

True Stories, Stories, P76 Song, Technical information. 2025 National Handbook



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Tech Tips from Phil or indeed any Club article or Private contribution used as a GUIDE, you do so entirely at your own risk! In other words, "all care, but no responsibility taken"!

Information about this Magazine

The magazine was made up from paperwork received from 2020 National that was delayed due to Covid. We thank members and friends of the P76 community, Publication from the many clubs in Australia and New Zealand for the use of the information.

I would like to thank Mr. Philip Crowther and others for the many technical articles, and we ask that you please read the disclaimer on the front of this magazine.

Additional technical information can be sourced on the web site www.leylandp76.com/technical.html

The Queensland P76 Club hopes you enjoyed your stay at Stanthorpe Qld.

We thank the community of Stanthorpe for their hospitality and look forward to your returning the Granit Belt in the coming years.

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Yowees' Adventures

"Life is nothing without a little drama and excitement"

Drama section

Well over the last couple of weeks I have been involved in trying to fix the power and oil fumes of my Orange P76 E6 super auto.

Just after the disaster of floods in the Southeast corner of Queensland I took my P76 for a run to Toowoomba, but due to road works I diverted through the Murphy Creek Road to Toowoomba. The last section of this road has a very steep section and on this stretch the P was down to 1st gear and just making it up the ridge.

After that episode I had fumes problems. While sitting at lights, the oil fumes did make life uncomfortable.

So a couple of weeks ago after picking up another motor I decided something had to be done, otherwise I would not be heading to Inverell in a P76.

The day of the Yatla Drive In I tried tuning the engine. Checked the timing and set the points and adjusted the SU caribe. Seem to be OK so off to the Movies, great afternoon and night. Upon leaving the drive in one of the cars next to us had a problem with noise from under the bonnet and had a hell of a time getting the car to run, but in time he was able to get going and was out of the Drive In.

This meant that we had to get going too, but only to find that I too had engine problems and the car would not start. Cold engine SU choke problems. I drove home with throttle wide open, problems when I came to traffic lights. So, I hope the other drivers got some good "Karma" because he got his payback for thinking how lucky I was not to happen to me.

Next day looked into the caribe problem only to find that the mechanism did not move, thought it was the linkages and the nut binding, but only later when I was putting on the manifold I found that the nut used to adjust the tuning was screwing onto the plastic section of the needle seat, so no a problem with the mechanical linkages.

When Rick arrived, a friend arrived we did a compression check of the engine. The car was running very roughly, so pulling off the spark lead for cylinder 5 the engine still ran with no change. Pulling the spark plug out the compression was 120 PSI. I said to Rick, leave it and I will pull the head off. I am getting good at this now as I have done it several times in the last years.

To change the head, you need to remove power, drain the water (removed the bottom water hose and un-did the brass bolt in the block), the fuel systems mechanical pump and the manifolds. Lifting the head off is much easier doing this.

I took the opportunity then with the rocker cover removed to check the clearance between the cam and the top of the valves. I had two inlet valves that had no clearance and were tight against the cam while another only had 2 thou clearance (norm 9-10 thou). This meant I had two inlet valves open, and the compression was not working correctly. I still have not found why, so I will do another report after Easter.

You have also got to set a top dead centre for cylinder one and align the marks on the cam and sprocket. This done you can detension the chain by turning a chain tensioner unit at the bottom of the engine with an allen key. Found by removing a bolt plug below the alternator.

As this engine has probably not been in touch for 30 years the head bolts were very tight. (Needed to have lengthened the bar on the socket to break the hold of the bolts).

After removing the head found that it was OK. No blowing through.

At the same time, I had the original engine in the shed that I had not touched or investigated since removing it a year earlier to go to the Nationals at Newcastle. Previously, to remove this engine I had changed the head with a reconditioned one only to find that the engine did not come up better than it was before changing the head. Removed the head and found out what was wrong, I had blown through between the cylinders on 5 to 6 2 to 3 which I now put down to either timing and bad petrol (causes pinging) and not retightening the head bolts.

After seeing what I had found went out and did some investigation. Sort out whether the new gaskets that the club supplies from ACL would need to be treated so as reduce the blow through and did I need to resurface the head.

Well Trevor from ACL was helpful and gave me some tips on reassembling of the head. He suggested putting anti seize on the bolts and oil under the head when tensioning also running the engine and retightening the head bolts. I also put some head gasket spray on the gasket as well.

After scraping the head and block I reassembled the engine, found the problem with the SU and put a temporary gasket under the tappet cover. Started the engine with little to no problems. It took a while for the water to get through the engine.

Next morning I went for a drive to check it out.

The car was nice and smooth. I pulled up to have a chin wag with a friend and when returning to the car found that the oil had dribbled down the back of the engine with an oil puddle on the ground.

Home, I went and again the oil continued to leak.

To finish the job, I was going to put a new rocker cover gasket on so while the cover was removed tried to tension the head bolt but they were good.

Add some gasket glue to the surface of the head and onto the gasket went on the positioned the rocker cover and refitted the fuel systems etc. and shut up the engine bay.

This is the exciting part

I waited till the next day, did a check of the obvious things petrol clamps to the SU check the water and oil and shut the bonnet again

Hop in and started the car, backing back I noticed a puddle of waterlike substance and also some petrol fumes.

This seemed wrong so still having the engine turning over lifted the bonnet and found petrol pumped out of the pump over the front of the engine. Hooped around, shut the motor off and then got the hose out and washed the engine down and the petrol on the ground.

Again, I would like to say how lucky I was that the house and I did not go up in a ball of flames. Sorry Jenny and Leonard that I did not take better care. So here is my story. (On a good note I had no part left over.)

Philip Crowther Tech Tips

There are a few maintenance and/or repair jobs on P-76's where an extra pair of hands can make the job quite a bit easier. Recently, assisting a friend to install "new" rear springs reminded me of some of the tricks I learned which made this job a bit easier. We all know that P-76's often suffered from a saggy rear end, with the easiest fix being to install an after-market, maybe slightly heavier-duty or taller rear springs to lift the P's rear end. Removal of the upper and lower spring retainers from the old springs can be a time-consuming job. Fitting a spring compressor to one side of the old rear spring(s) and then tightening it down to bend the spring like a banana, will often open-up the other side of the spring, making it far easier to remove/install the retainer(s). Good one, Mr. Glenn! Also, placing a small block of wood on the top rear end of the lower trailing arm, between the front edge of the axle tube and the rear edge of the new spring, will help to hold the bottom end of the spring in position while you bravely attempt to get the lower retainer secured. If the thread(s) on the retainers are damaged, it can be easier to drill-out the damaged stud and fit a 3/8" bolt through the retainer and the trailing arm. Don't forget to fit the flat washers-they help to prevent distortion of the trailing arms, when the retainer(s)' bolts or nuts are being tightened. Remember that if the length of the new springs means that you need to drop the rear axle right down in order to gain enough space to position the new springs, the lower ends of the rear shocks will need to be temporarily removed from the lower bolts. You will need to have vehicle weight on the rear axle, to provide sufficient clearance to remove the lower end of the rear shocks from the bolts or use a trolley jack to elevate the rear axle to the point where it is close to its "normal" ride height. While you're under the car, having so much fun, don't forget to check the condition of the lower shock mount brackets on the diff housing for any sign of cracking. Generally speaking, when the car is sitting back on the ground, if there's about 25 mm or 1" of clearance between the top of the rear tyres and the top inner edge of the rear guard's arch, then your P-76's ride height should be quite O.K. and you won't have a saggy rear end as you drive up to Stanthorpe!

DR PHILTHY'S TECH TIPS

As if it wasn't bad enough that I used paper of questionable pedigree to repair a damaged P76 V8 valley gasket, then I used short sections of 2nd hand flat fan belts to fabricate retaining straps to hold handbrake cables firmly against the sides of P76 lower trailing arms, to prevent the handbrake cables from rubbing on the inside sidewalls of the rear tyres.

Now, in my never-ending search to find economical solutions to P76 maintenance and repair problems, I have hit a new high – a pinnacle of Bodgie Brothers' Innovation.

A sort-of friend accidentally backed into the rear of HOS, destroying the last of the unfaded taillights I had in stock. Since I needed to keep HOS on the road to tow my firewood trailer, some improvisation was called for to make a faded but otherwise undamaged tail-light suitable for use.

My best efforts with acrylic tinting did not work very well, but another option presented itself while I was searching through one of my big boxes of P-bits. I carefully cleaned up the backing plate of a faded, but undamaged tail-light and sprayed on a few coats of gloss white. I used metho to clean the inside surfaces of the faded taillight, then Mr. Dremel and I did some surgery on about a dozen small confectionery containers.

After test-fitting some pretty coloured squares of plastic to the inside surfaces of the faded taillight, I enlisted the aid of a tube of Super Glue and carefully attached the coloured pieces of plastic to the inside faces of the taillight, then I weighted the little plastic pieces down to ensure they stuck firmly to the taillight.

Yes folks!! The purists would scream, but HOS is now running around quite happily and attracting no more than the usual amount of attention from the local Police, because he has a nicely coloured tail-light, which has quite acceptable tinting. The confectionary containers used in this poverty-pack repair came from Mr Ferero. HOS is the proud wearer of a nicely tinted TIC-TAK Taillight.

Now you may groan, but it worked for me!!

Have fun.

