



TORQUETUBE

Newsletter of Riley Motor Club Qld , Australia Inc. March 2017

www.rileyqld.org.au



Pictured above:

The Export of Rileys from England to the world .

Can you spot your Riley?

One of the features of this picture is the OH&S requirements and the number of suited staff required to direct the workers.

Picture curtesy of Mathew French

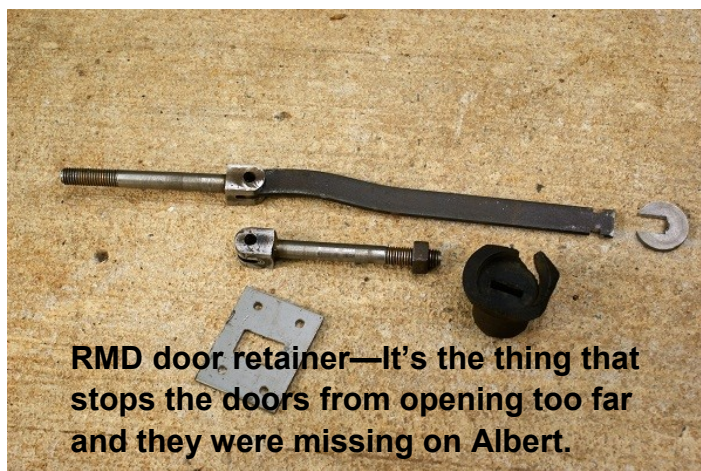
Editorial

In this edition readers will discover a variety of true stories about Queensland Rileys. Thankyou to Frank Wildemast, Ray Burrows, Simon Schooneveldt, Robert Spiers and innovative Rileyites who have attacked the issue of cooling their Rileys in the Queensland summer.

I like the idea of sharing insights and suggestions that enhance the life of our cars. I hope that there are some responses in terms of letters to the editor in the next edition about this month's content.

The February Monthly Meeting minutes and AGM minutes are being trialled as attachments along with an Excel sheet prepared by Di Phillips seeking corrections to the Queensland Riley register of

cars and their owners.



RMD door retainer—It's the thing that stops the doors from opening too far and they were missing on Albert.

The Editor appreciates receiving articles by the 21st of each month

THE 2017 RILEY MOTOR CLUB QLD ELECTED COMMITTEE		
PRESIDENT:	Ken Lonie	0409 613 231 kenlonie@bigpond.com
VICE PRESIDENT:	Trevor Taylor	0407 717 853 trevor.taylor@ymail.com
SECRETARY:	Mark Baldock	07 5491 5409 norest1@bigpond.com
TREASURER:	Linden Thomson	07 3139 1524 lindenthomson@optusnet.com.au
CLUB CAPTAIN:	Robert Spiers	0434 196 991 robertspiers36@yahoo.com.au
SPARE PARTS OFFICER:	Ian Henderson	07 5448 8317 ian.wil@hendoco.com
ASSISTANT SPARE PARTS OFFICER:	Brian Jackson	0417 625 099 brianjackson@iinet.com.au
REGISTRAR:	Di Phillips	0732813807 diannephillips1@optusnet.com.au
EDITOR:	Philip Wyllie	07 5499 9826 philip.w.wyllie@gmail.com.au
WEB COORDINATOR	Linden Thomson	07 3139 1524 lindenthomson@optusnet.com.au
SHED COORDINATOR	Bill White	07 3289 4282 thewhitehouse7@bigpond.com.au

Contents

Editorial, committee contact details and disclaimers	Page 2
Events program and Woongooroo estate winery run..	Page 3
Welcome to Elizabeth Collins and Committee News	Page 4
1949 RMA meets the Tuesday boys by Robert Spiers	Page 5
Riley RM Cooling systems—contributions from Brian Jackson, Peter Lee, Ken Lonie and Robin Hull.....	Page 6
A RMB restoration story by Simon Schooneveldt.....	Page 10
Riley Pathfinder 1870 by Ray Burrows ...	Page 12
Roadster 2055 with Frank Wildemast	Page 17

2017 Mac's Bridge Car Festival advert...	Page 16
Comparative numbers on Riley Diffs by Simon Schooneveldt.....	Page 17
Gold Coast Antique Auto club Motorama advert	Page 18
Windscreen wiper motors and drive cables by Phil Wyllie.....	Page 19
For sale column	Page 20

DISCLAIMER: *The Riley Motor Club Qld Inc. accepts no responsibility for the results of contributor's advice, nor does it endorse any services/ goods/ products offered by advertisers. Opinions expressed in this Newsletter are not necessarily those of the Club, its Officers, or its Editor*

MARCH EVENTS PROGRAM

5th Sunday 9 AM Breakfast Run: The next breakfast run is to Jollys Lookout at Mt Nebo near Samford. We will meet in Samford near John Scott Park at 0800 to leave at 0815 for Mt Nebo. We will travel along Mt Glorious Rd and either up the Goat Track or if you wish to remain on the bitumen up to Mt Glorious and left to Mt Nebo.

The views of the sunrise over Samford valley are spectacular so come and enjoy breakfast on the mountain.

Any questions call Trevor on 0407 717 853.

Woongooroo Estate Winery Tour



Club Captains Report Feb. 2017

We had a great turnout of 21 folk for our February run to Woongooroo Estate Winery at Mt. Archer, made more enjoyable by our hosts, Phil & Gail Close.

Phil read some bush poetry, while Gail put together pikelets with jam and cream, a slice, and a mini quiche with bottomless tea and coffee, followed by more bush poems, and a tasting of 3 white wines and 3 reds. All explained by the knowledgeable Phil.

As this is my last Club Captains Report, I would like to thank Club Members for their support over the past few years, and continue with our new Club Captain Robert Spiers and his partner Dulcie who seem very keen with some interesting runs, be they short or long.

