know when"

Stuart Battersby battersby56nz@gmail.com

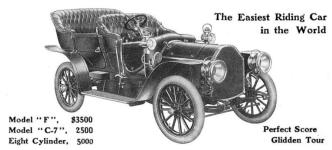
In this edition:

- * Chairman's Report: Ouch!
- * The Austin 10: Peter Sharp tells us of his new project.
- * **Power Steering Upgrade:** Ray Urbahn invests for comfort.
- * Focus on the marque: Marmon.
- * The Nissan 500 Race: Wellington 1985 and a rare competitor.
- * Christchurch 1954: How many can you identify?
- * A rare Triumph TR2 restoration: Frank Cleary is saving another TR.
- Cross-Ply Tyre sizing: Tips and tricks.

The Focus on the marque this month is the Marmon.

Another new one on me. I think, over priced, overengineered and over there, might typify this one!

THE MARMON "A Mechanical Masterpiece"



Chairman's Report: Tony Sparkes

October 2021

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Even less to report on this time. However, a big shout out to John Higham who has been at the club mowing the lawns and the paddocks. I also know that Peter Lloyd and Arnold van Zon have been doing drive bys, or cycle bys in Arnold's case, to check on the buildings.

My month has been eventful. You may remember that I injured my knee on a walk at the end of September. Well, it turned out that the A&E department completely missed on the x-ray that a ligament had torn a small piece of bone from the patella and was sitting 50mm away from where it should be. A telehealth appointment with a sports injury specialist last Thursday informed me that this is normally an injury suffered by elite athletes. Quiet in the cheap seats! Anyway, long story short, I was sent back to the hospital and had surgery to reattach everything on Friday. I now have a couple of months in a leg brace and some time in physio after that. Thanks to those who have called offering help, much appreciated.

I had several responses to the letter I sent out earlier about Covid and passports. Most were extremely supportive and some, correctly, picked up the fact that it was my letter and not from the Committee. We have still not been able to meet and probably will not until at least the end of November. I have also had an email from a club member who has been chatting to friends in the club. It seems that the general mood is that members only want fully vaccinated members at gatherings at the club. I use the word "gatherings" as that is the word used in the Government's proposed Traffic Light system. One very experienced and thoughtful committee member has raised concern on the legality of this restriction. But most members are in general support. But how do we police it if that is the way we go forward?

I would like to get feedback from the general membership. It is your club, and the committee does not always have the answers and we are in unknown territory here. So please call or email me with your thoughts. Obviously, I will respect any anonymity requested.

Since writing the first draft of this report, I have received an email from the president of another, non-car related club that I belong to. They have simply stated, "if you want to attend club events and premises, you must be double vaccinated."

Look after yourselves and others.

Enjoy your cars and the fellowship in our club.

Tony Sparkes Chairman

Email: tonysparkes@pointpromotions.co.nz

Phone: 027-499-5588

Peter Sharp's 1937 Austin 10: Another

project for Sharp Autos

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Peter writes "Hi Stuart, I have a Austin 1937 that is my next do up job. Just thought this information may be useful in the next magazine. I brought it from Gulliver International, Wairau Valley in 2020. It was a show car there for many years. The car is in original condition. It drives well and seems to be mechanically sound except that it some times jumps out of first gear. If you search the internet for "Culliver International, Wairau Valley" you will see the Austin there looking so proud of itself. "Many thanks to Peter for all the photos. What follows is the Wikipedia reference material on the Austin 10.

The Austin Ten is a small car that was produced by Austin. It was launched on 19 April 1932 and was Austin's best-selling car in the 1930s and continued in production, with upgrades, until 1947. It fitted in between their "baby" Austin Seven which had been introduced in 1922 and their various Austin Twelves which had been updated in January 1931.