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Cheers, Phil Crowther

It's lonesome away from City members and all
Out in the Bush where we answer the call.
But you can be happy out here in the sticks
If you go out and find a P seventy-six.
Now some like their Holdens and some like their Fords
And some like Cadillacs for pleasing their broads,
Chevvies and Rileys can give you your kicks
But there's nothing as sexy as a P seventy-six.
Michael from Coota has the 76 Bug,
His car is a beauty and he's feeling quite smug,
The colours's a brown which Gwen doesn't like.
But she says it's more comfy then riding a bike.
Now Ray and Craig are buying them too,
And Fred from Coota may have three, Yes that's true
They're simple to work on and easy to fix,
That's why they're all buying a P seventy six.
Now, Plates Registrar Eddie, with pride in our Club,
Has a FJ Ambulance, as shiney as they come.
But I'm sure he'd be happy to try a few tricks,
At the wheel of his new P seventy- six.
If you want a fast car, that's good on the straights,
Buy a P seventy-six, (or two P thirty eights),
The brothers called Leyland, would have made better pix,
If only they'd used a P seventy-six.
The boot is enormous; they say it can fit,
A forty-four gallon and still spare a bit,
But it's really for carrying home all the bits,
That drop off, while you're driving the P seventy-six.
By Dennis Shepherd.
And Gwen Livingstone
Riverena P76 Owners Club

My Love, Hate relationship with Cars **By Gwen Livingstone**

Oh what do I write about cars, I have had love, hated them over the years
I should have realised how much Michael loved cars when I first started going with him and he would comment about his car or cars we seen when out driving.

I have driven them, held the tools while Michael repaired or restored them, washed and cleaned them, helped run Rallies, Swap Meets. Pulled apart cars in the back yard to get Michael to store them, when I was worried about little kids getting hurt. Put plastic flowers in a radiator, when the Model T Brass radiator was left in the lounge room. (Michael moved after that) Followed up clues to where cars and parts where to be found. Looked at swap meets for parts for Model A's and P76's

(Left early in the mornings) Shared Driving the modern car trailering a car or trailer loaded with parts.

Followed the P76 in checking the speedo. I had to give up as was up to 120 on the modern car but only 100 in P76.

Driven the Model A for Weddings and even did a Funeral.

I first started driving a 1938 Dodge Michael bought from an old gentleman up the road from us.

Our eldest son was only a baby, and I was going to Temora to see my parents. (It was on full registration no 30-year gap then.) Coming back, I started to get itchy and sore legs. I found I had bites all over the lower part of my legs. Next day a vintage car member came to look at the car. We found a hornet's nest in the motor area. As the engine had heated up so had the hornets.

I then learned to drive the Model A Coupe we had. Going again to Temora. Michael was in the dicky seat with Patrick and Sharon. I was driving and about to have Amanda. Michael had put the throttle lever on and I didn't know when I tried to pull up for a large hole in the road. It didn't stop, I hit it, they hit the roof and with kids crying "I don't want to drive with Mum" Found out how to take it off auto, and Michael drove home.

I remember the first time I knew what a Leyland P76 was, Michael had a pamphlet on the Auction n Sydney of the cars when the factory closed.

He was wanting to buy a Force7 but was worried he would not be able to road register it.

He started looking for a P76 and when today's show came to Cootamundra he was asked by Grant Denyer "What was his favourite car". He replied to his beloved 1928 Model A Ford Station Wagon.

He was then asked "what car did he think was the collector's car of the future and he answered 'The Leyland P76.'

Michael stayed talking with the crew and car members and I came home.

I was only home a short while when the Television station rang. They were getting calls from people wanting to sell their P76's.

They asked me could they give them our number. I rang Michael and told him and he could not believe it and came straight home. All These numbers of people who had rang all over Australia and was kept busy for the next few days returning and answering calls. He did not buy any of them as they were too far away. I'm talking about Northern Territory and WA , etc.

I often wondered what happened to these cars and if maybe some of them have been restored by P76 lovers.

If a P76 was close, We would go for a drive to look at them,

When our son Patrick moved into a unit block in North Sydney, he told his Dad there was a guy who owned a P76 in one of the units.

Michael eventually met him and after going to look at it and visit him when we visited Patrick, he asked him if he could buy it.

He purchased Oh Fudge V8 on 1st April (April fools Day) as everyone said he was a fool to buy it. But that was Michael's sense of humour.
It was a great vehicle and went like a rocket as it had a lot of modifications.
It was a man's car and hated women and always played up every time I drove it. It just didn't like me driving it. I have driven a lot of different cars and had never had problems. Except for this cantankerous P76.

Michael continued looking up all the magazines advertising Leyland P76 and keeping a look out on his travels with work.

Then we found eBay and I taught him how to bid.

Worse thing I ever did. Before I knew he was buying everything that had Leyland P76 on it on eBay. Parcels were arriving daily with something that was being kept for a car he was going to restore. one day.

Michael seen an ad in Lismore for an Omega Blue Targa and rang up about it.

We left in the early hours in the morning to pick it up in . When we arrived in the shed was a rolling chases Aspin Green Targa Florio. We just loved it. So, we bought the two and then he had to sell omega Blue Targa.

Then I decided to buy the 6-cylinder Bold as Brass that was also there.

So suddenly we have four Leyland P76's Three A Model Fords, A Model Ford 31 Fire Engine,

FJ Holden Panel Van and Ford Thunderbird in the shed. Plus Stationary Engines.

The shed was a bit full. Also, his Chevy Truck work vehicle.

Michael found a lot of P76's parts for sale which a friend bought down from Queensland. These were all stacked in our backyard with our daughter's wedding only two weeks away. I was not happy. Not more parts and with the Wedding they had to be put away somewhere. "Even to the tip " I said. .So many boxes were filled and packed away in the shed. (A smaller shed) and marked with what they are.
Just as well as I would not know what they are now.

The Targa came on the road with the help of a friend Eddie Sams from Temora and its first run was to the 30th Anniversary of Leyland P76's 2003 in Canberra. Where it won best Targa Florio., and Most Original with the six-cylinder Bold as Brass. I drove the Bold as Brass.

I would always torment Michael by saying the Targa was my Woolworth's shopping car.

Michael had not been well, and we were going down to the first 2005 Muscle Car display at Eastern creek. He wanted a rest so I was driving down the Hume Highway when after about an hour driving there was a loud bang and I

Thought Oh S... and I am trying to pull over to the outside lane and trying to wake him up. Thinking I have done some major damage with his beloved car. When I was able to get off the road out of traffic and Michael looked at it, the air conditioner compressor had blown a big hole in it. I was relieved as I thought I had blown the motor.

We did arrive without any further drama, to the Muscle Car Event and it was great to catch up with fellow P76 owners.

The cars were able to be driven for a lap around Eastern Creek. And we were enjoying being able to do the lap. It had rained that day, and water was starting to run across the circuit, which was hard to see in the sun, when we hit it. The car was sliding, and Michael was getting it under control while I was screaming, though we were going to hit the barriers.

All good and we proceeded down the main straight with everyone clapping.

Michael said "Isn't it great they like the P76" ?I agreed, and we waved to the crowd.

When we arrived back at the starting point, we were asked. "Did you have a slide?" " How did you know" Michael said. "We see it on the big screen" was the reply. We then knew what they were clapping about.

Michael found a P76 Replica Station Wagon for sale in Adelaide and showed me the photo he had, but did not tell me, that it was when it was on the road. It had been stored for many years I with a cover over it outside. I found this out when we were only two hours from our destination and thought this is not good. It was actually much better than I thought and home it came. Michael was able to source a lot of old new stock to put in it. But then started to find he could not do the things he was always able to do and had to reluctantly sell it.

We were visiting friends in Wollongong and Michael was able to go and visit Fred Addison. Fred showed him through his shed and Michael was like a kid in a lolly shop. Look but don't touch. Secretly I was really pleased he was not able to buy anything. He really enjoyed his time with Fred and was pleased when Fred and his daughter Wyn came to the National Meet in Cootamundra. In 2006.

He formed the Country P76 Club, and the National Meet was held in Cootamundra in 2006 it was so great to see all the P76's and be able to get photos of all the cars together. I soon found out the different models of the cars and the Force7 was not a 47. It was also great to put a name to the P76 owners and meet them. Michael loved having Green's Force 7 in the shed and would have loved to have kept it. I was thinking "Not another car"

He tried many times to buy one not enough finance.

Sadly Michael passed away suddenly in October, 2006
On his headstone we have an image of the A Model Ford Woody and the Leyland P76 Targa. So in death I won't get away from the cars.

We still have the Country P76 Club in Cootamundra with members, but not as many as when Michael was alive and the Cootamundra Antique Motor club which we have celebrating its 40th birthday this year. It is also Michael's memorial run.

I have had fun when I had not started the Targa for a while. I rang member Ray Douglas asking how to start the car, as it wouldn't start. Take the Air Filter off and pour a little amount of fuel down the carburettor, then make sure you put it back on before you start it. Or it will go banging. That's ok, but when you are short like me and try and lean over to do it, and it doesn't start it is a problem. Anyway, after a couple of tries it did start for me.

Michael did not show me how to pump up the tyres on the cars and I have had some fun with the compressor trying to do this. I know you guys will laugh, but I cannot seem to get the same pressure in all the tyres. I either blow them up too much and then let too much air out. It can take me up to an hour to pump them up. Then someone told me it doesn't have to be exact just close. I do have a gauge but still get it wrong somehow,

I drove it to the 40th Anniversary in Canberra. Spent all day cleaning it and then it rained all the way over. Had to clean it again when I arrived. It was great to be parked with the P76's and meet up with friends again. I left before the presentation as the windscreen has no tinting and knew I would drive into the sun all the way home. It was a lovely surprise to get a email to say I had won Best Targa, a very emotional moment for me.,after driving Michael's beloved Targa Florio.

