



VALVE BOUNCE

AUGUST,
2020



What is this? It's a motor, it's compact, has few moving parts...and in 1906 would propel a car to a speed of nearly 200 *miles* per hour (322kph) – read its amazing story in this issue.

- 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@streetwize.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@streetwize.net.au	0409 427199
CLUB POINTS SCORER	Fred Galli beyondit123@hotmail.com	0423 664813
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:

- 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.
- GCC competition events scheduled for August and September have been cancelled.
- The date in October which was to have been a VHCC round has now reverted to being a GCC Club Hill Climb.
- Any events at Bryant Park 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 or officiating you will not be admitted to the event.
- 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.



AUGUST

Saturday to Sunday, 8/9	Supercars at Hidden Valley
Saturday to Sunday 8/9	Victorian 6 Hour Regularity Relay Phillip Island -CANCELLED
Sunday 9	NSWHC Round 7, Ringwood
Sunday 9	Repco Sprint Series Round 4, Winton - CANCELLED
Tuesday 11	Board Meeting, 7.00 p.m.
Friday to Sunday, 14/16	Australian GT Championship at Phillip Island - CANCELLED
Saturday to Sunday 15/16	Shannons Nationals at Sydney Motorsport Park
Saturday 15	M&DCC Boisdale Hill Climb Round 5, Long Track
Sunday 16	GCC Khanacross at Bryant Park - CANCELLED
Sunday 16	Vintage Rob Roy - CANCELLED
Sunday 23	VHCC Round 3 at Broadford - CANCELLED
Friday 28	AGM, CLUBROOMS, 7.00 P.M. - CANCELLED
Saturday to Sunday, 27/28	Supercars at Townsville
Sunday 30	GCC Multiclub Hill Climb at Bryant Park - CANCELLED
Sunday 30	RACES East Sale Super Sprint - CANCELLED

SEPTEMBER

Tuesday 1	Valve Bounce collation
Tuesday 8	Board Meeting, 7.00 p.m.
Friday to Sunday, 4/6	LMP3 Cup at Sydney Motorsport Park
Saturday to Sunday, 5/6	Formula Vee Nationals at Phillip Island
Sunday 6	Fathers Day
Saturday to Sunday, 12/13	Shannons Nationals at Sandown
Saturday to Sunday, 12/13	PIARC Supersprint Round 4
Sunday 13 or 20	GCC Club Hill Climb at Bryant Park - CANCELLED
Sunday 13 or 20	M&DCC Boisdale Hill Climb Round 6, Short Track
<u>Sunday 20</u>	<u>CAMS Club Challenge track hire at Bryant Park - CANCELLED</u>
Saturday to Sunday, 19/20	Supercars at Sandown
<u>Saturday 26</u>	<u>HRA track hire at Bryant Park (a.m. only) - CANCELLED</u>
Saturday to Sunday, 26/27	Victorian State Circuit Racing Championship, Phillip Island
Sunday 27	GCC Club Khanacross at Bryant Park - CANCELLED
TBA	VHCC Round 4 at Mt Leura - CANCELLED

OCTOBER

Saturday to Sunday, TBA	Shannons Nationals at Phillip Island
Sunday 4	NSWHC Round 8, Canberra
Sunday 4	MG Car Club Interclub Challenge Round 3 at Rob Roy
<u>Sunday 4</u>	<u>Kyneton Car Club track hire at Bryant Park</u>
Tuesday 6	Valve Bounce collation
Thursday to Sunday, 8/11	Supercars at Bathurst
<u>Sunday 11</u>	<u>Pilota Sportiva Audi Australia track hire at Bryant Park</u>
Tuesday 13	Board Meeting, Clubrooms, 7.00 p.m.

Saturday 17	M&DCC Boisdale Hill Climb Round 7, Long Track
<i>Saturday 17</i>	<i>MG Car Club track hire at Bryant Park</i>
Saturday to Sunday, 17/18	AROCA 12 Hour Regularity Relay, Winton
Saturday to Sunday, 17/18	Shannons Nationals at The Bend
Saturday to Sunday 17/18	Mt Tarrengower Hill Climb
<i>Friday 23</i>	<i>Monaro Club Nationals at Bryant Park</i>
Sunday 25	VHCC Round 5 at Bryant Park (PIARC) – CANCELLED
Sunday 25	GCC Club Hill Climb at Bryant Park
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

NOVEMBER

Sunday 1	MG Car Club Historic and Classic Rob Roy
Sunday 1	GCC 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, Clubrooms, 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
<i>Saturday 28</i>	<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, TBA
Saturday to Sunday 12/13	Supercars at Sandown
Sunday 13	GCC Khanacross at Bryant Park

CALENDAR 2021

JANUARY

Saturday to Sunday, 9/10	Supercars at Hampton Downs or Pukekohe
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

APRIL

<i>Saturday to Sunday, 23/24</i>	<i>Ford Four Track Hire at Bryant Park</i>
----------------------------------	--

SEPTEMBER

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

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 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:

I don't know about the rest of you, but I'd like to have just one day at the moment when I don't hear anything about COVID-19! If there was one industry that should be experiencing a boom at present, you would think that would be the media: they had the drought, the fires, and now the virus to keep us breathlessly and vitally up-to-date – so much to talk about! (Yet surprisingly, I read that both the ABC and 7 networks are cutting back on regional reporting staff and bulletins?!) As I write this, we have been told us regional-dwellers (what ever happened to 'country?') will also be required to wear a mask outside, despite almost no reported cases of COVID-19 in Gippsland. Better be safe than like Melbourne, I guess. Like some cheerful news? When you look around, I reckon we are in just the very best place in the world to sit this plague out: we (Gippsland) have almost no cases at present; the Victorian epicentre is in lockdown and residents deterred from coming here; we're not crowded into high-rise apartments with no space to exercise; we have magnificent scenery around us; we're still free to hop in our club-permit cars and tour the ranges; much of our industry and jobs are still in place; and we are surrounded by some great people with cheerful, positive attitudes – how could it get better? 😊



On the motorsport front, there is a little movement, with some events now re-starting, albeit in a fairly sterile manner with no crowds to add atmosphere. I've just about worn out my collection of past Bathurst races, re-living the heyday of XU-1s and GTHOs wrestling the mountain, and in earlier events, a fantastic diversity of machines including VW Golf, Alfas, Valiants, minis, Studebakers, Triumphs, right down to inverted Vauxhall Vivas. These grainy old videos also give me a good chuckle at marshalls standing in the open on the side of a road as though hailing a country taxi, and pit stops so relaxed that drivers could get out and talk to the crew before leaping back in and driving away – without anything so nastily restrictive as a harness to get in the way! Well before the days of a multi-million-dollar media and administration centre, drivers' briefings came without even a PA system, were held out in the open in a gravel area beside the pits, and the marshall dropping the flag to start the grand race was perched on a 44-gallon drum at the side of the track! Such unpretentious times.



Citroen DS at Bathurst – not something you'd see now!
(Source: www.bevanland.com.au)

Closer to home, let's talk about OUR club for a moment. Is it 'hibernating' at present? No way! The Gippsland Car Club comprises hundreds of members across Victoria and interstate, with the activity of the club overseen and organised by the Board – you know: that group of people whose



Infamous shot of Vauxhall Viva HA on its way to a monumental roll and crash at Murray's corner. The roof was pushed so far over that when it was towed back to the pits the driver had his head upright, but sticking out of the driver's window!
(Source: www.imcdb.org)

names appear at the start of each VB. One of the less predictable spin-off effects of the COVID-19 (there's that name again!) restrictions has been to affect the activity of your Board. Monthly meetings that are usually held in our smart clubrooms are now taking place via a phone linkage, arranged by Rhys Yoemans. By this means, and a healthy swag of e-mail exchanges, the club has kept running, though it may be out of sight to most of you. We have installed the new timing building; planned future events; managed payments and income; accepted numerous memberships; had private groups such as motoring magazines continue to use Bryant Park; liaised with several government and non-government bodies; maintained the track and facilities; held a tree planting; and a whole list of other matters too many to list here. So, the club is a bit like a swimming duck at present: it may look like not much is happening, but under the water there's a heap of activity! One difficulty at present with the virus changing how we live, is that under the club's constitution, we are to hold an AGM and election each year – we haven't been able to, and it doesn't look like this is going to happen in the near future. You'll notice on the list of Board members that we have a vacancy for our Competition Secretary: how do we fill this, when we can't hold an election? Also, some current members of the Board are intending to step down after having served for some time: how do you do this, when there is no AGM to formalise the end of your tenure? What all this is leading to, is we (the Board) are adopting an unconventional process, whereby we are inviting members of the GCC to self-nominate for any position on the Board, especially to fill any vacancies that arise in the next weeks or months. In a way, this is an ideal time to join the Board, as you can become familiar with the operations and processes without the deadlines produced by running events at present! So, you are all invited to register your interest in becoming one of the Board members by sending an e-mail to, or phoning, Club Secretary Rhys – details in the front of this mag.

I hope you've been enjoying the range of articles in recent VB editions. I'm keeping much the same flavour this month, with a couple of technical articles, some historical stuff, more beaut items from John Bryant and our regulars, and our 'lead' story being another engine-based tale, that just astounded me when I first read it. I guess we get a bit complacent sometimes, and assume high-speed motoring is a feature of our age, or one just passed. Imagine skimming boldly across a sandy beach surface just after the start of the 20th century (no long, straight bitumen roads in those days!), in something that looks like the love child between a grand piano and an Edwardian perambulator ...and clocking nearly 200 *mph* (322 *kph*)! If nothing else, it represents a formidable confidence in the engineering of the time. See the story later in this edition. Enjoy the read!

-IM the Ed.



I used to have a Hillman Imp, many years ago – even rallied it, so was delighted to find this great photo of one competing at Bathurst. This is a classic Imp pose, front wheels tucking under ...speed no doubt greatly assisted by the downhill section of track! I can't help wondering though, how many sandwiches the driver could have consumed while waiting for the lusty 875cc motor to propel them up Mt Panorama?! Or perhaps it was the factory race motor – a beast at 998cc.

(Source: www.htcav.com.au)

Chairman's Report – August, 2020

(-None for 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 (and this may change*):

- Sunday, August 30 GCC Multiclub Hillclimb **←CANCELLED**
- Sunday, September 13 GCC Multiclub Hillclimb **←CANCELLED**
- Sunday, October 25 GCC Multiclub Hillclimb...TBC
- Saturday, December 5 GCC Multiclub Hillclimb (Twilight)...TBC

*We are still looking for appropriate events at Phillip Island and at Winton.

➤ More for your calendar:

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

Next GCC MULTICLUB HILLCLIMB
Sunday, 25th October...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:



Bulletin

Industry Division

Reference No. Blitz/jk-5-20

Victoria Police Blitz on illegally modified vehicles

Victorian Police highway patrol unit has contacted VACC to raise awareness among the automotive repair industry relating to an increase of illegally modified vehicles on Victorian roads. Repairers may potentially be caught up in a police investigation for breaches of the Road Safety (Vehicles) Regulations 2009.

What's Happened? Police intercepted a vehicle fitted with a nonstandard high-performance engine and turbocharger without an engineer's certificate/VASS certificate. The owner was issued with a defect notice and fined for driving a high-powered vehicle while still on their P's.

Subsequently, the owner proceeded to have the engine swapped with the original engine in order to obtain a roadworthy certificate and have the defect cleared. The engine swap was completed by a repairer who then sent the vehicle to a licensed vehicle tester (LVT) for inspection.

Once the vehicle had passed the roadworthy inspection and a certificate issued, the vehicle was returned to the repairer. On that same day, the engine was again removed and replaced with the performance engine. The owner visited a VicRoads Service Centre with a copy of the roadworthy certificate and had the defect notice cleared. Police intervention prevented this vehicle from being allowed back on the road within 2 days of the roadworthy certificate being issued.

The matter is now under police investigation to determine any wrongdoing on the part of the repairer and the LVT. Fortunately, in this case the LVT was able to provide evidence including photographs and engine details of the vehicle when it was presented for inspection. The licensed vehicle tester was found to have acted in accordance with VicRoads testing standards and road safety regulations. Failing to adhere to these rules may have resulted in the LVT losing their license and possibly their livelihood or potentially facing the scrutiny of the coroner had the vehicle been involved in a fatal collision.

Road Safety (Vehicles) Regulations 2009 - Chapter 2 regulation 21 (3)

- (3) person who modifies, or adds components to, a vehicle must ensure that –
 - (a) If the vehicle complied with the standards for registration immediately before the modification or addition, the vehicle continues to comply with those standards
 - (b) For a heavy vehicle –
 - (i) The modification or addition is certified by a person appointed as an authorised officer under regulation 7 as complying with the National Code of Practice for Heavy Vehicle Modification published by the Department of Infrastructure, Transport, Regional Development and Local Government as Vehicle Standards Bulletin No. 6; or
 - (ii) The modification or alteration is otherwise acceptable to the Corporation (VicRoads); and
 - (c) For a light vehicle-
 - (i) The modification or addition is certified by an authorised officer as complying with the National Code of Practice for Light Vehicle Construction and Modification published by the Department of Infrastructure, Transport, Regional Development and Local Government as Vehicle Standards Bulletin No. 14; or
 - (ii) The modification or alteration is otherwise acceptable to the Corporation (VicRoads)

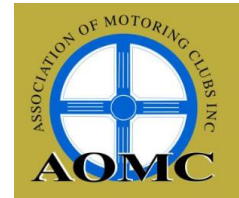
Chapter 6 regulation 233

It is an offence to substitute equipment on a tested vehicle.