Design: The design of the car was conservative with a pressed steel body built on a ladder chassis. The chassis was designed to give a low overall height to the car by dipping down by 2.75 inches (70 mm) between the axles. The 1125-cc four-cylinder sidevalve engine producing 21 brake horsepower (16 kW) drove the rear wheels through a four-speed gearbox and open drive shaft to a live rear axle. Steering was by worm and wheel. Suspension was by half-elliptic springs all round mounted on silent-bloc bushes and damped by frictional shock absorbers. The four-wheel brakes were cable and rod operated by pedal or by hand lever on the offside of the speed lever. The electrical system was 6 volt. For the first year only, a four-door saloon was made in two versions. The basic model cost £155 and was capable of reaching 55 miles per hour (89 km/h) with an



The Austin 10 in Peter's yard



Nice lines.



Original seats; looking good!

economy of 34 and the Sunshine or De-Luxe with opening roof and leather upholstery at £168. Bumpers were provided. The chassis was priced at £120.

Peter Sharp's 1937 Austin 10: contd.

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"The greatest comfortable speed was 55 mph though over 50 takes distance and persuasion. 30 to 35 is an effortless cruising rate with light throttle. . . The delight of the car lies in the easy speed and in the way it holds the road. The generally well balanced and quiet engine is livelier than some Austins. . . The suspension would probably be better with hydraulic shock absorbers. In front one travels very smoothly and the car is undoubtedly stable." *Motoring Correspondent, The Times*

1933 saw the saloons joined by an open two-seater or Open Road tourer, a Colwyn cabriolet and a van. A sports model, the 65 miles per hour (105 km/h), 30 brake horsepower (22 kW) *Ripley* joined the range in 1934. Mechanical upgrades for 1934 included a stronger chassis, synchromesh on the top two gears and 12-volt electrics. The Ripley was a close-coupled four-door tourer with lowered front doors and no running boards. Improved engine breathing, Zenith downdraught carburettor, revised manifolds and camshaft all combined to improve engine output to 30 bhp.

Facelift for 1935: The first styling change came in August 1934 with a change to the radiator when the plated surround or cowl was replaced by one painted in body colour and it was given a slight slope.



I know at least one club member (and wood restorer) who would love to get involved restoring that dash.



Nice little flat-head.

Synchromesh was added to second gear and dual screen-wipers, flush-fitting self-cancelling trafficators (worked by the steering) and a foot-operated headlamp dip switch were fitted. The engine controls were simplified by the adoption of automatic ignition, compensated voltage control, and the provision of a "choke" (combined strangler and throttle control). The saloon was given the name *Lichfield* and got a protruding boot which enclosed the spare wheel. During 1935 the friction dampers were replaced with hydraulic dampers.

Six-light Sherborne: A new six light (three windows down each side, with one behind the rear door) *Sherborne* body style was added in January 1936, the roof line swept to the rear without interruption to provide a flush back, the then fashionable 'Airline' style. The new seating was extra deep at the rear, now with armrests and somewhat longer from back to front than on previous models. The new *Sherborne* with fixed or sliding roof was priced at £10 more than the equivalent *Lichfield*. The forward doors opened rearwards which was considered safer, steering was now by worm and sector with an hour-glass worm.

Peter Sharp's 1937 Austin 10: contd.