I do love driving the Targa but worry about driving it a long distance on my own, as I would not be able to repair anything if it went wrong and no matter how good you think the car is. Things can go wrong with cars. I have a Ford Capri Sports car I drive. Michael bought it for me for our 40th Wedding Anniversary just before he passed. I also drive the FJ Holden and the 1928 Model A Fords. So life is interesting. I choose the run I am going on as to which car I take.

I must mention the first time I drove the 1928 Model A Ford I drove it on retard and boiled it.,didn't know what retard was. Soon learnt.

I am very lucky, the Cootamundra Antique Motor Club which Michael and I were foundation members have Wednesday night, where they use the Technical College to do car repairs and will help me with the cars, if I have a problem. I like to keep them in good condition. I hate the smell of grease, so they told me to wear gloves. Really couldn't imagine it. Recently our Politician for the area, came up to see how they use the TAFE to look after their cars. As I am the only lady that drives and takes her cars up. I was asked to go up for them to show there was no sex discrimination.

Unfortunately this does happen in car clubs, and I have found this over the years. Some Guys do not like their wives or partners or children driving their cars. I was lucky that Michael was happy for me or our kids to drive the cars. Sometimes he complained about all the cars in the shed and not one for him to drive. Now the Grandchildren are driving and that is so nice to see, It means they and their parents will keep driving our cars long after I am gone.

I did not realised when I started going with Michael at 17 that my future would be married to a man with such love of cars. We had a lot of fun and met some great friends over the years, We Traveled across the USA in a 1928 A Model Ford lent to us with friends. I drove Model A in the USA. Shared driving around Australia and to many rallies. I have driven many different cars over the years, which has been a pleasure.

It is a great Heritage we have left to our family The love of cars.

Gwen Livingstone 22nd January 2020.

My P76 Story. By Peter Velthuis.

It all started back in 1982/83 wanting a V8 4speed of any kind.

I knew a guy who ran a fish n chips shop on the northern beaches in Dee Why,

And was taking about wanting a V8 to buy.

The owner of the shop looked at me and told me he was selling his car.

So was interested in looking at it, took me up the road and showed me the car.

I was surprised first of, then started looking around the car and thought this is different to anything that's on the road, Nothing like the Torana's falcons and Valiant at the time. I thought about it for a little while and thought what the heck I can do something with this.

The car was a 1974 BAB super v8 4 speed with limited slip diff dual 2" exhaust with beige interior. The car was stock otherwise.



I then started to modify it as soon as I got it.

Set of 14x8 hotwires Headlight covers and some body work.

People thought I was mad buying a P76, Parts are hard to get and they break down a lot, But as soon as I took them for a drive they shut up and started to like it.

Mods are well on their way.

I went to our local drive in, and someone tapped on the window and was asking about the headlight covers, And this person happened to be Phillip Crowther.

Well parts seem to be easy to get knowing Phill back then.

Spend plenty of days at lane cove Leyland as it was known.



I wanted to change the colour to black, To make it a bit tougher looking.



I joined the P76 owners club on the second ever meeting back in the early 80's. Back then you didn't see many Ps on the road and when you did you pull over and have a chat.

Then the P76 sporting car club started, this was a whole different level.

Brushing up driving skills and further modify the P76 to take the beating it got.

Magazine from the P76 Easter Nationals “Stanthorpe Queensland 2025”

The sporting car club did the hill climbs, dirt circuits, Circuit racing Lots of motorkhana's.



Amaroo Hill Climb.



Oran Park raceway.



Motorkhana.

There have been numerous National meets, But nothing like going to Perth West Australia. 1990.



I spend lots of hours and money to go to the nationals in Perth,

But had a slight problem with the engine at a place called Berry 300 kms from Port Augusta S.A. As we had to stop for the river crossing to go onto the Ferry crossing. I noticed a lot of smoke from under the bonnet.

As we got to the other side, we opened up the bonnet and found oil had covered the engine bay everywhere, looks like it had a lot of crank case pressure. We decided to keep going for the next 300ks to Port Augusta where we would have a good look at it.

8 litres of oil later and we got there.

We found that after taking the engine apart at a hotel all the compression ring had failed, all cracked in pieces.

Again, lucky we had a hand full of people to help out.

Here we are at a hotel million miles from home rebuilding a P motor.

After getting the car going again we set off to Perth, We found a dry lake on the way and decided to have a bit of fun, This was called lake Philthy, after Phil Crowther found it.

Here I am with a bandaged rebuild motor screaming around this dry lake. We had fun.

We then had this feeling of oh shit we are low on fuel. So, we took off and made it an economy run to the next servo.

We all filled up and took off again till the next servo a couple of hundred kms away. The funny thing was my car had all the motor issues but had the best fuel economy out of all the cars. I was running a Holden piston motor, stage 2 cam, ported heads, 4-barrel carb, extractors, 2" exhaust. All the other cars where stock.

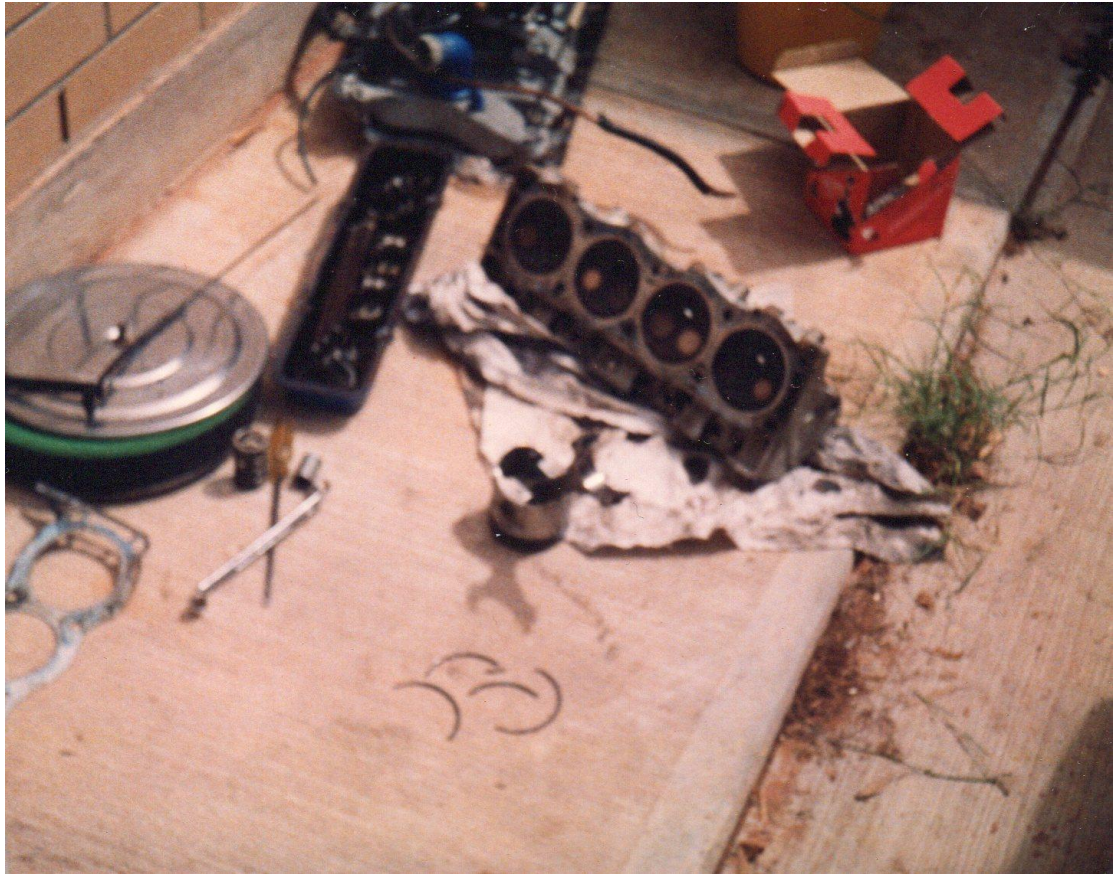
We did make it to Perth and had a bloody good time..

Some more photos of the Perth trip Looking at the damage. Before heading off to Port Augusta.



Graham Redhead working hard tearing the motor apart.





The broken parts.



Lake Pilthy. Phil in the background.



Plagued with mud.



Cleaning our cars from mud.



Made it to Perth, For the nationals 1990.



Motor Khana top of Perth shopping center.

Magazine from the P76 Easter Nationals “Stanthorpe Queensland 2025”

Special thanks to the guy’s that helped get me to Perth. Phil Crowther, Russel Nicholson, And Graham Redhead. LE

The Nemesis. Start to finish.

By Peter Velthuis.

It all started again at the P76 40th anniversary Canberra 2013.

I've been a member of the NSW owners club since 1982.

Had a break from car club events since 1990 after taking my P76 off the road and sell all the parts of the car, as it had a lot of rust in the wrong places. Something I didn't want to do.

I got married bought a house on the central coast and so on.

But I always thought about building a P76 one day.

Well it took almost 30 years and the 40th anniversary to get me going again.

It was all James Garrod's fault as he rang me to find out if I wanted to go to Canberra to have a look at the P76's.

We did go and I was surprised at the quality of all the P76's there, my mind was on overload.

The next day I was on the phone to Steve Maher asking him to look out for a P76 for me. Again, I was surprised how hard it was getting one. But finally, he found one. It was \$1250 at Smithfield Ford Pro wreckers, Yes wreckers.

It was a non-running car and had to be towed. Thanks to Martin Stockwell I was able to store my new purchase at his place for a week so I could organize a trailer to get it up to the central coast.







