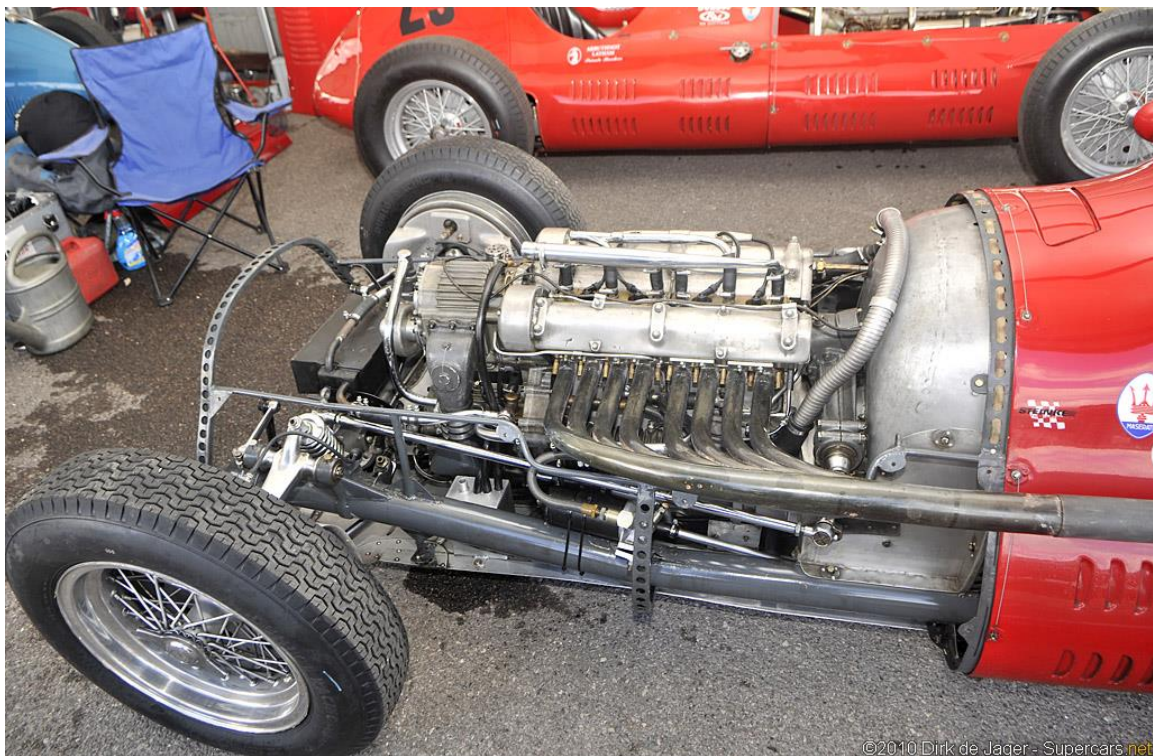




VALVE BOUNCE

OCTOBER,
2020



©2010 Dirk de Jager - Supercars.net

Under the bonnet of a magnificent 1948 Maserati 4CLT/48 Grand Prix car. Like several other manufacturers through motoring history, they used a supercharger (running 40psi boost) to improve performance. In this edition of Valve Bounce, Bill Freame outlines the historical role of super/turbocharging and its place in Australian tin-top racing.

- Gippsland Car Club Inc PO Box 493, Morwell, 3840 A3759. ABN 76 691 013 424
- Website: gippslandcarclub.com.au
- Track: Bryant Park, Bill Schulz Drive, Yallourn, 3852.
- All contents © Gippsland Car Club 2020

**GIPPSLAND CAR CLUB INCORPORATED
2020 BOARD OF DIRECTORS**

CHAIRMAN	Mick McGinn mpmcg2@optusnet.com.au	0402 739291
DEPUTY CHAIRMAN	Paul Hickey ausca62@hotmail.com	0427 852179
SECRETARY	Rhys Yeomans rhysyeomans@gmail.com	0400 519490
TREASURER	Yvette Stolk ystolk@gmail.com	0411 166 628
COMPETITION SECRETARY	VACANT	
KHANACROSS	Rob Duncan hxdude76@yahoo.com.au	0419 501394
PROPERTY	Bill Jennings niscap@aussiebroadband.com.au	0459 833431
MEMBERSHIP	Ken Neilson ken@streetwise.net.au	0409 427199
VALVE BOUNCE EDITOR	Ian Maud icfm710@gmail.com	0414 580921
PUBLICITY AND MARKETING	Ian Maud icfm710@gmail.com	0414 580921
HEALTH AND SAFETY	Shane Cane shanecane@me.com	0407 764275
BUILDINGS	Phil Tullett phil.tullett@energyaustralia.com.au	5127 8915
TRACK	Wayde Griffiths arrowlinemarking@y7mail.com	0458 882353
CLUB WEBSITE/FACEBOOK	Rhys Yeomans rhysyeomans@gmail.com	0400 519490
CLUB PERMIT REGISTRAR	Ken Neilson P.O. Box 1377, Traralgon, 3844 ken@streetwise.net.au	0409 427199
CLUB POINTS SCORER	VACANT	
CLUB ASSET HIRE	John Bryant johnandcarolbryant@yahoo.com.au	0439 741473
SOCIAL	Jill Hickey jillracer727@gmail.com	0409 412452
CAMS DELEGATE		

MAGAZINE CONTRIBUTIONS Forward by email to icfm710@gmail.com Contributions should be forwarded by the third Friday in the month.

BANK DETAILS: Bendigo Bank, BSB 633000, Account Number 1574 73836, Gippsland Car Club

WEB PAGE: www.gippslandcarclub.com.au

GIPPSLAND CAR CLUB VISION: To inspire and enable people to participate in motor sport.

GIPPSLAND CAR CLUB MISSION: To provide affordable motor sporting experiences for people of all abilities in a safe and friendly environment.



CALENDAR 2020

PLEASE NOTE CHANGES TO THE CALENDAR:

- A proposed Working Bee and Club Practice Day has been inserted into the Calendar on Saturday, October 31 – this is dependent upon the government rules in place at the time. Please check the Club website and Facebook page for further information as the date approaches.
- The Victorian Hill Climb Championship for 2020 has been cancelled.
- The GCC Annual General Meeting for election of office bearers, etc, has now been cancelled, and will be rescheduled on a date to be determined at some time in the future.
- The hill climb date in October has now been cancelled due to the continuing uncertainty in regard to lockdown restrictions.
- It is hoped that all other GCC events as shown on the Calendar will proceed on the dates shown, dependent upon Government regulations at the time.
- All events will be for GCC members only.
- All events at the track will be spectator-free until such time as government regulations allow spectators to attend. The definition of spectators includes our Club members – if you are competing you are allowed to be there, if you are not competing you will not be admitted to the event.
- Tentative dates for the Victorian Hill Climb Championship rounds for 2021 have been included on the Calendar – these dates will be finalised in the near future.



OCTOBER

Saturday 10	M&DCC Boisdale Hill Climb Round 7, Long Track
Sunday 11	<i>Pilota Sportiva Audi Australia track hire at Bryant Park - CANCELLED</i>
Tuesday 13	Board Meeting, 7.00 p.m.
Thursday to Sunday, 15/18	Supercars at Bathurst
Saturday 17	<i>MG Car Club track hire at Bryant Park - CANCELLED</i>
Saturday to Sunday, 17/18	AROCA 12 Hour Regularity Relay, Winton - CANCELLED
Saturday to Sunday, 17/18	Shannons Nationals at The Bend
Saturday to Sunday 17/18	Mt Tarrengower Hill Climb
Friday 23	<i>Monaro Club Nationals at Bryant Park - CANCELLED</i>
Sunday 25	VHCC Round 5 at Bryant Park (PIARC) – CANCELLED
Sunday 25	GCC Club Hill Climb at Bryant Park - CANCELLED
Sunday 25	MotoGP at Phillip Island - CANCELLED
Friday to Sunday, 30 to Nov 1	Supercars at Waneroo
Friday to Sunday, 30 to Nov 1	Legend of the Lakes Hill Climb, Mt Gambier
SATURDAY 31	PROPOSED WORKING BEE AND CLUB PRACTICE DAY



NOVEMBER

Sunday 1	MG Car Club Historic and Classic Rob Roy
Sunday 1	GCC Club Khanacross at Bryant Park
Wednesday 4	Valve Bounce collation
Thursday 5 to Sunday 8	Australian Hill Climb Championship, Mt Cotton, Queensland
Friday to Sunday, 6/8	Historic Sandown - CANCELLED
Saturday to Sunday, 7/8	PIARC Supersprint Round 5
Sunday 8	GCC Club Hill Climb at Bryant Park
Sunday 8	RACES East Sale Super Sprint - CANCELLED
Wednesday 11	Board Meeting, 7.00 p.m.,
Friday to Sunday, 13/15	Bathurst International
Sunday 14	Private Clubrooms hire
Sunday 14	Repco Sprint Series Round 5, Winton
Saturday 14	M&DCC Boisdale Hill Climb Round 8, Short Track (Noel Burley Memorial)
Saturday to Sunday, 21/22	Supercars at Symmons Plains
Saturday 28	<i>Nugget Nationals at Bryant Park</i>
Saturday to Sunday 28/29	Island Magic



DECEMBER

December 1	Valve Bounce collation
Friday to Sunday, 4/6	Supercars at Newcastle
Friday to Sunday, 4/6 (TBC)	Bathurst International
Saturday 5	GCC Twilight Club Hill Climb at Bryant Park
Tuesday 8	Board Meeting, 7.00 p.m.
Saturday to Sunday 12/13	Supercars at Sandown
Sunday 13	GCC Club Khanacross at Bryant Park

CALENDAR 2021

JANUARY

Saturday to Sunday, 9/10	Supercars at Hampton Downs or Pukekohe
Sunday 17	VHCC Round 1 at Rob Roy
Friday to Sunday, 24/26	Australian Racing Group at Symmons Plains
Saturday to Sunday, 30/31	Australian Racing Group at Baskerville

FEBRUARY

Friday to Sunday, 5/7	Supercars at Bathurst
Thursday to Sunday, 11/15	Mansfield High Country Holden Nationals
Saturday 13	VHCC Round 2 at Bryant Park
<u>Saturday 27</u>	<u>Targa Florio at Bryant Park</u>

MARCH

Saturday to Sunday, 27/28	VHCC Round 3 at Mt Leura, Camperdown
---------------------------	--------------------------------------

APRIL

Sunday 18	VHCC Round 4 at Bryant Park (PIARC)
<u>Saturday to Sunday, 23/24</u>	<u>Ford Four Track Hire at Bryant Park</u>

JUNE

Saturday to Sunday, 5/6	VHCC Round 5 at One Tree Hill, Ararat
-------------------------	---------------------------------------

JULY

Sunday 4	VHCC Round 6 at TAFE Logic Centre, Wodonga
----------	--

AUGUST

Sunday 22	VHCC Round 7 at Broadford
-----------	---------------------------

SEPTEMBER

<u>Sunday 19</u>	<u>MOTORSPORT AUSTRALIA Club Challenge at Bryant Park</u>
------------------	---

OCTOBER

<u>Sunday 3</u>	<u>Kyneton Car Club track hire at Bryant Park</u>
<u>Saturday 16</u>	<u>MG Car Club track hire at Bryant Park</u>

NOTE:

- All dates shown above are subject to change - please check with the organisers of the events to confirm the dates.
- Events shown as **Bold** are rounds of the Gippsland Car Club Championship (some of these dates may be changed)
- Events shown as **Bold Italics** are rounds of the Gippsland Car Club Khanacross Championship.
- GCC Practice Days are for members and associate members only, and will run from 1.00 p.m. until 4.00 p.m.
- If you believe that any of the dates listed are incorrect, please contact John Bryant and they will be amended.

Editorial Ponderings:

The COVID-19 stage four lockdown continues for our metropolitan brethren, but thankfully in the past month regional (still wondering whatever happened to 'rural?') Victoria has been let off the leash a little, and I for one have enjoyed getting out for an occasional drive in my CPS car. What a brilliant area we live in – wouldn't change it for quids!

The GCC Board has moved into a new stage where we can now start considering re-opening the track for limited use, restricted at this stage to 'regional' members. My apologies to our members in Melbourne and surrounds for raising this, but look at the bright side: we have a working bee scheduled for late October ('regional' members only), so hopefully you will be able to join us shortly, and the track will be back to pristine condition for you! A couple of new, actual, not-to-be-soon-cancelled events have also just been added to the calendar – check it out! All these will be run under COVID conditions, meaning low numbers, no spectators, masks to be worn when not running, go home as soon as finished, etc. It's going to be a different form of motorsport, but at least it will provide the craven 'hit' we starved motorsport druggies are in need of.

Are we soon to have another motorsport venue in Eastern Victoria? As reported earlier in VB, a consortium has come up with plans to build the extensive new \$200 million Cardinia Motor Complex south of Pakenham. Latest news is they have been given stage one planning approval, and backers are suggesting it will open within two years. What will it look like? The artists have been sharpening their mouse...or whatever it is that computer-based artists do:



The more I read about this, the more it sounds like The Bend Motorsport Park, if you have been there. Plans include a 70-room hotel, restaurant(s), 3.6km main circuit with variations available, a 1.5km rallycross circuit, 900m go-kart track, corporate facilities, exhibition areas, and 50 private (hmm) pit-side garages. There are also plans to use it for concerts and exhibitions. I look at all this and wonder: Is it going to take competitors away from Bryant Park? It will be interesting to see, assuming it actually goes ahead. Facilities of this size have a habit of catering to the high-end of motorsport, such as 'Supercars' and F1 – the costs of using it may be prohibitive for club members. If the above illustration is anything like correct, I look at it with my 1500cc car in mind and think "I'm going to be in fifth gear nearly all the time!" Such a high-speed track may suit practicing F1 teams,

but not many club-level motorists. On the other hand, if it attracts more competitors to the district, possibly more of them will join us at Bryant Park for greater variation and a more technically-challenging run? Could it, in fact, add to our membership?