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New body for 1937: A big change came in December 1936 with the almost streamlined Cambridge saloon and Conway cabriolet. Compared with the preceding cars the passengers and engine were positioned much further forward, the back seat now being rather forward of the back axle. There were six side windows like the Sherborne and the quarter lights were fixed. Again like the Sherborne the forward doors opened rearwards. At the back there was now a compartment large enough to take a trunk as well as more luggage on the open compartment door when it was let down. A new smoother single plate spring-drive clutch was now fitted, the two friction rings carried by the centre plate were held apart by leaf springs. Other changes included Girling brakes with wedge and roller shoe expansion and balance lever compensation using operating rods in tension with automatic compensation between front and rear brakes all four of which might be applied by hand or foot. Drums were now 9 inches diameter. 16-inch steel disc wheels replaced the 18-inch wires Top speed rose to 60 miles per hour (97 km/h). The car's wheelbase was now ¾ inch longer. Rear track was now increased to 3' 10½". The vehicle's weight was now reported to be 18½ cwt. The Times, when they had a car on test, commented favourably on the new clutch, saying no previous Austin clutch had engaged smoothly and added "the car is built for steady economical running rather than for speed or brilliance". These changes did not appear on the open cars, which no longer included the Ripley sports, until 1938 when the Cambridge and the Conway cabriolet gained an aluminium cylinder head on the engine and a higher compression ratio. Semi-unitary construction for 1940: A virtually new car was launched in May 1939 with the body shell incorporating the floor to give a semi-unitary structure. The car was completely restyled by Argentine born Dick Burzi who had joined Austin from Lancia in 1929. The bonnet was hinged at the rear, replacing the side-opening type on the old car and the radiator grille became rounded and there was no cabriolet. It was now available as four-door saloon with fixed or sliding head or as a sporting type four-seated tourer. The new chassis consisted of a platform braced with box members bounded by reversed U channelling the full length of each side. The body was then bolted, not welded, alternately to the top and bottom of that channelling. The forward end was strengthened by diagonal bracing and the centre given extra strength by the tunnel over the transmission. Windows were of toughened glass. The cylinder head was now aluminium for high compression and output now 32 bhp at 4,000 rpm. Shock absorbers were now hydraulic and of the double acting piston type. Bumpers were now given over-riders, lighting was 12-volt.

War: Despite the outbreak of World War II, production of the Ten continued in large numbers; there were no tourers but there was a pick-up. In all during the war, 53,000 of the saloons and utilities—pick-ups and vans—the last two unofficially known as "Tillys", were made. Postwar: With peace in 1945 a change was immediately made to civilian production but because of the post-war financial crisis the cars were nearly all exported, with the first one arriving in the United States in July 1945. In September 1945 the first passenger cars produced after World War II's end to arrive in Switzerland were two Austin Tens exported from England. The car continued in production in saloon form only until October 1947 to be replaced by the A40. The van also re-appeared post-war with a slightly larger 1237-cc engine.

Ray Urbahn's Daimler: Power steering upgrade.

Expensive but worth it? "You betcha!"

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As the manual recirculating ball type steering was beginning to get the better of my arm and shoulder muscles, especially manoeuvring around the tight parking at our place, we ignored such suggestions as "Fit cross ply tyres" or "Go to the gym", and decided to replace the system with a hydraulic rack and pinion power steering unit. I learned from the Daimler/ Jaguar Spare Parts Club that John Sutherland of John Finlay Motors in Christchurch had successfully converted several cars. He agreed to supply the parts and for me to arrange a local installer, namely Fraser Windelburn of North Shore Automatics who had completed various works on Brian Bisset's Rover V8.

The fitting was reasonably straightforward but

seat mountings.



Ray's stunning Daimler V8 at Hatfields Beach: Plenty of rubber with which to fight.

slowed at various stages due to the certification required of the odd modification and the strengthening of mounting brackets. (I did have to ask Mr. Google for help with "bump steer adjustments"). Although not associated with the power steering job, the Certifier noted that the standard automatic gearbox had been replaced with a Jaguar four speed overdrive manual box which had been fitted some years before my ownership but not certified. On inspection, because of driveshaft mods, a loop bracket needed to be added to prevent a possible shaft drop. Also, due to earlier restoration modifications, it was noted that the original seat belts had been

replaced with retractable versions, also uncertified. This resulted in a strengthening of the rear

All in all, I guess that safety and insurance wise, this additional work was worthwhile.

I must say that the car now drives like a modern. The only change that I can detect is a slight loss at the outer limits of the lock. This results in an additional back and forth in extracting the car around the multiple pillars in the underground car park at our Retirement Village.

As an aside, the Certification, instead of a plate in the motor area, is now a disc attached to the passenger door frame. This disc contains a identification number, and a smart phone, by entering the ID number and the last six digits of the vehicle VIN number, can access a photographic record of all the modifications. The LVVTA website details this information. I can only hope now that my fingertip muscles keep their control.