Then the fun started, pulling it apart to a bare shell.



Rust wise I was very lucky, Sills are perfect and all the structural parts.

But the floors and the boot area had seen better days, As this car was used as a race car, It had a lot of big dents in it.

I then got it to the blasters to get all the paint off the body and see what I've got left to work with, To my surprise it wasn't too bad.

The original colour was Oh Fudge, but I had better plans for the colour.



All sand blasted







Then epoxy sealed. on the rotisserie

Grinding rust away and planning for the air conditioning unit.



I had to cut a big hole to fit the air con unit further back in the dash.



Final fitment.



My workshop, The tarpaulin taj mahal.

Not easy when rain and cold winter hit when working on the car.



The first time on wheels.



Car finally in primer for paint.

Took the car to a mate who is a panel beater in Sydney to get it painted.



He looked over the work I had done and told me No I'm not painting it until you get the body panels straight. I thought I did a good job on the body, but I was wrong (very wrong).



This is why he didn't want to pain it lol.



Magazine from the P76 Easter Nationals “Stanthorpe Queensland 2025”

I’m glad he spotted it as it would have looked like shit.

Then the 3 months of hard labour started for me.

I was able to use his shop under his guidance as he showed me how to do it properly. I have a whole new respect for panel beaters.



We had some crazy ideas.



High fill on.



High fill off. Looking a lot flatter now. I had repeated this a couple of times.



All rubbed down.



Base coat on.



Clear coat.

Magazine from the P76 Easter Nationals “Stanthorpe Queensland 2025”

And all the other parts painted.



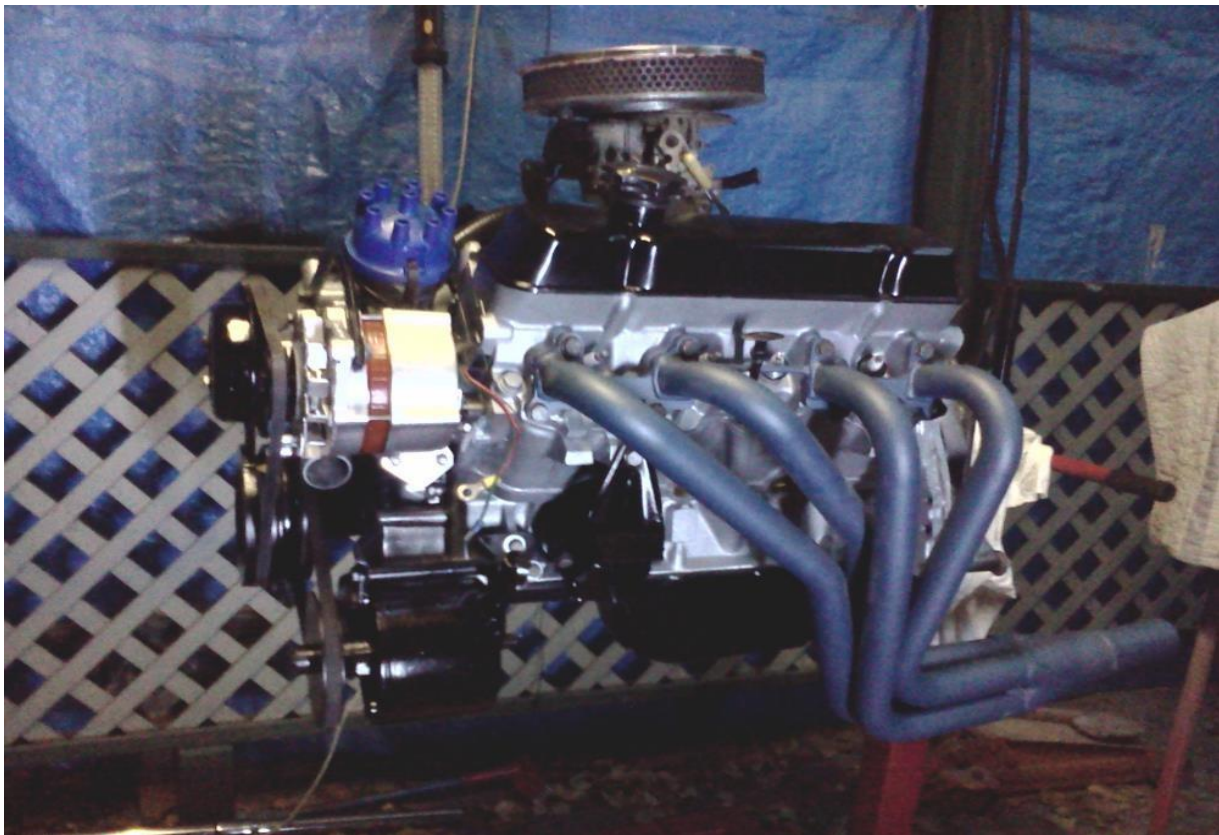
We even had the oven set on 76dec.



Then the fun part putting it all together again without scratching it. Stressful.



Just a quick cleanup of the motor,





Motor ready to go in.





The finished product. For now.

I only got this car going a week before Adelaide nationals in McLaren vale 2015.

And still had problems with the ignition system the day before leaving.

Made it there and back with no issues. Very nerve wrecking trip straight after a build.

I have gone and done some more mods as time went on, to now getting ready for the QLD Stanthorpe Nationals 2020.

Specs and mods done to the car.





This car was originally a 1973 OH Fudge deluxe V8 auto column shift.
Motor had been fully balanced, Has Repco pistons (thicker sidewalls).
Cam unknown but not standard.
Heads are ported and match ported to inlet manifold.
Rover modified flywheel to fit the larger ford clutch and heavy-duty pressure plate.
Sump has new baffles to stop oil surge.
Holden Z30 oil filter conversion.
Holden VN V8 Clutch cable.
Limited slip diff.
Now with a T5 speed ford gear box.
Power steering.
MSD ignition.
Willpower 4-barrel manifold.

253 Holden 4-barrel Rochester carb.

Hurricane extractors.

Dual 2 ¼"exhaust system.

Rover painted rocker covers.

WB Holden alloy radiator.

EL Falcon dual thermo fans.

Holden V6 Throttle cable.

Custom under dash air conditioner with Sandon compressor running through standard dash vents.

Original heater box removed.

Central locking and boot catch release button in the glove box.

All Locks removed.

Suzuki liana power side mirrors.

Bonnet scoop is a modified Holden VK commodore with cold air intake through bonnet.

Rear wing is a fiberglass XY Falcon type.

Pioneer sound system.

Standard P76 braking system.

Club front Pedder's strut inserts.

Rear Bilstein shocks.

Heavy duty lowered front and rear springs. Brand unknown.

Falcon 27mm front sway bar.

Rear sway bar unknown. Was on the car.

I'm sure I missed heaps but always looking to add on later.

Peter Velthuis.

PVP760 THE NEMISIS.

P76 Recollections

By Robert Wild



Figure 1 On tour in 1974 P76 Level 4

Not a typical Pom, I've lived and worked in 11 countries during a 53-year career, which continues. In 1897 my grandfather had sailed into Sydney after a record-breaking run from New York aboard the clipper Westgate. He would later work for Dorman Long on the harbour bridge.

On three occasions I settled and worked in Australia, the first time was in Jan 1974. I knocked at the Leyland factory door on Dowling St and was interviewed by department manager Reg Fulford, starting work in the experimental department as a Vehicle Proving Engineer. My first few weeks were spent working as a fitter. Before leaving, I led the first installation of a local 4.4 litre V8 engine into a Range Rover.

Anyway, let's talk about the P76. I'm a fan (less so when it comes to the S2 Force 7). For what it's worth.

Let's put the car into perspective: The contemporary Australian cars were all derived from US designs. Each had stand-out attributes in my view: The HQ with it's excellent front subframe solution, the VJ Valiant with its flexible slant 6, the XB Ford just all round successful. All were so well styled. What a challenge!

I don't know what influence, in any, the parent UK company imparted into the P76 design. One suspects very little given how well it turned out. Ha. We know that the gods sent the Rover Buick V8 to be stroked and made into a local gem. The Borg Warner transmissions were also good.

Styling: Let's put this subject to bed. And, of course, we say it's subjective, which is a way of being nice to people who disagree with us. I would say P76 is a dog's dinner (with some redeeming features) that never got close to competing. The Force 7 defies comment, it's so bad.

Structure: Now we can talk about what this car gave us all and where it stands out to this day. Its advanced unitised body design is linked closely to its achievement in handling (and ride compromise). P76 has yet to be exceeded in weight / strength / and durability. It was a point designed car, not a derivative and never intended as a platform solution. This was very much to its advantage (vs every production car today which is inhibited by having to satisfy a range of platform duties). Low weight and design simplicity were key words in 1974. The philosophy was that it was the way to achieve low cost. In its weight and durability, P76 was a world beater! As was its handling.

My cars



Figure 2 Car as delivered and posed at Clovelly

During 1974 I ordered a new P76 under the employee discount scheme.

That year, the World Cup Rally car was prepared in the Experimental dept and I obtained a number of supplementary body reinforcement parts surplus to the rally-car build. In the factory, on the body assembly-line, I waited for the build of my car, a level 4 auto. In hand, I carried cartons of cigarettes and bottles of whisky as bribes which ensured a quality build. They scrapped my first car because the turret was mis-located and another was assigned. The body reinforcement brackets and several extra welds were conscientiously added to my car. Later I'd add World Cup type welded parts to the axle mounts, along with WC spec'd rear springs and dampers, under-engine splash guard etc. Last of all came the big Super Cibie driving lights and Ray Chegwidden-welded lightweight bush bar.