I listened to a radio talkback show where locals were invited to discuss the building of the new track. Already, some were expressing concerns about noise level – that curse which has hobbled both Phillip Island and Sandown, and seen the closure of many a fine track around Australia. The nearest houses are 1.5km away – how is that going to go? Will the operators be given restricted days before the facility even opens? One chap complained there was no provision for a speedway track: another that there was no drag racing strip. Most were in favour of building the track – it's going to be an interesting couple of years.

Speaking of race circuits, I have driven at several around eastern Australia over the years, particularly in my early days of motorsport, and thought we might start a series featuring 'lost' circuits. Hume weir, Catalina Park and Lakeland hillclimb are amongst my experiences: what about you? Do we have any older members who can tell us about competing elsewhere? Orange, Gnooblass, Longford, Fisherman's Bend – these are well gone, but maybe someone can describe them for us, and a tale or two of being there? Or perhaps more realistically, having been back there for a nostalgic visit? Feel free to drop me a line!

I'd like to relate to you some tales of garage humour. Three such items come to mind, and I'm hoping these might inspire others to send in their own such stories:

- As a young bloke back in the 70s I used to work part-time at a local service station. (*service station* – remember them?) The boss would get us to collect the sump oil from any car we did a service on, and drain it into some plastic containers against the workshop wall. I thought this was for disposal, and it was...sort of. Turns out each Friday night a bloke would drop by with his Combi van that was using oil at a vast rate, and he'd collect the oil. Seems he'd keep pouring it in to the motor as fast as it leaked (or burned?) and kept himself mobile, saving the cost of an engine rebuild.
- 'Wheels' magazine was a staple read of mine as a young bloke, with the added advantage that my dad would buy it regularly, so it cost me nothing! For several years, the best section in my humble opinion, was the back page, which held 'Dirty Wheels' – written by an actual, practicing garage mechanic at the time. Each month he would relate a tale from his own workshop – some bordered on unbelievable, but truth is often stranger than fiction, as it's said. One such story involved one of their mechanics who was tuning a car at the time: air cleaner off, hand on the carby throttle lever, giving it some large blips while listening closely. At this point the garage cat stirred up a mouse, which took to scampering about the workshop in fear of its life, cat in hot and enthusiastic pursuit. After a couple of desperate manoeuvres, the mouse tore across the workshop floor, up the leg of the mechanic, up his back and then, without any change in breakneck speed, straight down his arm and disappeared into the throat of the carby! Reputedly, the car didn't even change tune, and despite a short examination no further sign was found of the mouse.
- And lastly (for this month): I recently re-read 'May on Motors,' a collection of entertaining and pondering articles written by – as he describes himself – "...the other guy on Top Gear." Turns out he's quite a skilled scribe, and has written some very good items. In one, he's reminiscing about his (brief) time spent as a quite young and inexperienced employee of one of London's larger new car dealers, where James acted as a Concierge for the service department, booking people's cars in for maintenance, and dealing with their enquiries...and their complaints. He relates how one day a near-new sedan fell off the workshop hoist, landing on its side just moments before the owner popped his head around the corner to see how the service was going! Next, was the time they cut a hole in the roof of a new car to fit a sunroof...only to discover that the opening they had made was considerably larger than the sunroof going into it! But James declares neither of these surpass the time a lady bought

in her car and asked to have the new radio/cassette unit sitting on the passenger seat in its still-new box, fitted into the dashboard in place of the old and apparently troublesome unit. No worries, James booked her in, job organised to be done, new radio unit sat prominently on the mechanics' bench, etc. The next day he fielded a phone call from the same but by now most annoyed owner, asking why she had been charged for the job when the new unit had not been fitted? He promised to look into it and got her off the phone, only for it to ring a few minutes later. This time it was a charming customer, phoning to say how pleased he was with the first service he had received on his new car, and to also thank them for the new, and apparently complementary, radio/cassette unit they had fitted – he wasn't even aware there was a fault with the original one!

OK...that's enough of that for now. Will COVID ever end? While it endures, you lucky sods are receiving yet another bumper edition of Valve Bounce, courtesy of some fantastic contributors and your Editor's pathetic lifestyle. Our leading article is another beauty by Bill Freame: if you've followed Australian motorsport in the 80s and 90s, or have an interest in matters technical, then his article will be a revelation. The ever-reliable John Bryant has provided us with further insight into the club's history and achievements, as well as recommending some great reading; Rhys has an excellent article on competition tyres; there's some daggy humour; updates from the AOMC; two club members' profiles, and a fascinating link to the Austin Seven featured last month, provided by Lloyd Shaw. And...we look like getting back on to the track soon: what more could you ask for? Enjoy!

-IM, the Ed.



Jack Brabham wharf side at Monaco. Source: BP promotion.

Chairman's Report – September, 2020

-not received this month

What do you need to know now?

There are several changes, as outlined by John Bryant in the section at the top of the calendar – make sure you read them!



➤ CLUB CHAMPIONSHIP 2020

Here is the updated version:

Club Championship events for 2020 are as follows:

- | | |
|------------------------|--|
| ○ Sunday, October 25 | GCC Multiclub Hillclimb ← CANCELLED |
| ○ Sunday, November 8 | GCC Multiclub Hillclimb...TBC |
| ○ Saturday, December 5 | GCC Multiclub Hillclimb (Twilight)...TBC |

➤ More for your calendar:

Next KHANACROSS for 2020
Sunday, November 1st ...TBC

Next GCC MULTICLUB HILLCLIMB
Sunday, 8th November...TBC

➤ VICTORIAN HILL CLIMB CHAMPIONSHIP 2020

...has been cancelled 😞

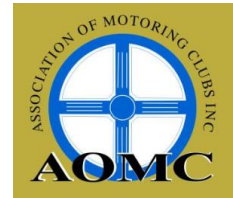
➤ REMINDER TO ALL COMPETITORS

MEECAMS-only entry **now applies** for all events from now on!! Go to the CAMS website for access.
Save the trees, forget the paper, see your event SuppRegs for more info or help if required.



➤ **From the AOMC:**

A couple of extracts from the AOMC:



Recent changes to the Club Permit Scheme

October 2020

The Road Safety (Vehicles) Regulations 2009 will be replaced by the Road Safety (Vehicles) Interim Regulations 2020, which will take effect from 4 October 2020.

The new Regulations include the following changes that apply to the Club Permit Scheme.

Use of Club Permit vehicles

The vehicle operated under the Club Permit must not be used for hire or reward for the carriage of goods or freight or to provide a commercial passenger vehicle service as defined by the *Commercial Passenger Vehicle Industry Act 2017*.

Club conditions

VicRoads may, from time to time, vary or remove a condition that an approved vehicle club must comply with. Internal review rights apply.

Club Permit number plates

When applying for a Club Permit, the applicant will now be required to pay a fee for the issue of standard Club Permit number plates (\$38 for two number plates, or \$19 for one number plate).

Requirements of club membership

To be eligible for a Club Permit, the club member will no longer need to be a 'financial' member of an approved club; they will simply need to be a 'member' of an approved club.

Obligations of Club Permit holders

A Club Permit holder must notify VicRoads within 14 days after a change in vehicle details or modification of the Club Permit vehicle.

New permanent or temporary operating conditions

VicRoads can now impose, vary or remove permanent or temporary operating conditions on a Club Permit if the vehicle does not meet the standards for registration. Internal review rights apply. For example, a vehicle with non-compliant headlights may have a condition of no driving at night.

The permit holder will be notified and sent a *Certificate of approved operations* if this occurs.

A Club Permit holder must not use a Club Permit vehicle to which a temporary or permanent condition has been applied without carrying the *Certificate of approved operations* in the vehicle.

Reassignment of a Club Permit

A Club Permit can be re-assigned to the surviving spouse/domestic partner when the permit holder is deceased. The surviving spouse/domestic partner of the deceased will also need to be a member of an approved club. An application must be made by the authorised representative within 90 days after becoming the authorised representative.

For more information visit vicroads.vic.gov.au

And some other forthcoming events...not yet advised as having been cancelled, but dependent on restrictions at the time (confirm with organisers):



Nov 1, 2020

MGCC 29th Historic and Classic Hillclimb Rob Roy

Rob Roy Hillclimb

375 Clintons Road
Smiths Gully, Victoria



Feb 27, 2021

Rally Retro Festival

METEC Driver Education Centre

112 Colchester Road

Bayswater North, Victoria



Apr 17, 2021

Echuca Swap Meet

Rotary Park, Rose Street

Echuca, Victoria

Gippsland Vehicle Collection

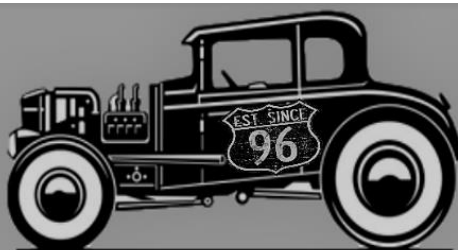


Apr 18, 2021

Gippsland Vehicle Collection - Swap Meet

1A Sale Road

Maffra, Victoria



O'CONNELL'S TYRES
136 MOORE ST, MOE
(03) 5126 2822

MECHANICAL REPAIRS

LOG BOOK SERVICES

BRAKES

ALIGNMENTS

COMPUTER SCANS

TYRE REPAIRS

WHEEL BALANCE

STEERING ADJUSTMENTS

SAFETY CHECKS

SUSPENSIONS

GENERAL REPAIRS

PARTS FITMENT

TYRE REPLACEMENT

MECHANICAL INVESTIGATION

Ed: hot off the press, as this mag was being assembled – also via AOMC:

There has recently been a lack of clarity about whether left hand drive (LHD) vehicles over 25 years old (but under 30 years old) are eligible for the club permit scheme.

The attached VASS Bulletin clarifies the rules for left hand drive vehicles. It will be available on VicRoads' website in the next few days.

John Lewis

Principal Practice Advisor – Registration and Licensing



Connecting
our communities

If the Vehicle Import Approval (VIA) includes a 17-digit VIN, this must be permanently stamped into a substantial part of the vehicle body such as the firewall or suspension tower.

You will issue a standard VASS Approval Certificate and blue modification plate/label to the vehicle.

The VASS Approval Certificate and blue modification plate/label must state in a location that is easily visible that the vehicle is for **"Club Permit Use Only"**. VicRoads will be implementing measures at Customer Service Centres and within the administration of the Club Permit Scheme to ensure these vehicles are not eligible for registration.

LHD vehicles that are 25 years old and older and less than 30 years of age will only be eligible for the CPS.

Vehicles that are 25 years old and older, but less than 30 years of age will not be eligible for registration in the LHD configuration even though they have a VASS Approval Certificate and blue modification plate/label.

When will vehicles with a LHD steering configuration be eligible for registration?

A vehicle that is 30 years old or older is eligible for registration with a LHD steering configuration.

Will a vehicle with a LHD steering configuration that has been approved for use on the CPS need another VASS Inspection when it becomes eligible for registration and registration is sought?

Yes. A new VASS inspection will be required, and a new VASS Approval Certificate and blue modification plate/label must be issued.

A VASS Signatory approving a LHD vehicle that is 30 years old or older for registration that was previously approved for use under the CPS before it was 30 years old will be required to replace the blue modification plate/label which was previously issued to the vehicle.

Does this change also include LHD Personal Import vehicles?

VicRoads will only accept a Personal Import vehicle that is 25 years old and older and less than 30 years of age with a LHD steering configuration on the CPS if it is given a VASS Approval Certificate and blue modification plate/label stating that it is for **"Club Permit Use Only"**. A yellow plate must not be issued.

A personal import LHD vehicle that is 25 years old and older and less than 30 years of age which has been imported under the Federal Personal Imports option is only eligible for registration in Victoria when it is converted to right hand drive, and a Commonwealth yellow plate issued.

Will a Personal Import vehicle with a LHD steering configuration that has been approved for use on the CPS need another VASS Inspection when it becomes eligible for registration and registration is sought?

A VASS Signatory approving a LHD Personal Import vehicle that is 30 years old or older for registration that was previously approved for use under the CPS before it was 30 years old will be required to replace the blue modification plate/label which was issued to the vehicle with a Commonwealth yellow plate.

The vehicle will require the 17-digit VIN that is on the Yellow Plate to be permanently stamped into a substantial part of the vehicle body such as the firewall or suspension tower, if not already done.

ANOTHER WAY TO WHILE AWAY YOUR TIME WHILST WAITING FOR COVID 19 TO DISAPPEAR

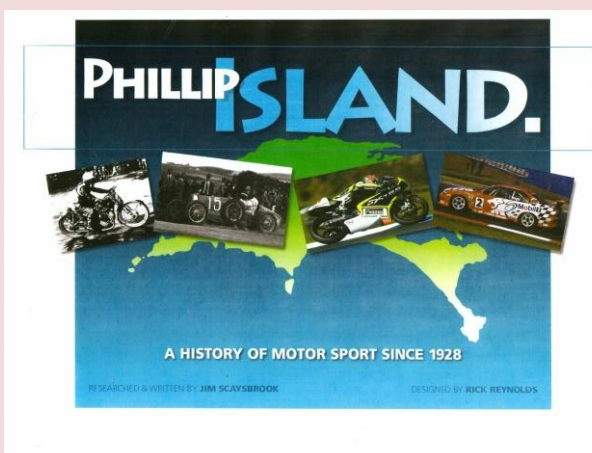
- John Bryant

In this day and age, many people pass a lot of their time on the computer or similar device – many websites have been included in Valve Bounce in recent times for you to peruse, and a number of you, including me, will have investigated a number of these sites.