If a current certificate or roadworthiness exists for a vehicle, a person must not detract from its roadworthiness by adding, altering, removing or substituting equipment or fittings on the vehicle. Penalty: 5 penalty units

I am aware of multiple instances where a vehicle has been altered after a roadworthy certificate has been issued resulting in a show cause sent to the License Vehicle Tester. Members are reminded to check for any signs of previous modifications when inspecting vehicles and that photos are your best form of defence should you be investigated.

John Khoury
Industry Divisions & Policy Advisor
ARD, AED, ER RD, GD, SVA, Auto Trans, ATRA, LVT
VACC



Important message from VHRR Committee

Historic Sandown 2020

As you may be aware, the VHRR Committee has for some time been in preplanning for Historic Sandown 2020 and incorporating both the Government's Covid-19 restrictions and Motorsport Australia's Return To Race strategy into the deliberations.

Unfortunately the situation in Victoria has continued to worsen with increasing doubt on our ability to conduct the event.

The VHRR Committee wishes to advise that we have come to the reluctant unanimous decision to cancel Historic Sandown 2020. We trust that you can appreciate our efforts in attempting to run the event and that you understand that we have been left with no choice in reaching this decision.

We look forward to welcoming you to Historic Sandown 2021 when hopefully this dreadful virus will be under control. In the meantime we trust that you and your families maintain good health in these difficult times.

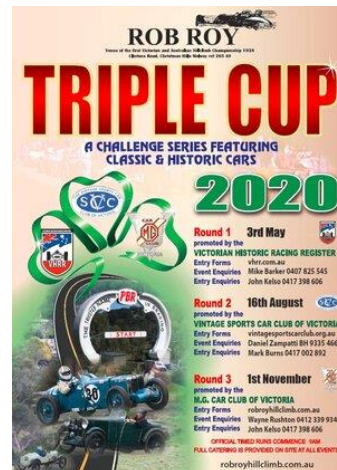
15 July 2020

AOMC News



[The 2020 Bendigo Swap has been cancelled](#)

Following recent announcements from the Victorian State Government in relation to COVIT19 concerns, the Bendigo National Swap Meet Committee has decided to cancel the Bendigo Swap that was to be held on 14-15 November 2020.



Aug 16, 2020

[VSCC PreWar Historic Hillclimb](#)

Rob Roy Hillclimb

375 Clintons Rd
Smiths Gully, Victoria

Ed: interestingly, in these times of event cancellation, this hillclimb is not listed (yet) as being cancelled. One assumes it is, though.

...and continuing from the AOMC, some more information regarding the Club Permit scheme. Vic Roads is now offering online renewal of your classic, though it would seem instead of taking your permit paperwork to the club's officer to be signed, you now need to plan ahead and send a copy of the 'club permit endorsement form' to the Officer, have them complete it, and send it back to you. One assumes the renewed permit and new log book is then sent to you in the paper post 😊



Paying your permit renewal online

This additional option for renewal will be available through the myVicRoads portal account from 31 July 2020.

The link to set up your myVicRoads account is:

<https://www.vicroads.vic.gov.au/online-services/sign-up-for-a-vicroads-online-account>

However, the club permit vehicle will only be displayed in a customer's myVicRoads account if the vehicle is associated with a client id (licence/client number). If any of the club members want to use the online renewal option and do not see the club permit vehicle in their account at the time of their renewal, they can contact VicRoads Call Centre on 13 11 71 to have it linked.

As previously mentioned, the other options of renewing at a Customer Service Centre or via mail, will continue to be available. However, some of the services at the Customer Service Centres may be currently disrupted due to the COVID-19 pandemic.

Also attached the club permit endorsement form which can be used by the clubs to endorse a vehicle requiring renewal. The authorised club representative will need to fill this form and forward it to the customer to attach it with their online renewal application. This form will also be available on our website.

...and this continues on the next page, with some clarifications about the document circulated recently that outlined proposed changes to the club permit scheme. Specifically;

- *The need to make an appointment (at a cost) with VicRoads to have your permit renewed, so you can be assured of a service person who is familiar with the scheme*
- *The concern (referred to in the VACC bulletin included in this VB edition) about modifications made to club permit vehicles*
- *The concern that some club officers are allowing obviously over-modified vehicles on to the permit scheme*
- *A change to the fee charged: basing club permit fee upon a pro rata payment of full registration.*



Club Permit Scheme Proposed changes to regulations Explanatory Notes 9th July 2020

Vehicle Safety

There is **no** plan to introduce further inspection regimes for the scheme.

The document recently forwarded to clubs discusses proposed strengthening of regulations concerning the club scrutineer checking of vehicles for safety where pre 1949 built vehicles are not required to have a Road Worthy Certificate.

The Associations view is that club appointed scrutineers carrying out safety checks should have appropriate qualifications!

The responsibility for suitability of a vehicle for use on the road requiring a Road worthy certificate rests with the Road Worthy Certificate supplier not the club! There is no change to this arrangement.

Requirement for appointment for application to the scheme.

This has been suggested for **administrative** purposes. It has been found that the process is causing delays at the Vic Roads service centre's counters. The appointment system will ensure an operator with the appropriate knowledge processes the application and time is saved. The proposed fee is in line with other specialized registration arrangements.

Fee increase

The proposed pro rata payment for permits is based on the permit fee only not the TAC payment!

Iain Ross



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: I was sent this item from the 'Carfection' series as published on YouTube, and thought many of you would like to check it out:

Aston Martin have released their newest 'supercar,' the V12-engined Valkyrie, and amongst all the other developments in the car, the engine is spectacularly engineered. What does it offer?

6.5 litres; V12; naturally aspirated; 1,000bhp; 11,000rpm, built of titanium, aerospace aluminium and carbon fibre...all in a 'road' car!



If you go to the link below, you'll find a quite detailed interview and discussion with the people that designed and built this...but the highlight would have to be the SOUND(!) of this thing on the engine dyno: not at all unlike a F1 motor, which is not surprising since it was designed by an F1 engineer. If you're a petrol-head, do yourself a favour and have a listen for your daily hit of automotive addiction.

https://www.youtube.com/watch?v=pk8ZrN_nmA

(that's: rN_nmA)

Also; while you're there, look at the 'recommended links' section at the side, and there is also a circuit test of the Valkyrie at Silverstone with Max Verstappen and Alex Albon – worth a watch! Max's comment after his drive was along the lines of: "If this is going to be on the road, it's going to be insane!"

**FOWLERS
ASPHALTING**

PO Box 199 Trafalgar Vic 3824

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

2004 AUSTRALIAN HILL CLIMB CHAMPIONSHIP, GIPPSLAND PARK

– some musings from John Bryant

The 2004 Australian Hill Climb Championship was held at Gippsland Park from October 29 to October 31, with Thursday, October 28 being a practice day for any competitor who felt inclined to use the day for practice.

This was the fourth time that the GCC had conducted the AHCC, and, as it turned out, the last time that we conducted the event at Gippsland Park. The first event in 1977 (which I have written about previously) was held on the original track with the hump, whereas the 1989 event (won by Alan Hamilton in the Lola T87/50 Buick V6) and the 1999 event (won by Peter Gumley in the SCV) were held on track after the hump had been removed. The 2004 event was the third time this configuration had been used.

As is usual for an event of this magnitude, we started out early to find sponsorship for the event. We tried the usual automotive related places but had no luck – where to now? It was suggested at a Board meeting that we contact Tru Energy (Energy Australia now) to see if they were interested. We also thought that we might have a discussion with them about resurfacing the track, which was by this time starting to get a little second hand (it was previously resurfaced in 1989, just prior to the 1989 AHCC). The discussion with Tru Energy revealed to us that they were contemplating taking over our track to expand the coal mine – this was news to us at the time and we had no inkling that this might occur. They did suggest to us that any resurfacing of the track would be a complete waste of money, as we would probably not be there much longer. That knocked the wind out of our sails, but the shock was tempered a little when they agreed to sponsor the 2004 AHCC. What happened between that time and the opening of the new track in 2008 provides the material for a whole new story, which I might write one day.

Major sponsor in hand – the next task was to find a large number of class and special award sponsors (32 in all) which we were able to do, many from the local area, but some from Melbourne and others from as far afield as Shepparton – this meant that we were able to offer other prizes as well as class prizes. Excellent – ready to go. Entries were opened and came in thick and fast – well over 100, with 110 recording a time during the event.

The next piece of organisation was to organise a 40th Anniversary (of the Club) dinner for the Saturday evening of the event, and find a guest speaker who would entertain us at this dinner as well as compete in the hill climb and draw some spectators. We had Peter Brock at the 1977 AHCC and looked around for a similar personality – Norm Beechey was the man, and he fitted the bill perfectly. Norm brought the big 409 Chev Impala to run in the event, and he was also a very entertaining guest speaker at the dinner, held at the Italian Australian Club in Morwell.

All in place – practice went off well, and everyone lived to fight on the next day. Saturday dawned fine and dry – the big dread when running a two-day event is that the first day is fine but the second day is wet. The outright favourite for the event was Peter Gumley, who had won the previous 6 titles in his SCV. GCC member Andrew Howell was certainly a title contender in his purpose built Pilbeam hill climb vehicle, whilst Gary West from WA, driving the Lola T87/50 Buick that won the event at Gippsland Park in 1989, was a dark horse for the win. Others who were in with a chance included Alan O’Connell from Queensland, Ashley Cutchie in the larger engine Swift Formula Ford owned by Andrew Howell, Rod Moody, Alan Foley and Garry Kent, whilst “new boys” to the AHCC in with a chance of doing well included Brett Hayward and Greg Ackland.

The track record at the time was under 30 seconds – a feat at that time achieved only by Peter Gumley, and it was anticipated that an under 30 second run would be needed to win the event – who could achieve that? The aim of the exercise for the two days was to have seven runs each – four on Saturday and three on Sunday.



Peter Gumley (SCV)



Norm Beechey (409 Chev Impala)



Gary West (Lola T87/50 Buick V6)



Andrew Howell (Pilbeam)

Day One. The Saturday runs commenced spot on time at 9.00 a.m., with an estimated finish time for the day off around 3.30 p.m., which gave those going to the dinner plenty of time to get organised, and those wishing to play with their cars plenty of time to do that.

Run 1. All except Tom Donovan in his Zip Honda (Ewen Moile??) recorded a time. The front runner after the first run was Andrew Howell in the Pilbeam with a run of 30.93 seconds, from Alan O'Connell in the Van Dieman with 30.98 and, probably a surprise, Brett Hayward in third with a time of 31.09. Peter Gumley was half a second back, whilst Gary West was two seconds off the pace, trailing Garry Kent in the GAK 04. Terry Dowel was the fastest historic car whilst Norm Beechey managed to wrestle the boat sized Chev Impala around in under 40 seconds. Andrew Mitchell in the Farrell was the fastest sports car with a time of 33.39, Wayne Burden in the Gemini was the fastest sports sedan (just) with a time of 34.05, whilst Stephen Kent in the Sigma was the fastest improved production vehicle with a time of 35.92.

Run 2. Gary West found his two seconds and recorded a time of 30.42, with Brett Hayward recording a 30.65 to move into second overall. Andrew Howell slipped a little but still managed to retain third, from Peter Gumley in fourth who improved to 30.98. Alan O'Connell was slower, whilst Rod Moody recorded a time of 31.80 to move up the field. Terry Dowel improved almost two seconds to still be the fastest historic vehicle, whilst Norm Beechey recorded another sub 40 second time. Andrew Mitchell was a little slower this time, but was still the fastest sports car. Wayne Burden was almost two seconds faster than any other sports sedan, whilst James Atkinson in the Gemini and Wim Janssen in the Honda Civic both recorded times in the low 36 second bracket in the improved production class, but still behind Stephen Kent



Terry Dowel (Mustang)

Run 3. Early afternoon, with the weather still fine and dry. Gary West put the cat amongst the pigeons by laying down a time of 29.99 seconds – second fastest run ever at the track. Would that be enough to take the weekend? Peter Gumley had a slight mishap and lost six seconds, Alan O'Connell had a slight off and lost ten seconds, Andrew Howell recorded his best for the day so far with a time of 30.76, but he was slightly slower than Brett Hayward with an excellent time of 30.71. Ashley Cutchie improved a little to 31.37, Rod Moody was a little slower with 32.03, whilst Garry Kent improved to 32.05, but not fast enough to worry the front runners. Terry Dowel had a big off in the Mustang, and recorded a run 40 seconds slower than his best!! Norm Beechey had the afternoon off to go and visit a local winery with his wife Margaret! Wayne Burden continued to dominate all of the sports sedans, with consistent times in the 32 second bracket – Allan Hunt recorded the only other sub 34 second run by a sports sedan during the event with a 33.51 in his Torana. Meanwhile, James Atkinson improved to 35.98 to almost catch Stephen Kent as the fastest improved production vehicle.