Sheila Hill



9th Thursday 8 PM Monthly meeting at the Club-house: Held at the Queensland Riley Car Club-house, Samford showgrounds

19th—23rd National Rally at Phillip Island: Rileys at the Island 2017. Registration is from 2-4 PM in the Bass Function Room, Ramada, 2128 Phillip Island Road (on the right hand side), Cowes.

19th Sunday 10 AM Club Run: For those who are not attending the National Rally club run to Newstead house. Meet at Australian Catholic University McAuley Campus, Banyo (top of the hill). BYO picnic lunch. Tour of house begins 11 AM. \$12 entrance per person.



In the spirit of our February run to Woongooroo Estate Winery

by Elizabeth Collins

I'm glad I own an MG
I now attend the Riley meets
Not really sure how this happened
It really was quite a feat.

I'm glad I own an MG
Where would I rather be
I could be at the beach or shops
But it's on a Riley hop for me

I'm glad I own an MG
It runs better with more driving
So off we head up Mt Mee





Linden and Delma Thomson

Not every person was captured on camera at the Woogooroo Winery but everyone had a good time and it was a great swan song for Sheila Hill who has done a tremendous job over the past years as Club Captain. In the first picture Sheila was hidden behind Robin Hull and others escaped the camera lens altogether.

Editor

Welcome to Elizabeth to the Queensland Riley Motor Club

Hi, my name is Elizabeth Collins and I joined the Riley club in February this year. Doing a bit of fishing around last night, I find that I will have owned my MG for 10 years this September – how time flies. I bought my MG after I gave up



long distance (endurance) horse riding. Still not sure which is the most expensive hobby.

I was born and raised in

Rockhampton, spending about 28 years there. I have been a long term employee with in the electricity industry. Leaving school, I joined the Capricornia Electricity Board. From there I moved to Dalby to join South West

Power, and then into Too-



woomba. From there, I joined Ergon Energy

COMMITTEE NEWS

Registrar

At the AGM our Registrar asked for an update to her list of Queensland Riley's and their owners. In her words, 'the idea is to send it out to members so that they can let me know of any wrong information'.

'I have included *cars and their owners who were* members previous to 2016. It would be good if they *would* let me know what happened to their Rileys so that the register remains as accurate as possible.

I would be grateful for any updates on vehicles as well.

Thanks for your assistance.

Di Phillips
Registrar

diannephilips1@optusnet.com.au
34 Blackwood Street
East Ipswich 4305

The excel sheet will follow in a separate e-mail as an attachment to the March Torquetube. Please communicate with Di directly.

2018 Queensland National Riley Rally Co-coordinator

Wendy Lonie provided further details of the work undertaken so far. *So far locked in* is the location and date for the National Riley Rally to be held in 2018. *The plan included some exciting ideas and is expected to be a very special event for all Australian and overseas Riley members.*

(Information in italics included by the Editor)

Secretary's notes

Mark reported that special events over the next year apart from the Riley Motor Club included:

RACQ re Southern Qld (Hub) Rally, 9-11 June 2017.

Beaudesert and District re 40th Anniversary Sunday 19th March 2017.

Ipswich Festival re Honk Saturday 6 May 2017

Blackall Range Horseless Carriage Club Inc re Montville Country Run 20-21 May 2017

Townsville Vintage Car Club re Hub Rally 14-17 April 2017

Robert Spier's 1949 RMA meets the Tuesday Riley boys

Trevor Taylor turned up with Alan Hill at my house in his Range Rover with a car trailer attached to pick up my RMA to transport it to Alans house at Samford. Work was to begin on the car by a number of club members to prepare it for a roadworthy certificate. 'Grateful' is not a word that would sufficiently cover my feelings.



After a year of walking past it in the garage, and occasionally consoling myself by sitting in its front seat behind the wheel and making broom-broom noises, Alan advised me that the clubs Tuesday Riley Boys would help. Simon Schooneveldt was selling a re-stored motor, and the game plan was to pull out my old motor (which had a knock that was darkly hinting at big end issues), and put in the new and drive off into the sunset with years of happy motoring and Riley fellowship before me.



To backtrack a little - I had purchased the car sight unseen from Tasmania 15 months before. This was either a very brave or very foolhardy thing to do. When she turned up at my house, I came to realise that the used car yard had 'gilded the lily', yes, but that, in the long run, the lily was worth gilding.

After getting the car on the hoist, all ancillary parts were removed by Rod Longden, Graeme



As it turned out, the car was coming home - it was sold new out of Flinders Motors in Adelaide St, Brisbane and at some stage was owned by an early member of our club, Don Blackman. When its Tasmanian registration expired last year and I was involved in a struggle to the death getting a granny flat constructed in our back yard, I knew the Riley project would have to be tackled later.

Bourne ,Simon Schooneveldt, Linden Thomson and Alan Hill quite painlessly, and completing its removal was frustrated only by the toggle clutch operating shafts reluctance to 'play ball'. This led to a spirited discussion including consulting Alan's faded workshop manual.

By then it was 4:30, and being Valentines Day, all worked ceased to enable the males to purchase suitable objects of devotion to lay before their partners, thereby ensuring another year of marital harmony.
Robert Spiers

Riley RM Cooling Systems

Recently Brian Jackson sent some photographs to me showing an air scoop that he had fitted to his RMF Riley (Editor)



I have noticed for some time on RMF, oil pressure is normal around town but on a long trip of 1 to 2 hours oil pressure is still normal at 60 psi until left to idle, then it drops to almost nothing. After stopping the motor and then re-starting after 5 minutes oil pressure on idle was OK, which meant to me that the oil has already cooled down. This led me to think that after 2 hours of driving at 100 KPH on hot roads the oil gets overheated, so I thought up this cooling air scoop.



Now with the oil sump scoop after a 2 hour drive the pressure gauge sits on 10 psi. I am interested in other people's thoughts about it.

Brian Jackson.