It may be of interest that I was advised by the durability specialists to spec an auto transmission because of superior reliability over the manual, and because the auto was giving better transmission and axle life with its softer inputs.

This car went around Australia and was close to being written off in central Queensland but was patched-up and we continued.

In 75, I shipped it to New Zealand but it ended up in Rio de Janeiro. From there I redirected it to the UK. Such was my lack of direction at the time.

1975/1976 found me working as a body Tool Engineer for Triumph Cars at Canley plant in Coventry, UK. A nice man called Con Allen, a senior manager from Leyland Australia tracked me down. "I found your report and notes on the local engine installation in Range Rover. I couldn't read your handwriting FFS and now I've a few questions for you."

Anyway, I was busy tooling the SD1 instrument binnacle and the fabric sunroof for the TR7. Snooping around the surplus experimental cars one day I found a P76. It was the abandoned Vanden Plas project car. I was told it was to be scrapped and was not to be registered. I bought it from the company promising to use it only for spares for my yellow car. But it didn't get scrapped, it got painted up and a manual gearbox fitted (which I'd brought back from Australia). And registered.

This ex Vanden Plas car was entered by me in several UK national, club level events and proved quicker than factory prepared entrants which included Rover V8s and Ford V6 Capris. The P76 at limit is a balanced and highly controllable car. Later, the more highly developed SD1 emulated this attribute but was heavier. Some people say these cars are related, but they aren't. Some pictures



Figure 3 Factory photo taken with a Hasselblad to show David Abel the black accents and dual exhaust.



Figure 4 Photographs at Dawes Point, Sydney, after black strips and accents are applied. A black bonnet was added later.

Legacy of UK influence:

I worked at the Government Aircraft factory at Fishermen’s Bend, Melbourne, in later years. It astounded me that Australian industry had built Beaufighters and Lincoln bombers through WW2. What sort of incredible achievement was that, in wartime and on the other side of the world! Similarly, the BMC factory at Zetland was so successful in the early 50s.

Someone at Zetland said to me, a long time ago, don’t you know that the British car industry was equipped and poised to take on the world at the beginning of the 50s. They were right. But my long-winded point here is that by the late 50s the consolidated UK industry had begun making the mistakes that lost them a world market. This BMC / Leyland UK culture of management-errors ultimately constrained, under-funded and killed Leyland Australia. With some help from Gough Whitlam and his still prevalent view that Australia doesn’t need self-sufficiency. The generation of managers, the like of

whom had overseen the building of those WW2 planes in Melbourne had retired or been ousted by the whiz kids like Michael Edwardes and David Abel.



Figure 5 Touring Australia in Late 1974



Figure 6 Leyland Australia Certificate of Service

Experience in the Leyland Experimental Dept: Recently, I finished a 6 year stint at Jaguar Land-Rover drivetrain design in the UK. I will tell you that the quality of working culture never got close to that of the people I worked with at Zetland through 1974. JLR today has an abundance of excellent young people but they do not work as well as the keen and skilled Australians it was my good fortune to work with and to learn from. Electronic definition and fabrication builds wonderful cars today but hinders how we work and can cause some very big problems.

Detail work on Force 7: The pilot builds of the first Force 7 cars began during 1974 and I was assigned to investigate and fix several interior body quality features. Most serious was the door glass constraint and sealing.

As we know, Force 7 has frameless door windows and I'll say that they are not the easiest designs to get right on any car. We did not have time to tackle the necessary design changes before the program ended. But I did learn that the car's styling dictated

an exposed (unconstrained) door glass area that was too high relative to the portion of glass which is constrained within the door panel. The (long) door panel was insufficiently structured to provide constraint of the glass. Put simply, the door panel was too shallow for the tall glass.

Test work: I was fortunate to join one of the bush durability test teams and we were despatched to SW NSW to an area which I cannot recall to this day. It involved a disciplined daily test routine with the cars running at least two long shifts per day. I suffered an axle coming loose when a link mount failed so drove gently to the nearest farm where we lifted the car with a front loader and welded up the broken bracket. We were soon on our way again, with the event and mileage recorded. The backbone of the department's excellent manual paperwork system was a log for every test car which contained green-sheets. These were the single page docs used to communicate every request, answer, build event, test event, in fact everything. It worked well and was managed diligently by a lead man called Archie. Were the green-sheets ever salvaged or saved I wonder? On another occasion my electrics failed completely so I sat in a dark car all night and got underway in the morning. We lost a driver for the best part of a week on another test event which I was not part of. He hit a large Kangaroo, overturned and left the road, and was thrown from the car and wandered for days before being rescued.

Such bush testing was elemental in the process of accumulating miles and data on durability, with a cycle of necessary modifications being quickly executed, involving the Experimental and the design drawing office people, and re-tested. Back in the Experimental, when the certain cars returned, they were stripped and measured on a large surface table for any structural deflection / dimensional degradation. Front suspension lower link and its associated strut (with large bush) which runs aft were always a concern. I was involved with some high speed pot-hole testing at Windsor airport. We strain-gauged the lower link and recorded the inputs and degradation. Similar activity which I saw taking place recently in the UK did not get close to the diligent Australian processes I saw in 1974. A high degree of dependence on rig testing has replaced most of the conventional road-durability and Belgian-pave testing.

Summing-up: I wish we could buy cars like the P76 today. How good might subsequent Leyland Australia cars have become? How good might the smaller rear-drive Leyland car have become? What a shame we've lost the low-cost conventional rear-drive six and eight cyl cars which Australian industry excelled in building.

Article by Robert C Wild, currently with WildBridge International Consultants,
www.wildbridge.co.uk



Facebookmarch 7, 2020

Author Robert Wild

OK, here's a story for the boys who like cars. In 1968 I was an engineering apprentice in the New Vehicle Projects dept at Rover Cars, Solihull.

We were testing a prototype car in which the company was heavily invested and was to become the Rover P8. We were assessing a tyre and suspension combination at an extreme, on-limit handling condition.

I was asked to get out and observe while my boss and another colleague increased the test speed to approx 120mph. The car flipped three and half times and ended up as we see in the picture. I helped extract my colleagues who were not badly hurt.

A post script: My boss later contacted the F1 driver Jody Scheckter and asked if he would take over the testing we'd been doing which involved inducing lift-off oversteer at max lateral-g and at 120mph. "Fuck off" was his response.

Questions

Justin Townsend

Great story and photo! Just been reading about Ken Miles after watching “Ford vs Ferrari”. Testing cars was a far different proposition in those days

Robert Wild

So there's more to this if you're interested, Justin. We were aware that the big new competitor car from BMW had a flaw which had sent several of us off sideways and into

fields when we were assessing its handling. When, as one commonly did, the driver lifted off the throttle in a bend at high speed, the BMWs rear wheel geometry would change and cause it to oversteer and spin. A wholly unsafe characteristic. The P7c / P8 was to be a large new Rover which set its sights on being superior even to the then new XJ6. The Rover had a sophisticated de Dion type rear suspension. The prototype car we wrecked had cost the equivalent of millions today to develop and build. We needed to confirm that the problem couldn't happen on our car. And we began by ordering up the best spec of experimental Pirelli tyre available. The accident happened because the Rover achieved such enormous grip. It didn't suffer oversteer, but the superior tyres hung on so well that the wheel rim eventually dug into the tarmac and caused the car to roll. The P8 program was eventually cancelled which was a real shame.



Sue Desmond

Justin Townsend you've done some stuff Bob!! Very interesting 👍

Nick Kounelis

Robert Wild was those prototypes running 4.4 v8 engines or 3.5?

 **LEYLAND MOTOR CORPORATION OF AUSTRALIA LIMITED**
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CERTIFICATE OF SERVICE

This Certificate is given, without admission or payment of any fees.

No Certificate of Service is given in the case of any Employees discharged for a serious offence.

This is to certify that **Mr. Robert Cardwell WILD**, of P.O. Box 471 COOMBERBERRY,
whose signature appears at the foot hereof, was employed by Leyland Motor Corporation of Australia Limited
as follows:

Date of Engagement: 29. 1. 74.
Date of Leaving: 4. 11. 74.
Details of Service: He, WILD commenced duties with this company on
29th January 1974 as a Technical Officer 1st year
in Product Engineering-Vehicle Proving, and has
remained in that capacity until that time.

Signature of Employee: _____

Technical Manager
J. D. McKeen.

Date: 4th November 1974.

THE FIRST "P" I HAVE DRIVEN IN 45 YEARS.

Back in the 80's I thought I was the only defender of our so called "Lemon". Yes, they had their problems with quality control, panels not fitting quite perfectly, a few minor water leaks and a couple of hot exhaust mufflers. However, it should be remember that this car was developed on a shoe string and being produced within two years from concept. Remember also there were no robots or computer drive machines then. It should also be remembered that it was also plagued with part shortages and industrial problems. On the plus though look at the V8 engine and the drive train was built like a tank. The Force 7 that was due to be released in 1975 was a much-improved vehicle even though it was a 3 door vehicle. The P77 which was to replace the 76 never had the time to be a prototype built for testing.

Then Twenty or Thirty years later there were still plenty of regular P76 drivers roaming around doing their daily drive. Some motor writers and motor industry watchers started to admit that the P76 might not have been the "Lemon" it was painted as, back in its time. Its innovations were never properly appreciated at the time. Today it is written about as an ideal and popular classic collector. Wheels Magazine saw its potential back in the day and awarded it *Car of The Year* as we all know.

The P76 project has many parallels to the "Tucker" built in the late forties. It was strides ahead of any other car being built in that time. Technology, finish, safety and advanced suspension and transmission were all unparalleled.