Run 4. Last run for the first day. Peter Gumley put in his fastest run for the day with 30.81, fractionally faster than Brett Hayward with 30.82, but Gary West was still the fastest on this run with a 30.32. Andrew Howell had a lose in the Loop (see photograph above) and recorded a very slow 71.52, whilst all other contenders were a little slower than their previous runs. Terry Dowel continued at the head of the historic field, Andrew Mitchell did the same with sports cars, and Wayne Burden continued



Keith Linnell (Cortina V8)

on his merry way in sports sedans. James Atkinson snuck in a time of 35.81 to take over as the fastest improved production car, from Stephen Kent and Wim Janssen.

Day One over, with a 40th Anniversary Dinner to attend. We decided that as some people were remaining at the track, we would leave the timing equipment in place overnight (famous last decision as they would say in the classics!). Excellent dinner, Norm Beechey was an excellent speaker, and Carol and myself had the privilege of sitting with Norm (and Margaret), one of my boyhood heroes, for the night.

Day Two. Excellent weather for what promised to be an exciting day of hill climbing – all competitors were still keen and eager to proceed, but as it turned out, the organisers were not. We left the computer in place on Saturday night, and the area experienced some electrical problems overnight, such that all of the times for the event had been wiped out – excellent start to the day, especially for me as I was the Clerk of Course and had to explain to all and sundry what had happened, as well as work out what we were going to be able to do to continue on with the event. We had the hard copy of results from Day 1, so Ben Jennings and Jason Bryant gave me a good talking to relieve my panic, and offered to enter all times into the computer again – a task that would take up about the time of one run. I called a drivers' briefing and explained to all what had happened. The plan was to have an untimed practice run, and follow this with three timed runs for the rest of the day. All competitors were very understanding, no one attempted to lynch me, and on we went – in fact, I think that many of them were secretly happy that they could have a practice run before the real runs for the day.



Gary Downes in the 'Pink Pig' Falcon

Run 5. Brett Hayward recorded his fastest time for the weekend, 30.54 – not enough to win the event. Alan O'Connell recorded his fastest with 30.48 – not fast enough. Ashley Cutchie put in his fastest – 30.98 – not enough. Gary West recorded a 30.15 – not as fast as the previous day, but still very fast. Peter Gumley came out and did a 29.72, fastest for the event so far and that certainly had people thinking – was that the AHCC winning run? Andrew Howell put in a slow run, Rod Moody improved, but not enough. Terry Dowel put in his fastest run for the weekend in a time of 36.42, and promptly retired for the day to watch everyone else try to catch him (which they did not). Andrew Mitchell continued at the head of all of the sports cars, still almost two seconds in front of the next fastest. Wayne Burden did the same in sports sedans, although not as far in front of the others. Wim Janssen took over as the fastest improved production vehicle with a time of 35.86, from James Atkinson with 35.97. Kevin Mackrell, driving the 4WD Datsun in the Performance/Evo class continued on with one of his many 32 second runs.

Run 6. Could Peter Gumley be caught? Not by Brett Hayward, who was marginally slower with 30.82, nor Alan O'Connell who was also slightly slower with 30.59, nor Ashley Cutchie who was faster than previously with 30.86 (still not enough), or Gary West who recorded his second sub 30 time with 29.88, or Andrew Howell who was slightly slower with 30.60, or Rod Moody who put in his best for the weekend with 30.96, or Garry Kent who also put in his best for the weekend with 31.56.

Greg Ackland snuck in on this run and put in a time of 31.15, which placed him in for eighth overall for the event. Terry Dowel was not headed in historic, nor was Andrew Mitchell in sports cars, or Wayne Burden in sports sedans. James Atkinson went faster on this run, and now headed the improved production field by almost half a second, from Wim Janssen and Stephen Kent.

Run 7. Was this the Championship run, or had the Championship already been decided?? We run our events with Formula Libre cars first, with cars running in numerical order in class order – small engine classes thus first. In the up to 1300 class, contender Brett Hayward recorded a 30.71 – not his fastest for the weekend, so no championship for him. In the 1301 to 2000 Alan O’Connell decided not to run, so he missed out on the championship. Ashley Cutchie recorded his fastest time of the weekend at 30.81, but unfortunately not fast enough. All eyes were on the top 3 in the larger engine class. Peter Gumley ran first, and recorded a 30.21, not his fastest for the weekend, but he was still in front. Gary West took centre stage – could he beat the Gumley time?? Gary went over the finish line sideways, recording his third under 30 second run for the weekend, and on this occasion – 29.66!!

Was the Championship his by a mere 0.06 seconds or would Andrew Howell record a faster time? Andrew recorded his fastest time for the weekend of 30.21, so the Championship belonged to Gary West (his first of three as it transpired). The rest of the runs were really an anticlimax, with none of the leaders in each category being beaten on this run.



Gary West crossing the finish line sideways to win the 2004 Australian Hillclimb Championship

There were some excellent performances on the day, with some very close results in classes- such results included Formula Ford, where Paul Zsidy (34.22) won from Wesley Inkster (34.39) and Barry Gibbons (34.76). Tom Donovan (33.06) won the FL up to 750 from Allan Foster with a best time of 33.12, Hamish Rhodes won the Historic Group N up to 2000 with a best of 37.24 from the rarely beaten Lindsay Siebler with 37.30. Norm Beechey returned to the competition and recorded three 39 second runs – excellent times for such a big car. Eleven new records were set on the day, many of which will remain in posterity. An excellent weekend was had by all!!


The top 11 results (sub 32 seconds) were:

Gary West (WA)	Lola T87/50	29.66
Peter Gumley (NSW)	SCV	29.72
Andrew Howell	Pilbeam MP82	30.21
Alan McConnell (Qld)	Van Dieman	30.48
Brett Hayward	Suzuki	30.54
Ashley Cutchie	Swift	30.81
Rod Moody	Cheetah	30.98
Greg Ackland	Ninja	31.15
Simon Lake (Qld)	Axtell Suzuki	31.36
Garry Kent	GAK 04	31.58
Alan Foley	Talbot RF	31.69

Peter Gumley returned to the winners circle in 2005 and 2007, whilst Gary West took the honours in 2006 and 2008. Brett Hayward broke the Gumley/West dominance by taking the title in 2009.

PS

Below : A fine set of car tools in a steel case
(Abingdon King Dick)



of owners in im-
rs is to meet the
the head lamps,
hed reflectors, by
ve auxiliary lamps.
such lamps is for
fog lamps are too
lamps too narrow-
head lamps. It is
replace the lens-

Trimming
lastic for
quarters

...and a shot from 'The Autocar' magazine of 21st February, 1958, from an article looking at useful motoring accessories for the period.

They may well have been a fine tool set, but I doubt any modern manufacturer would dare use such a boastful brand name nowadays! If you look closely, you can see the name is even stamped on the handles, so when you're working you can be holding...oh, never mind. 😊

Ed: I hope you have enjoyed reading some of the historical items from the GCC that have been included in recent VB editions. Many of these come from the depths of John Bryant's memory banks, or his vast record & magazine collection. On the next page John outlines his background, and **your** opportunity to assist in building an even greater collection of documents that we can all draw from. Please get involved! This is one thing we can all be doing to help the club while there is no competition.



HISTORY - some short ramblings from John Bryant

Most of you will have realised that I have a great interest in history, and in particular the history of the Gippsland Car Club and then motor sport in general, hence the articles that appear in Valve Bounce occasionally. Some will say that I live in the past, but what I believe is extremely important is that there is a record of the Club from the day that it started. It is too easy to just forget about everything that happened yesterday, and at some stage if the Club disappears into oblivion (and hopefully this will never happen) no-one will ever know that it existed unless there is a record of all Club activities, important decisions etc. Many clubs have club historians – we do not, which is a pity.

At one stage, I was going to write a book about the Club from the day it started, but my enthusiasm for this project has waned as I have a love/hate affair with the Club at times. I also think that if I wrote a book about the Club, it would start at the start, but it would finish at a particular point in time, which would not be the end of the Club – it just means that someone else would have to write the ongoing version of the history, and would there be anyone prepared to do that?

I have collected most of the raw material needed to write such a book – in the Clubrooms under lock and key are the minutes of committee/board meetings from the first meeting of the Club in 1964 – a rich source of information. I have my own collection of Valve Bounce magazines – almost every one that the Club has ever printed – again, a rich source of information. This was relatively easy, as I have been the editor and printer of the magazine for most of the time from the mid 70's onwards. I have my own collection of event times for almost every hill climb and khanacross that the Club has ever organised – again, relatively easy, as I have been the timekeeper at many of these events.

In regard to times recorded in events the results for 1999 show that John Althuizen took out fastest time of day for the events on February 20, May 30 and June 20, whilst Peter Gumley travelled from Wollongong on March 14, August 14, August 15 (strange you might say but we had two rounds of the VHCC two days in a row because of an oil spill that occurred during practice for the VHCC earlier in the year rendering the track unusable - do you remember this??) and for the AHCC in late October. Peter had won the 1998 AHCC at Collingrove in SA and was keen to succeed again – the first visits were for practice and the AHCC was fair dinkum – he did win and set the record which still stands (and obviously will for ever more) of 29.27 seconds. Unless you had access to the records, or you were there, you might not know **these** facts. The year 2000 started off on February 5 with the first Brett Hayward fastest time of day!! **HISTORY!!**

In regard to our monthly magazine I used to contribute some ramblings on a monthly basis, which ran from 2 up to 8 pages – I did this for approximately 35 years. I am sure that these ramblings would give a precis of the Club history and activities during that time period. I could simply copy what I have written during all of that time and I have a book, albeit one that would run to probably 500 pages – who would read it, apart from me??

How can you contribute to this history without having to write a book?? One thing that you could do if you have the material is to contribute to the Facebook page started by Jarrod Bryant – 'Gippsland Park Morwell Hill climb 1960s – 2008.' I am personally not a Facebook person, but I do regularly look at this page, which contains some fascinating material about the Club when it was located at the old track. There are a large number of photographs, many of them from people I have not heard from in many years. This Facebook page is providing an insight in to the Club during those years – **HISTORY!!** Check the page out if you have not already done so, and contribute if you can.

Milner challenges

Cold grey weather and a brand new track layout greeted competitors in Round 3 of the Victorian Hillclimb Championship at Morwell last Sunday.

Star of the day was Charlie Milner in his flying mid-engined Torana Sports Sedan he snatched F.T.D. after a day long duel with fellow Torana driver Gary Williams who finished with second F.T.D.

The absence of current pointscore leader Peter Hollinger allowed Charlie, who was running second outright to pull a full 20 points and bring him equal to Hollinger at 40 points.

With round four only two weeks away, again at Morwell, we could well have a tin top in hot contention for the 1980 title. Gives the "wind in the face" boys a little to think about, eh what?

Many people were caught out by the new track layout and needless to say there was some furious inter-class battles. In

Mel Mason. The Elfin wiped the floor with the others scoring a beat off 42.1 seconds to Mason 44.1.

Open wheelers were very poorly supported. Merv Pearce scored a walkover in the Geener Vee (42.0) while the same applied to John McLuckie's Massoro Motors sponsored Scorpion (41.4) and the Panther BMW of Peter Hudson (43.2).

Sports Cars weren't much better with only four cars entered for Group A and Prod. Sports. The Triton Clubman of Denis Hogan shared equal fastest with the Prod. Sports Porsche of Barry Tierney 41.3 while the thundering SR3 Match of David Richardson hardly got out of first gear on the tight twisty track and only just beat Keith Guille's V8 engined Hillman Imp 42.1 to 42.4.

Touring cars were a little healthier than previous events with the addition of Gemini trio

Col. Spencer, Ken Price and Keith Linnell. Everitt was opposed by John Bryant RX3 in the 2-3 litre class in his 4 door RX3, while Murphy and Jarvis confronted each other in the big tourers, L34 versus XU1.

Bob Jarvis had a new engine and mastered the new track quicker than Wayne Murphy or Gary Everitt. Ken Price bettered the other two Geminis right from the start. Price just nipped the Jarvis XU1 for fastest tourer 41.6 to 41.7. Everitt then followed in an unaccustomed third slot 41.9. Even the scrap for fourth was close — Linnell just scrapped home after a big moment at Trevally loop, from Spencer and Bryant, the latter having his first open competition drive.

As mentioned earlier Charlie Milner and Gary Williams dominated the big sports sedans, but a couple of new additions provided new fire to this popular class. They were Kym Ewart returning in a V8 engined FX Holden and Datsun punter Alan "Superbike" Richards in his lightweight Datsun 1000.

Richards (Datsun) Keith Shaw (Renault) and Neil Pollar (Corolla) were closer than ever before in the small Sports Sedan and the normally dominant Pollard found it hard to break away. Experience told in the end. Victory went to the Corolla driver (43.5) followed by Alan Richards (43.8) and a desperate Keith Shaw (44.4).

With John Raynors ill-handling Mini out on run two after a spectacular shunt, Peter Johns (Cooper 'S') won at a

MORWELL HILLCLIMB

cakewalk 42.3 to Raynor's one only 49.0.

Gary Williams already with second outright was unopposed in 2-3 litres and Milner of course had two many legs for Kym Ewart whose new car, while showing lots of verve, was a little unsuited to Morwell. Lookout when Ararat and Mt. Leura come up!