Another way to spend your time is to read books – a pastime that many in the population no longer pursue. As an aspect of my interest in the history of motor sport, I read a lot of books, or look up a lot of historical websites/Facebook pages. I will mention a few books that may pique your interest. The purchase of these books would be a worthwhile addition to your library if you can locate them.

PHILLIP ISLAND – A History of Motor Sport since 1928, researched and written by Jim Scaysbrook.

Are you actually aware that motor racing took place on Phillip Island from 1928 onwards, a long time pre-bridge to the Island? All visitors and all cars had to be floated to the track by ship from Stony Point to Cowes. The Australian Grand Prix was the first event to be held in 1928, but this was not at the track that is currently in existence. The track was on public roads close to Cowes, and measured 6.569 miles for the lap. Any eagle-eyed observer of motor sport or Phillip Island resident will know that the corners of this track are marked by plaques. Cars ran on this track from 1928 to 1935, when a decision was made to rotate the AGP between states, and the organisers (Victorian Sporting Car Club at this time) decided that the dust was too much, and would not continue without the roads being sealed (which they were not!). Motor cycle racing continued on the Island until 1940, but they actually used a 12-mile track for their events. End of motor sport for many years!! The original San Remo bridge was completed in 1940, just in time to see the end of any racing on the Island. This bridge would have been almost a miracle to Island residents – I can tell you from personal experience that it was not the most exciting bridge to cross, with one-way traffic and a wooden deck.



In the late 1940's PIARC was formed by some locals, and a new track was planned (very similar to the current track and in the same location). Did you know that racing on this track was originally meant to be anti-clockwise, as distinct from the clockwise direction that is actually used today? After a large amount of frustration, the opening meeting (for cars and bikes) was held on Saturday, December 15, 1956 (just after the Melbourne Olympics) – although only a high school kid at the time, I was there, as I was at virtually every other event held during that period of the circuit's history. Looking back, this to me was the golden era of Australian motor racing. Then came the Armstrong 500 events, held in 1960, 1961 and 1962. The track was destroyed, and racing ceased. A new bridge appeared before racing began again – in 1969 the new bridge was opened – two lane concrete – the one that is still in use today.

Len Lukey then purchased the track – the track was rebuilt, and racing commenced again in 1967 and continued to 1978 – racing again stopped due to a combination of circumstances.

“By 1984, there were few reminders of Phillip Island's motor racing heritage. The crumbling remains of the once great circuit were fighting a losing battle against nature and its elements, and cattle now grazed where cars and bikes had battled”

(Jim Scaysbrook, Page 155).

The track was rebuilt again (with a couple of slight differences) – this time with new owners and for bikes. 92,000 people attended the inaugural meeting - The Swan Premium Australian Grand Prix

won by Wayne Gardner from Mick Doohan. I can assure you that as one of the 92,000 it took a long time to get off the Island that day! 1990 saw the arrival of the Australian Touring Car Championship, and racing was back for the long term. Ownership has now changed to the Linfox Group, and many millions of dollars have been spent on the track in recent years. An excellent read and full of magnificent photos. Results of races are included. There are copies available on eBay, but not necessarily cheap.

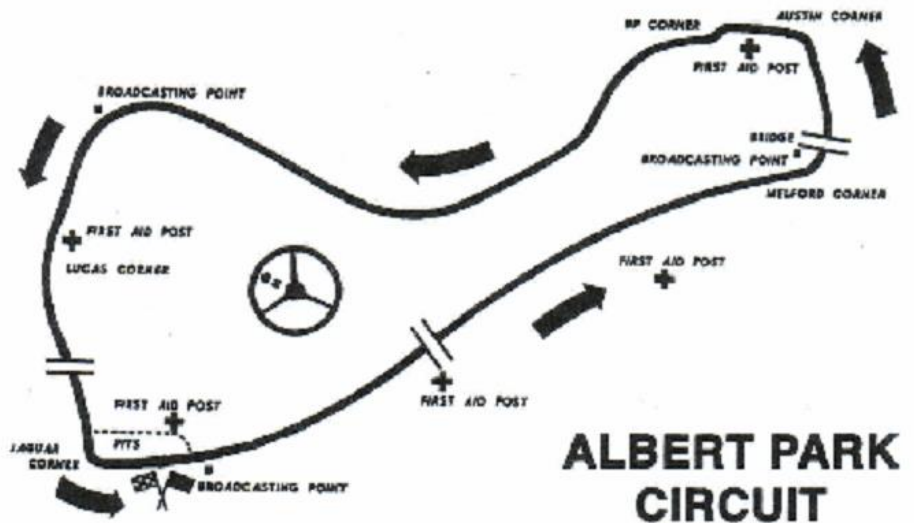
GLORY DAYS Albert Park 1953 -58, by Barry Green

Albert Park 1953-58



By Barry Green

GLORY DAYS



Are you aware that racing took place at Albert Park from 1953 to 1958? I am, because I went to all of the meetings that were held there – Grade 6 primary school kid in 1953 and Form 5 (Year 11) kid in 1958. The track ran in the opposite direction to the current track, and used public roads around the track – safety features were very poor when compared to a modern circuit, and there were a few accidents. I can recall Alec Mildren baling out of a Cooper Bristol whilst he was in motion going down the main straight – the car was on fire and he waited as long as he could, and then bailed, rolling down the track (he was OK).

Talking of bales, there must have been a million hay bales lining various parts of the track and stacked up against trees and poles – every farmer in the vicinity of Melbourne would have made a fortune that year. At the time of these race meetings, the population of Melbourne was approximately 1 million people (now 5 million) – at the Olympic Grand Prix meeting held in November 1956 (during the Olympic Games in Melbourne) 100,000 people attended the meeting (I was one of them) – 10% of the population of Melbourne!! If 10% of the population of Melbourne attended one of the modern Grand Prix events at Albert Park, the crowd would number 500,000!! One of the interesting things to note (and this is mentioned in the book and also shows photographs of this occurring) is the fact that the Grand Prix cars were driven on the public roads to the track (and I did see them travelling along Albert Road)– the Maserati team was housed at Reg Hunt Motors in Elsternwick and drove to the track – no such things as trailers for them! This does not happen these days, but it did happen in Adelaide during the 1980's.

I will quote from the back cover of the book (the front and back covers being the only pages with colour photographs):

“The roar of supercharged engines echoing across the lake . . . precipitation from the overhead trees converting understeer into oversteer in a heart beat . . . straw stuck between Borrani spokes after a brush with hay bales . . . the white hot stench of punished brake linings and crucified clutch plates . . . green lawns, red cars, fast track, bold drivers. This was Melbourne’s Albert Park, 1953-58.”

“An unforgettable era of Maybach v Lago Talbot and Maserati v Ferrari, Jones v Whiteford and Moss and Brabham. Here are the race reports and results, but more than the fine print, Barry Green tells the evocative story behind the story of Albert Park, courtesy of personal accounts profiles and a gallery of 130 photos, most never before published.”

The amount of work put into this self-published book is unbelievable. This is not your glossy page colour photographs book, but rather the rougher paper and black and white photographs-type book. The results of every race, plus many other items of interest, are included in this book. The book is distributed by Barry, who can be reached at greenbw@bigpond.com.au Barry has also written other books, including Fast Track Back (history of Longford track in Tasmania) and Driven to Succeed – the Alec Mildren Story. The books can be purchased on eBay, but as for the Albert Park book, they are not at giveaway prices. An outstanding read, particularly if you were at the races at Albert Park during that time period.

CHALLENGE AUSTRALIA – the 1979 Repco Reliability Trial

The wonderful text in this book is by Candy Baker, with hundreds of photographs included by Ray Berghouse, Thomas B. Floyd, Colin Lock, Bill Forsyth, Ian Ashburn and John Lemm. This book is a limited edition, hard to get hold of, but would be of immense interest to the rallying fraternity amongst our members.

The event, which was the last of the great around Australia rallies, was divided into six Divisions or stages:

Division 1. 28 hours schedule (1700 kilometres) – Melbourne to Tooberac (Special Stage), Heywood (Special Stage), Mt Gambier, Bordertown, Renmark, Kuinto (Special Stage), Adelaide

Division 2. 57 hours 45 minutes schedule (4200 kilometres) – Adelaide to Yunta, Broken Hill, Flinders Ranges, Maree, Kingoonya, Nullabor, Kalgoorlie, Narrogin (Special Stage), Perth.

Division 3. 58 hours schedule, 4800 kilometres. – Perth to Waneroo (Special Stage), Geraldton, Hutt River, Cue, Newman, Port Hedland, Derby, Kununurra, Darwin.

Division 4. 50 hours 50 minutes (3700 kilometres) – Darwin to Mt Goyder, Pine Creek, Roper Bar, Borrolloola, Burketown, Mt Isa, Kajibbi, Bang Bang, Croydon, Mt Sunrise, Almaden, Cairns, Mt Fox, Townsville

Division 5. 30 hours 30 minutes (1500 kilometres) – Townsville to Mackay, Rockhampton, Maryborough, Brisbane (Special Stage), Gold Coast, Grafton, Port Macquarie, Newcastle, Sydney.

Division 6. 21 hours (2900 kilometres) – Sydney to Oran Park (Special Stage), Canberra (Special Stage), Buchan, Beechworth, Albury, Melbourne

The trial covered 18,887 kilometres in 14 days! If someone was able to do that trip these days, it would take far longer. What has to be remembered is that the large majority of the trial was held over very rough outback roads, not the relatively smooth highways that one can travel around Australia these days to go to most of the places visited by the trial. There were meant to be five 12 to 14-hour rest breaks during the trail, but most crews had far less than this as they could not complete the stages in the time nominated. 209 crews entered the trial, but by the time the start came around 162 actually started. Of this number, only 96 survivors made it back to Melbourne, and of this number, only 13 were actually classified as finishers, as they completed the trial without missing any controls. Another 83 finished the course, but missed a number of controls. As is probably known to most, the event was won by Brock/Phillip/Richards with a total time loss of 3 hours 39 minutes and 18 seconds! They won by 13 minutes from Ferguson/Bell/Boddy, also Holden Commodore mounted as were the winners.

Of the thirteen finishers who did not miss controls, four were Holden Commodores, one Volvo 244, one Ford Cortina, one Toyota Celica, one Mitsubishi Lancer, one Porsche 911, one Porsche 924, one Datsun 180B, one Peugeot 504 diesel and one Chevrolet Blazer. A number of the finishers with missed controls missed very few controls – how stiff could you be if you were one of the two crews who missed only one control? Three of the thirteen above had only two crew members – all others three, where one slept whilst the other two drove and navigated. The range of cars and drivers entered was amazing – from brand new vehicles specially prepared for the trial to others who merely went in the family car for the adventure. Many of the drivers were experienced in rallies - others had never entered such an event and had no idea what they were in for. An example was the Gullager family (all 4 of them) from Nathalia in their Holden HT GTS Monaro 2 door (having purchased a Monaro in 1969, I can certainly vouch that there is not much room for four adults for a cruise around Australia) – their family car! None of them had ever been in a rally, with 16-year old Donna taking time off school, and navigator Dot learning how to navigate as the trial proceeded – they finished – missed 72 controls but reached the finish!!

An outstanding feature of this book is that it gives a detailed outline of every vehicle and every crew who entered the event – how much research would that entail?? As this is a limited edition book, it is probably hard to come by, but worth the chase if you are into rallying.



PO Box 199 Trafalgar Vic 3824

Bryant Park track was asphalted by Fowlers Asphaltting
For domestic and industrial asphaltting services, please call 03 56332918

Tyres – A general guide – Rhys Yeomans

Tyres are an effective way to reduce your lap times in all facets of motor racing, and are often overlooked by a number of competitors, either as they've spent all their money on that fresh engine rebuild or they don't appreciate the influence a good quality and correctly chosen tyre can have on the handling characteristics of their vehicle.

Performance tyres are generally grouped in the categories shown below. Some classes or series may dictate the tyre that you are required to run, though for most of us out competing on the weekends for a bit of fun, we can choose to run any tyre we desire.



200tw tyres

Treadwear (tw) rating is a self-issued rating by tyre manufacturers to advise the rate of wear of their tyres. Due to its lack of 3rd party review, this rating can only be used as a guide, though worldwide treadwear is used by a number of racing series to determine the tyres that can be used. Due to this self-issued rating and manufacturers wanting to create and sell the fastest tyre on the grid, there has



been several 'super' 200tw tyres developed to win this all mighty battle! Yokohama A052, Bridgestone RE71r and Dunlop Z3 Direzza are commonly known as the fastest 200tw tyres available in Australia (in that order also). From my experience, these tyres are fast for a handful of laps (Winton for example) and then overheat and fall off in pace - really a tyre that is for one outright fast lap rather than beating on them for a 20-minute session. Tread depth and lack of road handling comforts are common for these 'super' 200tw tyres, though realistically anyone purchasing these tyres are looking to run the fastest laps they can while remaining on a 'street' tyre.