As a self-confessed petrol head all my life, one has to go back to the 60s and 70s to see this vintage of the Big 3 brands.

There they are in abundance and why not so many to choose from Ford, The General, Chrysler, Leyland and the Japanese were starting to bring in their models as well.

So here I must confess my Bona fide credentials as an enthusiast and petrol head. I mentioned earlier it has been 45 years since I drove my last "P". After completing an apprenticeship at Leyland Australia from 1969-72 I worked in the Experimental Department from 1973-74. For the first few months of 1973 I worked in the newly built Emissions Control Lab. I was asked to join the Durability Driving Team and there I worked till I was no longer required due to the factory closing down at the end of 1974. In the automotive scene one could possibly think this was the best job in this industry to be driving and testing prototype cars. Well you would be right! So, I have driven a few in my time even the Holden Mules. (but that's another story for another day).

My uncle Alan purchased a new Super P76 in 1974 and used pulled a caravan around Australia a couple of times and was driving it till he passed in the late 80's. His eldest son Jim took the P and stored it in Rockhampton and planned to restore it when he retired. The restoration took several years it has now been lovingly returned to its nearly original condition. The V8 engine has spent a fair bit of the last 30 years in Jim's speed boat pulling skiers around.

My family have been to Rocky a couple of times to visit Jim and Jill and the P. Jim and Jill were members of: All Classic Motor Club, (Central Queensland). Jim and Jill and my wife Lynn and I had planned to attend the Nationals together in April 2020. Sadly, Jim passed away in late 2019 and I bequeathed the P76 to me as he knew I had a history with them. So I was

determined to bring it to the P76 Clubs Australian Nationals 2020 in Stanthorpe Queensland. One could now say I am proud to own this "LEMON".

The World Beckons – A P76 Anthology



Most of us are fairly familiar with the exploits of Evan Green and John Bryson in their Leyland P76 during the 1974 UDT World Cup Rally. They led the rally on a world stage only to have the front suspension break whilst recovering from getting lost in the Sahara Desert due to poor and inaccurate route instructions. Still, a win on the Targa Florio section inevitably gave us the Targa Florio special edition P76. The 74 World Cup Rally was one of those great motor sport missed opportunities. It did prove though that John Bryson's claim that the P76 was the best long distance rally car in the world at that time is probably correct.

Fast forward 37 years to 2011 and Gerry Crown and Matt Bryson, fresh from their win in the 2010 Peking To Paris Motor Challenge in their 1964 EH Holden decided to retire the Holden and build a new car for the 2013 Peking To Paris. John Bryson, who is Gerry's good friend and Matt's father naturally advised them that the P76 was the best long distance rally car of the era, having proved to a certain extent that fact. So the choice made now to find one. If they were going build it just to enter the Peking To Paris time would not have been a problem but Gerry and Matt decided to do it properly. They needed to enter an event to give the car a good try out. The event they aimed for was the 2012 Trans America Challenge which posed a small problem, that of a short build time.

A nationwide search was put out for an already built P76 rally car that could be bought. Alas there were none to be found in Australia but over the ditch in New Zealand, Phillip Meyer had one that had been extensively rallied but was currently sitting idle. The car wasn't actually for sale but after a call from Matt's father, John, it instantly became available. The deal was done and the car was shipped to Sydney for an upgrade to somewhere close to P2P specs. Many long days and nights ensued with Matt working furiously on the car. New remote canister shocks were sourced from Murray Coote, the diff strengthened and upgraded, a T5 gearbox fitted and the engine rebuilt and enlarged to just under 5.0 litres with Rover fuel injection adapted. Literally at the last possible moment the P76 was shipped off to New York where Gerry and Matt will reunite with the car to tackle the 31 day rally from Newark, New Jersey to Anchorage, Alaska.

2012 TRANS AMERICA CHALLENGE

The event kicked off from Newark on the 8th of May 2012 with an entry list of some 50 cars. A few of these would play a pivotal role in future rallies. The Rally travelled through New Jersey, Maryland, West Virginia, Tennessee, Alabama, Arkansas, Kansas, Colorado, Arizona, Utah, Wyoming, Montana, Idaho, into Canada to British Columbia and Yukon and finally back to the USA and Alaska. They covered 13,515kms over 25 actual competition days. Whilst the rally wasn't too taxing on both crew and car it was certainly a good shake down run netting the Crown, Bryson, P76 team equal second with an E Type Jag, both being beaten by a Jaguar Mk2. The winning margin was a slim 38 seconds in penalties. The winners, Richard Worts and Nicola Shackleton had to be congratulated as they battled hard and had to spend almost every night patching up the car. The P76 on the other hand ran faultlessly. Gerry and Matt rarely had to rev it past 4,000 rpm due to the fantastic torque available to them. So Gerry and Matt came away very happy. The P76 required a few refinements before the Peking To Paris but on the whole for it's first competitive run it was given a big tick. As you would imagine no one from the US had ever seen, let alone heard of a P76 before but the feedback from the good ol' boys was 100% positive. It was likened to a classic Maserati and without exception it was thought the car would have sold well over there. A lost opportunity maybe. From Anchorage, Alaska it was back home to the relative warmth of Sydney where plans were made for the preparation for the 2013 Peking To Paris.

2013 PEKING TO PARIS MOTOR CHALLENGE

Once back home the P76 was stripped back to a shell and rebuilt. Shock absorbers were returned to Murray Coote for refreshing, upgrading and some slight valving adjustments, A new bigger alloy radiator from PWR was fitted, the engine was again refreshed with some refinements and the car was put on a diet. It wasn't long before it

was once again shipping time and as usual it was being worked on right up until shipping day. This time of course the P76 was off to Beijing, China to tackle what has been recognised as the longest, toughest endurance rally for classic cars in the world. The Peking To Paris Motor Challenge. 2013 was an important year for the P76 as it was it's 40th Anniversary and all hopes were on Gerry and Matt to bring home a good result. The 2013 edition of the P2P was certainly a tough one covering some 12,247 kms over 33 days through China, Mongolia, Russia and into Europe for the finish in Paris. There was some seriously tough opposition on this rally including a well built Aussie Datsun 1600, several Very quick Porsches including one built by renowned Porsche rally builder, Francis Tuthill and driven by ex Walkinshaw Racing driver Peter Lovett. One of the most interesting though was the 1974 UDT World Cup Rally winning Citroen DS23 of Aussies Rob Sherrard and Peter Washington. Could history be repeating itself. Through experience Gerry and Matt knew that the P2P is won and lost in the Mongolian desert and Russian steppes. So Gerry and Matt applied the pressure from the first day in Mongolia and quite simply the others were either not fast enough or broke attempting to keep up the unrelenting pace. Leaving Russia with a handy lead meant from there simply pacing themselves and whilst they lost a little time, particularly to the Lovett / Smith Porsche, no one was seriously able to threaten Gerry, Matt and the P76. As fate would have it the final day with the finish in Paris coincided with the P76 40th Anniversary Dinner in Canberra. Midway through the dinner a phone call was received from a very excited John Bryson who was in Paris for the finish. 40 years from the release of the P76 it had won the greatest long distance rally in the world today for classic cars. A truly memorable result. The only real problem the P76 had was the failure of the front suspension radius rod bushes. Nothing made of polyurethane could take the pounding and several sets were tried. This prompted the NSW P76 Owners Club to instigate an R&D program to make some new ones.

2015 THE ROAD TO MANDALAY

After a year off it was time to prepare for the next adventure. The Peking to Paris organisers had decided on some rule changes for the next run to Paris. The two most important was no fuel injection and no remote canister shock absorbers. This was done to try and level the field somewhat so Matt once again had to go back to the drawing board. The induction system was changed with the removal of the Rover injection system and the engine reverted back to the Edelbrock Performer manifold with the 465 4 bbl Holley carburettor at the same time the MCA shocks were sent back to Murray Coote to be adapted back to non remote canister shocks. The result of these changes was a reduced ability to tune the engine on the run and a loss of horsepower as well as reduced shock absorber damping efficiency. Other improvements were made and overall it was a good package. The Road To Mandalay was certainly not a tough rally like

P2P. Only 24 days and some 7,600 kms. Peter Lovett had returned with his now detuned Porsche, he was running fuel injection and remote canister shocks in the last P2P as well. This rally was ground breaking in that it was the first time in some 40 years that outsiders have been allowed into Myanmar (Burma), quite a feather for the organisers. The fight between Gerry and Matt in the P76, and Peter and Zoe Lovett in the Porsche see-sawed all the way through the event. Gerry and Matt went into the last day with a slender 1 second lead over the Porsche but in the last test the Lovett Porsche beat them by 2 seconds thus handing them the win by just 1 second. So near yet so far. It was still a good result and things were looking good for the next event, the 2016 Peking To Paris.