Barry "Smockey" Gibbons was second to Charlie's Torana with the thundering Ewart FX third.

Yet again a fantastic entry of cars for the street radial series pruned the starting lights. Ian Prain's 2 litre RX3 bettered Bob Pitman's Cooper 'S' while in the over 3 litre class no less

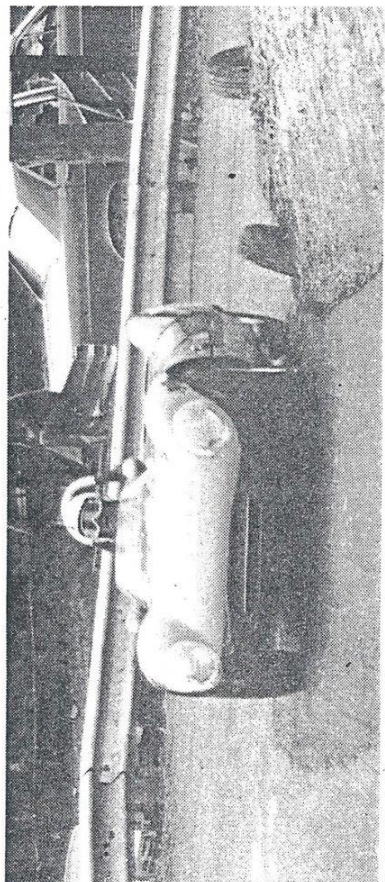
than seven entrants battled for line honors.

The first casualty was Bart Van Dongen's RX3 which brushed the armco at Skyline Corner and from then on a battle royale ensued between L34 of Graeme Stoll, the 4 door 4.2 GTS Monaro of Dave Neenan and the "Rubber Band Brigade" (Mazda's) led by Ken Douglas, Myles Higgins and Ian Freeman and a lone XU1 driver Glen McLeod. Ken Douglas took out a well earned win (42.6) followed by Stoll's L34 now on its third differential (43.5) and Ian Freeman's RX2 (44.6).

A great finish to a busy day. Don't forget the next round is on Sunday July 27. at Morwell again.



● Barrie Tierney's Porsche 911T was the only starter in Group D sports cars, all capacities. Pic. by Peter Rostler.

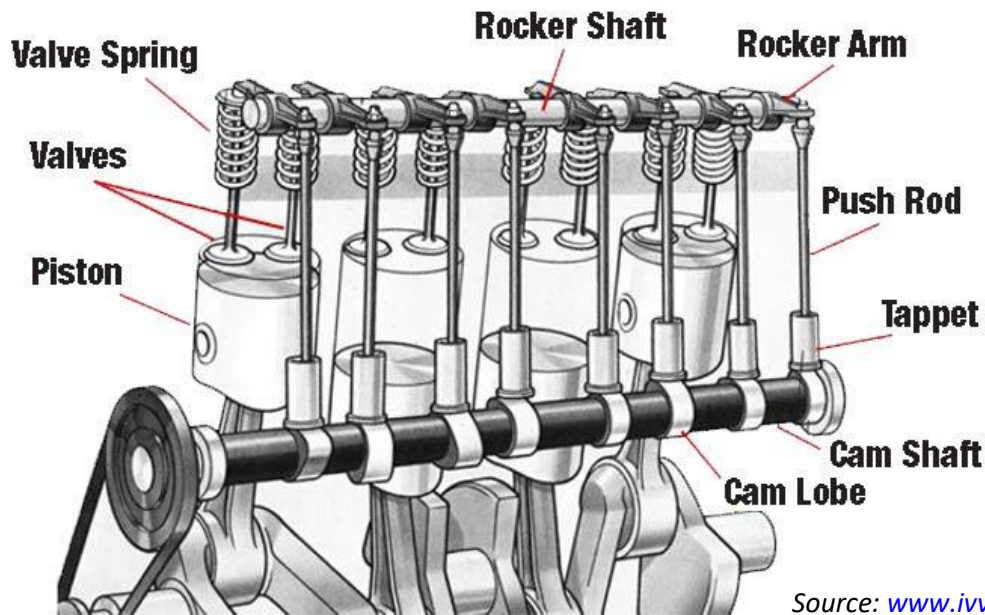


● John Partridge in the Elfin races through the new dogleg at the start of the Morwell Hillclimb — one of the fastest cars on the day. Pic. by Annette Hausdorfer.

Ed: and while we're in an historical mood, here's a reprint from Australian Auto Action from July 18th, 1980 of a hillclimb at Gippsland Park. All sorts of interesting bits here, especially some of the names you may recognize! (Source: Facebook)

Push-rod Valve Clearance Adjustment made easy?....Bill Freame

Following on from the story about valve shim adjustment on OHC engines, I thought it might be useful to do a similar story on adjusting the valve clearances on Push-rod engines. I will be ignoring what valve stem diameters may be used in NASCAR and Top Fuel drag motors (as few of us have access to them?), but instead concentrating on the four and six cylinder engines that many of us grew up with, from BMC, GMH, Ford and Chrysler, to name just a few.



As mentioned in the previous story, for best results you need to know if the engine has a reground camshaft or still using the originally supplied camshaft grind. Also is it using genuine valves or after market supplied valves, as stainless-steel valves can have a higher expansion rate, closing up valve clearances at operating temperature. Using all genuine valves and camshaft, the factory valve settings should be adhered to, and set on a cold engine. Reground camshaft suppliers will usually specify that the valve clearances be set on a hot engine, at operating temperature. This is because they don't know what valve materials, rocker arm material, even changed push-rods are in the engine.

Clearances set hot, at the base circle of the cam lobe will ensure that the valve is smoothly accelerated off and back onto the valve seat, not banged open and dropped back onto the seat, which can cause early onset of valve bounce at high revs. This can happen before the springs are eventually over-powered by the mass of the valve train. Clearances set hot, at engine operating temperature, completely disregard what materials may have been substituted in the valve train.

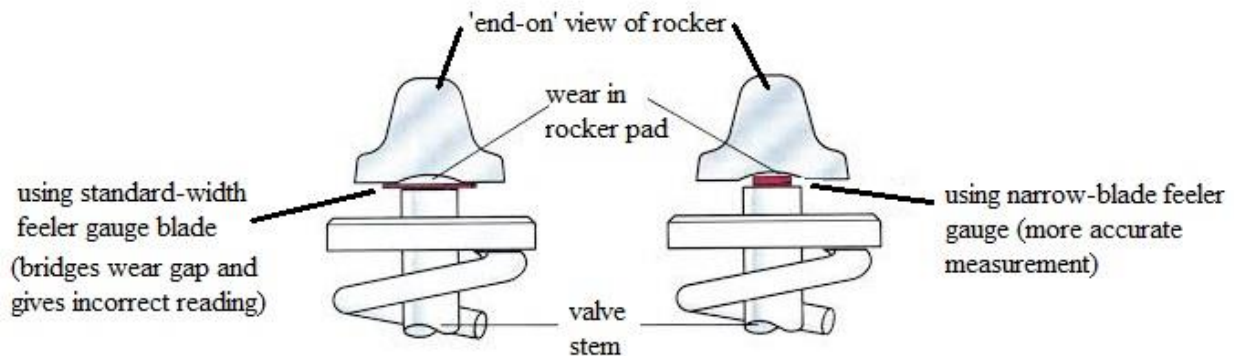
I am only considering solid lifter engines, where the cam follower has no hydraulic components involved. The follower face that rubs on the cam needs to be smooth and free from defects. I was tempted to say flat but some followers are very slightly curved to ensure it rotates in use, while others have a very curved surface and must not



Source: www.howacarworks.com

rotate, Austin 7 as one example. The tips of the rocker arms, where they push on the valve stem end also wear, which if not resurfaced present problems when trying to adjust the clearances, as usually most feeler gauges are quite wide, much wider than the diameter of the valve stem. You may wish to narrow the tips of the rockers, so there is no lip to confuse the feeler gauge setting, or you could sacrifice one or two feelers by narrowing them - your choice!

(Ed: this is the situation Bill is describing – the diagram on the left shows a standard-width feeler gauge bridging the worn recess in the end of the rocker arm; the diagram on the right shows how a narrowed feeler gauge can fit into the recess, providing a more accurate measurement.)



Source: adapted from www.uniquecarsandparts.com.au

A word of warning: most rocker shafts use coil springs to locate the rockers against the rocker posts. Narrowed rocker arm tips, when in valve bounce, could possibly move far enough sideways, against the spring pressure and push on the valve spring cap, instead of on the valve stem tip. This could release the valve collets with disastrous results!!! Replacing the rocker shaft springs with tube spacers avoids that possibility but presents difficulty when installing the rocker shaft.



Typical pushrod camshafts (FIAT 600D/850), with rocker shaft setup in centre showing spring-retained rockers and worn tips on end of rocker arm.

(photo: Bill Freame)

Some engines require the rocker shaft to be removed for a re-torque of the head bolts. That is always an ideal opportunity to inspect the condition of the rocker tips and also any wear of the rocker shaft. It is also always a good idea to pre-check and re-tension the rocker shaft mounting bolts, before you begin setting the tappet clearances, regardless of whether you have removed the rocker shaft or haven't disturbed it.

Just as I recommended with OHC engines, I find it is always a good idea to ensure the valves are closed before removing the spark plugs. That requires the plugs to be only removed in the engine firing order, which means rotating the crankshaft during the plug removal process, in the engine firing order. On level ground, with the top gear engaged, you can roll the car forward by pushing

against the compression, perhaps with a gentle rocking action. Personally, I prefer to leave the spark plugs in the engine so there is far less possibility of dislodging any carbon.

OHC engines enable us to see when it is possible to measure the valve clearance on the base circle of the lobe. With pushrod engines the camshaft is buried within the body of the engine, well out of sight. With four-cylinder engines I use the '9' system, while with six-cylinder engines I use the '13' system, to find when the follower will be on the base circle of the camshaft.

Let me explain this: it's the 'Add One' system. With an eight-valve, four-cylinder engine, we will start by numbering all the valves, one to eight. With the very first valve at the very end, valve number one, perhaps an exhaust valve, this will be fully closed, with the follower on the base circle of the camshaft lobe when the exhaust valve at the other end, valve number eight, is fully open. Thus, using the '9' system, when valve number eight is fully open, taking 8 away from 9 gives us number 1, the actual valve that is ready to have the clearance set. Therefore, whatever valve number is fully open, subtracting its number from 9 (or 13 for a six-cylinder) will tell us which valve clearance to set. I must point out that it will always be an exhaust to exhaust, or inlet to inlet in this calculation. When that clearance has been set, rotate the engine until another valve is fully open and again use the '9' or '13' system to find the valve waiting to have the clearance set. This makes setting the valve clearances very easy. I do them in firing order and I use a marking pen to indicate the valves that have had their clearance set. I always go around at least for a second time to make sure I am satisfied that they are all set at their correct clearances.

Something I was shown almost 40 years ago you may find interesting. I was setting the cam timing on a four-cylinder pushrod engine I was building for my rally car. I had installed a symmetrical regrind of 30/70 - 70/30, had a mounted degree wheel on the flywheel and two dial indicators to check TDC plus the inlet at full lift. This was when I was still at Repco and I had the very good fortune to work with Rogero Giannini, an extremely smart engineer who had settled in Australia with his family to escape the political and terrorist turmoil in Italy. He watched my antics for a while as I checked and rechecked my careful measurements. Eventually he enquired if I was certain that the cam was set correctly. I assured him I was certain it was set very accurately, slightly advanced to allow for chain stretch. He offered the following simple confirmation check for a *symmetrical* grind camshaft.

At TDC, with two valves rocking, (inlet begins opening 30 degrees before TDC and the exhaust will close 30 degrees after TDC) set the valve clearances on that cylinder to the same setting of feeler gauge: the thickness is immaterial! Yes, the valves were off their seats and you are now closing them. Then, rotate the crankshaft one full rotation, stopping back exactly at TDC again. Now we have the cam followers on the base circle of the camshaft and the valve clearances are massive, usually somewhere between 2 and 4mm. Do not be distressed, we have done this as just a simple check of our cam setting. Now we are back at TDC again and the camshaft has rotated half a turn, using our gang of feeler gauges, measure the valve clearances of these two valves. If the feeler measurements are not identical your cam is either advanced or retarded, but it is not correct! This will not tell you just how much you are out, just that you are wrong. When satisfied with the setting of your camshaft, don't forget to reset the valve clearances back to the required feeler gauge gap again. However, if you have a non-symmetrical grind, ignore this final paragraph as it is not a check that you can use for setting cam timing at this time.

As an aside, advancing the camshaft will give you slightly more bottom end, acceleration and sharpen the throttle response. It will also stay sharper as the timing chain or rubber belt stretches over the time between rebuilds. Retarding the camshaft will give you a little bit more power at the top end of your rev range and an increase in RPM. That's useful information to consider if you are racing a Formula Vee, Formula Ford, or HQ because they all have a designated standard camshaft.