After looking at the scoop and reading about the improvement in oil pressure I asked Peter Lee if he would send a picture of his innovation. The following is what he sent to me:

On long trips, I often experienced high water temperatures and low oil pressure in my two

RMBs.

Not long after I commenced restoring the RMD in early 1990, I read an article in one of the classic car magazines about the original road tests of the prototype Bentley R type Continental in Europe in the late 1940s.

On long runs, it was noted the oil pressure fell gradually and this, naturally, was a cause for concern. In fact, from memory, one Continental actually 'failed to proceed*'. The problem was part of the chassis was restricting airflow over the sump.

I took a close look at the Riley and, while the fins on the base of the sump might have received some airflow, most of it did not due to the front suspension cradle.

I discussed cutting a hole in the cradle with Gordon Cameron and he said that, if done correctly, it would not weaken the cradle and, in fact, would make it stronger. I took the stripped cradle to Accurate Welding at South Brisbane with a drawing of the idea and they did a neat job even fitting a scoop at the front to maximize the airflow.

Being more than a bit obsessive, I also had a new thicker radiator core made and fitted an electric fan. I honestly cannot remember the last time I used this fan.

Does the modification work? Yes, but sometimes too well. The RMD can still get hot when stationary but when it's moving the temperature drops quickly. Without a thermostat, it will only reach 175 when idling or in traffic. On a recent trip to Samford on a hot day, the temperature dropped back to 120/130 once I was out of the heavy traffic.

When the original thermostat carked it, I took to carrying a thick rag to shove in the front of the air scoop during cooler weather. However, I have just fitted a new one and now have two spares.

* A Rolls Royce term meaning 'seized'.

Peter Lee

You can see from the picture below a ventilation hole has been cut through the front suspension cradle and a scoop has been fitted. Both Brian and Peter's innovations have improved engine oil cooling.



I knew that Ken Lonie had experimented with oil coolers and so he was asked to share his experience and insights into RMB cooling. The following is his thoughts on the matter:

Although I cannot recollect where I read it, the cooling system of the Riley 2 ½ litre engine is fairly unique in that most internal combustion water cooled engines rely on the cooled water from the radiator being pumped into the hottest parts of the engine, usually the rear of the cylinder head or the head around the exhaust valves, and then passing through the head and down through the block. This ensures a complete flow of water through the engine.

However, Riley 2 ½ litre engines direct the cooled water into the exhaust valve area of the head, through the head and then out the front of the head with no forced circulation through the block. As I remember, the few other engines to use this system include Armstrong Siddeley and Lea-Francis.

In these engines, circulation through the block is only achieved through percolation of hot water rising from the block and mixing with the water in the head. This system is probably ideal in cold climates and ensures rapid heating up of the block to operating temperature. It probably also works quite well in new, clean engines where the heat transfer from the oil to the block to the cooling water is reasonably efficient. However, I believe that in old blocks where scale and other foreign matter has accumulated, it reduces the rate of heat transfer from the block into the cooling water that is flowing through the head.

This will particularly be the case in our hotter Australian climate and where we are travelling at higher speeds for longer distances without a break, than in, say, the UK.

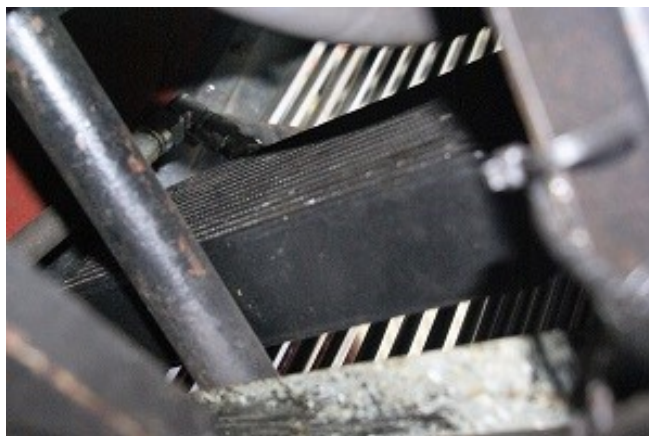
On longer trips in hot weather, this would result in the engine water temperature apparently being within normal limits, because the heat from the block is not getting to the head cooling water. However, the oil temperature would be very high as the heat generated from bearings etc. is being transferred to the oil but is not being adequately transferred to the block and then cooling water.

This would then result in reduced oil pressure after some hours and big end bearing failure on long trips when the engine water temperature seemed fine.

This is exactly what we experience in practice. Oil temperature readings taken by Linden Thomsen

indicated oil temperatures as high as 150 degrees Celsius, when water temperature was 95 degrees Celsius. This was only after a relatively short run to Bribie Island. On a long interstate run oil temperature will clearly be higher as the differential between oil and water temperatures steadily increase due to the heat not being transferred from the block at a sufficient rate. A temperature of 150 degrees is sufficient to start to cause white metal failure and this temperature is taken at the output from the oil pump. The oil temperature as it leaves the block and returns to the sump, will be even higher, due to the sump acting as a heat dissipater.

The easiest way to address this situation in our Australian conditions, on our older blocks and with the Riley lack of forced flow through the block, is to install an oil cooler. I have done this on my two operating RMB engines. This has resulted in high and stable oil pressure (45 psi at revs whether hot or cold and 20 psi at idle whether hot or cold) and with good steady water temperature (80 degrees Celsius) at all times, rising to only 90 degrees Celsius when climbing the steep range to Maleny, climbing 200 metres in about 2 km. However, this has not been without some unanticipated problems! Above: pictured is the oil cooler between the grill and radia-



tor. Notice that the cooler is fixed as low as possible. Below: cooler oil hoses to the block



I initially purchased an oil cooler which had been pressure tested to 200 psi. A flexible oil hose was fitted to the oil pump output point at the bottom of the block on the centre RHS. This hose runs to the input side of the oil cooler which is mounted behind the grill and just below the radiator. Another flexible oil hose runs from the cooler output point to the input to the oil filter. After installation, all was working well with high operating pressure when hot. Then, one coolish morning, I started the car and gave the engine a brief rev to clear the cobwebs. I then realised there was a rapidly growing puddle of oil on the garage floor.