2016 PEKING TO PARIS MOTOR CHALLENGE

Once again after the P76 returned to Australia all major components were removed, stripped, checked, rebuilt and reinstalled to the car. This is a practice that occurs prior to every major rally this P76 does. The main changes for this rally are the change to a 600 cfm QFM carburettor and a new style power steering pump. The original Thompson style pump couldn't keep up with rapid changes in direction and required major overhauling after each event. Despite the addition of the larger carby they were still 30 hp down on where they were with the fuel injection. This edition of the P2P was to held over 36 days covering 13,695 kms and the competition level had certainly stepped up a gear. Now there were a number of very good Mustangs, some excellent Datsun 240Zs and Peter Lovett had returned in his Tuthills Porsche. To say the rally didn't turn out as expected would be an understatement. The Porsche proved to very underdone by Tuthills, was down on power and unreliable. Very disappointing for Peter Lovett as he deserved better. The Mustangs proved to be quick as expected but the big movers were the Datsun 240Zs. Disaster struck 4 days into the rally when Gerry and Matt hit the opposing bank of a river crossing at around 160kph. The huge impact, that would have taken any regular car out of the event, blew the right hand front tyre, bent the left hand radius rod and pushed the 6mm thick alloy sump guard up into the sump. This resulted in oil starvation and a faulty PCV valve resulted in fluctuating oil pressure. All these dramas netted them some big time penalties but on the up side, day 5 was a rest day and all these dramas could be sorted out to a certain extent. These dramas sent Gerry, Matt and the P76 way down to 52nd place but there was still a long way to go. Such was the pace that Gerry and Matt put on into Mongolia that they hauled themselves up to 12th place in 2 days. And so the rally moved on with the P76 applying pressure the whole way. The Peter Lovett Porsche eventually dropped out and the Aussie Garnsworthy / Teasdale Mustang crashed out of a sure 3rd place just days before the end. Gerry, Matt and the P76 finished an extremely creditable 6th place with the well deserved win going to fellow Aussies Mark Pickering and Dave Boddy in their Datsun 240Z. The new experimental rubber radius rod bushes were tried for the first time and the one set did the whole rally.

2017 SAMURAI CHALLENGE

It was a very short turn around time between getting the P76 back from London and shipping out to Japan. The Samurai Challenge is 23 day, 4,660 km rally through Japan on a mixture of bitumen and dirt over mostly back roads. Due to the short turn around time there was no time to make any changes or improvements so the P76 was basically still in P2P spec. This event was run by a different organisation and the competitive side was expected to be not as tough on the car. The biggest opposition turned out to be Marco Halter and Claudia Engelhardt in their 1963 U.S. Ford Falcon with 5.0 litre V8. This car was built for Marco in the U.S. and sported lots of trick NASCAR bits making it an absolute rocket, considerably much more modified than the P76. The scoring for this event also included extra penalties for more modern cars so with the P76 a 1974 build and the cut off at 1975 they were at a certain disadvantage. Rallying through the back roads of Japan in a P76 is a bit like threading a needle. The P76 is a big car on these roads with very little room for error. Gerry and Matt were always at the pointy end of the field with all the leaders swapping backwards and forwards depending on what the test was. The most disappointing thing about this rally was the scoring. Protests were flying all the way through the event by one team or another. Mistakes were frequent but most seemed to be rectified eventually. Gerry and Matt eventually finished as the second best in Classics to the Halter Falcon although were awarded 1st in class due to the rule that if you finished in the top 3 you couldn't get a class trophy. Go figure.

2018 THE ROAD TO SAIGON

Back to South East Asia for the next rally and although the finish line is in a different location it was expected that this rally would be similar to the 2015 Road To Mandalay. The P76 had once again gone through a refit and refresh and Matt was happy because it was the first time he was way ahead of schedule. No more panic stations. That was until on the final systems check, which was just a quick run up the road, the T5 gearbox exploded internally. This was the same gearbox that was fitted way back in 2012 for the Trans America. Over the previous 6 years lots of kilometres have been covered at competition speed and the engine has progressively been getting more and more power and torque. Finally the T5 cried enough and Matt was back to panic stations to acquire a Tremec gearbox and fit it to the P76. At the start in Singapore Gerry and Matt met up with their sparring partners from the Samurai Challenge, Marco Halter and Claudia Engelhardt in their now 5.4 litre Falcon and sporting Aussie MCA shock absorbers, so impressed were they with those on the P76 last rally. As it turned out it was Japan all over again with the Falcon and P76 trading fastest times everywhere. And the result was a bit like history repeating. Marco and Claudia again won with Gerry and Matt in second,

this time by 1 minute and 21 seconds. A blocked fuel filter on day 9 cost them about 2 minutes so the result could easily have gone the other way. Still there was another Peking To Paris on the horizon and Matt got the job of building a car for Marco and Claudia to run in the P2P. The Falcon being far too modified to be allowed to compete. Marco wanted something different, something that had never run in the P2P before and he wanted a gold medal finish. Matt discussed this with his legendary father John and found that Lancer is the Answer.

2019 PEKING TO PARIS MOTOR CHALLENGE

To quote Matt “This was the toughest P2P yet”. Gerry has done every one of these rallies in the modern era. Even for Gerry 1907 was a bit too far back. Of those 5 events Gerry has won 2 of them, both with Matt. The first time in their EH Holden and the second in the P76. If things went well Gerry and Matt could make it three wins out of six. This edition of the P2P was to cover 36 days and approximately 13,680 kms and like all Peking To Paris events it was tough, as Matt said “toughest yet” and like all the others the rally was won and lost across the Mongolian deserts. It was here that Gerry and Matt once again outdrove everyone else building what was to be an unassailable lead and then pacing themselves to the leaders to hold on to that lead. In another case of history repeating Gerry and Matt once again held off the rest of the competition led by David and Susan Danglard in another Tuthills built Porsche and Chris and Tjerk Bury in a Datsun 240Z. Early competition though was from a couple of Aussies in a very fast 240Z driven by David and Steve Gainer. Unfortunately for them they hit a ditch too hard and broke both of the front radius rods. They got going again but the lost time put them down the order. They did put in an heroic drive back towards the front and eventually finished 5th. Matt also had to keep an eye on Marco Halter and Claudia Engelhardt's Mitsubishi Lancer. This is the car built by Matt for them using much knowledge from a few old hands on the strengths and weaknesses of this giant killing forest stage rally car from the 1970s. Although not fast enough to challenge for the lead it did finish 7th with a class win and a gold medal for the crew. Like the P76, the Lancer didn't miss a beat for the whole rally. So they are now known as Gerry Triple Crown and Matt The Master Bryson and for someone else to achieve what they have will take some doing, no matter how old they are.

WHAT DOES THE FUTURE HOLD?

The answer is no one knows but now that Gerry, Matt and the Leyland P76 are undisputed kings of the Peking To Paris there is only one thing left to do and that is to win the Round The World Rally and be in effect World Champions. The Round The World Rally is to be done in three parts. The first part gets underway in just a few weeks

running from London to Casablanca through Spain and into Morocco. This 17 day event will be tough particularly through Morocco covering approximately 5000 kms. This section covers the Atlas Mountains and Sahara Desert. Let’s hope there is no repeat of 1974. Later this year part 2 will send the crews back to North America starting on the east coast at Boston, Massachusetts, USA to Vancouver, Canada on the west coast over 21 days. Then in early 2021 the final leg will take them from Vladivostock, Russia back to where it all began in London. The total rally distance of some 35,000 kms over 80 days traversing 4 continents and 12 countries. A truly epic adventure and then, who knows, Peking To Paris 2022?

RESULTS

2012 Trans America Challenge	Equal 2 nd
2013 Peking To Paris Motor Challenge	1 st
2015 Road To Mandalay	2 nd
2016 Peking To Paris Motor Challenge	6 th
2017 Samurai Challenge	2 nd
2018 Road To Saigon	2 nd
2019 Peking To Paris Motor Challenge	1 st

You can catch up with these events in greater detail plus follow their exploits in future events via their Facebook page <https://www.facebook.com/groups/112305558944828/>

Or via their rally blog <http://worldrallyp76.blogspot.com/>

Leyland P76, anything but average

By Abby Jones

Have you ever heard of a Leyland P76?

Let me guess no, I know that some of you have probably heard of it from me, or some of you might think that it's a truck or bus and I just added the P76 on there for no reason.

But here comes a surprise the car exists; its model name is P76.

So P76 means it's a car. Lots of animal names like Tiger and Buffalo were used for bus and truck names.

P76's were built by Leyland Australia at their Zetland plant in NSW and in New Zealand at the old Austin plant in Petone on Hutt Road. This big old brick building was demolished a few years ago. They were built between 1973 and 1975. As well there were many built up cars imported into New Zealand.

Our car is the only 6-cylinder one left in New Zealand. All the rest are V8's. There were 18,200 built in total throughout New Zealand and Australia but sadly there isn't that many alive today. There are only ten Force 7V coupe models in the world and dad has driven one of them.

Being built in the 70's the cars were bright colours with funny names like Bold as Brass yellow, Plum Loco purple or Am Eye Blue like my parents' car in the photo. My dad says there is only one ugly colour, Spanish Olive green, and I

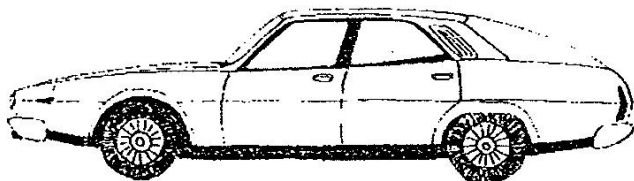
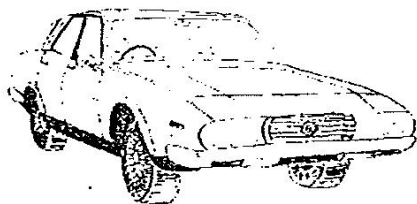
must say yuck! The P76 has a huge boot, it will hold a 44-gallon drum with the boot closed!

My Dad is a founder and life member of the NZ Leyland P76 Owners Club which started in 1983. We go to shows and rallies all over New Zealand in our big blue Leyland P76. Some unkind people call it a P38 because they think it is only half a car. You don't want to hear what my Dad says to them! He has owned a P76 since 1982, which was like a million years ago, so a very long time!