Driving, old-time. -Ian Maud

With the relaxation of COVID-19 lockdown restrictions recently, I thought I'd take my 'classic' for a fun drive, rather than just a jaunt to the shops for essential supplies. The vehicle of choice is a 1950 Riley RMB, 2 ½ -litre. (For historical reasons, the English in that period referred to these vehicles as '1 ½, 2 ½, etc – not 1.5, 2.5: maybe the decimal point didn't successfully migrate across the Channel until later?) I've owned this vehicle for a small number of years now, and it's the focus of a progressive 'tidying' rather than restoration. Anyway, the point is, it's an older car, and maintained to stay that way, not dragged into the next century by replacing items with current technology. This brings forth issues that most owners would rather not experience, but I see as part of the charm (cough, splutter!) of owning a 70 year-old vehicle.

Now, on the day in question the morning was cool but fine...until I backed out the Riley, upon which the skies opened and we had a typical Gippsland shower, followed by a grey drizzle that looks like it had set in for the day, if not the season. I started to walk away, then, humbled by the philosophy that I buy cars to be used, not to become shed sculptures, I thought "bugger it" and returned. It needed a clean, anyway!

To get underway is one of the rude awakenings to owning an older car. Yes, you can just start and go some days, but because 'old' and 'British' seem to unite in a mischievous synergy of sequential 'things to attend to,' I first had to clean the distributor cap and points. No, this is not a normal step in starting: my Riley has decided that now that I have cured several of the obvious issues, it will opt for the weird and wonderful – in this case, it's somehow bringing oil up the distributor shaft whereupon it collects inside the cap, and apparently drips on to the points. When it gets bad enough, the car misfires. Or, won't start. This has provided ample opportunity to meet interested onlookers after, for example, a cuppa stop in a local town, when the bonnet has had to come up. There is no better way to attract new acquaintances than to open a bonnet of an interesting car in a populated area – they come like blowies to a BBQ! Anyway, ignition cleaned, bonnet down, ignition on, choke out (choke? What's that? As probably asked by more youthful drivers), ignition retarded a little (can do this from the Riley dashboard), a prayer said to the Gods of Lucas, press the starter button, churn for a while and hopefully it kicks off, as it did on this day.



Headlights set to high glow, I elected to head up into the Strzeleckis (now, there's a challenge for the spell-checker!) and wind my way to Mirboo North for a coffee. This is a hilly, narrow, winding forest road that in a well-handling sports car will generally captivate and encourage you to an enthralling and rapid blast, twisting fluidly amongst the Mountain Ash giants and the wet ferny glades. Recall then, that I am in an aging, heavier vehicle with dynamics applauded in its day, but now in their pensioner years.

Firstly, it was raining. The wipers in the Riley are, I believe, at best a decorative item. About half the length of a modern Japanese hatch wiper arm, they progress at an arthritic pace and occasionally

manage to relocate water to one side of the small screen. As the Riley comes from that penny-conscious era when heaters were an optional extra, and the original purchaser saw fit not to tick that box, my car has no heater and thus no demister. Correction, it has one, but it's the scrap of clean rag I carry in the dash, the effectiveness of which is determined by the haste of its operator. As the Riley also has heavy steering, and the road is rarely straight, demisting is also a function of hand availability.

Next item to consider is the tyres. In keeping with the age of the vehicle, it is shod not with radials, but with buttock-clenching moment-generating cross-pplies. Modern cars have evolved to the point where you largely *think* them around corners: driving cars such as the Riley requires forward planning and judgement, which is one of the reasons I like to go motoring in it – when it suits. Having scrubbed off enough speed with the good-in-their-day brakes, there is a concentrated double-declutching and matching of engine revs to allow uninhibited selection of a lower gear from the synchro-starved 'box: you then heave on the helm, get the front end turned in and hold on while the rest of the QE2-like mass argues forcibly with inertia and decides to follow, accompanied by the sound of scrubbing tyres (cross-pplies scrub at almost any speed!) and a noticeable dose of body roll. All going well, things straighten and the car moves on before the need arises to repeat all this again. Luckily, the 2 ½ is a torquey motor and will pull the car around bends quite happily, if more sedately, if left to its own stately means.

Yes, I did make it successfully to Mirboo North, and the Riley behaved itself and started easily for the return journey. No matter if it didn't: I now keep the necessary gear under the bonnet and, well practiced, can do the cleaning trick in about 2 – 3 minutes as needed. Still, attending to this annoying matter is on the top of my next fixit list.

If you've never driven a car from pre-60's, it isn't quite the same as what you've become used to. Driving an older car such as this takes patience, judgement, prediction, a bit of knowledge and a focus on driving, rather than just getting there. While it can be trying on occasion, for most of the time it is practicing these exact skills that makes going somewhere in the Riley more entertaining than 'a modern.' Perhaps the next time you see someone driving an older car you might consider being less upset at the reduced pace, and instead be impressed that we all apparently got around in this manner not so long ago!

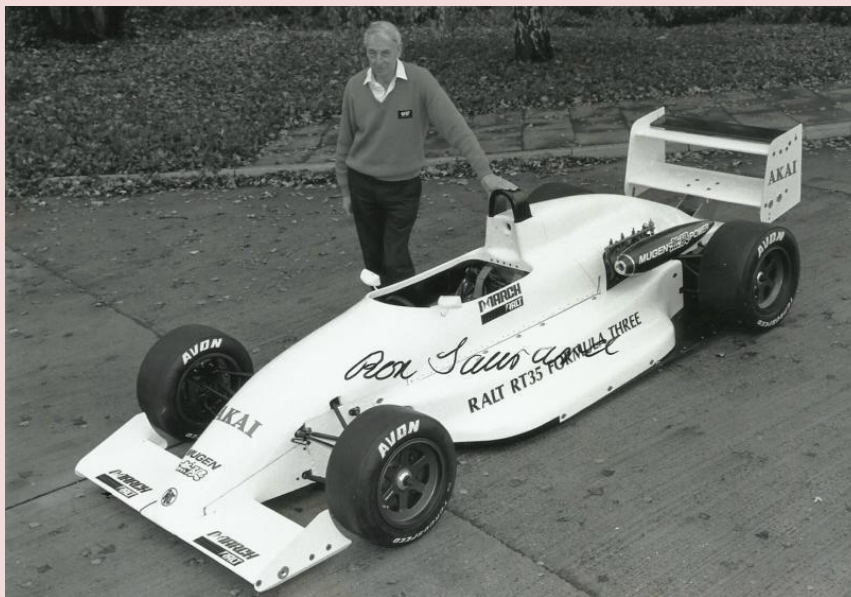


Ed: Just prior to the last edition of VB the world was mourning the loss of Stirling Moss: this month it was the turn of the highly influential and skilled engineer Ron Tauranac to leave us. As you are probably aware, Ron was in a partnership with Jack Brabham, creating a Grand Prix car that would enable Jack to win his third World Championship, and become the first, and possibly only driver ever to win the Championship in a car of his own (and Ron's) design. Tauranac would also become famous and highly admired for his own cars, many of which we recognize today as RALTs.

Chris Martin was a colleague of Ron's, and wrote this insightful dedication to him for the August 2020 edition of Motorlife News Magazine, a publication of The Australian Motorlife Museum in Kembla Grange, NSW.

(If you haven't been to the museum, it looks like it has an excellent collection and is well worth a visit.)

VALE RON TAURANAC AO



Ron left us July 17th aged 95, not a bad innings but what a legacy he left for the world of motor racing.

Born in England in 1925 His father brought the family to Australia when he was three and after first staying in Melbourne, then Newcastle they settled in Fassifern near Lake Macquarie where he grew up building boats for his mates and got a job aged

fourteen with the Commonwealth Aircraft Corporation in Sydney designing jigs and tools and continued studying at technical college in the evenings.

He also joined the Air Cadets and managed to get accepted for fighter pilot training in Harvards during the war although he did not see action. By the late 1940s he was building his own racing and hillclimb specials with his brother Austin and their combined names created the RALT name he would use thereafter.

Ron was known as quite a handy driver having won the 1954 NSW Hillclimb Championship and by now was known as a serious competitor by Jack Brabham. They had been rivals on track but when Ron started making parts for Jack they started a partnership that would result in winning at the highest level. Brabham was already winning in Formula One with Cooper cars when he asked Ron to fly over to England to join him in 1960 and after improving the Coopers as best they could they set up Motor Racing Developments to build Brabham cars.

With Jack driving and Ron designing they soon had enough success to attract many customers for their single-seater and sports cars and when Brabham won the Formula One World Championship in 1966 he became the first, and still only, person to win in a car of his own name.

More successes followed until Brabham sold his interest in the team to Ron at the end of 1969 (so briefly becoming Ron's employee) but Jack then retired from racing and in 1972 Ron agreed terms to sell the outfit to Bernie Ecclestone. Some freelance consultancy work followed until Ron's wife Norma found he was at a loose end and getting in the way at home, so he decided to revive the RALT name and set to building cars for various formulae with much success.



Left: Ron shares a joke with Murray Walker at Silverstone in early 1991 between skiing accidents.

He sold RALT to March Engineering in 1988 but stayed on as a consultant for a few years. It was during this time that I had the good fortune to work for him building many very successful Formula Three cars that won races all over the world. We were well paid for this too as there was a bonus of £13 paid to each employee every time a RALT won a championship scoring race and we used to rush to read the faxes on the notice board every Monday morning to count how many wins we may have had in British, German, French, Italian, Japanese and even Swiss F3 races, it was usually all of them (the Brazilian and Swedish series did not count as to keep costs down these were restricted to using older cars). I learned much from Ron at this time, he was known for having little patience and some strict mechanical principles; "you only turn the nut, not the bolt!" and never had time to draw anything, he just told others what he wanted. I had a tough time shaping (by hand) the improved bodywork for the 1991 Formula 3 car, the RT35 as Ron had an idea to improve the aerodynamics and would try to describe where he wanted the curves to go while I was wrestling with a bucket of resin and filler. We got it done to his liking in the end and when a model was sent to Southampton University wind tunnel on March management's instruction it proved the exact results Ron had predicted; "I told 'em, they could have saved some money and not bothered". He must have liked my work though as he then got me to do a similar job on the RT23, the updated F3000 car.

Early in 1991 Ron took time off from the factory to go for his annual skiing holiday in the Swiss Alps. That was cut short when he managed to break a girl's leg with his nose! He claims she was learner who had strayed on to the faster downhill pistes reserved for experienced skiers only when he was flat-out and head-down and could not avoid contact. Impatient as ever he discharged himself from hospital and returned to work with two cartoon like 'panda' black eyes. He had to go to a local hospital a few days later to have his cheekbones reset and was back at work again the next day. Meanwhile I had left RALT to spend a season working in France and

next met him at the Pau Grand Prix the following May. He had come over to help set up the Formula 3000 car that Jack's son David Brabham was racing that season but was somewhat hampered by having an arm in a sling. "What now?" I asked. Well feeling short-changed by only having had half of his skiing holiday he had gone back for the week he thought he was owed and managed to break a collar bone in another high-speed accident.



John Macey's Brabham BT18 which he kindly loaned for our Expo display last year is a typically efficient Tauranac design and this model was very successful in international Formula 2 races in the 1960s.

Ron did not agree with March's idea that Formula Three cars should have carbon fibre chassis as he felt they could not be built sufficiently engineered down to the price necessary to sell to customer teams and again when he was proved right in the early 'nineties he stepped away from the company.

The following years saw many other projects including consultancy work with other F1 teams and designing a car to be used for Honda's racing school in Japan.

He moved back to Australia after Norma passed away in 2002 and settled for while in Bondi where even in his eighties he would swim laps of the pool every morning. Soon after I moved to Australia in 2003 some friends of Ron's including racing commentator Will Hagon organised an 'Evening With Ron Tauranac' at the Canada Bay Club and I went along. Ron was never much of a talker and if they expected him to regale the audience with some interesting stories they soon found it hard work. After a brief film and some commentary from Mr Hagon Ron was happy to answer questions but needed persuasion to go into much detail about his long career and racing successes. Things livened up a bit when it was thrown open to the audience to enquire further or add comments at which point I spoke up to remind everyone about Ron's helicopter. Met with a blank look and the answer "what are you talking about? I never had one of those, an old

‘plane yes, it was Harvard trainer, but never a helicopter” I had to explain. When I first started work at RALT I was warned by more than one person about the ‘helicopter’ which was what everyone called Ron’s habit of waving his arms around above his head when he lost his temper with someone; it seems everyone was aware of it except Ron himself; “I never knew that” he replied, apparently nobody had had the nerve to let him in on the joke.

He was awarded the Order of Australia in 2002 and inducted into the Motorsport Australia Hall of Fame in 2017. Many members will of course remember Ron came to Motorlife in June 2010 with Sir Jack at the official opening of the Brabham Room.

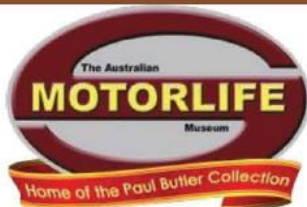
Sir Jack Brabham signs yet another autograph while Ron talks to visitors in the foyer at Motorlife in June 2010.



Ron had stayed fit and active well into his ‘nineties and only moved north to Sunshine Coast to be near his daughter in the last couple of years. A statement from the family said; “In keeping with his ‘quiet man’ reputation, a small private funeral service will be held for family and close friends. His life and achievements will be publicly celebrated in the coming weeks with a memorial service in Sydney, details of which will be confirmed in the near future.”