On closer inspection, the oil cooler was seen to have a great bulge in its centre, with oil pouring out of soldered joints. I had previously noticed that when cold, the oil pressure gauge would go to full scale (100 psi) when the engine was revved. The oil pressure gauge is actually at the end of the line near the relief valve and therefore the upstream pressure under these circumstances would be considerably higher, clearly more than 200 psi.

Not to be deterred, I thought that this might have just been an aberration. So another unit was purchased and installed. You guessed it! While doing a short run from home one morning, I noticed the oil pressure drop. I had emptied the oil tank along the Montville road through another burst oil cooler. After refilling and disconnecting the oil filter on the side of the road, I proceeded home.



Oil pipes being refitted and sump refilled

I have now purchased two more oil coolers (Speco) and fitted them to my two cars. However, after discussions with Robin Hull, I manufactured a spring loaded relief valve for each car and installed them between the pump output from the block and the oil hose to the oil cooler. The relief hose goes from the relief valve to a drilled and tapped hole in the block below the distributor.



On start-up in cold weather, if the oil pressure at the pump exceeds about 80 psi, then oil relieves over the relief valve back into the sump. However, oil at 80 psi is also fed to the oil cooler and filter. Oil pressure reading on the dash gauge generally shows about 40 psi. Once the oil has warmed up, the relief valve closes and the oil pressure gauge reading rises to 45 psi. In this way, pressure experienced by the cooler is limited to no more than 80 psi.

I have not measured the oil temperature with the cooler operational, but oil pressure and water temperature are much improved and stable even after a long trip.

Ken Lonie

February 2017

During a recent visit to Robin Hull the photos below were taken of his oil cooler arrangement. His cooler is fitted below the radiator and at an angle to fit into the space available with an air scoop



Notice the oil hoses above; hot and cold. The blue one has a high pressure tolerance. Both have an ID of 1/2 inch.



Robin Hulls' relief valve

A simple oil relief valve made with a ball bearing, spring, soft cap (in the picture it is pointing in the wrong direction) and a cap. This allows cooler oil at a higher psi to pass back into the sump so the oil cooler is not damaged by excessive pressure. Robin advised against banjo fittings to avoid high oil pressure. Fitting can be sourced from any engineer suppliers.

Ken sourced his oil coolers from Performance warehouse 17, Moncrief Road, Nunawading Victoria. 3131. Phone (03) 9845 0888. They will supply Derale (USA) or speco (Chinese) coolers. Derale is more expensive but manages higher oil pressures.

Above right: An arrangement using a modern spin on oil filter may be fitted when a relief valve is fitted in line between the oil pump and filter.



I wonder what experience readers of *Torquetube* have with oil pressure, getting rid of excessive heat and the effects of superheated oil on white metal bearings?. Is it only a problem in Queensland? I wonder what our interstate brethren think about this issue?

Editor

Below: another picture of Ken's oil cooler



A RMB RILEY RESTORATION STORY

Simon Schooneveldt reminisces on how he acquired and undertook the total restoration of his RMB under an old Ascot Queenslander.

A three part story to keep you on the edge of your seat over the next three issues of Torquetube (Editor)

In 1985 I visited the Queensland Motor Show at the RNA Showgrounds. Members of the Queensland branch of The Riley Motor Club of Australia had mounted a display there which caught my eye. The Riley Club was quite pro-active in those days in promoting interest in all things Riley.

On display were Dick and Earla Self's beautifully restored red and black 2 ½ litre RMB. Peter Lee's original brown fabric bodied Monaco 4 cylinder "9" and Neil Brandt's replica "Brooklands" sports racing machine. (Over 30 years later each of these cars is thought to be still out and about in the hands of Riley Club members.)

I expressed a vague interest in undertaking such a restoration to Dick and Earla and they immediately had me note my details in the visitor's book (which the Queensland Club still has in their archive) and invited me to the next monthly club meeting. In those days evening club meetings were held around Brisbane at member's homes, and friendly affairs they were too.

At my first meeting John Hocking told me of a 'lapsed' member, Terry Hanley of Hope Island who might wish to sell an unrestored derelict white 2 ½ RM, some 'bits' and a "chopped short" rolling chassis with a seized engine that he thought was a 1 ½ litre RME. I did not need to be told twice. As it turned out Terry also had another 2 ½ RM chassis, which I left there because I did not want to make a third trip. But all the 'junk' was now mine, under the house at Ascot!

The 1 ½ litre Abingdon RME (39S17270) bits found various homes over the ensuing years. Perhaps sadly the shortened chassis eventually found its way to the dump. I never heard of what may have happened to the left behind 2 ½ chassis. My Riley enthusiasm followed the usual path of becoming an infectious disease as my young son Matthew and I eventually dragged home 11 Rileys, most of them beyond restoration. The Pathfinders we dredged up (literally) can be written about another time. And so, on April 13th 1985 it started...



This is the story about my 30 odd years with my trusty 1951 RMB registered Qld SPS 51. The rego represented my initials and the year of manufacture, which was about as fancy as you could buy from Main Roads back then! The photo above shows the old girl 'coming home' on the trailer on the 13th April 1985. It was the start of my Riley illness.

My Coventry Riley RMB is 61-S-8999 with stamped engine number 7738. That number is also stamped on the crankshaft and con rods. It is a late 1951 model that arrived in Queensland at the Downing Brothers Dealership in early '52. I understand it went to a grazier type in central Queensland but at the end of its life it was re-acquired (traded in?) by Harold Downing who decided to keep it as a car to be restored or modified for his personal use.