On reflection, I know that many enthusiasts will be thinking -- " Yeah baby! But wot did it bloody cost?" or words to that effect. The overall guesstimate by my fellow vintagents was around \$5000 made up of a couple of grand for the parts and the rest for labour. This was also the figure which I estimated the Christchurch installation would cost.

As it turned out, the parts were about \$2500 and the total came to around \$7.5K which included the cost of various modifications to the steering job , the additional work for the gearbox and seatbelts and the Certification fee of \$750. So all in all, I guess that without the extras, the original thought of \$5k would still be about right.

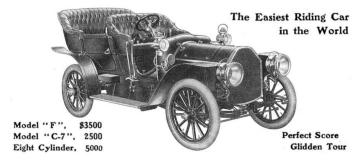
Focus on the Marque: Marmon: a marque for the rich and famous.

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Summary: Marmon Motor Car Company was an American automobile manufacturer founded by Howard Carpenter Marmon and owned by Nordyke Marmon & Company of Indianapolis, Indiana, US. It was established in 1851 and was merged and renamed in 1933. They produced cars under the Marmon brand. It was succeeded by Marmon-Herrington and later the Marmon Motor Company of Denton, Texas. The name currently survives through the Marmon Group of Chicago.

THE MARMON

"A Mechanical Masterbiece"



"The easiest riding car in the world"

Marmon cars: Marmon's parent company was founded in 1851, manufacturing flour grinding mill equipment and branching out into other machinery through the late 19th century. Small limited production of experimental automobiles began in 1902, with an air-cooled V-twin engine. An air-cooled V4 followed the next year, with pioneering V6 and V8 engines tried over the next few years, before more conventional straight engine designs were settled upon. Marmons soon gained a reputation as reliable, speedy upmarket cars.

The Model 32 of 1909 spawned the Wasp. The Wasp, driven by Marmon engineer Ray Harroun (a former racer who came out of retirement for just one race), was the winner of the first ever Indianapolis 500 motor race, in 1911. This car featured the world's first known automobile rear-view mirror. The 1913 Model 48 was a left-hand steering tourer with a cast aluminium engine and electric headlights and horn, as well as electric courtesy lights for the

dash and doors. It used a 9,382 cc T-head straight-six engine of between 48 and 80 hp with dual-plug ignition and electric starter. It had a 3683 mm wheelbase (long for the era) and 91×11.4 cm front and 94×12.7 cm rear wheels as well as and full-elliptic front and ¾-elliptic rear springs. Like most cars of the era, it came complete with a tool kit; in Marmon's case, it offered jack, power tire pump, chassis oiler, tire patch kit, and trouble light.

The 48 came in a variety of models: two-, four-, five-, and seven-passenger tourers at US\$5,000 seven-passenger limousine at US\$6,250, seven-passenger landaulette at US\$6,350, and seven-

Ray Harroun's Wasp, winner of the 1911 Indianapolis 500. The car's rear-view mirror is mounted on struts ahead of the steering wheel.

passenger Berlin limousine at US\$6,450. In comparison these prices would translate to \$165-\$170,000 US\$) in 2020.

Focus on the marque: contd.

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The 1916 Model 34 used an aluminium straight-six, and also an aluminium body and chassis to reduce overall weight to just 1,495 kg. A Model 34 was driven coast to coast as a publicity stunt, beating Erwin "Cannonball" Baker's record to much fanfare.

New models were introduced for 1924, replacing the long -lived Model 34, but the company was facing financial trouble, and in 1926 was reorganized as the Marmon Motor Car Co.



1923 Marmon 34B 2-passenger speedster

In 1929, Marmon introduced an under-\$1,000 straight-eight car, the Roosevelt, but the stock market crash of 1929 made the company's problems worse. Howard Marmon had begun working on the world's first V16 engine in 1927, but was unable to complete the production Sixteen until 1931. By that time, Cadillac had already introduced their V-16, designed by ex-Marmon engineer Owen Nacker. Peerless, too, was developing a V16 with help from an ex-Marmon engineer, James Bohannon.