R.I.P. mate.

-Chris Martin



Patrons: Pedr Davis OAM, Jeremy Morris SC, Wayne Gardner AM & Warren Brown

Integral Energy Recreation Park
94 Darkes Road, Kembla Grange 2526
NSW Australia
phone: (02) 42 614 100
email: admin@motorlifemuseum.com
web: www.australianmotorlifemuseum.com
FB: www.facebook.com/TheAustralianMotorMuseum

Tax Exempt Charity

N.S.W Auth. To Fundraise: CFN 10468
ACN: 001 673 070 **ABN:** 50 254 219 543

Proudly sponsored by the



Ed: I found this amongst some old magazines I had been given years ago: the program for the FIRST race day at Calder!

The race entry list makes interesting reading...many well-known names are listed, together with some fascinating machinery. These were the days when many spectators followed open-wheeler racing, and touring cars were a support act!



The following is an article I came across in the October, 1958 edition of Sports Car World. I think it adds to the article if you can put into context: in the year 1897, automobiles – as they were known then – were in their infancy. Petrol-engined cars were uncommon, with steam and electric cars racing to establish themselves in the marketplace. The famous T-model Ford did not appear for another eleven years, and would be exhausted at a best speed of around 70kph. Roads were few, often in poor condition, and certainly not sealed. Horses were the transport for the well-to-do, and few people had seen anything move faster than a horse at speed. Into this time came a remarkable pair of brothers with an astounding flair for engineering: if events had differed only slightly, they would be household names by now. Read on!



THE *Greatest*

It wasn't much to look at, the Stanley, but from a standstill it could hit 50 m.p.h. in nine seconds — which is faster than a lot of modern sports cars. Yet it burned kerosene and had only 32 moving parts.

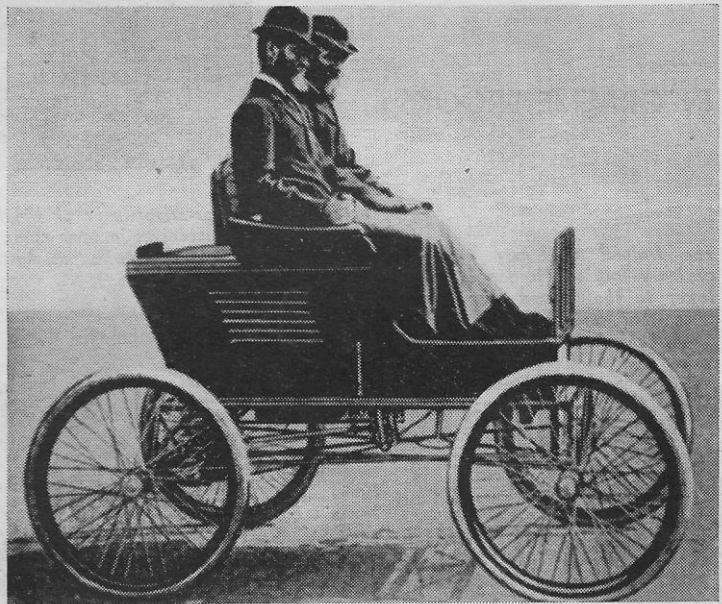
TWO cars pulled up waiting for the light to change. One was a shiny, swept-back, jet-inspired 1957 Chrysler — 325 horsepower, tops for a U.S. production car. The other car was a 17-year-old Packard — horsepower unknown. Its lines were stately and vertical rather than flowing. Only when the light became green did the Chrysler driver deign to glance at the other car. What he saw seemed appropriate, considering the car. A quiet-looking gentleman, about 60, returned the look and nodded his head, as though saying, "After you, sir."

The Chrysler driver seemed anxious to get away fast. He floored the accelerator and roared off, all 325 horses pulling in smooth, steady acceleration. Then a strange thing happened. After the Chrysler had gone about 50 yards, the old car began to move — not like an old car at all. The Packard shot forward as though it had been fired from a cannon. In another 50 yards the old car zoomed past the startled Chrysler like a jet passing a kite. How come? The Packard was powered by a Stanley Steamer engine — horsepower 20, age 46 years.

The Stanley Steamer was one of the most powerful cars ever built. It could accelerate from 0 to 50 m.p.h. in just over nine seconds, driven by a tiny two-cylinder engine churning 250 brake horsepower.

Had it not been for a small bump in the otherwise smooth, hard-packed sand at Ormond Beach, Florida, in 1907, the whole history of automobiles might be radically different today. It is possible we would be driving a light, economical steam car which could out-perform anything else on wheels.

The race fans had waited all morning for this event. The day before, the world's speed record had been equalled by a Stanley



The two bearded gentlemen aboard this horseless carriage are none other than the Stanley twins in their very first steam car.

car that was not half opened up. Today, the same car was going to be driven wide open. There were a dozen rumours: The Stanley might explode; it was too fast for the course; the driver had been promised 10,000 dollars if he broke his record by a big enough margin.

The sleek, streamlined racer moved proudly toward the starting position. Nine miles up the beach the "Rocket," as it was called, took off from the flying start permitted by the rules.

One spectator peered through binoculars, "Here he comes!" he yelled.

The crowd roared and strained to catch a glimpse of the Stanley, for they could hear no engine sound. Then it flashed past the starting line with a *whoosh*, spew-

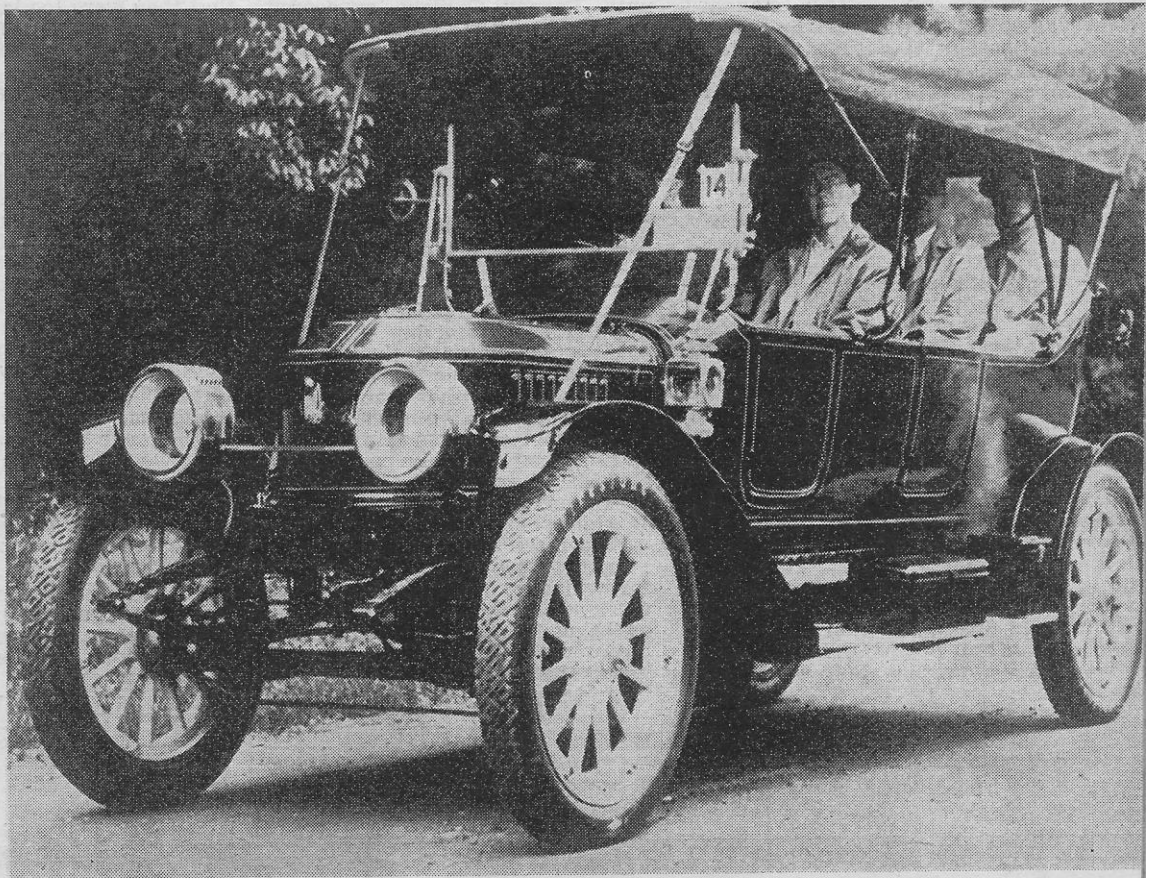
ing a long thin cloud of steam, travelling faster than any car ever had before.

The tiny, sharp-nosed projectile reached 197 m.p.h. as it crossed the starting line. It was still accelerating 100 yards down the beach when something went wrong. The crowd gasped as the "Rocket" hit a small bump in the sand and zoomed into the air; a gust of wind carried the little car ten feet off the ground. It sailed for 100 yards before twisting slightly in the air and slamming into the hard-packed sand. As the racer broke in two, the heavy boiler tore loose and rolled down the beach, spouting steam like a giant geyser for nearly a mile.

Fred Marriott, the driver, had been thrown clear and lay un-

From GEORGE BALASSES

CAR EVER BUILT



This beautifully restored early model Stanley steamer belongs to a member of one of the many steam car clubs in the United States.

conscious on the sand. A crowd gathered around him. "Do something, doctor," two bearded figures said almost simultaneously. A spectator who had just come up thought he was seeing double, for the two men were identical twins: F. E. and F. O. Stanley, the inventors of the Stanley Steamer.

"Don't worry," the doctor said. "It's a good thing we got here so fast." Gently he eased Marriott's right eye back into its socket.

When Marriott regained consciousness, the doctor told him, "You're a lucky fellow, Fred. Soon as those cracked ribs heal up, you'll be good as new."

The Stanley brothers were relieved, "Godfrey mighty!" F. E. exclaimed. "Fred's even tougher than the Rocket!"

Marriott grinned ruefully through his pain at the mild oath, for that was the only sure way of telling the Stanleys apart. F. O.'s favourite exclamation was a leg-slapping delivery of "Gee cracky!"

"Maybe if we'd spotted that heavy boiler more up front, instead of behind me," Marriott said, "I'd be still travelling. She just reared up like a bucking bronco when the front wheels hit that rough spot in the sand . . ."

F. E. Stanley nodded. "I reckon it's just as well things happened this way. We know we got the fastest car in the country. So why race any more?" His brother agreed.

Though the Stanley never raced on beaches thereafter, it continued to beat all comers in hill-climbing

and cruising-range competition. At the time the Rocket had been in production for only ten years, yet it had compiled some amazing records, only a few months before cracking up, Marriott broke the two-miles-a-minute barrier with an eye-popping 127.6 m.p.h. on the same Ormond Beach course. And this was done by a car that weighed 1,600 pounds and contained only 32 moving parts, including engine and wheels. Its small 35-pound, two-cylinder engine, rated at 30 horsepower, could deliver 250 with a full head of steam. The pistons had a $4\frac{1}{2}$ by $6\frac{1}{2}$ -inch stroke and turned a lazy 350 revolutions in a mile. With so much performance from such a simple mechanism, it is no wonder that the Stanley Steamer was the

THE GREATEST CAR EVER BUILT

best of all the 125 brands of steam cars produced in the United States.

Several months after the accident, the Pennsylvania Railroad tried to horn in on the Stanley's record. A special K-4 locomotive was carefully souped up for a fast run on a straight and level stretch of track, scientifically selected in Ohio.

To make it look authentic, the locomotive pulled four standard passenger cars. With the best of all possible conditions, the huge locomotive managed to reach 122 miles per hour, still short of the record established by the diminutive steam car.

What kind of men were the inventors of this phenomenal racer? The Stanleys were born in 1849, in Kingsland, Me. F. E. Stanley was mechanically minded, but F. O. preferred books and studied to be a schoolteacher.

F. E. invented with a practical eye. After devising a home generator for illuminating gas, some early X-ray equipment and a dry photographic plate, he decided to go into photographic dry plate manufacturing. He prospered and by the time he was 36, he had saved 50,000 dollars, with which he expanded the business.

F. O. finally gave up school-teaching and went into partnership with his brother. They made a lot of money together, but they grew bored, and decided to give up the business. Eastman Kodak, then an infant business, bought their patents on the photographic dry plate.

At the age of 48, the Stanley brothers decided that the new automotive business needed some real ingenuity. Steam power seemed the most efficient. A year after their curiosity was aroused, they had a car on the road. From then on the Stanley Steamer proceeded to smash all records.

Fred Marriott's official record stood unchallenged for four years until Barney Oldfield, sponsored by Henry Ford, hit 131 m.p.h. Oldfield was driving a giant 200-horsepower job that was several times as heavy as the Rocket.

During the Stanley's record-smashing heyday, race officials often showed their displeasure at the Steamer's monopoly on victories. On two occasions they actually conspired to keep the Stanley from entering a race. On the day before the Rocket broke the two-miles-a-minute record, the race committee furtively changed the announced starting time. The officials waited until the Stanley brothers had gone to bed, then they informed the rest of the competitors that the morning runs would start at seven a.m. instead of nine as previously posted. For an alibi, they posted an "official" notice on the bulletin board late at night.