Other options in this category for those that want a longer lasting tyre are Hankook RS4, Federal RSRR, Yokohama AD08R and even Nankang NS2R. While this group of tyres will not be as outright fast as the 'super' 200tw tyres, these tyres generally have better road driving characteristics and could be used as daily tyres on your dual-purpose vehicles. They are also less susceptible to overheating during a 20-minute sprint session. This would be a great spot to start in your journey down the tunnel of tyres as these tyres are available in most of the popular sizes for performance cars, are reasonably good value and have a reasonable lifespan.



Semi-slick tyres

While semi slick tyres don't have the treadwear rating to group them, overall they can be categorised as a treaded tyre developed for circuit racing that (if they have it) have a treadwear rating of 100 or below. Many also have Department of Transport (DOT) rating, though most people when buying these tyres are not interested in the road handling characteristics.

Due to their involvement with World Time Attack Challenge and Improved Production Racing, Yokohama A050 seem to be the 'go to' tyre in this category. The tyre itself is readily available in almost every size and there is



a huge amount of data available on how to setup and use this tyre, along with actually being a great tyre to begin with. Depending on the use, there are both soft and medium compounds, so you would choose the compound depending on your use and class requirements. As a hill climb tyre, the soft would be the preferred option as it requires less heat to become effective, though I have used mediums previously with some success.

Other options in this grouping of tyres include Dunlop DZ03G, Nankang AR1 and Hankook Z221. Nankang AR1 has become a very popular semi-slick tyre, mainly for its very good pricing and availability, along with how easy it is to drive if you are transitioning from a 200tw tyre. I have not used them personally, those who do admit they may not be as fast as other offerings (Yokohama and Dunlop for example), this is offset by their great price and longevity.

I mentioned DOT rating earlier, which has seen tyres like Hoosier A7 and Hankook Z214 being used in Japanese and American Time Attack events as they set their tyre categorisation for certain classes as requiring a DOT approval.

While it is laughable to categorise these tyres as semi-slicks due to their obvious lack of tread (there is some, I swear!) these tyres could also be another option. I personally have used the Hoosier A7 the last couple of years and am VERY happy with its performance. The 225/45/15 works nicely with my low power and gear ratios, compared to the taller 225/50/15 Yokohama A050 which left me between gears at some tracks.



Slicks

This is a tyre category that I have not delved into at all! From listening around the pits, the Avon offerings are the fastest overall and heat cycle out quickly, being the fastest when brand new and then falling off with use. There is also a Pirelli option which is not quite as fast, though has a much longer lifecycle. If you want more information about this category, walk over to the garages and see what the fastest Formula Libre guys are running!!



Other things to consider when buying tyres

Size – The widest and tallest tyre is not always going to be the best solution. You first need to be able to fit the tyre and wheel combo to your car, as well as having it work with your engine and gearing setup. I mentioned the difference in profile above, and that the 45 profile worked better with my car which is the case at Bryant Park and Winton, though at Phillip Island I need a 50 profile as I hit the limiter with a shorter profile tyre down the straight. This equates to a difference of about 20kmh before T1!

Compound – While a softer compound tyre may produce a singular faster lap, are you going to gain more of an advantage in a tyre with more longevity which will let you drive your car more laps and gain driver skill and confidence? You also need to take into account the number of heat cycles a compound allows: will the tyre remain competitive until it is worn out?

Multiple sets of wheels – If you do drive your car to the track, you don't want to be driving on an expensive semi-slick as you're burning your money doing highway kilometres instead of on the racetrack. Carrying a second set of wheels is a great way to extend the lifespan of your tyres. This may require some interesting packing techniques, though is something I've done with my car for a number of years. If you are running a slick tyre, you may also want a treaded set of tyres for wet events, which at Bryant Park is more often than we'd like! Wet weather-specific tyres are a whole other subject also!

Cost – This is the never-ending argument with racing cars, particularly when there aren't any sheep stations for first place! If you are able to spend half the cost for a set of tyres and get 80% of the performance, freeing up some budget for other improvements or even more events, is this a more thoughtful use of your race budget than spending all your dollars on the best tyres available?!

Buying second hand tyres – I don't like to buy second hand tyres, unless I know specifically how they've been used and stored. The date of manufacturer is also worth checking if purchasing second hand tyres as tyres do have a 'best before', which depending on what you read, could be anywhere between 2 and 5 years. You can't beat a brand new tyre for pace!!

Have I missed anything? Am I thinking too much about tyres when we're just having fun for the most part?!

If you would like me to cover a topic, please send me an email rhysyeomans@gmail.com



Source: www.cartoonstock.com

"Thank goodness I remembered to bring those spares!"

Flashback!

GRASS TRACK RACING AND AN ALTERNATE HILL CLIMB SITE

Grass track racing in Victoria had been held at Nar Nar Goon and at Romsey, and was not necessarily a new thing when the GCC Committee made a bold decision to hold a grass track car racing meeting at Lardner Park in 1979. At the same time, the Committee organised an alternate hill climb site in the old Yallourn township. The following is an outline of the trials and tribulations over a period of time in 1979.

The following documents are copies of the President's Comments for February, March, April and May for 1979 – a time of great optimism which finished in great disappointment. At this time in the history of the Club, there were only 100 members to share the workload.

PRESIDENT'S COMMENTS – John Bryant

FEBRUARY 1979

The 1979 competition is about to commence as far as Club activities are concerned, and it is a year in which we will be conducting far more events than we have ever done in the past. All sections of the Club membership will be catered for, and I trust that during the year all members will endeavour to compete in or assist in the organisation of as many of these events as possible.

Once again, the hillclimb track will be the centre of most of our activities for the year. We will be conducting seven, and maybe eight, hillclimbs during the year, three of which will be rounds of the Victorian Hillclimb Championship. Two hillclimbs will be held at the track before the first GCC event in March – the first of these is the Mazda Car Club track hire on February 18 (to which GCC members are invited to compete) and the other is the Marque Sports Car Association track hire on March 11 (to which GCC members are NOT invited). Both meetings are worthy of attendance. The MSCA meeting in particular usually provides plenty of entertainment and thrills for the spectators, if not the drivers. The possible eighth hillclimb mentioned above is one which would be run exclusively for Vintager and Historic cars – negotiations are presently underway in regard to this event.

Negotiations are also underway at present with regard to the running of Round 2 of the VHCC at a new venue in the town of Yallourn. A track has been chosen from the now empty streets of one area of the town, tentative approval has been given to the venture by the S.E.C. (the owner of the town), and hopefully CAMS approval; will be gained this coming week. If approval is given, we have a new hillclimb track (with a genuine hill in it!) that we can use once a year in conjunction with the Latrobe Valley Festival. By the end of this week, we will know if the March 25 meeting will be held at Morwell or Yallourn. If the Yallourn track is gained, it will mean an extra effort will be required from ALL club members to help ensure the success of the day.

The off-road members of the Club will be organising the Gippslander '79 Rally to be held on June 30, along with the organisation of autocross and motorkhana at the Athlone track. An Autocross series will be conducted by the Pakenham Car Club, HMAS Cerberus Car Club, and GCC/Fiat Car Club.

Dates of events to be held at the Athlone track will be inserted into the Club Calendar when they become known.

In addition to the above events, I have been pestering the Committee to organise at least one lap dash at Winton, at least one quarter mile sprint at a venue to be decided, and, last but not least, an event that I have only mentioned to one or two people – a speedway lap dash. I think a speedway lap dash would be a great day out and provide a lot of thrills in a relatively safe environment – I would be interested to hear the views of members on an event such as this. Dates of these events will be placed on the Calendars when known.

By far our largest undertaking for the year, however, will be the organisation of the motor sporting complex at Lardner. Much work has been done by very few people to this date – a case is presently being prepared for submission to CAMS. If this case is successful (which we confidently believe that it will be) then Rallycross events will be organised at the circuit within the very near future. Machinery is ready to spring into action the minute the go ahead is given. The only reservation at this stage is whether there are enough interested people in the GCC to make venture a success. I will be doing everything in my power to make the project the motor sporting centre of Victoria – I hope you will be doing likewise!

PRESIDENT'S COMMENTS – John Bryant

MARCH 1979

My comments this month consist of a mixture of both good and bad news. The bad news first. After lengthy negotiations and many, many hours of work, we were granted permission by the S.E.C. to use some of the roads in the Yallourn Township to conduct a hillclimb event – namely, Round 2 of the VHCC to be held on March 25.

A CAMS track inspection was carried out, and a very interesting track was designed with a length of 1.1 miles. As an added bonus, the circuit even contained a real hill! The Supplementary Regulations were prepared and sent out, with the title Yallourn Hillclimb spread all over them. Press releases were prepared, and an advertising campaign was set to go. Local service clubs were organised to handle the gate and the catering arrangements on the day.

On Thursday just passed, it was discovered that some ***** had ripped up some 200 yards of the track! The result is that the hillclimb on March 25 will now be held at Morwell. At this stage, it appears that no-one seems to know who ripped the track up, or why it was done. Our man inside the S.E.C. is carrying out an investigation at this stage to find out why it was done.

Special thanks to Kevin Foote and Colin Ashby for the large amount of work carried out to organise this new venue.

We are still hopeful of carrying out a hillclimb in Yallourn at a later stage this year.

The good news. We have been granted approval in principle to conduct a shakedown meeting at Lardner. This will be held in May, and will be in the form of Short Circuit grass track racing – up to 10 cars at a time on a track of approximately 1 mile in length – and using only radials or slicks – all other types of tyres are banned. Should be very interesting! Again, much groundwork has been put in, and much more remains to be done. All offers of help will be gratefully accepted, especially in organising and conducting the event in May. Races will be held for all classes of cars, not just off-road type of vehicles.

I would ask that all members of the Club support the hillclimb on March 25 – although this meeting is labelled Round 2 of the VHCC it is in fact the first meeting of the year, as Lakeland was halted in rather dubious circumstances a couple of weeks ago. A full field of competitors is anticipated.

Also worthy of support if you can see your way to assist, is the Latrobe Valley Festival parade to be held on April 1. An interesting few weeks in store for all.

PRESIDENT'S COMMENTS – John Bryant

APRIL 1979

We are presently engaged in a very hectic time as far as motor sport is concerned at Club level. Our round of the VHCC held on March 25 went off very well, and for the first time in a long while, our members were actually volunteering to act as officials without any pushing whatsoever. Congratulations to Chris Murphy for taking out fastest time of day – with Werner Rodkin unfortunately eliminated in a rare lose on practice day, together with the non-appearance of Peter Holinger, Chris already has a handy lead for this year's title. Round 3 (or is it Round 2?) will be held at Lakeland on April 29.

A glance at the Club Calendar will show members that the Club is in for a hectic couple of months as far as organising of events is concerned. On April 22 we are conducting a closed hillclimb at Morwell – this is an event in which any club members can enter in the family car. If you normally watch our events, why not have a go at this one? An entry form for the event is included in this copy of Valve Bounce. Entries will be accepted on the day, but it is preferred that you post your entry to the Secretary as soon as possible.

On May 13, we will be conducting the first meeting at the Farm World circuit at Lardner. This meeting will feature short circuit grass racing – the circuit will be approximately 1.6 kilometres in length and will feature a predominantly grass surface. Races will be of three to five laps in duration, and we are hopeful of getting through approximately five races an hour, with racing lasting for probably five hours. Races will be held for various classes of cars, with the classes being finally decided when all entries have been received. Invited clubs (as well as our own) are the Buggy Association of Victoria, the Formula Vee Association of Victoria, the Victorian Rally Association, and the Austin Healey Sprite Drivers Club. All of the behind the scenes organisation has been completed, but we will need assistance with the running of the event. The concept has aroused a great deal of interest in the motoring world, and should be a great success. It will be a success if you help make it so. Unfortunate many people have been knocking the venture (many Club members included) and are hoping that it will be a failure. At least two other clubs and one motor racing promoting company are waiting in the wings to take over should this meeting not succeed. The venture should prove to be a gold mine for the Club – play your part and help make it the success it should be.

On May 20 we will be conducting Round 4 (or is it Round 3?) of the VHCC at Morwell. We are still hopeful of conducting hillclimbs at Yallourn, but will probably have to again go through miles of government red tape before we can get the go ahead to conduct meetings there.

On April 1 the Club entered a display in the Latrobe Valley Festival Street Procession. Racing cars owned by John McLuckie and Ken Gray and rally cars owned by Graeme Parker and Chris Stone took part in the procession, and in the static display held at the Morwell Football Ground after the parade. Thousands of people lined the streets of Morwell for the parade, as well as countless thousands of others watching the event on television. Thanks go to Barbara McLuckie for

undertaking the organisation of this promotion. What a pity that our proposed motor racing show did not eventuate – I think that it would have been an outstanding success.

PRESIDENT'S COMMENTS - John Bryant

MAY 1979

This coming Sunday, May 13 hopefully marks the beginning of a new era for the Gippsland Car Club. We will be conducting our first race meeting at Lardner. As previously advised, the meeting is to test the viability of the area for motor sport. I believe that it will be very suitable and I also believe our concept of grass track racing should be a winner. You, as a Club member, can make the day a success – those members who are on the officials roster area asked to attend and perform the functions for which they are listed. Members who are not listed are asked to attend and make themselves available for a job. Regardless of where you work you will be able to see the action. For the ultra-keen members a working bee will be held at the property on Saturday afternoon to arrange hay bales, etc., at various places around the course. REMEMBER, THE SUCCESS OF THIS WEEKEND DEPENDS UPON THEIR MEMBERS.