The Marmon Sixteen was produced for three years. The engine displaced 8.0 L and produced 200 hp It was an all-aluminium design with steel cylinder liners and a 45° bank angle.

Marmon became notable for its various pioneering works in automotive manufacturing; for example, it is credited with having introduced the rear-view mirror, as well as pioneering the V16 engine and the use of aluminium in auto manufacturing. The historic Marmon Wasp race car



1929 Marmon Series 8-69 4-door sedan

of the early 20th century was also a pioneering work of automobile engineering, as it was the world's first car to use a single-seater "monoposto" construction layout.

Marmon-Herrington: While the Marmon Company discontinued auto production, they continued to manufacture components for other auto manufacturers and manufactured trucks. When the Great Depression drastically reduced the luxury car market, the Marmon Car Company joined forces with Colonel Arthur Herrington, an ex-military engineer involved in the design of all-wheel drive vehicles. The new company was called Marmon-Herrington.

Marmon-Herrington got off to a successful start by procuring contracts for military aircraft refuelling trucks, 4x4 chassis for towing light weaponry, commercial aircraft refuelling trucks, and an order from the Iraqi Pipeline Company for what were the largest trucks ever built at the time. In addition to large commercial and military vehicles, company leaders recognized a growing market for moderately priced all-wheel drive vehicles.

Focus on the marque: contd.

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This gave birth to the Marmon-Herrington Ford. The installation of all-wheel drive to commercial truck chassis is the primary focus of the Marmon-Herrington Company today. In the early 1960s, Marmon-Herrington was purchased by the Pritzker family and became a member of an association of companies which eventually adopted the name The Marmon Group. In 2007, the Pritzker family sold a major part of the Group to Warren Buffett's firm Berkshire Hathaway.



Marmon Series 16 4-door sedan 1933

For the 1993 Indianapolis 500, to commemorate the 40th anniversary of The Marmon Group of companies, Éric Bachelart drove a tribute to the Marmon Wasp, actually a year old Lola with Buick power, which was uncompetitive and failed to qualify. After qualifications ended, the sponsorship was transferred to the car of John Andretti, who was driving for A. J. Foyt Enterprises. Andretti started 23rd and briefly led before eventually finishing tenth.

Notable Marmon drivers: Actor Francis X. Bushman, at the height of his movie fame in the 1910s, owned a custom built purple painted Marmon. Other actors who were owners of Marmons include Wallace Reid, Douglas Fairbanks and Arthur Tracy.

Statesman and national hero of Finland Carl Gustaf Emil Mannerheim's representational car was a Marmon E-75. Much later, the same car was bought by a group of technology students. It is still the representational car of the Aalto University student union after considerable repairs, and the name Marmon, to some extent, is coupled to this specific vehicle.

J. Horace McFarland, president of the American Civic Association, owned a Marmon. In 1924, he wrote to John Gries of the National Bureau of Standards' Division of Building and Housing that his Marmon cost nine cents a mile to operate, "independent of the chauffeur."

In his memoir, "The Cruise of the Rolling Junk", F. Scott Fitzgerald wrote about a 1,200-mile automobile trip to the South that he and Zelda Fitzgerald took in their used 1918 Marmon Speedster.

In 1916–17, Ruby Archambeau of Portland, Oregon, became the first woman to drive the circumference of the United States. Her vehicle was a Marmon.

Actress Bebe Daniels was driving a Marmon Roadster 72 miles per hour south of Santa Ana when she became the first woman to be convicted of speeding in Orange County.



Sir Len Southward with the Indianapolis Stutz at the Nissan 500 street race on the Wellington waterfront 27 January 1985.





Souped up Model T with a Rajo head and lots of other period goodies. Seen recently at an event in the Wairarapa.

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from 1954?





Cathedral Square, Christchurch September 1954. How many cars can you identify. Very specifically are there any Vauxhall experts out there that can identify the Vauxhall just to the right of the tram (enlarged) .