The Downing Boys were well known Brisbane Riley people in the 50's and 60's. I acquired a 2 ½ litre motor (B3218) years later that they had converted to a sumpless marine speed boat motor in a roughly engineered fashion. Roughness was normal then. My RMB was originally delivered in the rare Riley colour *Sun Bronze* but had been brush painted over with white household enamel when I acquired it. Post restoration I recreated the Sun Bronze colour using *Dulux Moonstone* with black mudguards. That original colour was still present on the unexposed edges of the mudguards where the Downing paintbrush could not reach!

Below is the just restored car first emerging from under the Ascot Queenslander in 1987.



Visiting Riley club members expressed amazement at how far apart the car had been pulled, exposing woodwork (or its rotten remains) such that they had never physically seen before. The entire body was pulled off and disassembled. I don't recommend that, incidentally, because I could never get the thing back together

The easy part...pulling the old girl apart:



Still I pride myself with the fact that the restoration, from acquisition to obtaining registration took two years to the day, while working full time. I made sure that not a day went by without something, even the smallest thing, being done. Like fixing the dashboard clock on the kitchen table after dinner. The car never left my little workspace in all that time.

Working on the (arrogant) theory that if someone else could make this car, I could remake it. Only the engine re-bore and seat upholstery sewing was entrusted to others. I improvised or made up the special tools the handbook said were needed. Many tools were not needed at all, just a bit of thinking outside the square worked fine. For me "cheque book" restoration was not affordable, coupled with the unreasonable fear that I might get ripped off, just like fellow club member Brian Jackson always seemed to.

Despite the amateurishness of my work, it could be said that it's useful for an owner to know the insides out of his car. I know there is no rust. I know the Tasmanian Oak woodwork is sound. I know that what is supposed to work will work, because I handled it myself. Even if something were to break now, I should be able to fix it. Certainly, some of my Riley mates do help occasionally, with sophisticated lathes and so forth. Jack Warr, in his prime as our Club Spare Parts Officer made some wonderful bits and pieces for me, all for the love of Rileys.

Thirty plus years and forty thousand plus miles later, after driving to National Riley rallies all over this vast land of ours, it's great to report that I was only stuck on the side of the road once... when I foolishly ran out of petrol!

I often wonder about modern mechanics working on old cars. I have seen the most expensive engine rebuilds blow up. Axles and wheels flying away from their mountings, essential parts falling off. The shiniest pretty cars often fail to proceed for the most minor (and embarrassing) of causes. Often such cars have their mechanicals neglected entirely because what cannot be seen isn't important.

Throughout the 30 years, I have meticulously kept a journal log book on all the trips, mileages and happenings that SPS 51 and I have undertaken together. Helga has steadfastly refused to drive it. My daughters were a bit daunted by the size of it and young Matthew learnt to drive in it. More on that later.

Leafing through the log book, some memories of events may be worth recounting. Hopefully anecdotes are more interesting than a retelling of the step by step restoration process itself. On my first few drives I noticed that the car was indeed a 'head turner' and I was especially pleased to receive "nice car mister" comments from young ladies. Club member, the late Ross Philips drily remarked "you're a new chum, after a while you won't even notice!" And he was right!

It took Matt and I about 2 weeks to fully dismantle the car. I noted that for the most part there was no undue wear. The odometer read 60,432 miles. The pistons were original and the block had not been re-bored. Although the car had been regularly used well into the 70's, no doubt its reasonable mechanical condition justified Harold Downing putting the car aside for his personal attention.

By the end of June, the rear end of the chassis, springs, brakes and differential had been overhauled, refurbished and refitted. July saw the front-end suspension rebuilt with new kingpins, wheel bearings and brake linings. Getting the old kingpins out took a mighty sledge hammer. Fitting the new ones was an anticlimax. The literature and the Riley boys advised of the need to freeze the kingpin and really heat the suspension arm to expand it so it could be driven in. In the event the pin dropped in effortlessly by itself. I worried for years that maybe they were undersize, but they are still safely there.

By end of August the block had been topped and bored. .040" oversize pistons were fitted. I was horrified to find on opening the crankshaft oilways (with difficulty) they were almost completely blocked with sludge, packed in perfectly by centrifugal force. Never the less the white metal on the mains and big ends were close to specification so I left them be. Starter motor, carburettors, distributor and fuel pump were all refurbished as per "the book".

I was talked into fitting Jaguar model valve guides by the people who bored the block, because they had spiral grooves cut inside supposedly to improve oil flow and lubrication. They did not tell me that Jaguars also had oil seals fitted around the valve stem which my Riley would not have. Thus, for years my Riley blew oily exhaust smoke on the overrun down hills and club members would not follow too closely behind. I did not remedy that until 2016, and that repair generated another story which I will relate a little further on.

Simon Schooneveldt

Riley Pathfinder 1870 By Ray Burrows

We were living in Mackay. At the time, I was employed as the head tech teacher in engineering at the Tafe college. During this time, I heard about a Riley Pathfinder and chased it down to a barn that was located at Oakey. It was in pieces. The Pathfinder was in very poor condition and it was purchased as a wreck from Mr Kevin Pink in 1988. We do not know the car's previous history except that Mr Pink purchased it from a person living in Bundaberg. The gudgeon had lost a circlip from number 3 piston and it had marked the bore. As the engine, had also been left outside in the elements at Banana, Central Queensland, the engine was a mess. In short, it was not worth repairing. The car had been transported from Banana to Oakey where it remained for some time becoming the home for mice who must have found the red dust that accumulated in the car in central Queensland inviting. The gearbox was also un-serviceable.

A nephew who worked for Boetcher motors in Ipswich helped me pick the car up with a ute and car trailer. Surprisingly the front of the ute lifted when the car was loaded onto the trailer so many parts needed to be removed from the body and relocated for travel to my garage.



Above: The car as it originally appeared in 1988

The car was originally registered as 546 NIR with 123,219 miles on the speedo. The instrument technician adjusted the speedo back to zero when the instruments were overhauled.