On Sunday May 20 we will be holding Round 3 of the Victorian Hillclimb Championship at Morwell. Members are again asked to support this event. As an added incentive to competitors at this meeting, Colin Ashby, through Ashby's Electrical has generously donated \$200 for distribution as prizemoney. This will be distributed to the fastest ten competitors on the day, regardless of category. Many enquiries have been received for this event, so hopefully it should turn out to be a very successful meeting. Again, the success of the day depends on the members of the Club.

WHERE ARE THE PRESIDENT'S COMMENTS FOR JUNE WITH THE REPORT OF THE INAUGURAL GRASS TRACK MEETING AT LARDNER???

THE EVENT AT LARDNER DID NOT HAPPEN!! IN THE FEW DAYS PRIOR TO THE EVENT, A DISAGREEMENT AROSE BETWEEN CAMS AND THE PROPERTY OWNERS – RESULT – MEETING CANCELLED, MANY DISAPPOINTED PROSPECTIVE COMPETITORS, AND WE WERE LEFT WITH EGG ON OUR FACES!!



TWO MEETINGS ORGANISED BY THE CLUB, BOTH OF WHICH WOULD HAVE BEEN ABSOLUTE BONANZAS FOR THE CLUB, CANCELLED WITHIN THE SPACE OF THREE MONTHS!!!

A few car meetings have been held at Lardner Park over the years, mainly rallies and burn out competitions, with the odd motorkhana. It still is an ideal venue for development as a motor sport venue. A couple of other possible events for the Club were mentioned in the previous comments – a sprint meeting – this did occur at Winton and was very successful, and a motor racing show at Kernot Hall in Morwell – excellent roll up of cars but not a huge attendance from the general public. Forty years after the event, the ¼ mile sprint has still not occurred nor has the speedway lap dash – one can only hope.

I changed my iPod's name to Titanic. It's syncing now.

England has no kidney bank, but it does have a Liverpool.

Haunted French pancakes give me the crepes.

This girl today said she recognized me from the Vegetarians Club, but I'd swear I've never met herbivore.

I know a guy who's addicted to drinking brake fluid, but he says he can stop any time.

A thief who stole a calendar got twelve months.

When the smog lifts in Los Angeles U.C.L.A.

I got some batteries that were given out free of charge.

A dentist and a manicurist married. They fought tooth and nail.

A will is a dead giveaway.

With her marriage, she got a new name and a dress.

Police were summoned to a day care centre where a three-year-old was resisting a rest.

Did you hear about the fellow whose entire left side was cut off? He's all right now.

A bicycle can't stand alone; it's just two tired.

The guy who fell onto an upholstery machine last week is now fully recovered.

He had a photographic memory but it was never fully developed.

When she saw her first strands of grey hair she thought she'd dye.

Acupuncture is a jab well done. That's the point of it.

I didn't like my beard at first. Then it grew on me.

Did you hear about the crossed-eyed teacher who lost her job because she couldn't control her pupils?

When you get a bladder infection, urine trouble.

When chemists die, they barium.

I stayed up all night to see where the sun went, and then it dawned on me.
I'm reading a book about anti-gravity. I just can't put it down.



The Turbo Years.....by Bill Freame

Forced induction for improved performance has been around for over 100 years. Massive engines, usually liberated from early aero use were the initial means of adding speed for racing cars.

However, these always added huge stresses on chassis and tyres and thus were a serious handicap, especially combined with a high centre of gravity when trying to get them around corners. Physically smaller engines but with similar or more power available would certainly be an advantage, so supercharging was developed and added to race cars to force more air and fuel into the engines, to increase the power and torque to similar levels that the larger engines had provided.

Naturally aspirated engines permit cylinder filling by lowering the piston in the cylinder while having the inlet valve(s) open to allow the passage of air/ fuel into the cylinder. That sounds simple enough, but if we increase the pressure of the air we are putting into this cylinder, with an increase in the total volume of fuel mixed with it to maintain an air/ fuel ratio of around 14:1 for petrol, then when it is ignited during the compression stroke, this increased volume of expanding gases increases the pressure within that cylinder, pushing on the piston with much more force.

Naturally enough, there is always a downside when boosting power in this way. This very rapidly increased cylinder pressure is trying to lift the cylinder head off the block, every firing stroke. This reduction of clamp pressure on the head gasket during the high pressure within the cylinder can force the fire ring of the gasket, between the head bolts, to move outwards. Eventually it will leak, often to the water jacket, in my experience! Not only is the head panting up and down, so are the cylinder walls, but moving unevenly in and out. This flexing of the cylinder walls (to out-of-round) reduces the effective sealing of the (piston) ring pack, just when we needed the rings to contain the gases above the piston, not bypassing into the sump as blowby.



Ford Barra 6-cyl 1,163hp turbo on engine dyno.

Photo source: Internet: 'Auto expert'

This increased cylinder pressure from supercharging is also trying to push the crankshaft out of the bottom of the engine, increasing the loading on the main bearing bolts. The worst situation is for inline engines, where the load is stretching them in line with the bolts. Vee-formed engines have the load trying to shear the bolts by loading them diagonally. High performance V8 engines often use four bolt steel main bearing caps, with a long metal plate bolted to the caps to tie them all together. Serious race engines often use integral main bearing caps as part of the sump structure. This also allows the separation of each crank stroke from all the others. However, this then needs multiple scavenge stages but that can help achieve a vacuum within the crankcase, which tends to help make more power with reduced wind resistance for the rotating bits to push through.

Compressing air raises its temperature. The more we compress the air before we push it into the engine, the higher the temperature and the lower its density. For performance we want cool, dense air so we can cram more of it into the cylinder. The compression stroke will raise the air temperature further, as it is compressed. Thus, we want cool air pushed into the cylinder during the intake stroke. This can be achieved by intercooling the air in the plumbing between the compressor device and the intake manifold. However, we must never, ever, intercool the air if we are drawing through the compressor with the addition of fuel. This is often achieved with a carburettor mounted on the front of the Turbo or Supercharger, in draw-through configuration. Having air/ fuel passing through an intercooler will only work until probably the first backfire of the engine, when the resulting huge explosion will dramatically destroy the intercooler!

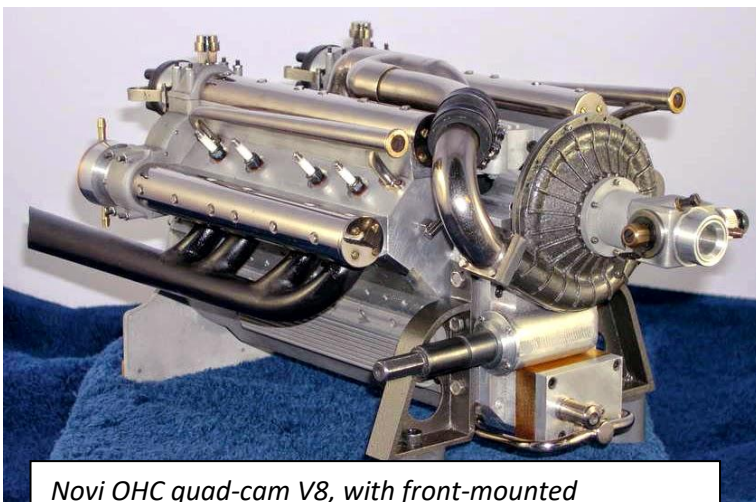
*FIAT 804 Grand prix car, 1920:
1,991cc supercharged.*

*Photo source:
www.grandprixhistory.org*



Alfa Romeo, Fiat, Delage and eventually Bugatti supercharged their race engines in the 1920s. Auto-Union did likewise in the 1930s, with boost pressure of almost 30psi (above atmospheric) on the 6-litre V16 engine, to make over 500bhp at 5000rpm on special fuel blends. The Auto-Union was rear-engined, with swing axles while their main opposition was from Mercedes-Benz, who used a straight-eight up front, with slightly less capacity and boost, but making more power and torque. These were truly amazing vehicles for the race circuits (and tyres) that were used at that time. Only the Auto-Union engine had detachable heads: the Mercedes engine had an integral head, one per fabricated barrel, thus it was engineered to eliminate a head gasket problem.

After WW1 European racing eventually resumed, plus in America they had developed drag racing and salt lake straight-line top speed events, with supercharging adding to the power they could wring out of the engines they had available. Drag cars and Indy cars were all still front engine, but they were starting to add boost very effectively on high compression ratios aided by the cooling effect of alcohol for fuel, with the small addition of Nitro-Methane, especially during qualifying for the Indy 500, where crew chiefs were known to tip a little bit in.



*Novi OHC quad-cam V8, with front-mounted
supercharger*

Photo source: www.justacarguy.blogspot.com

For the Indianapolis 500 the 3000cc Novi V8 used a centrifugal supercharger, with 42,000rpm on the impeller at 8,000rpm crankshaft speed. This gave an impeller tip speed of Mach 1.67 on the 250mm aluminium impeller: now that is extremely high! This engine was designed in 1940 by Leo Goossen, under the supervision of Fred Offenhauser of 'Offy' four-cylinder fame and first raced in 1941 at the Indy 500 that year. Continual development had it making 740bhp at 8200rpm by 1963, at 2,750cc capacity. Through

most of its racing lifetime it was the most powerful circuit-racing single-seat race car engine. The Novi V8 engine retired in 1966 by which time rear-engined cars dominated Indy racing. The early Novi Indy cars were front-wheel drive, then they became rear-wheel drive and then finally all-wheel drive, using the Ferguson system, to try keeping up with the rear-engined cars!

In the 1950's, Maserati had a 1500cc inline four, the 4CLT/48, with almost 40psi boost. However, Alfa Romeo's 159 inline eight of the same capacity was accepting over 45psi on 7.5:1 compression ratio and giving 420bhp at 9,500rpm. Adding further complication, the British team, BRM, built a V16 of 1500cc running on 70psi boost with 430bhp at 11,000rpm, eventually available after a very, very public, long and painful development process, with the main problem (cooling water ingestion) regrettably designed into it at the very start of the project.

So, serious top-level racing cars were often developed with supercharging, whenever the rules permitted it. Road cars were much slower to adapt the technique, with a very few exceptions. Bentley used them, as did Mercedes-Benz. Blower Bentleys were considered and called 'Trucks' by Bugatti, but they always did very well between the wars at Le Mans in the 24-hour races and that was when in the hands of just gentlemen racers. The road car Mercedes-Benz engines could disengage their blower for cruising economy! Eventually even Bugatti himself decided his cars needed supercharging to remain(?) competitive.

Diesel engines can cope very well with boosted air, as shown by the many truck and tractor manufacturers who have increased the power delivery capability of their engines to haul heavier semi-trailer loads or move more earth and rocks on construction sites. Exhaust-driven turbo supercharging was originally attempted in the early part of last century, by Alfred Buchi. Buchi is considered the father of turbo supercharging, but was let down by the lack of suitable materials to cope with the raised exhaust gas temperatures. Buchi succeeded with marine diesels, when working at Sulzer, in conjunction with the forerunner of the company that has now become ABB. Eventually new materials were developed that could survive the intense heat and these have since continued to improve even further.



*1931 Duesenberg Indy car:
turbocharged diesel*

*Photo source:
www.pinterest.com*

In the early 1920s turbocharging was successfully used on an airplane to exceed 40,000 feet altitude for the very first time, an altitude where the air is extremely thin and humans need bottled air to survive! In 1931 the Duesenberg Cummins turbo diesel competed in the Indy 500 for the first time. So, despite the knowledge of turbocharging being out there, car manufacturers found it easier to just build bigger engines than add the complexity and heat problems of any forced induction. That was left to 'Hot-Rodder' companies to add superchargers from trucks or war surplus aircraft cabin blowers to boost performance from existing engines, as an alternative to substituting a larger engine. Supercharged MG TCs from the early 1950s spring to mind.

In 1962 the Chevrolet Corvair, powered by an air-cooled flat six, was offered by General Motors with a turbocharged engine, boosting the power up from 100 to 150bhp. By 1966 the power had been upped even further, to 180. The Corvair was the first mass-produced turbocharged car offered for sale and it sold very well until Ralph Nader said (some true) nasty things about it!

Chevrolet Corvair

Photo source: www.drivetribe.com



Porsche brought out the 911 Turbo, in 1974, developed with the help from what they had learned with their incredible 917 race car at Le Mans and it forced the demise of the Can-Am sports car series that they decimated when pitted against massive V8-engined sports cars.

When Renault entered F1, they did so with a 1500cc V6 that was highly turbocharged. Initially they had (very public) reliability problems during F1 race weekends. Other manufacturers took notice and began their own development programs in secrecy. Before long Ferrari, Alfa Romeo, BMW and others were rapidly catching up. It was rumoured that the BMW inline four was capable of well over 1000hp in qualifying set-up! Of interest to peasants like us, BMW were exchanging new engines with their customers, getting the used engines back because the blocks had been through many heat cycles, thus they were very stable for the new life they would be subjected to. Wild times indeed.

Here in Australia in the late 1970's when Ford pulled out of the Rally Championship, Datsun closed down their rally team and went Touring Car racing instead. The Nissan Datsun Bluebird, with a 16v twin-cam engine was the then chosen weapon, but with a turbo added to massively boost the performance. George Fury was the pilot and his rally skills were needed to make up for any handling issues the car initially had.