Upcoming Events: Unfortunately everything is up in the air at present... because of you know what.



Please drop us a note if you know of an event that might be of interest to our members. Remember that **North Shore Branch events are in RED**, whilst other branch and private events are in our usual blue font. Obviously all these events are subject to Covid postponements.

November

Nothing planned.

December

December 5: Club Christmas Run: Country run and Picnic (Organisers John Castle and Bill Duffy)

January

January 9 2022: Combined run with The Vintage Austin Register. 8.00 start from FALLOON'S CORNER (Junction Dairy Flat Highway and Kahikatea Flat Road). Instead of our usual Warkworth Picnic, we will again go north, but will visit the Kauri Museum at Matakohe. There is a lot to see – it is an amazing museum. Breakfast stop in Wellsford.

It will be good to meet up, not only with our northern North Harbour VCC members, but we hope that many Northland VAR members (and lesser marques) will be able to join us. Lunch at the Kauri Museum; bring a picnic, or eat at the nearby Café.

January 16-22 2022: Vero International Festival: New Plymouth.

Longer Term (Who knows?)

February 10-13: Brits at the Beach: More details at www.britsatthebeach.co.nz

Regular Diary

Committee Meetings: Last Monday of every month, 7.30pm.

Tuesday Mornings: Restoration shed open. Coffee and tea around 10 - ish.

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

Thursday Mornings: All sheds open. Why not come along and explore the parts shed? Fantastic

experience, even if you don't need any bits! Coffee, tea, cakes and savouries at 10.30am.

It goes without saying that the club is SHUT until we move into Level 2 Lockdown or the appropriate Traffic Light System status. We will keep you all in touch.

Triumph TR Restoration: Frank Cleary is bringing another rare Triumph back to life.

Frank writes: "A short explanation and some photos introduce this project. Not something tackled during lockdown but if you are stuck here are a few images of the restoration of TR2 TS767 SP-O. Built in March 1954 the TR is one of three factory replicas of the famous Jabbeke

TR2 that attained a touch under 125mph on a 2 litre engine over the measured mile.

Two of the replicas were shipped to New Zealand and my wallet has been most unfortunate having to shell out on its restoration. It was found in a shocking state that I describe as raced, rallied, rolled & written off. Both cars have "survived" although that is a very loose term.

Restoration work is being undertaken by R3 Fabrications in Papakura. They are doing a superb job. "









Triumph TR Restoration: Contd.

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Thanks to Frank for these photos. We are certainly looking forward to being updated with the progress. Of course we will expect to see the finished vehicle at the clubhouse in due course.



How to convert from cross-ply tyre

measurements (without using a chart)

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There's no guessing as to the size of a tyre - it's always right there, moulded in the sidewall along with the load rating, date code, and plenty of other information about that tyre. Older tyres, however, used a slew of different sizing formats unrecognizable to most people who've bought tyres in the last 40 years or so and are used to the now-standard metric sizing system. Sure, there's plenty of charts out there to find a modern equivalent to older tyres, but it only



takes some maths, a tape measure, and a quick history lesson to convert to modern sizing.

While modern tyres come in a variety of widths, heights, and aspect ratios, up until the early Seventies, tyre manufacturers offered just two aspect ratios: 90 percent up to 1964, then 80 percent from 1965 to 1972. Not a lot of choice, but that system vastly simplified the tyre sizing format, with one number ahead of the dash to indicate the section width of the tyre (in inches) and one after the dash to indicate the wheel diameter (in inches). According to Coker's Wade Kawasaki, the earlier 90-series tyres had measurements that ended in a 0, while the later 80-series tyres has measurements that ended in a 5. The exception would be some European tyres that didn't display aspect ratios; Kawasaki said to assume those are 80-series tyres regardless of the last digit.