Next morning, at seven a.m., the Stanleys were sitting beside their car, whittling unconcernedly. Their racer proceeded to make history by being the first car to go more than two miles in one minute. What the conniving officials had forgotten was that the Stanley

brothers were not only early-to-bedders, but also early risers.

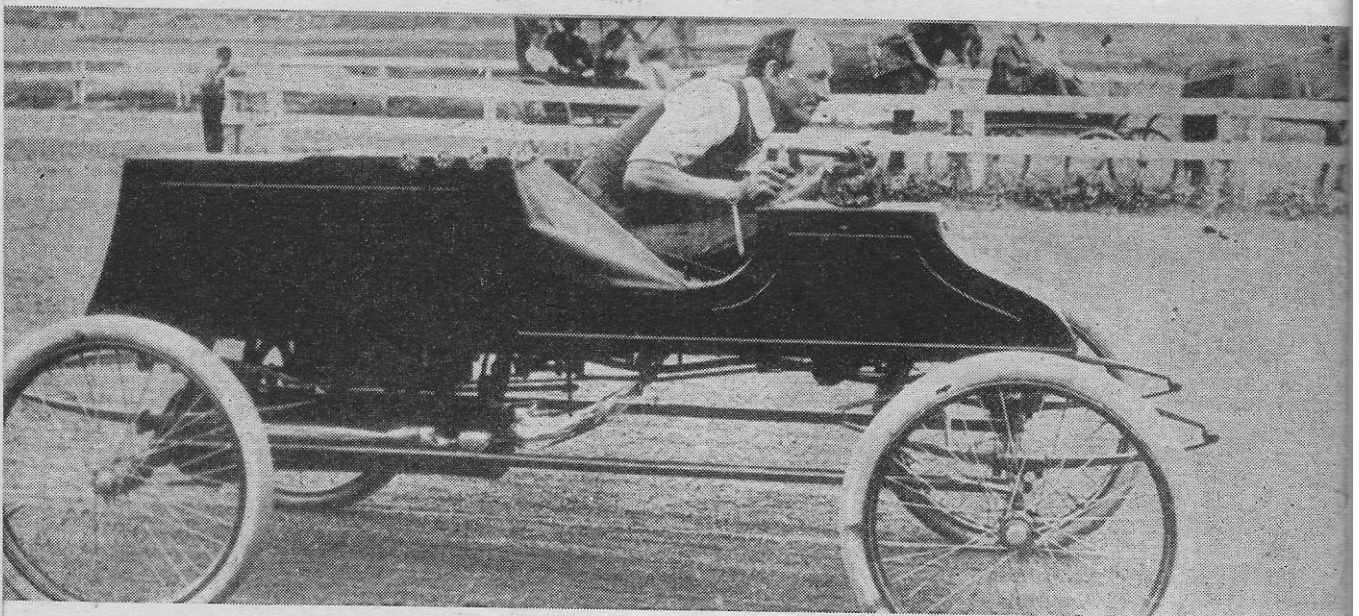
Another occasion where race officials tried to keep the Steamer out of the picture was the "Giant's Despair Hillclimb" in 1909. For this race the Stanley brothers had entered two cars, a 20-horsepower model and a 30. This time the committee sent a telegram to the Stanley's hotel informing them that they were too late to register. In short, they were not eligible to compete. The stubborn Stanleys told Fred Marriott to drive one of the cars and the reserve driver to take the other.

Fred Marriott knew more about operating steam cars than anybody, including the Stanley brothers. He had been a bicycle mechanic until he met the Stanleys in 1898, just after they had built their first Steamer. From then on, Marriott became almost a third brother to the Stanleys. After his crack-up in 1907, the Stanleys forbade him to drive in speed trials, but they didn't object to hill climbs.

Marriott stayed with the Stanley Steamer Works until the company went under. Then he retired, ran a garage specialising in Stanley Steamers. Until 1956, when he died, a Stanley Steamer owner could be sure of expert advice from Marriott.

One of the last visitors to Fred Marriott's garage reported that the old man, nearing 80, still held himself erect and could diagnose and cure steamer ailments as quickly as in 1906, when he was

Fred Marriot, the courageous racing driver who helped to make the name of Stanley famous, at the tiller of a very early racer. He was once almost killed while attacking the World Land Speed record.



king of the racing world.

Arranged on the walls of Marriott's small office were misty photos of bygone autos, compact and clean-looking. One photo showed a rugged-looking, moustached young man sitting in a cigar-shaped vehicle. The caption under the photo read: "The Stanley Rocket. F. Marriott, driver, first man to travel two miles in a minute. Ormond Beach, Fla."

Whenever he had visitors, Fred Marriott would look fondly at the photo. "It was a sweet car in its day. The Stanley brothers designed it and I built it—just a few yards from where we're sitting."

Marriott liked to reminisce about the Wilkes-Barre, Pa. "Giant's Despair Hillclimb" in 1909:

"I was driving the 20-horse model and the other driver had the 30. Even though we were technically not in the race, we did pretty well. If you've ever seen the course—they're still holding races there — you'll understand what I mean when I say it was rugged. It was only one and a half miles, but about the roughest stretch of twisting, uphill road I've ever seen.

"Well, when the race started, we hung back and let everybody get started. You never heard such noises. Lots of backfiring and big clouds of dirty black smoke. Several cars stalled out, and by the time drivers could crank them back to life, the cars were out of the race. About 20 of them managed to get around the first curve. Then we started. Those were the days before we had the steam condenser and recirculator, so we took off in a light cloud of steam, like a locomotive.

"Well, sir, we won first and second. Time was one minute, 45 seconds. The other driver shoved back his goggles and raised his eyebrows before he spoke to a Stanley mechanic. 'Have you got a cup of coffee handy? I think we have a little time before the official competitors come in.'

"And, wouldn't you know it, someone produced an old thermos and poured two cups. One for me and one for the other driver. We got about half through the coffee by the time the first official car crossed the finish line."

Every time the Stanley won a race, it was like a slap in the face to the builders of the much more complicated gasoline-driven car. A Stanley did *not* have a flywheel, clutch, transmission, rear axle gear arrangement, ignition system, timing unit, water pump or complicated lubricating system. Even without all these parts, he Stanley offered a far-advanced form of power brakes. To halt a Stanley fast, the driver merely pressed the reverse pedal on the floorboard. Sometimes the car stopped so fast

that the driver kept on going. Once in reverse, the car would go just as fast backwards as it did forwards.

In 1906 the battle for survival between steam and internal combustion was still in full swing. It was being fought on race courses from the hard sand beaches of Florida to the specially built Vanderbilt Raceway on Long Island, New York. For endurance tests there were rough mountain hillclimbs.

Practically from the moment it was first built, the Stanley Steamer made news. In 1896, the Stanley twins had attended a fair at Brockton, Massachusetts, where a steam horseless carriage put on a demonstration. With a large crowd on hand, the unfortunate steamer broke down before it had gone one lap around the trotting track.

F. E. Stanley, watching the disappointing run, turned to his brother and friends. "Well, boys, before another autumn passes I will show you a self-propelled carriage that will go around that track not only once, but several times without stopping!"

Since he had made his statement in public, F. E. Stanley proceeded to back himself up. He and his brother studied a few cars in the field. They experimented and changed designs for a year. Then in July, 1897, they began to assemble the first Stanley Steamer. By mid-October the car was ready for a run at the same fair grounds. The Stanley Steamer zipped around the track easily, without mishap.

But even after the success of the first Stanley Steamer, the brothers didn't officially enter the auto business. They considered their car a hobby and took orders for only three cars. What really pulled the Stanleys into car building was the first automobile show held in New England in 1898.

There were only four cars shown in Boston's Mechanics' Building. Two were gas cars, a De Dion from Paris and a Haynes-Apperson from the U.S.; the third was an electric car, and the fourth was a steam car built by George Whitney of Boston. The Stanley brothers had not entered a car. Actually they owned only one, having sold the other three.

A newspaper sports writer had heard of the Stanley Steamer run at the Brockton Fair so he arranged to have the Stanley compete in a race with the other four, to be held after the exhibit closed. The course was a 1/3rd-mile track at Charles River Park, Cambridge, Mass. As the crowd of 5,000 avid car fans watched, the Stanley Steamer sped three times around the track in two minutes 11 seconds, for a new world record of 27.4 m.p.h. F. E. Stanley continued driving round the track for

another mile, finishing the two miles at an average of 22.2 m.p.h.

Immediately 100 prospective customers put in their orders for the amazing steamer. Thus the Stanleys were forced to start building cars. In their first full year, the Stanleys sold 200 cars, being the first manufacturer to make automobiles on a production basis.

With the same first model, F. O. Stanley set off, with his wife as passenger, to climb Mt. Washington. This was no mean trick; no other automobile had done it before. The path led ten miles up a tortuous 12 per cent grade. Stanley required two hours and ten minutes. Within five years, however, he had lowered the time to 27 minutes.

In the same year the year-old Stanley Steamer broke the world's speed record, the little car also put on a phenomenal hill-climbing demonstration. The track officials had built grades of five, ten, 15 and 20 degrees. F. E. Stanley didn't think the steepest hill was any challenge. "Would you mind," he asked, "building a 30 per cent grade so we can have a little fun?"

To forestall accidents caused by cars running out of power halfway up a hill, car-catchers were spotted along the way. Their job was to assist cars to backdown gently when they stopped short.

When the Stanley's turn came, F. E. said, "You can take all the men away from the hill. My car won't need any help." And then, just as though he had done it a hundred times, F. E. disdained the ten-foot start. He drove to the foot of the hill, stopped, then accelerated straight up the hill without a tremor. The crowd went wild with enthusiasm. After F. E. drove down the hill, spectators crowded around and asked dozens of questions. The brothers finally left with 200 orders.

As word spread about what a Stanley could do, there was occasional exaggeration but usually more truth than fiction. For instance, a story was told from Maine to Florida that the Stanley brothers had a standing offer of 1,000 dollars to anyone who could drive a Stanley Steamer for three minutes with the throttle wide open. F. E. claimed that this story got started through a driving error. A new car buyer was anxious to try out his steamer. He started up the boiler and waited for steam pressure. He opened the throttle a bit and nothing happened. Then he gave it a little more; still no movement. Finally, he checked his emergency. It was on. When he eased off the emergency, with the throttle half open, the car shot forward, bursting through a two-inch wall.

(Continued on page 64)

THE GREATEST CAR EVER BUILT

(Continued from page 25)

In 1905, Fred Marriott and his mechanic staged a one-car assault on a speed record. Citizens of Lowell, Mass., had constructed a special stretch of road along a riverbank especially for speed trials. Marriott decided to break the record. He figured that a few extra pounds of steam wouldn't hurt. So when his gauge showed 600 pounds, usual pressure, Marriott chose a moment when the Stanley brothers weren't looking and turned the needle back to zero. Then he ran up another 600 pounds.

In a few minutes Marriott and his mechanic got the starting flag. They reached 95 m.p.h. with ease. Just as they hit 100, Marriott saw that the crowd had surged onto the track. He knew there was only one way to stop. He shouted, "Hang on, we're going into reverse", and shoved hard on the reverse pedal. The tyres screeched and blew out. The wheels spun madly as they fought to overcome the forward momentum. Then the front wheels tore loose from the hubs. Still the car kept moving forward. Finally, the rear axle and rear wheels broke loose. For a few seconds the dismembered Steamer

dragged forward, then stopped — ten feet short of the stampeding spectators who thought a tornado was coming their way.

Most annoying to the Stanley brothers was the gossip that a driver had to have a steam engineer's licence before he could really handle a Stanley, otherwise he might get blown up. This was not true. The brothers took great pains to disprove it. What irked them particularly was the fact that they wound hundreds of feet of extremely strong piano wire around the outside of every boiler to make it extra safe.

It was true that a boiler operated at 400 to 600 pounds of steam pressure. But only two cases of boiler explosion had ever been recorded. In both of these, the layers of piano wire had been removed. Once a foolhardy do-it-yourselfer had objected to the appearance of the extraneous wire. He unwrapped three outer layers. When he started his steamer, both he and the car blew up. The second explosion was engineered by the Stanley's own nephew, who couldn't resist trying to find out how high the pressure had to go before something gave. But just

to be sure that the boiler would explode, he too removed some of the safety wire wrapping.

He, however, took elaborate precautions. After digging a ten-foot-deep pit for the detached boiler, he attached the proper feed pipes and started the burner. Gradually the pressure built up past the normal operating pressure of 600 pounds, then past the 1,000 mark. As the needle edged toward the 2,000 reading, there was a momentous explosion. Two hundred windows in the Stanley factory were shattered and brought the bearded brothers on the run.

When the Stanleys learned what their overly curious nephew had done, they informed him that they too had run a similar test, but had left all of the wires intact. They had also followed the pit procedure, but when the pressure shot past 2,000 pounds, the boiler pipes had sprung leaks and thus acted as safety valves.

If the Stanley had so much to endorse it, why then did it fail? Actually it was killed in slow stages — by the self-starter in 1912 and by the gasoline car model changes every few years.

Up to 1912, when a gasoline-engine car owner wanted to go driving, he took his life in his own hands — literally. Cranking a car was risky business, as many a driver with a broken wrist found out.