Fred Gibson eventually became involved to 'improve' and solve the shortcomings of the team, made up of most of what had been the Nissan rally mechanics, etc. Planning and car preparation were very much improved and the team transitioned very well. This was at a time when Nissan were still manufacturing their road cars in Clayton, but the race cars were prepared in a factory in Dandenong. Fred Gibson brought discipline and structure to the team, as well as the addition of his driving skills to help sort the sudden and massive power delivery and some of the suspension shortcomings.

Howard Marsden was the overall boss of the race program. However, he was working out of Clayton, so it was Fred who was in charge on the spot, in Dandenong. Race reports from the time describe turbo failures for initial problems due to parts that Nissan would buy-in. There were problems aplenty as the team attempted to increase the power. Locally produced forged piston assemblies were being used, with some success. The turbo Bluebirds were easily capable of winning the under three litre class, against the Ford Capri V6, Mazda rotary 12A, Toyota Celica, Ford Escort, Alfa Romeo, Holden Gemini and Triumph Dolomite. But did they know that the turbo Volvo was coming, and soon? This was back when turbo engine capacity was multiplied by a factor of only 1.4:1, long before 1.7:1!

One of the early Nissan engine problems that was encountered was severe bore scuffing particularly whenever the boost was increased. Perhaps ring end gaps were not being increased enough to cope with the heat increase that increased boost generates? Top rings were sourced from a local ring manufacturer (not Repco!) of ductile material, but not coated, just the parent metal blackened. I was approached to determine what the problem could be, so their scuffing problem could be solved. During this time, I was still employed at Repco Engine Parts, where the manufacturing of some of the engine parts for all the car companies was successfully done. Thus, I arranged for a couple of scuffed ring samples to be unofficially tested by the chemists in the Repco lab. The result was that the material was indeed SG cast iron, but of a Martensite structure which always needs to be coated with Chrome or Moly on the rubbing face, whereas if remaining uncoated it should be of a Pearlitic structure. The pressure being generated would push the face of the ring hard against the bore material, excluding almost any surface lubricant, thus localized welding of the two materials would take place and rip the bore surface savagely.

With the problem identified I was able to arrange the casting of some Pearlitic SG sleeves through the Repco cast iron foundry. This was in the rotary casting machines, in a process of horizontally rotating of the die, to rotate and centrifuge the metal until solidification. These castings were scheduled and made during the next melt of the correct material. Usually these machines were casting grey iron for engine sleeves, which are poured at a lower melting temperature. Repco management were quite happy to sell these sleeves to the outside ring manufacturer for him to make small batches of industrial sealing and compressor compression rings. These were batches way too small for Repco to consider, but the company was sensibly keen to be seen helping their Nissan customers' image in local motorsport.



George Fury and the 1983 Nissan Bluebird race car that set pole position at Bathurst '84. His time would remain the fastest ever lap of Bathurst by a Group C car.

Photo source: www.uniqecars.com.au

When George Fury set Pole, at Bathurst, in 1984, in the Nissan Bluebird Turbo, it's rumoured that the waste-gate was completely blanked off. The Nissan team understood that that turbo would have a very short life, but the team were prepared to accept that, "To stick it up the V-8's!" Taking Pole at Bathurst gave them incredible publicity - everybody noticed, even people usually not interested in motorsport. Sensibly another new turbo installed for the race and it was one with a correctly operating waste-gate.

Then the Turbo Volvo started racing. Volvo was a brand having been marketed very successfully as a mature drivers' family sedan but now being promoted with a very sporting image and it then needed a performance to match it with most of the other race cars. It was a very successful campaign that did the Volvo company image no harm at all!



Not the Team Volvo 240T with young punter John Bowe at the helm, but a great photo of Robbie Francevic pushing hard in the Mark Petch Motorsport car.

Photo source: Paul Cross

At around this time I was running the Repco Engine Parts Product Development machine shop and we had just expanded it into also making specialist piston requirements, for private customers of the Repco organisation. The Repco Engine Parts company had a technology exchange arrangement with Mahle and this gave my department access to Mahle forged piston blanks, including ones suitable for the 1600cc Formula Mondial engines in the race car replacement of Formula 5000.

Repco Engine Parts were keen to get involved in motorsport again and arranged for the very visible Repco branding sponsorship on the Peter Macrow Mk8 Cheetah. I ultimately developed a good relationship with Peter and he was very pleased that we were making and supplying him with free engine parts for his engines, comprising bearings, gaskets and piston assemblies. His Mk8 Cheetah was up against mostly Ralt RT4's driven by top drivers like Bowe, Costanzo and Hopwood. I was very pleased to be involved with making forged racing pistons, especially in this high-profile class.

With forged piston blanks (easily?) obtained from Mahle we then became involved with other race classes, including some of the HDT Brock Commodores, just before his breakup with GMH. Then the Repco Engine Parts group became a management buy-out and reverted to the ACL name and logo. At about this turbulent time, 'locally developed' Group C was replaced by Group A in touring cars. This excluded the 'hot-rod' Commodores and Falcons, plus the turbo Datsun as manufactured numbers needed to be far larger. However, Group A rules brought in many more brands, including the turbo Volvo, the Nissan Skyline turbo and eventually the turbo Alfa.

The opportunity arose for me to break away from ACL, setting up in a partnership for the independent manufacture of small (very small) piston quantities. This was eventually done with the blessing of ACL management, but that is a story for another time! ACL would purchase and hold quantities of Mahle forgings that we could purchase from them as we needed them. Apart from making pistons for ACL's industrial customers I was also involved with the V6 Holden Formula Brabham pistons, all on Mahle forgings. This was the new premier open-wheeler class for Australia and as the major engine parts supplier to GMH, ACL was very heavily involved in it.

Our company was also able to purchase forgings from the USA, from Arias and Ross - useful when there was no suitable Mahle forging available at ACL. From our very first steel purchase, we had made the decision that we would only have EN-36 in stock as our ideal pin steel. Thus, any tooling we made was from that steel, but we knew that every pin we supplied, industrial or racing would be made from the correct steel. Not a cheap decision but we felt it was a sensible one.

All the Ford Sierra pistons we made were on the correct Mahle forging, which had a short ring belt, for a dished crown and big pin bosses for the 24mm pin they used. We made pistons for several of the Sierra teams, but not all of them. Every team had their own compression ratio requirement, some vigorously requesting a particular bowl volume,



Photo source: Internet: 'The Cutting – blog'

getting larger as boost levels went up. Neal Lowe, team manager at DJR had experimented with a development engine and discovered that a flat top piston gave the best burn pattern and the least detonation damage. Thus, for DJR pistons there were no valve pockets as the flat crown piston finished down the bore about 4mm. This means there was no squish band at all, terrible for initial response when just getting moving. As Neal said, 'The only time we are below 3000rpm is when driving through the pits, so it won't hurt us'.

Every time a DJR engine was rebuilt we supplied a new ring set, even though we advised that the rings being replaced were only just run in. According to Neal, "Rings are the cheapest thing we put in the engine!" The rings we supplied for the Sierras worked far better than what they had previously purchased out of the UK. We supplied rings to several other teams, including teams running pistons supplied from other suppliers. We were the piston supplier to the DJR Sierras from very early on!

We became involved with the Colin Bond Alfa 75 Turbo, as those engines were being developed in Melbourne. From memory they had been homologated by Alfa Romeo with the 1750cc engine, including with the small port 1750cc engine head, when the readily available 2 litre head had better-flowing, larger ports and could bolt straight on. That period of my life I would prefer to forget, as all the advice and suggestions we offered to solve problems were ignored!



We only became involved with the Nissan team officially when they changed over to the R32, the 'Godzilla' Nissan Skyline. For that engine we used an Arias 2618 forging that we then had 'spark eroded' internally, done locally. This process doubled the price of the forging, before we even started any machining. The spark eroding reduced the ring belt, thinned the skirt thickness and reshaped the pin bosses for the 21mm pin. They looked magnificent internally, rather than being internally

milled, everything smoothly flowed, with no excess metal anywhere. The Nissan team didn't balk at the prices we needed to charge to cover the spark erosion. That's the cost of success when you are wading knee deep in cigarette company money and winning races.

Colin Bond eventually changed to using a Sierra and his team were running deep-dished pistons that as usual required valve pocket 'eyebrows' machined in the squish band. During the Sierra onslaught, we were supplying high-strength cylinder sleeves to some of the teams. Colin had several of his 'uncracked' blocks sleeved, to an undersized diameter and we reworked his good used pistons to suit, plus we supplied a ring-set to suit the new bore size. Bare Cosworth engine blocks were costing over \$10,000 landed, including freight and taxes. They frequently cracked around the main bearing area when subjected to big boost levels to obtain the power needed. Something you should keep in mind if thinking of buying a used Sierra block for an Escort.

The Australian developed Sierras were eventually almost bullet proof, especially with the homologated Harrop-designed and built 9" differential installed, and once the ECU was eventually understood by the teams here. Dick took his car to the UK and was blowing their top cars away until a water pump failed. Andy Rouse could not believe how quick Dick drove away from him on a track he was new to. It was an exciting time in our motorsport history, with multiple manufacturers involved and with big and small cars mixing it together, many with similar lap times. I was excited and satisfied to be involved with the top teams, when they were supporting the local motorsport industry. Harrop, Holinger, Tighe, Wade, Autronic and MoTeC, to name just a few.

The 1992 Bathurst was the swan song for the turbo cars, so the pressure was on between the Sierras and the Nissan's to go out with a win. As can so often happen at Bathurst, it can rain late in the race and true to form that happened in 1992. Dick Johnson/John Bowe were on Pole with the Sierra and they and Jim Richards/Mark Skaife played tag all day, with the Sierra having good pit stops all through the day. With most cars still on slicks when it started to rain heavily, there began a series of off-track excursions and crashes. While the whole track was obviously very wet, up top of Mt Panorama there were rivers of water rushing across the track making driving quickly impossible even with the Nissan 4WD. With Jim still on slicks, the Nissan slithered off the track exiting Forrest Elbow(?) and crashed heavily into already-crashed cars on Conrod Straight.

How many of us remember Bathurst, 1992: the Richards/Skaife Nissan joins others at the side of Conrod Straight, ending the race.

Photo source: 7motorsport.



There were damaged cars and fences, plus there was so much crash-generated rubbish strewn across the track that to continue would be very unwise on the grounds of safety. The race was stopped by the use of a red flag at all points. Dick, still mobile and racing in the Sierra, together with the rest of the DJR team, thought they had won the race. The leading car, the Nissan, had crashed on lap 145, thus leaving Dick in the lead. But the race result was declared at two laps (at 143) before the red flag was eventually thrown at 18 laps short of full distance.

At the presentation after the race, the Nissan was declared the winner, to the hoots and can throwing of the crowd below. Jim Richards' memorable comments to the crowd are part of Australian sporting folklore now, however, were very understandable when you realise that he was already very upset having only just been told about the death of Denny Hulme from a massive heart attack, on Conrod Straight, on lap 33. The crowd really were "...a bunch of arseholes" at the time, instead of acknowledging a great drive in difficult conditions.



An infamous scene from Bathurst, 1992: Jim Richards leaves the crowd in no doubt as to what he thinks of them.

Photo source: www.au.motorsport.com

involved as an engine parts supplier with the top three placings, with the Nissan R 32 team car of Anders Olofsson/Neil Crompton placed in third. Many would be happy with achieving second place, although I could fully understand the bitter disappointment for the whole DJR team.

The year 1993 changed everything. The turbo cars were replaced with Falcon or Commodore V-8 cars for the start of the V-8 Supercar era racing class that we are still blighted with. Some of the turbo cars became Sport Sedans and some went into museums: whatever. Despite how much money had been spent to develop them into the incredible race cars they had become, they had been replaced. The teams that decided to remain just started spending heaps more money again, to build completely new cars to suit the completely new rules: these were totally new race cars where not much was going to be transferable from the turbo cars' spare parts bin.

So, that age old question, 'How much power did they make'? Well, the DJR Sierras could make over 650 very peaky horsepower for qualifying, but raced at around 600 hp for reliability and driveability. The Nissan team cars were also raced at around 600 hp in race tune but they had the added grip of 4WD, plus were also powered by a much larger budget! These were very busy times where DJR and the Nissan teams (plus others) were contracted to have two cars on the grid for every race. Don't expect sponsors to forgive or understand if only one car is mechanically capable of starting a race: that's because the contract clearly states two must start, whatever that may cost in time or effort! I'm sure that clause is still in the two-car team sponsorship contracts even today!

Ed: It's remarkable what turns up when you involve hundreds of motoring enthusiasts! The last edition of VB featured the remarkable 750cc motor as used in the Austin 7. Shortly afterwards, I was contacted by Lloyd Shaw, who told me the photos and article had stirred some memories, and he was looking further into it. What he has sent me reveals there is a strong Aussie link to the story of this motor. Yes, a supercharged version was used to win the 1928 100-mile road race at the original Phillip Island road circuit (the car driven by Captain Arthur Waite, who just happened to be Lord Austin's Son-In-Law!)



Arthur Waite and Guy Barringer winning the 1928 100 Miles Road Race in the tiny 'works' Austin 7 s/c (B King Collection)

but even earlier than that – Lloyd has documentary evidence that a two-cylinder motor bearing the characteristics of the Austin 7 motor had a patent application made for it in Melbourne in 1896 – when a young Herbert Austin (later to become Lord Austin – was working in Australia!