We purchased a wreck from Linden Thomson, treasurer of the Queensland Riley Motor Club and dismantled it for spare parts. It had been located at his mother's home and some work was required to free it from the earth where it had settled. The brakes also needed to be released as the brake linings and drums had bonded together. But this done, it was possible to move the car from its resting place. All the useable parts were then stripped from the body and the running gear removed with engine and gearbox.

It's engine number was 3150. The engine was stripped down and the head and sump was taken off. Years of sludge were then removed and after some work the engine was reassembled. The gear box was in a very sad condition, so being 'green' I tried several wreckers to see if any gearboxes were available. Finally, a wrecker

was found who had a near new 1954 Morris Issis gear-box. So on Christmas eve 1988 we travelled to Kingaroy and purchased the box. As the input shaft was different from the Riley I had the Morris and Riley input shafts cut and shut by Zenith Engineering. A mechanic friend transferred all the relevant parts into the Riley Case and that box is still in the car today.



Above: Linden Thomson's 1955 Pathfinder

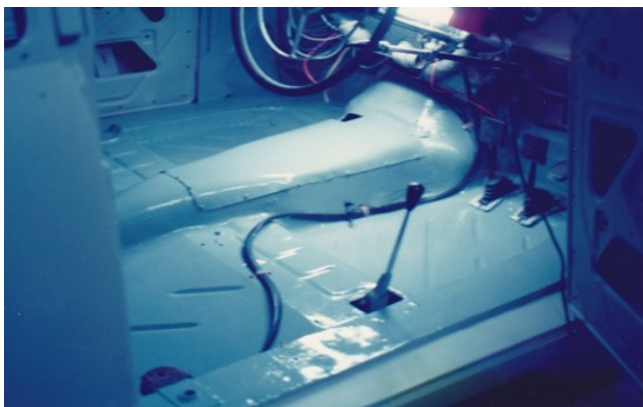
Bottom left: Undercoated and ready for topcoat July '89



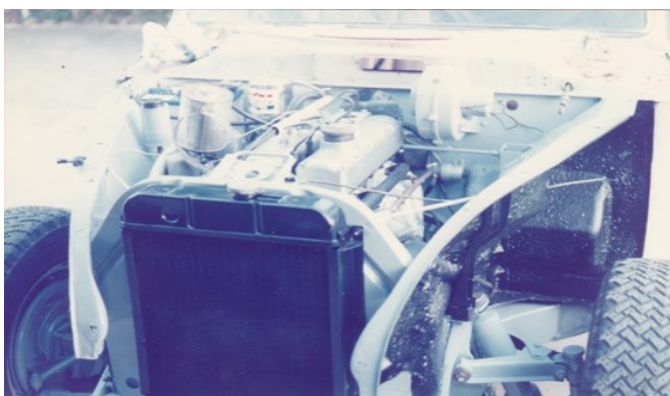
Above: Paint on and buffed in July 1989 and ready for registration in 1990

My spare Engine, number 3109 from an unknown car was overhauled by Repco at Eagle Farm and fitted in April 2003.

In May 2014 on our way to the Charters Towers Rally, the rubber oil ring on the oil filter split producing an oil leak and slowly the sump drained of oil and the engine destroyed itself near the Yandina turn off. Interestingly the oil pressure gauge did not show a drop of oil pressure. Following this sad event the car was towed back to Brisbane and work commenced on resurrecting engine number 3109. A local engine re-conditioner overhauled it. A replacement crankshaft was located at the Riley Club Spares. A screw on oil filter assembly was manufactured by Robin Hull and fitted to the new engine.



Floor repaired and painted June 1989



Linden's engine installed and running June 1989



Oil filter as fitted to previous engine. New assembly takes a Repco Z178A

This engine just did not sound right from the start and I spent a lot of time with various electronic distributors and carburettor adjustments and still did not sound good.

In April 2016, while on our way to the National Rally at Merimbula, 17 kilometres outside of Glen Innes, Number 3 conrod decided it liked it better outside the engine than



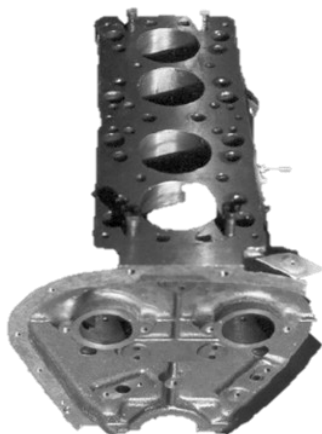
inside. The mystery as to why the engine did not sound good was solved as one of the conrod bolts had been cracked when the engine was being assembled.

Hind sight is a wonderful thing. I should have dropped the sump and had a look around the bottom half. I could have saved myself a lot of grief. I am not getting any younger and these engines are heavy even with a hoist. Many thanks to Greg May for the loan of the hoist.



Remains of number 3 piston, conrod and the damaged oil pump strainer. The splash tray in the sump was also destroyed.

Below: Engine ready for reconditioners



New conrod bolts were manufactured by Robin Hull and supplied to the engine re-conditioners. Mains were ground to .010", conrods .020", bores .030". Bedford Truck conrod bearings were sourced from Melbourne, Lister single cylinder conrod bearings were sourced from Rocklea and from Roma. JP236 pistons were obtained from Adelaide. The last original conrod bushes available were found in Melbourne. The engine was then re-assembled with the expectation of a long life.



Hopefully, this time we will get to the next major rally in Townsville.



Riley Pathfinder 1870 ready to go

Ray Burrows

Roadster 2055 with Frank Wildemast

Prior to migration four classic cars were in the garage. Sadly, these had to go when migrating to Australia from Holland. But good fortune arose about 20 years ago, when several vintage and classic cars came up for auction on the Gold Coast. One of the cars that was for sale was a 1950 RMC. The engine produced a fair bit of smoke, some of the instruments did not work, but the paint appeared to be in good condition. It was a beautiful car. It was originally painted red but it had been repainted white prior to the auction with red upholstery. An offer was made and the car was transferred into Wildemast ownership.