On the other side, starting a steamer was a complicated routine, but not nearly so dangerous. First you made sure that you had a full tank of water (20 gallons), plenty of kerosene (17 gallons), and a gallon or two of oil (which dripped into the cylinders a drop at a time by gravity feed). Then you pumped up fuel pressure and lit the pilot light, which in turn started the burner, which heated water, which then was changed to steam. The minimum operating pressure was 400 pounds of steam, which took from 20 to 30 minutes.

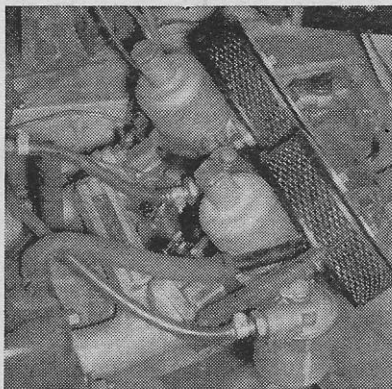
In 1912 Kettering invented the self-starter for gas-driven cars. Steam car makers misjudged the importance of the self-starter, because no steamer had anything to match it until six years later. Though the Stanley brothers retired in 1917, the new owners kept working on a Stanley process for quick firing. Finally in 1918, with the aid of a storage battery, the Stanley Steamer offered a means of raising steam pressure fast. Electric current from the battery heated a coil which acted as a burner. In two or three minutes the steamer was ready to roll.

Since there was nothing that a gas car could do better than a steamer, the competition resorted to extravagant advertising. On paper you could say anything you wanted and portray your product with beguiling word pictures, as well as dramatic illustrations. The Stanleys would have none of this. Later they tried, in honest prose, to describe their car and what it

—SPORTS CAR PERFORMANCE

from YOUR CAR

Multi Carburettor conversions are available for:



MORRIS MINOR 1,000
1½" SU Carburettors and Sports Air
Cleaners.

AUSTIN A30, A35, A40, A50, A55, A90,
A95, Lancer.
FORD Anglia, Prefect (100E), Consul,
Zephyr, V/8 S.V.
HILLMAN Mark 8, Series I. II.
HOLDEN All models.
MORRIS MINOR S.V., O.H.V. (803 and
1,000 c.c.), Oxford S.V., O.H.V., Major,
Isis.
SIMCA.
STANDARD 8 H.P., 10 H.P., Cadet
O.H.V., Vanguard.
VOLKSWAGEN.
WOLSELEY 4/44, 1500.

Most conversions ex stock.

SPORTS ACCESSORIES: Ram Pipes,
Racing Overalls, Sports Air Cleaners,
Sports Exhaust Systems, Aluminium Finned
Valve Covers (M.G.), Tranco Valves,
Sports Coils, Sports and Racing Spark
Plugs, Electric Fuel Pumps.

Service, Spares and Tuning for most makes
of Carburettors and Cars.

AUTOMOTIVE CARBURETTORS PTY. LTD.

156 WILLIAM STREET, SYDNEY. FA 2716

SERVICE STATION, 64 Nicholson Street, WOOLLOOMOOLOO

TRADE and WHOLESALE ENQUIRIES INVITED. FA 8011

did; but it was too late.

Believing that if they produced a good car, word-of-mouth advertising would be the best endorsement, the Stanleys did just that. And for a while they saw themselves justified. In the first few years of their business they got all the customers they wanted and more. Hundreds of would-be buyers had to wait months for delivery. Many didn't want to wait and switched to gasoline cars, where the wait was only a few days.

The Stanleys did not expand. They never hired more than 2,000 people and many of these were friends and relatives who had come down from Maine, where the Stanleys were born. But while businessmen recognised the potential of the Stanley as soon as it went on the market, they didn't recognise the sharp business heads the Yankee twins had.

Early one morning, about two years after the first steamer hit the market, the Stanley brothers were sitting in their office. They were planning the day's activities when their treasurer walked in. "There's a man outside wants to see the Stanley brothers."

"Send him in," F.O. replied, for they were always willing to see people.

"I'm John Brisbane Walker," the visitor announced, as though everybody should know who he was. He quickly added, "And I've come here to buy a half interest in your automobile business." The brothers were both pleased and annoyed. They didn't want any partners, but they felt complimented.

Walker said, "But I own *Cosmopolitan* Magazine, and we could advertise in it." Once more the Stanley brothers refused. After seeing how stubborn the brothers were, Walker left.

Two and a half months later he returned. "I want to buy you out," he said.

"That's a different proposition," the brothers countered. "Come back tomorrow and we'll give you our price." That night the Stanleys decided that they didn't want to sell, but since they had promised to set a price, they would. The only solution was to set such a high price, it would scare both Mr. Walker and the *Cosmopolitan*.

Next morning, when the Stanleys reached their office a little before seven, they found Walker waiting. "Our price is 250,000 dollars," said the Stanley, expecting to see Walker turn white.

"Just the figure I had in mind," he snapped, anxious to close the deal. "Here's a cheque to bind the deal." Since the business had cost them only 20,000 dollars, the Stanleys accepted. They promised to stay out of the steam car business for one year.

Within two years the new owners abandoned steamers and entered gasoline-car building. For 20,000 dollars the Stanleys bought back their own steam patents and had a neat 230,000 dollars profit.

Also, during their lay-off period, they had designed a much improved steamer. For one thing, the drive chain was eliminated. On their new cars the engine was geared directly to the rear axle.

The new Stanley proved itself by smashing all records for speed and endurance, but it made a bad sales record. The early 1900's saw the beginning of large automobile companies. Either a small company expanded or it died; there was no standing still.

The Stanleys were happy with 500 cars a year, while Ford produced 50,000. In 1917 the brothers were 68 years old and weary of fighting. They sold out and retired. One year later F. E. Stanley was killed while driving his steamer. He came over a hill and found two farm waggons blocking the road. Veering sharply, he crashed into a gully. F. O. Stanley survived him by 22 years, passing away in 1940 from a heart attack.

In 1926 the Stanley Co. went under for good. A group of steam fanciers tried to revive the company by designing a steam bus, but that deal fizzled out.

The Stanley Steamer legend is still alive today. Several steam car clubs are active across America. Wherever steam car buffs gather, the talk soon turns to the Stanley.

Not long ago a gentleman in his mid 70's challenged a younger friend to a road race. What made the affair memorable, beside the age of the challenger, was his car—a 1913 Stanley Steamer—and the race from Chicago to New York.

The second car was a 1912 Stoddart-Dayton. For the first few miles it was a close race. Then the steady-performing Stanley pulled ahead, pausing every few hundred miles for water and furnace oil fuel. The Stanley finished far ahead. Total fuel costs for the 800-mile trip were 4.50 dollars.

T. C. Marshall of Yorklyn, Del., owns 18 Stanleys in good working order. Last year he sent three of them to the Steam Car Meet at Shanksville, Pa., where they showed they still had plenty of go.

Spotted around the country are many shops still specialising in building and rebuilding steamers. Robert E. Ostervald of Staten Island, N.Y., sells up-to-date boilers for steam cars and has compiled a list of 500 steam car owners in the United States.

With automotive men concentrating on gas turbines, some brilliant researcher may "stumble" upon the efficiency of a steam turbine. In fact, the most modern mobile power in the world today moves by steam—the atomic submarine *Nautilus*.

It took 50 years to realise that the little car Fred Marriott drove in 1906 had an engine that could not be beat. By an irony of fate, the year that steam made its big comeback—1956—was the same year that Fred Marriott died. Should he meet the Stanleys and tell them the latest on steam, F. E. might nod and say; "Godfrey mighty! It's about time."

250 MASERATI GRAND PRIX

Rebuilt at works to new F.I. specification.

Petrol cylinder head: ex Fangio car. Not raced since re-building.

£A3125 or nearest offer

Apply: H. DIGBY, Esq.,
101 Oakwood Court,
LONDON, W.14.

BOOKS

CHALLENGE ME THE RACE. Hawthorn 27/6
IN THE TRACK OF SPEED. Moss 19/9
ALF FRANCIS, Mechanic to Moss 43/6
JUAN MANUEL FANGIO. Life Story 36/-
THE SPORTS CAR. Design, performance 51/-
SPEED CAMERA. How to photograph 12/6
GRAND PRIX CAR. Vol. I 94/-
GRAND PRIX CAR. Vol. II 125/-
DRIVERS IN ACTION. Photos 21/9
RACING HISTORY OF THE BENTLEY 51/-
THE VINTAGE MOTOR CAR 38/6
RESTORATION OF VET. & VINT. CARS 44/9
THE CLASSIC CORD 54/6
ROLLS-ROYCE. The Living Legend
TECH. FACTS OF THE VINTAGE BENTLEY 62/-
COLOUR SLIDES. Vet. & Vintage. each 4/6
PHOTOS. Vet., Vintage, etc. Racing 8/6
FREE LISTS MANY MORE

Jack Kernohan

Bonnie View Rd., MOUNT DANDENONG,
VICTORIA.
Phone OLINDA 9.2315

ACE CAM GRINDING

AMERICAN METHODS

LATEST PROFILE MACHINE

20 Years Experience

We grind $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, Full or Super
AIR FREIGHT OR POST FOR
24 HOUR SERVICE

CARS: £1/5/- A CYLINDER

Also PORT GRINDING
and BLOCK RELIEVING

ACE CAM GRINDING

Lot 6, GREGORY STREET,
ENFIELD
YB 4018



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!

FOR SALE: Jaguar XF Sports 5.0 V8 6-speed auto.

First registered in April 2012, one owner car, purchased from Melbourne City Jaguar, lady driver, only 91,000km country driven. Polaris White with Warm Charcoal Leather, Burr Walnut and Knurled Aluminium interior panelling.

Fitted with optional R-Performance Aerodynamic Pack (side skirts, rear deck spoiler, sports front bumper), optional Blackout Kit (blackout grille and side window mouldings), and option 20" Alloy Sports wheels.

Engine 5.0 litre V8 283kw and 6-speed automatic with dynamic sports drive system; 0–100kph in 5.0 sec, 0–160kph (yes the tonne) in 11.6 sec.

Equipped with 7-inch touch screen, satellite navigation, Bluetooth connectivity, rear camera, keyless starting, foldaway mirrors and optional cargo boot liner, comes with two sets of remote keys, owner's manuals, original sale brochure and service books.

\$34,000 with Vic Registration until April 2021 and RWC.

Car is in Newborough Vic. Call Gary Tate 0407 505 935.



Source: www.ncrs.org

CLUB MEMBER PROFILE:

ALAN RUMBLE

Alan would be known to many of you with his green Opel Monza that he has run at Bryant Park, but also in numerous tarmac rallies. He came into tarmac rallying only in recent years and loves them! He competes with his son as Navigator, which he reckons is a brilliant way to enjoy motorsport.

No photo provided

- Years of membership of GCC: 5 years
- Cars of interest owned: Torana A9X (genuine): currently on offer as lot 138 at Shannon's auction on 24th August, and a green Opel Monza (sort of a 2-door Commodore)
- Your first car was: Valiant Charger 770, 265 hemi. Bought when 18 ½.
- The best car you ever owned was: Commodore Redline
- The worst car you ever owned was: 2003/4 Commodore 6-cyl auto.
- Your biggest car-related disaster: very little – had a power steering hose blow on stage 16 of 18 on a tarmac rally, which parked the car – that's about the worst.
- Your greatest moment in motoring was: Coming 3rd in class in the 2019 Baw Baw sprint: a fantastic result! Alan also mentioned a time at Winton, during another tarmac rally, when they completed several laps as a special stage, running competitively with a Porsche GT2 and an Evo 7 – not bad for a Commodore-based vehicle.
- Your most-admired driver is (and why?): Alan Grice: builds and races his own cars, tries new engineering developments.
- Your favourite driving circuit/track/road/area, & why: Mallala (SA): fast, complicated and tight. Also likes Winton, and Mt Leura hillclimb.
- A phrase you say regularly: "It's not bad!"
- Finish the sentence: I will die satisfied if..... I can keep driving.
- What is something few GCC members would know about you? We achieved 3rd placing in the tarmac rally series (early modern class)
- Who or what do you think has been a great influence in your life? Roy Swan (Bairnsdale mechanic), Dave Stevens, my son...the fellows I knock around with. They're not 'look at me' type of people – they enjoy what they do and just get on with it.
- Any other insights you'd like to share? You've got to have a go at things. Don't be afraid to be laughed at. What I enjoy is building the car, doing the competition, and the team effort it takes to pull it all together; working with the Pit Crew, a great bunch of blokes.

FOR SALE:

Nissan Pulsar SSS

- 1999 Model
- SR 20, N15 Motor
- 5-Speed Manual
- All original SSS features
- One owner
- Would make a great race car or road car.
- with Rego & Roadworthy: \$4,500
- Without Rego & Roadworthy: \$3,500



Phone Terry on 0421 994 039



...and a parting shot:

Ed: I came across this photo of a well-known Australian race driver when he was much younger. Do you recognize him? Answer on the last page.



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 Asphaltting	Roadmaking	03 5633 2918 admin@fowlersasphaltting.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
Russel Ingall 'The Enforcer'	← is the person in the photo on the previous page: former touring car racer and winner of the V8 Supercar title.	