So, for instance, the 700-15 whitewall tyre above, installed on a Buick, would have measured 7 inches wide and had a 90 percent aspect ratio. The sidewall would have thus measured 6.3 inches high (7 inches \times 0.9 = 6.3 inches) while the entire tyre would have measured 27.6 inches tall (6.3 inches \times 2 + 15 inches = 27.6 inches).

alphanumeric-series tires

letter	A	В	С	D	E	F	G	н	J	L
width (13- inch tire)	6" / 165mm	6.5" / 175mm	8	7" / 185mm	-	8		-	3	27
width (14- inch tire)	-	6.45" / 165mm	6.95" / 175mm	ä	7.35" / 185mm	7.75" / 195mm	8.25" / 205mm	8.55" / 215mm	÷	-
width (15- inch tire)	5.6" / 155mm	18.5	6.85" / 175mm	:	7.35" / 185mm	7.75" / 195mm	8.25" / 205mm	8.55" / 215mm	8.85" / 225mm	9.15" / 235mm

Later in the Seventies, things started to get complicated. More aspect ratios came along - most popularly 78 percent and 70 percent - to meet the demand for wider tyres. Rather than express the tyre's width in numbers, tyre sizes switched to letters, with the letters denoting the tyre's load rating and with the tyres getting wider as the letters progressed through the alphabet: A for tyres 6 inches (165mm) wide, progressing up to L tyres more than 9 inches (235mm) wide. To add to the complication, along came radials during this time, introducing slightly different formats. Michelin, for instance, measured section width and even wheel diameter in millimetres.

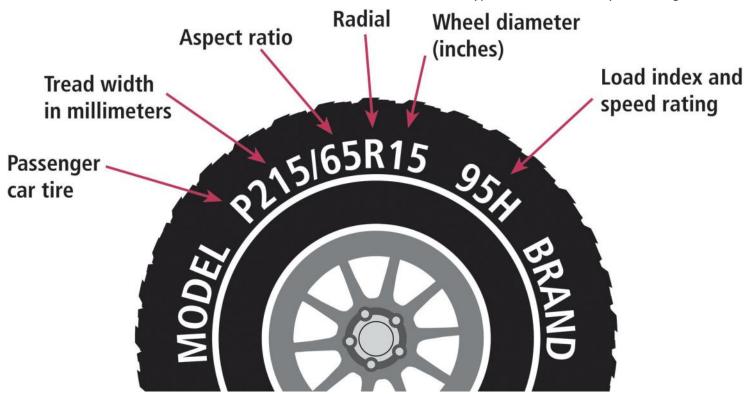
Cross-ply measurements: contd.

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It soon became apparent that the existing size formats wouldn't be able to adapt to an everexpanding range of tyre sizes across multiple aspect ratios, so in 1980 the International Organization for Standardization came up with the P-Metric standard for passenger cars. This new P-Metric standard still incorporated aspect ratios, but it also decoupled the aspect ratio from the tyre's width. It also, confusingly, made use of both metric and SAE measurements in the same format.



Typical Michelin radial tyre markings



Deciphering tyre markings

Converting from bias-ply sizes to P-Metric sizes, in theory, shouldn't be all that difficult. Measure the section width of your cross-ply tyre and convert it to millimetres (1 inch = 25.4 millimetres), determine the older tyre's aspect ratio, then plug those numbers and the wheel diameter into the P-Metric format.

In practice, however, tyre sizes don't exactly match up, and despite the proliferation of tyre sizes in recent decades, there's often not a perfect match to older sizes. That means rooting through available tyre sizes to compare sizes and to find the closest or most appropriate tyre. The above mentioned 700-15 tyre would thus roughly convert to a 175/90R15, but good luck finding radials in that size.

Cross-ply measurements. Contd.

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Something like a P175/75R15 would nearly match the width, but would have a smaller diameter (25.3 inches), throwing off the speedometer by about 8 percent. Alternatively, a P215/75R15 would come closest in diameter to the original bias-ply, but would measure more than two inches wider, potentially rubbing on the car's guards or even not fitting on the stock wheels.