After the car came home, the car was taken to Bill French for a complete rebuild. Bill removed the engine, dismantled it, and sent it off to an engineer to be machined. At that time, Bill was asked if he would allow the rebuilding to be viewed so that some understanding of the workings of the engine could be learned. This arrangement resulted in more than one visit to the French home garage. Bill did an outstanding job and the engine is running just as well as it did when the car returned from Bill's home.

Over the next few years the paint began to deteriorate and bubble in a fashion that indicated some serious issues. The paint on the body was corrupting but not on the doors. Several paint and panel tradesmen looked at the car but none of them could explain why the paint was metamorphizing as it was.



You can see above the bubbling of the paint. It appears to be the result of rust not be treated prior to painting

During 2013 a neighbour who had migrated from Serbia offered to strip the body back to bare metal and repaint the car in two pack. The car was taken to his place and the Serb, who was called Jasmin and his Philipino helper dismantled the car, stripped the paint, and repainted it white. The inner guards, chassis and other parts were also painted in a black rust resistant paint. As you can see from the accompanying picture they did a very good job.

After that the hood was replaced with a material used by



Mercedes in Germany. It is a maroon material on the outside and black on the inside. At another time the exhaust system was replaced by a professional and



apart from that all the cosmetic improvements have been done in the garage, this includes the dash and other interior parts.



The car drives very well, but it has a slight tilt to the driver's side and a solution to this minor issue has not been found. There are a few other issues that need to be resolved as the speedo cable is broken and the altimeter is not functioning. But these are minor issues and soon they will be repaired.

Recently the car was driven to Siromet winery to participate in a Riley outing and this was a very enjoyable activity and hopefully there will be other Riley outings in the southern part of Brisbane that will be within the area where Roadster 2055 can participate.

Frank Wildemast



2017 MAC'S BRIDGE

Sports & Classic Car Festival

Frankly Supporting





SUNDAY 28TH MAY

Join us for our annual car show in idyllic surroundings with excellent catering and trade displays at the
Qld Rifle Assoc Belmont Range
 1485 Old Cleveland Road, Belmont
(see reverse for location map and directions)

FURTHER INFORMATION

Mike Taylor: 0417 183 811
 Geoff Johnson: 0413 734 977
 Murray Clark: murray.clark@bigpond.com.au
 Or visit: www.nassaleanebridge.com

ENTRANCE FEE

Display car, driver & one passenger: \$15.00
 Extra passengers: \$10.00 each
 Visitors (including parking): \$10.00 per vehicle
 Children under 12: FREE



Activities for all sports and classic car enthusiasts. Proudly sponsored by the Triumph Sports Club, Queensland GreenCar for the enjoyment of all sports and classic car club members and enthusiasts.

SOME COMPARATIVE NUMBERS ON RILEY DIFFERENTIALS

In the mid 1980's I put together the following charts, published in *TORQUETUBE* to assist people contemplating changing diff ratios, especially in Riley Nines, at that time.

MODEL	MK IV 'NINE'	MK IV Colonial	1 ½	1 ½	2 ½	PATHFINDER RMA RME RMB RMH
Diff Ratio:	5.25:1	6.20:1	4.89:1	5.13:14.11:1	4.10:1	
1000RPM						
SPEED MPH	14.87	12.70	16.1	15.4	19.6	19.6
Engine RPM						
@ 58 MPH						
Top Gear	3900	4500	3600	3770	3000	3000
GEAR RATIOS:						
First	20.37:1	24.05:1	19.42:1	20.37:1	15.05:1	13.59:1
Second	13.13:1	15.50:1	11.20:1	11.74:1	8.86:1	8.45:1
Third	7.67:1	9.05:1	7.23:1		7.58:1	5.83:1 5.88:1
Top Gear	5.25:1	6.02:1	4.89:1		5.13:1 4.11:1	4.11:1

MPH @ 3000

RPM in gears:

First	11	10	12	12	16	18
Second	18	15	21	20	27	29
Third	31	26	33	31	41	41
Top Gear	45	38	48	46	58	58

Clearly only the 2 ½ and Pathfinder are "comfortable" at 3000RPM highway speed. The Colonial 'Nine' at 38 MPH is too slow for 100/110 KMH modern freeways.

Set out below are the outcomes when various Riley diffs are modified using other models. My own Nine had been fitted with a turned down 2 ½ diff. Very fast on the flat, hopelessly slow up inclines and hills. The 1 ½ diff is the preferred option for the "Nine"

MODIFICATION	NINE	NINE	NINE	1 ½	1 ½	
OUTCOME:	Std diff	1 ½ diff	2 ½ diff	Std diff	2 ½ diff	Diff Ratio: 5.25:1
	4.89:1	4.11:1	4.89:1	4.11:1		

1000RPM Top gear

Speed in MPH	14.87	15.9	18.99	16.1	19.8
--------------	-------	------	-------	------	------

MODIFICATION	NINE	NINE	NINE	1 ½	1 ½
OUTCOME:	Std diff	1 ½ diff	2 ½ diff	Std diff	2 ½ diff

ENGINE RPM @

58 MPH in Top	3900	3650	3250	3600	3020
---------------	------	------	------	------	------

Gear Ratios:

First	3.88:1	3.86:1	3.88:1	3.975:1	3.975:1
Second	2.50:1	2.50:1	2.50:1	2.290:1	2.290:1
Third	1.46:1	1.46:1	1.46:1	1.480:1	1.480:1
Fourth	1 to 1	1 to 1	1 to 1	1 to 1	1 to 1

OVERALL RATIOS:

First	20.37:1	18.97:1	15.95:1	19.42:1	16.33:1
Second	13.13:1	12.23:1	10.29:1	11.20:1	9.41:1
Third	7.67:1	7.15:1	6.05:1	7.23:1	7.23:1
Fourth	5.25:1	4.89:1	4.11:1	4.89:1	4.11:1

MILES PER HOUR @

3000RPM in Top

First	11	13	14	12	13
Second	18	19	21	22	26
Third	31	33	35	35	40
Fourth	45	48	51	48	59

At 3000 RPM, a NINE with a 1 ½ diff could cruise at 48/50 MPH in relative safety and a 1 ½ with a 2 ½ diff in it would comfortably achieve 60 MPH at 3000 RPM without screaming its little heart out. Meanwhile the stately 2 ½ purrs along at legal highway speeds without stress.