I'll let Lloyd tell you the details:

When I received my August copy of VALVE BOUNCE I was immediately interested in the two cylinder device pictured on the cover. Some years ago whilst researching things automotive at the State Library I discovered some drawings of a motor and the relevant correspondence. The drawings and text referred to an application for patent that was lodged on **September 4th, 1896**. The application was handled by Edwin Phillips, a patent consultant, on behalf of the inventor Henry Austin. The original documents cover 15 pages of barely readable text and opens by stating – *I, Henry Austin of 49 St. Davids Street Fitzroy in the colony of Victoria, Gentleman, do hereby declare the nature of my invention for –*

"Improvements in and connected with the motors and mechanism of mechanically propelled road vehicles"

- and in what manner the same is to be performed, to be particularly described and ascertained in by the following statement. The object of my invention is to provide a light motor or motors and mechanism for road vehicles the part of which will be neither expensive in first cost or complicated in their working.

And so it goes on for 12 more pages to cover, in supposed detail, most of the components. There are no dimensions recorded nor reference to lubrication or cooling. Ignition is achieved by an enclosed flame illustrated in **Fig 1** as **Y**, & heating a tube **Q**, located in the overhead cylinder head **B**. Note also the length of the valve rocker **T** located between the gear driven cam **X** and the exhaust valve **R**. The inlet valve is opened by down stroke suction together with atmospheric air pressure. Both valves are closed by springs **S** pressure. And so it goes on to state that (quote) the twin motors which may be integrally or detachably connected can reconfigured to inline (ie-boxer style).

In The Veteran and Vintage Magazine number 24 I have found an article on Lord Austin that when read together with the patent application speculation arises. He came to Australia in 1884 (aged 17) and worked with his mothers brother in North Melbourne and had exposure to other engineering companies including the Wolseley Sheep Shearing Machine Company and through them he became aware of the level of engineering needed in outback Australia. Austin returned to England in 1893 (aged 27) with his wife and young child and was appointed Manager of the Wolseley company that had recently transfer to England.

The article records *"In 1895 he designed a self propelled road vehicle, the engine of which –at least the valve gear – today sounds more like a brief description of some engine about to emerge from the drawing board stage for exhibition in the coming motor show"* It also briefly identifies the features

itemized above and includes a cam following roller **Fig 1** item **V** and referred to horizontal motors. Austin's first car, built in secret, appeared in 1895, a second car appeared in 1897, the third in around early 1900. Austin refused to admit the advantages of the vertical engine, and was partly responsible for his leaving the Wolseley company. in 1905 The Austin seven miracle was to follow.

The grey area in all the above is interesting. The permit application was lodged in Melbourne on behalf of **HENRY** Austin in 1886.

Records indicate that **Herbert** Austin (Later Lord Austin) built his car in England with the horizontal engine in 1885. .

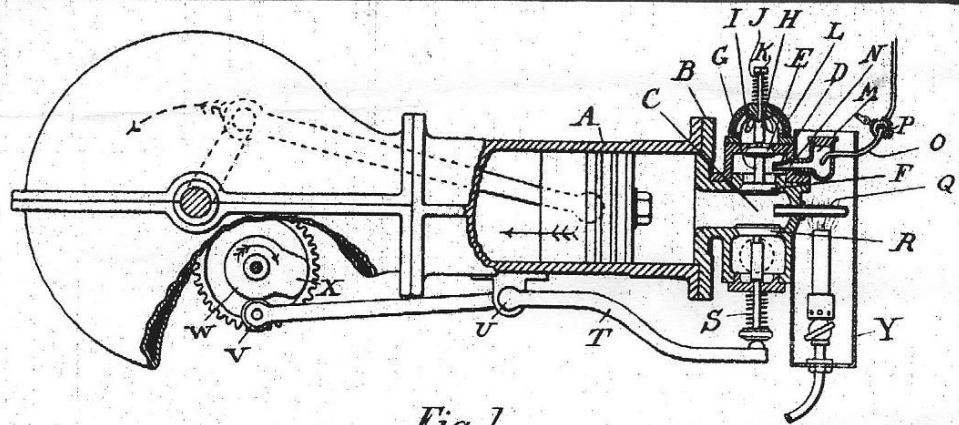


Fig 1

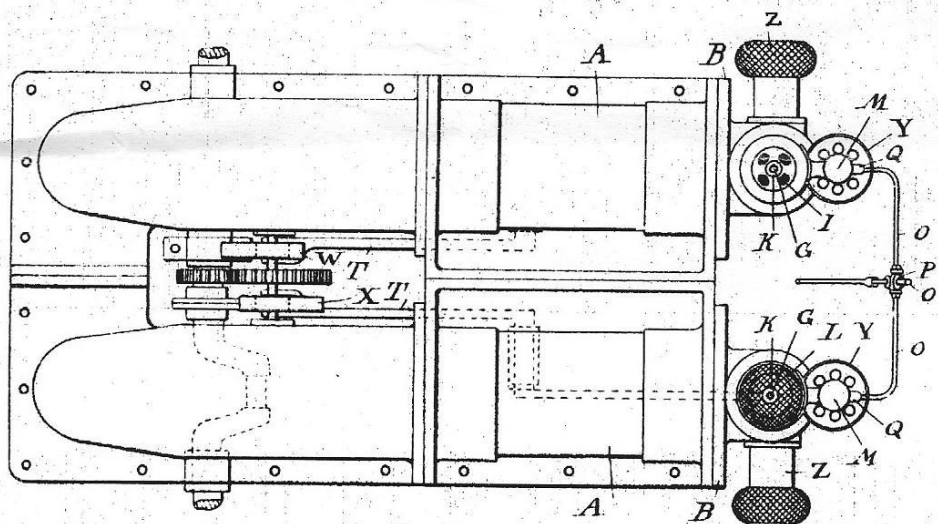


Fig 2

Fantastic! Thank you, Lloyd!

Car club quietly achieves



By Ian Maud

You may never have heard of the Gippsland Car Club, yet we are on your doorstep.

As a group of hundreds of motoring enthusiasts, competitors, supporters and officials, GCC is almost unique in Australia in operating its own world-class facility for members, invited competitors and commercial track hires - all from Bryant Park, which is on Bill Schultz Drive just outside of Newborough.

We are your neighbours, so why haven't you heard of us lately? Like numerous other sporting groups, we've been put on hold due to COVID-19 restrictions. While we're unable to hold events at present, the club is still very much developing and growing - steered by a hardworking board of experienced and willing members.

The club began in 1964, using an unsealed collection of disused roads at the end of Latrobe Road, Morwell. This evolved over the years into a sealed, purpose-built hillclimb circuit across the adjoining area - complete with clubrooms, kiosk, spectator areas and timing tower. It was known as Gippsland Park.

The venue hosted dozens of events, including Australian National Hillclimb Championships, attracting competitors and spectators from around the country. Among them many well-known motor racing names such as Peter Brock, Norm Beechey and Alan Hamilton.

The last event held at Gippsland Park was on 6 April 2008, and the move to a greenfield site at Bill Schultz Drive began. We now have a fantastic venue that is the envy of other clubs in the country.

It includes a high-quality sealed circuit that can be reconfigured into nine variations, large sealed pits and car park areas, garages, a new timing building and an impressive two-storey clubroom with kitchen and a balcony area - providing excellent spectating vantages.

With this as our home ground, it's no wonder our membership boasts State and National championship winners.

The club runs regular hillclimbs where you can see some of the fastest vehicles in Australia, yet it is also closely tied to the local community offering motor safety through our monthly Khanacross events - which attract all levels of vehicle and driver skills to these lower-speed challenges that are more a test of manoeuvring. Participants include young school-age drivers who are improving their abilities, judgement and vehicle control prior to gaining their civil licence.

Experienced and skilled GCC members are on hand to offer advice and often share a run in a developed car, which can be an eye-opener. This training helps make these young, local participants more capable and safer drivers.

Another aspect of our activity is links to commerce and industry. Bryant Park is a favoured track for private hire, which often includes commercial use such as vehicle testing by manufacturers, magazines and TV programs. Have a look in the background of some of the motoring comparison videos on television, and you'll find they were shot at Bryant Park.

We have also hosted school groups for driver training sessions, through to go-karts, cyclists, and various non-motorsport functions.

GCC membership is deliberately kept affordable, with various levels from \$40 to \$140 available.

Members have access to a wide range of events both at Bryant Park and elsewhere; the monthly informative magazine Valve Bounce; access to the club permit scheme for historic and modified vehicles; and the opportunity to connect to a broad network of members throughout the local area and interstate who can offer advice and guidance.

Working bees are held regularly and give another opportunity to mix, while helping maintain and further develop our marvellous facilities.

There's a lot that's usually happening, but some of it is quiet at the moment. We're just next door to many Yallourn North Connection readers, so why not make a visit when restrictions are lifted. You can join and become involved at any time - even now.

More details about the GCC and our calendar of events can be found on our website and Facebook page.

gippslandcarclub.com.au
facebook.com/gippslandcarclubbryantpark

Further evidence of your Board working away in the background!

The Yallourn North Connection is the closest newspaper dealing with the area around Bryant Park. Your Board felt it was important to maintain links to the local community, and decided it would be useful to inform locals who we were, and what we do. This is the article that appeared in the latest Yallourn North Connection.



MACHINING & CYLINDER HEADS

28 CHICKERELL ST MORWELL phone: 51344023
email: simon@btrmorwell.com.au

- Cylinder Head Reconditioning
- New Cylinder Heads
- Torque Plate Boring
- Diamond Honing
- Flywheel Grinding
- Engine Reconditioning: Petrol and Diesel
- Engine Balancing, Crankshaft & Flywheel
- Crankshaft Grinding And Crack Testing
- Pressure Testing Of Cylinder Heads
- Petrol Injector Reconditioning & Testing.



SPECIALIZING IN DYNO TUNING CARBURETOR'S



Simon@btrmorwell.com.au

5134 4023


arrow
LINEMARKING

No job too small, give us a call!

CLUB MEMBER PROFILE:

LARRY KOGGE

- Your name: Larry Kogge
- Years of membership of GCC: 6 Years
- Cars of interest owned:
 - Race cars :- FJ drag car, LC Torana sports sedan, RX3 touring car / sports sedan, RB30 Skyline GP A tourer, LJ XU1 GP N historic tourer.
 - Road cars :- '65 Chevvy Impala SS 2 door, '58 FC Holden ute, HT 327 Holden ute, WB 350 ute, '58 FC Holden sedan, also the only Fords I have ever owned, a '55 F100 Ford pickup, a DRB Cobra 302. Plus a heap of other Holdens, Commodores, Mazdas, etc., all of interest to me.



- Your first car was: '52 Chevvy sedan
- The best car you ever owned was:
 - Race:- Mazda RX3 coupes/sedan; pretty happy with the XU1 too.
 - Road:- '74 RX4 sedan was quite good in its day, currently my Adventra LX8 is the best Holden I've had.



Larry's favourite race car: RX3

- The worst car you ever owned was: Lloyd Alexander TS 600

- Your biggest car-related disaster: In 1978 towing my Torana s/sedan home from Winton with my freshly rebuilt 327 HT Holden ute we were T-boned by a drunken tart in a Triumph 2000. The ute rolled, the trailer picked up the Triumph which smacked into the race car. The only straight panel on the ute was the tailgate.



'88 AGP, Adelaide: 45 C in shade!

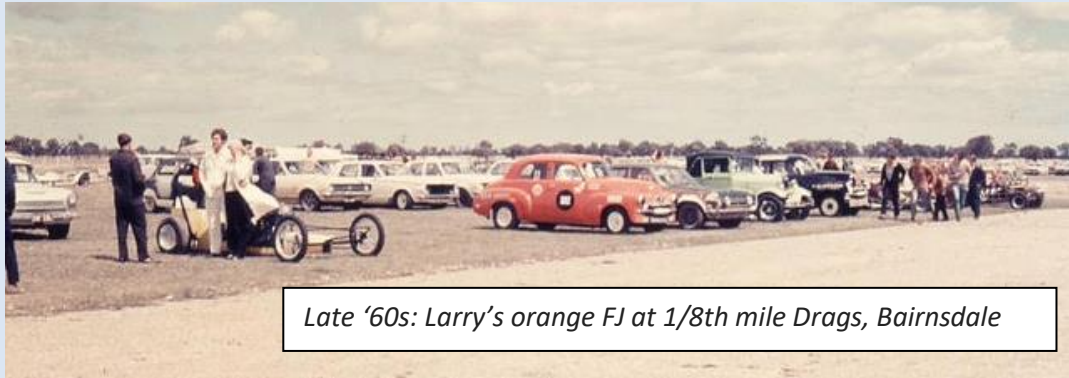
- Your greatest moment in motoring was: None that I would call great, but there have been a few pretty good ones, like winning my first Victorian Sports Sedan Championship in '78 after a big effort to repair all that damage in time for the last couple of races that year. Then again in '85 driving an R100 s/sedan. Driving the Skyline in the GP A race at the '88 Adelaide GP was a highlight. Winning the GCC Club Championships are right up there too.



'88 AGP Gp A support race, Adelaide: Larry in Skyline RB30

• Your most-admired driver is (and why?):

- Local:- past- Jim Richards, present- Jamie Whincup.
- International:- Jackie Stuart, a Champion who used his influence to improve safety in motorsport.