We'll note here that larger truck tyres and off-road tyres often follow a different tyre size format using SAE measurements, with the first number representing the tyre's overall height in inches, the second its width in inches and the third its wheel size in inches. So a 255/85R16 tyre, typically found on large trucks, would translate to a 33X10R16. You may also find different formats for Brass Era tyres, racing tyres, and older European metric tyres.

We'll also note that the tyre sizes above are all nominal sizes and not necessarily representative of actual sizes in real-world conditions. Overall dimensions will change depending on load, inflation, wheel width, and manufacturer, so take caution to carefully measure installed tyres whenever possible before comparing sizes.

If you're not a fan of math, pretty much all of these conversions have already been done and structured into easily found reference tables or online calculators. On the other hand, the conversion is fairly simple and it never hurts to know for sure that you're picking the right tyre size when upgrading to modern radials.

Pre-1964	1965-72	80 series metric	Alpha Numeric 78 series	P-Metric 75 series Radial	P-Metric 70 series Radial
5.90-13	600-13	165-13	A78-13	P165/75R13	P175/70R13
6.40-13	650-13	175-13	B78-13	P175/75R13	P185/70R13
7.25-13	700-13	185-13	D78-13	P185/75R13	P205/70R13
5.90-14	645-14	155-14	B78-14	P175/75R14	P185/70R14
6.50-14	695-14	175-14	C78-14	P185/75R14	P195/70R14
7.00-14	735-14	185-14	E78-14	P195/75R14	P205/70R14
7.50-14	775-14	195-14	F78-14	P205/75R14	P215/70R14
8.00-14	825-14	205-14	G78-14	P215/75R14	P225/70R14
8.50-14	855-14	215-14	H78-14	P225/75R14	P235/70R14
5.90-15	600-15	165-15	A78-15	P165/75R15	P175/70R15
6.50-15	685-15	175-15	C78-15	P175/75R15	P185/70R15
6.40-15	735-15	185-15	E78-15	P195/75R15	P205/70R15
6.70-15	775-15	195-15	F78-15	P205/75R15	P215/70R15
7.10-15	825-15	205-15	G78-15	P215/75R15	P225/70R15
7.60-15	855-15	215-15	H78-15	P225/75R15	P235/70R15
8.00-15	885-15	230-15	J78-15	P225/75R15	P235/70R15
8.20-15	900-15	235-15	L78-15	P235/75R15	P255/70R15

Typical tyre conversion chart. Your local tyre service branch will have all these charts



This was only earlier this year:

Progress
November 2021



The way we were.....



Intense discussion at 'smoko'.



When he's happy like this we just let him play



Operation Wolseley a tricky fitting.



One man went to mow.... went to mow a meadow

About Us

Progress
November 2021

Club Address: 40 Masons Rd, Albany, 0632

Phone: 09-4792779: email: northshorevcc@gmail.com

Website: 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).

Club Committee

Chairman: Tony Sparkes 09-473-5872 or 027-499-5588

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

Treasurer: Ross Moon 09-426-1508 or 022 426 1508

Club Delegate: Stuart Battersby 022-471-2759

GENERAL COMMITTEE Members:

John Higham 09-478-7973

Barry Thompson 09-959-0206

Peter Lloyd: 09-426-7179 or 021-298-8795

Richard Lloyd: 09-420-5048 or 027-483-2898

Mike Swanton: 09 426 0011

Arnold Van Zon: 09 473 5750 or 027 2765336

OTHER CLUB OFFICERS (Non Committee)

Members' Garage Manager: Kevin Lord 09 413 9157

Welfare Officer: Brian Bisset 09 554 1740

Magazine Editor: Stuart Battersby: Tel: 022 471 2759: Email battersby56nz@gmail.com

THE INFORMATION IN THIS MAGAZINE IS SUPPLIED AS A SERVICE TO MEMBERS. ARTICLES OF INTEREST ARE ALWAYS WELCOMED. THE OPINIONS EXPRESSED IN THIS MAGAZINE ARE THOSE OF THE AUTHORS AND THE CLUB ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF ANY ARTICLES OR STATEMENTS HEREIN.

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