Simon Schooneveldt

Brisbane, December 2016. [Adapted from my article first produced for Torquetube 1980's]

Gold Coast Antique Auto Club AUTORAMA

Location: Gold Coast Antique Auto Clubhouse MUDGEERABA and Don Paxton Park, Station St, TUGUN, QLD

29TH – 30TH April 2017 SAT 29TH 8:00am Registration and Morning tea at the Clubhouse .Rally to commence at 10:30. Lunch will be at the Tumbulgum School. Dinner 6:00 for 6:30pm. at Tugun Bowls Club and Community Club Sunday 30TH 8:30 Static Display and judging Morning tea from 9:00am at the Tugun Bowls and Community Club {adjacent to the Park}

10:00am RALLY COMMENCES 12:00 Fabulous GOURMET Lunch at the Tugun Bowls and Community Club.

For further information phone John Talbot on 0421185419 or e-mail autorama.gcaac@gmail.com Website www.gcaac.com.au



Click on the adobe icon for the entry form

Adobe Acrobat
Document



Ray with his Riley Pathfinder



What do you find under a Riley?

1950 Windscreen motors and drive cables

They are not all the same. There are five motors and three drive shafts at home and when it came time to fit one to Albert, a 1950 RMD I tried them to see if they worked. The first two were dead. The third one worked.

Life in the Brisbane river is not good for windscreen motors



It had a cast all-aluminium gearbox housing. Inside was a yellow gunk that must have been a grease. This was cleaned out and the box was regreased. After that a wiper shaft was disassembled and regreased. The last issue was obtaining the rubber bases with the threaded bolts to fit into the motor housing and the metal frame. As you do, I e-mailed Paul Bae, NSW spare parts officer and asked him where I might get three of them from. He sent me a triangular base with the three rubber pieces attached with their threaded shafts. How was I going to fit that? I called him and he told me that there were two bolts that fitted through the middle of the triangle into the windscreen motor body. My motor didn't have the two centre threaded holes to fit the triangle to.



So, the first dead motor was re-examined, it did not have the two central threaded holes but seeing that it was already dead it was decided to drill two blind holes and tap them with a 4 BA tap to see if I could make the modification without drilling into the armature. It worked so the holes were drilled into my living motor body, they were threaded and the triangle was fitted to it and I thought Yahoo, this thing will work. The drive shaft was then threaded through the hole in the scuttle from inside

the car to the motor, the first windscreen wiper shaft fitted into the hole beneath the driver's side window and it was found that the middle part of the cable was too short to reach the passenger side aperture! I measured it to be 375 MM but the distance between the shaft apertures was 420 MM. The other cables were then brought out and compared with the one I intended to use and found that the other two were 420 MM between the shafts. The inner cables were all the same length.

At that point a second cable was stripped down, cleaned, regreased and then fitted through the scuttle to the motor and guess what? The collar of the drive cable was of a wider diameter than the all-aluminium gearbox could receive. At that point all of the motors, their gear boxes and drive cables were compared. The cables that I had were of two lengths; 420 and 375 MM, the gear boxes were of two different types; one all aluminium and the other with an aluminium back and a flat steel top. The collars were of two sizes. The third difference was in the design of the wiper shaft bodies. I thought, 'Mr Lucas, I hate you'. Why did you produce three different gearboxes and two different lengths of outer drive cable and two different size collars?



At that point an outer drive cable with a brass collar that fitted an all-aluminium bodied gearbox was matched to one of the dead motors. This was then disassembled, the bush contacts cleaned, a spring that held the brush



contacts was taken from another dead motor and fitted and the whole lot re-cleaned and fitted. It was with some trepidation that a battery was attached and to my belated joy the system worked. This system is the one that has been fitted. But, I have to say that it may last a short time or it may last a long time but sooner or later it will require more work, such is the life of a Riley enthusiast.

At that time I spoke with Paul Bae and he provided me with a rebuilt later windscreen motor. The lesson of the story? Ask if anyone has a complete system before you start pulling them apart and restoring them.



One of the three wiper motor bases missing the rubber block

For Sale 1951 RMB

This car belonged to the late Keith Ireland of Warwick Qld, and the sale is being coordinated by Steve Moulder, a family friend on behalf of Keith's Wife.

It is an older restoration whereby everything was rebuilt including leather upholstery, and everything appears to be in good condition. A brake booster has also been fitted.

The car is currently registered with new plates (not shown) however as the original Q plates were personalised they can be sold with the car.

The car currently jumps out of gear, the front brakes are binding and there is a slight engine miss.

The odometer shows 27,000 miles, however this cannot be verified.



0427 1961 38, or 07 4661 3831.

Asking price \$15,000 for the vehicle, plus \$2000 for original Q Plates.



It is intended to sell the car with a safety certificate and current registration, and further details on this and any other aspects can be obtained from Steve Moulder on



FOR SALE RILEY 1 ½ RMA GEAR-BOX \$350.00

1949 Nuffield Motors vintage model

Suits Riley, MG, Morris, Austin and Wolseley

4 speed, synchromesh on 2nd 3rd and 4th gear.

Fully refurbished in good working order.

In Brisbane, Phone Simon 0499 228 603

Email: spschoon@iprimus.com.au