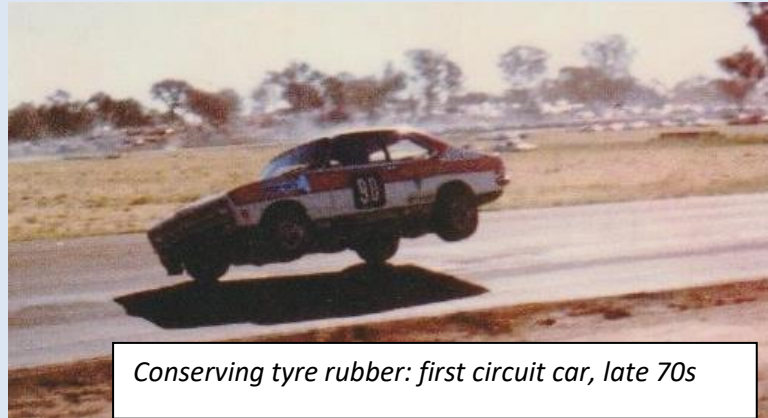


Late '60s: Larry's orange FJ at 1/8th mile Drags, Bairnsdale

• Your favourite driving circuit/track/road/area, & why:
They all present challenges that I like to tackle, but I haven't done my best at Phillip Island yet.

• A phrase you say regularly:
Bloody Hell! [or worse!]

• Finish the sentence: I will die satisfied if..... At my age I am not tempting fate, but I would like "I am, you are, we are AUSTRALIAN" to become our National Anthem.



Conserving tyre rubber: first circuit car, late 70s

• What is something few GCC members would know about you? I like to do a bit of sailing/boating. We have travelled about 1200 kms on the Murray, hanging out to do the remaining 1600 kms.

• Who or what do you think has been a great influence in your life? As far as motor sport is concerned, without the help of Lou Stoopman senior I may never have got to be on the track side of the fence.



Relaxing on the Murray: boat and crew.

• Any other insights you'd care to share? Learn to type early in life. All this with one finger is a bit of a chore.

CLUB MEMBER PROFILE

ERNIE MAWHINNEY

- Your name: Ernie Mawhinney
- Years of membership of GCC: ?
- Cars of interest owned: Any - all
- Your first car was: Mini Cooper
- The best car you ever owned was: All – except FC Holden
- The worst car you ever owned was: FC Holden
- Your biggest car-related disaster: Having the mini run over on my way to Sandown
- Your greatest moment in motoring was: Still to come
- Your most-admired driver is (and why?): Murray Carter – has he retired yet?
- Your favourite driving circuit/track/road/area, & why: RAAF base at Sale – nothing to run into
- A phrase you say regularly: “When you stop learning, you’re dead.”
- Finish the sentence: I will die satisfied if..... When I’m 100 and still competing
- What is something few GCC members would know about you? I like Triumph TR sports cars
- Who or what do you think has been a great influence in your life? Dad
- Any other insights you’d care to share? No

No personal photo
provided



Photos on this page courtesy of Jim Jones, Jamar Imaging.



50 of the best!

The wait is over! Last month's VB included 50 questions about the Club and motorsport, written and supplied by John Bryant. You might like to know that these first appeared in VB in January, 2001!
You want answers? Here they are!



GIPPSLAND CAR CLUB FIFTY QUESTION QUIZ

1. Name the current outright record holder at Gippsland Park hillclimb, with the current record time.
A. Peter Gumley, 29.27 seconds
2. Name the four hillclimb tracks which conducted rounds of the 2000 Victorian Hillclimb Championship.
A. One Tree Hill (Ararat), Mt. Leura (Camperdown), Rob Roy and Gippsland Park.
3. With which Australian racing team has Jason Bright signed a two year contract?
A. HRT
4. Name the person who won six Australian Hillclimb Championships?
A. Bruce Walton
5. Name the driver who became the first Australian to win an International Grand Prix (New Zealand, 1954), and name the Australian built Special that he was driving.
A. Stan Jones, Maybach.
6. In which Australian State was the former 2.3 mile motor racing circuit known as Schofields?
A. New South Wales
7. List the three years in which Jack Brabham won the World Formula One Championship.
A. 1959, 1960 and 1966.
8. Name the winner of the inaugural Redex Trial held in 1953, and the type of car that he was driving.
A. Ken Tubman, Peugeot 203
9. At which circuit was the first Australian Grand Prix held in 1928?
A. Phillip Island
10. Who was the winner of the 1953 Australian Grand Prix held at Albert Park?
A. Doug Whiteford, Lago Talbot
11. When was the first motor race meeting of the modern era held at Sandown Park?
A. February, 1962
12. Name the two Formula One drivers and cars which finished first and second in the 1980 Australian Grand Prix held at Calder Park.
A. Alan Jones, Williams FW07 and Bruno Giacomelli, Alfa Romeo 179.
13. Who was the winner of the first Formula One Australian Grand Prix to be held in Adelaide (1985)?
A. Keke Rosberg
14. What type of car did Peter Brock drive in the 1989 .05 – 500 held at Sandown Park?
A. Ford Sierra RS500
15. Which two drivers won the inaugural Sandown Six Hour Race held in 1964.
A. Roberto Businello and Ralph Sach
16. The 1960 Australian Touring Car Championship was the first time this Championship was held – who was the winner, and what type of car did he drive?
A. David McKay, Jaguar 3.4, Gnoo Blas Circuit at Orange, NSW.
17. How many Australian Touring Car Championships did Ian 'Pete' Geoghegan win?
A. Five
18. Which year was the first in which the Australian Touring Car Championship was run as a series?
A. 1969
19. In which year did Dick Johnson have his first start in a Ford in the Australian Touring Car Championship?
A. 1977
20. In which year did Phil Hill become the first American to win the World Formula One Championship?
A. 1961
21. Which driver won the 2000 Konica V8 Lites Series?
A. Dean Canto
22. Name the driver who drove Holden Commodore Number 32 in the 1998 Australian Touring Car Championship.
A. Tomas Mezera
23. What is the length of the Symmons Plains racing circuit in Tasmania?
A. 2.41 kilometres
24. What is the direction of racing at the Hidden Plains circuit in Darwin?
A. Anti-clockwise
25. Who is the holder of the Formula Vee record at Gippsland Park, and what is the record time?
A. Mark Wicks, 36.53 seconds
26. Name the car driven by touring car legend Norm Beechey in the 1960 Armstrong 500 held at Phillip Island.
A. Standard Vanguard
27. What make of car filled the first nine places in Class C (and also the first nine places outright) of the 1966 Gallaher 500 held at Bathurst?
A. Morris Cooper S

28. Two cars finished the full 130 laps of the 1968 Hardie Ferodo 500 held at Bathurst – name the drivers and the cars.
A. Bruce McPhee and Barry Mulholland, Monaro, and Jim Palmer and Des West, Monaro
29. Name the year that Peter Brock first won Bathurst.
A. 1972
30. In what year did the Bathurst race change from 500 miles to 1,000 kilometres?
A. 1973
31. What year was it that the famed staged finish of the Moffat/Ickx and Bond/Hamilton Falcons took place at Bathurst?
A. 1977
32. How many laps in front of the next finisher was the Brock/Richards Torana A9X in the 1979 Hardie Ferodo 1000?
A. Six laps
33. Which unlikely driving combination won the 1986 Wellington 500 street race in an HDT Group A Commodore?
A. Peter Brock and Allan Moffat
34. Which driving combination won the opening round of the 1987 World Touring Car Championship at Monza in a Commodore VL Group A?
A. Allan Moffat and John Harvey, Commodore
35. In 1953, the first truly Australian car competed in an international event. What was the car, the event and who were the drivers?
A. Holden 48/215, Monte Carlo Rally, Stan Jones, Lex Davison and Tony Gaze
36. What is the size of the V8 engine originally fitted to the Daimler V-8 SP 250 sports car?
A. 2.5 litres
37. It was described as short, flat, uninteresting and in desolate country, but it was Australia's first purpose built racing circuit. What was the name of this circuit?
A. Port Wakefield, South Australia
38. What was John Faulkner's first race car?
A. Ford Capri
39. Jonathon Williams' Formula One career lasted just one race. For whom did he drive that one race?
A. Ferrari
40. What was the name of the marque created by Garrie Cooper?
A. Elfin
41. In what year did Alan Jones win the Formula One World Championship?
A. 1980
42. Who was the international Formula One driver who came third in the 1980 Australian Grand Prix driving an Australian built Formula 5000?
A. Didier Pironi in an Elfin
43. What was the first car raced by Glenn Seton?
A. Ford Escort Sports Sedan
44. Why did Alan Jones cover the race distance of the 1977 Australian Grand Prix quicker than all of the other competitors in the field, only to be classified fourth?
A. One minute penalty for jumping the start
45. Which very fast Australian road circuit featured corners called Newry, Tannery and Mountford?
A. Longford, Tasmania
46. On which one of the following tracks did Peter Brock win six Australian Touring Car Championship rounds – Phillip Island, Oran Park or Surfers Paradise?
A. Surfers Paradise
47. The Australian Drivers Championship is contested by drivers of Formula Holden vehicles – which was the first year that this occurred?
A. 1989
48. What type of vehicle did Peter Brock drive in the 1996 Australian Super Touring Championship?
A. Volvo
49. Name the car and driver combinations of the first three place getters in the 1979 Repco Round Australia Reliability Trial.
A. Holden Commodores, Brock/Phillip/Richards, Ferguson/Bell/Boddy and Mehta/Aaltonen/Lake
50. Which two drivers drove for the Holden Racing Team at Phillip Island in the 1993 Australian Touring Car Championship (held on April 4, 1993)?
A. Tomas Mezera and Wayne Gardner.

Ed: all challenges/disputes, etc to be directed to John Bryant: NOT the Ed!!!

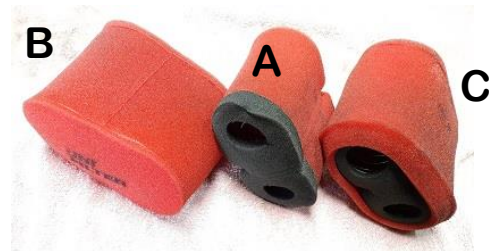


For Sale – having a bit of shed clear-out!



Set of four long ram tubes for DCOE carburetors: 75mm length (from carb) – these are the 'bolt-on' styles. Crescent retaining washers included. **SOLD**

Set of two pod-style UniFilter high-flow filters to suit DCOE Weber carbs. The main pod (A) stays on the carb and for non-race use is covered by (B) to give (C), creating a filter that is effective, but can quickly have the outer cover removed to leave a clean, high-flow filter for competition use. Near-new, little use: \$90



Lightweight aluminium radiator to suit Commodore (sorry-don't know which model!), fitted with near-new electric fan. Slight bow in the bottom of the radiator, otherwise VGC: \$100

Tyres:

- Yokohama A050 225/50 x 15, one pair, ~40% tread remaining \$100 pair.
- For road car: set of four almost-new Smacher brand tyres, 195/55 x 15 (used once then changed wheels!): as new, \$160 set.



Set of four alloy wheels, 'Speedy' brand on centre caps, 14 x 6", 'MC' logo on wheel. One wheel nut seat damaged but useable. 4 1/2" 4xPCD, suits Alfa, 240Z, some Datsuns, some Ford, Hillman, MGB, Porsche 924, Sunbeam, some Toyota, some Triumph. \$100 set

Pair of 15 x 7" alloy wheels, 4 x 100 PCD, suit Toyota, Mazda, other. In VGC: \$150 pair.



Pair of NEW lightweight cam gears to suit Toyota 4AGE/4AGZE motors. Billet-machined, with Vernier centres. Negotiable!

For any of these, phone Ian on 0414 580921.



MOE PARKLANDS MOTEL



- Closest motel to Bryant Park!
 - 3.5 stars
 - Family restaurant next door
 - Guest Laundry
 - BBQ area
- Car and trailer parking
 - Free wireless internet
 - Solar heated pool
- At the Moe Parklands Motel, we invite you to picnic or use the guest barbeque in our delightful gardens.
 - For your evening meal, Rookies Bar and Restaurant is next door.
 - A dip in our solar-heated pool will relax you at the end of a day enjoying all that Moe and surrounds has to offer.

RECEPTION HOURS : 7.30 am to 9.30 pm

98 Narracan Drive, Moe, Victoria

Telephone 03 5127 3344

EMAIL: stay@moeparklandsmotel.com.au

WEBSITE: www.moeparklandsmotel.com

SUPPORTERS AND ADVERTISERS INDEX

These businesses support our club!! Make sure we support them!

Name	Product	Contact Details
Moe Parklands Motel	Accommodation	03 5127 3344 stay@moeparklandsmotel.com.au
BTR Machining and Cylinder heads	Dyno tuning, engine rebuilds, race prep, general repairs	03 5134 4023 simon@btrmorwell.com.au
Penrite Oils	Oils and lubricants	www.penritetopclass.com.au
Fowlers Asphalting	Roadmaking	03 5633 2918 admin@fowlersasphalting.com.au
Arrow Linemarking	Linemarking	0458 882 353 arrowlinemarking@y7mail.com
Alfa Motorsport Fibreglass	Automotive repairs	info@alfamotorsportfibreglass.com.au
O'Connell's tyres	Suspension, front end, brakes, shocks	03 5126 2822 Facebook presence https://oconnellstyres.weebly.com/
James Lambert	Photography	James Lambert @SJLambert6
Jim Jones	Photography	Jim Jones Jamar Imaging.net
SPIN Media	Photography and video	ncardwell@spinmelbourne.com
Trafalgar Auto Elec	Auto Electrics	56332062
Capaldo Automotive Repairs	Mechanical, alignment and MX 5 specialist	5134 4328 Ask for Steve
Peter Weaver Msport Photography	Photography	0438 109 027 peter.weaver@speedway.net.au