I went on my first Leyland rally to Reefton in 2007 when I was 5 months old. I've been to Napier, Hastings, Palmerston North, Wellington and Kapiti Coast in George and yes, our Leyland's name is George. I might never have been to these places and created memories with my friends and family that would last a lifetime, so I will always be forever grateful to George.

When my dad dies my sister and I will probably fight over dad's Leyland and we will most likely miss the funeral because of it. When I get the Leyland, I will go all over the South Island in it, like what my dad did last year with cousin Jared.

CONCEPTS



Being that we're considering each others Leyland day dream concepts, I thought I'd toss mine into the ring. The rear glass would be moulded perspex, Porsche style, laminated to the rear portion of the boot lid and hinged at the roof line to make it a Hatch-back. The nose cone is extended 15cm (6"), tapering to just allow the headlights to fit in over the bumper. Indicators are fitted into the front bumper to allow the fitting of the usual twin headlights plus a spotlight each side (that's three lights per side) behind

tailored cover lenses. The grill height is reduced to suit the slimmer nose. I drew this up more than 12 years ago, but money limits reality, perhaps just as well!!!!.

Regards Jim Vickers.



THE EVOLUTION OF THE P-76

On the first day God created the Heavens, the Earth, and the Rimutaka Hill Road but He wasn't happy. His Kingswood would sway on the corners, crawl up the hills, and use heaps of juice.

On the second day, God took a new track and created the Falcon. He enjoyed the feeling of power, and it was fun. But it still used heaps of petrol.

So, on the third day, God created the Torana V8, and it flew up the hills. It never broke down, but the corners remained a problem. Yet He had tasted close to the ultimate in power and craved for more.

On the fourth day He added a 650 Holley, extractors, and twin 2" exhausts and created adrenalin. His insurance premium doubled and it cost a fortune to get the body fixed. He had also created fear (His hair turned white), and the cliché "Enough is enough".

On the fifth day God created the 351 GT. He would cruise up and down hills in top gear, and pick up heaps of babes. But the hog was too heavy, broke down a lot and handled like the proverbial brick sh-----se, and the Kingswood.

Then on the sixth day, God made the 5 litre Commodore. He would still pick up the babes outside the Rimutaka Tavern and it sounded good. His car felt light, and for the first time corners were fun. It handled! God was stoked!!! But its weak body worried Him crazy, it was a touch gutless, and it still ran out of juice every 100 miles. He wasn't happy, but He was close.

So finally, on the seventh day, God produced a car with the speed of a 351 GT (almost!), the reliability of Rolls Royce (what else?) and the handling of a Commodore. He could afford the petrol, tune it Himself, pick up chicks, and still blow off 351's through the corners.

He called His car P76, and He was happy!!!

Amen.

This is so old I don't recall the source but I remember adapting it to local geography many years ago and then filing it! I hope you enjoy it. Rob Jones.

The Night Before Christmas in NZ

BY ??

Twas the Night before Christmas and all through the bach
Not even a weta was making a scratch
Woolly socks were hung by the pot belly with care
In the hopes that Santa soon would be there
The children were snoozing in a light summer's breeze
Whilst dreaming of spongy pud and lime green cream freeze
And dad in his walk shorts and me in my jandals
Had just settled down for a couple of handles
When out on the lawn I heard such a ruckus
I sprang from my Lazy Boy to see what the fuss was
I ran to the sliding door, gasping and wheezing
Threw open the curtains and upped the venetians
The moon on the sand and the Trailer tarp
Lit the beach up just like Eden Park
But still when I saw, I thought I was asleep
A miniature Leyland P76, pulled by eight tiny sheep
With a little old driver, sipping a Fanta
I knew in a moment, it had to be Santa
Faster than Phar Lap on steroids they came
And he coo-eed and shouted and called them by name
Now, Kevin! Now Sharlene! Now Rangī and Beck!

On, Darryl! On Shazza! on Bilbo and Shrek!

To the top of the Pagoda, to the top of the wall

Get in behind, Get in behind, Get in behind, All!

As sand flies around a bar-b-que fly

When they sniff the sizzlers and take to the sky

So up to the top of the bach they flew

With a boot full of toys and Santa Claus too

With a handbrake stop, they arrived on the roof

Four Goodyear tyres and 32 hoofs

And as I quickly turned and ran to the lounge

Out from the chimney Santa came with a bound

He was wearing board shorts, and gumboots on foot

And his Mambos were covered in six-month-old soot

A bundle of toys he had on his back

As if on OE with a brand new Macpac

He looked like he'd come from the beauty parlour

With rosy red cheeks like Pohutakawa

A gorgeous big grin and white as white hair

With wee little tufts growing out of his ears

He had a broad chest and a round beer gut

That shook when he laughed like Jabba the Hutt

He was chubby and plump, a right jolly hobbit

And I laughed when I saw him, I couldn't stop it

He gave me a wink and a bonza thumbs up
And I quickly realised he wasn't a nut
He went straight to the socks without saying a thing
And filled them with barbies and Shrek 2 key rings
Then giving his nose a jolly good scratch
He flew up the chimney with an almighty flash
He jumped in the Leyland P76 and cranked the ignition
And then they took off, like some NASA mission
But I think I could hear, as he drove out of sight
"Merry Christmas to all, have a bloody good night!"

A colourful ditty without a title

By Luke Vrettos

From the Leyland P76 Classic Car Club magazine from 1997,
rediscovered May 2019

Oh Fudge, It's time for me to go as I asked my wife to
Peel Me a Grape, to which she said Am I Blue or are you as
Bold as Brass, to which I said no. Then she said well you
must be Plum Loco to which I then proceeded to sing
Home on th"Range. She then asked me if I would like a
Bitter Apricot, to which I replied no but I would like some
Country Cream with Nutmeg on my dessert and also with
dinner maybe a glass of Dry Red with some Spanish
Olives. So if you want people to be Green with NV next
time you see your Omega Navy parked next to a
Corinthian Blue near Aspen Green where they grow
Hairy Limes, then remember to keep your P76 in a
condition to be proud of.

Yours P-76fully

P76 "The attrition rate"

Philip Crowther 19th Oct 2024

I've written some posts before about the attrition rate we face when we're trying to re-use 50-year-old engine parts. Water pumps, timing covers, heads and blocks all suffer from corrosion and mechanical damage. Here's a repeat of an earlier "Tech-Tip": Some of the earlier V-8's may have been fitted with heads which may have been cast in Pomgolia. I believe the later-cast heads, which I'm told were made in Oz, all had small date stamps cast between the middle sets of valve springs. I've seen several of the earlier heads suffer a coolant leak from near the outside, middle head bolt's head. There may have been a problem with the casting being too thin in this area on the heads from Pomgolia, but as far as I'm aware, the "Ozzie" cast heads don't seem to suffer from this problem. One other difference: Most of the "Ozzie" heads have the stepped tops on the valve guides, whilst most of the heads from Pomgolia have a non-stepped top end on the valve guides. We've used Gemini-type valve stem seals on most of our rebuilds of the "Ozzie" heads. What type/brand of valve guide seal is currently available for the Pomgolian heads?

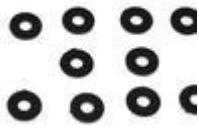
Alistair Roberts

I seem to recall Cooper S stem seals being used on early ones as a retrofit. The inlet is the main one to do due to vacuum. Anything for early Rover V8 would do (as likewise all RV8 gained stem seals from the mid 1970s.

I don't think it's hugely fussy, given they were designed not to need them originally. I've known people use a fat O ring quite effectively as it only needs to seal when the valve is fully open, so they naturally find their position and stay there.

There are also some aftermarket options like these, I'm sure you could find an equivalent in Ozwegia 🤔

<https://www.turnerengineering.co.uk/.../erc-7865-stem...>



TURNERENGINEERING.CO.UK

ERC 7865 Stem Seal - Flat early type V8

ERC 7865 Stem Seal - Flat early type V8

Philip Crowther Tech Tips

Some P-nutz were debating the relative merits of running a Stromberg, versus fitting a 350 Holley when you're running a factory manifold. Obviously, the Holley will flow more mixture, and you will get a few more neddies out of your engine if you've done some inlet manifold porting work to improve gas flow. I still prefer to run a Stromberg on a ported inlet manifold, because the Strommys can't develop a critical fuel leak, since they don't have the accelerator pump and diaphragm on the bottom of their float bowls, like the 350's do, the main carby body on the Strommy's being a single cast unit. I think the biggest weakness of the Holley design is the location of the accelerator pump's diaphragm-if it perishes, then your float bowl will empty rather quickly. Our "sports" P-76's in the old days usually had Holley 350's, which were more responsive than the Strombergs, and our cars didn't suffer fuel starvation when driving/cornering hard. Now if you want to service a Strommy, you'll probably have to source an overhaul kit from the 'States, whereas (I'm informed that) Holley overhaul kits are still easily found here in Oz.

Stuart Brown

Geelong Carburetors recently did this one for us, fully restored, brilliant job

They can source kits but not sure if they sell them as kits.



Anton Frank

Kits available at Repco, part # SB 651

Robert Stevenson

Holley has lots of drawbacks.

But. For a modified engine the advantage they had was the availability and cheapness of jets and power valves etc.

When I used to hang around the pits at Oran Park back in the 80s Holley carbs were popular.

Saw a few blokes with aluminum plates drilled and tapped with a heap of different jets and power valves screwed in to keep them handy.

I've used 350 Holley on a few different applications and with some tweaking they were better than the standard carb but always used more fuel.

Scott Wilkie

Been using 350's & 500's for decades & never had a pump diaphragm fail. One word of 'wisdom' (used loosely) is if you have an apparently incurable bog when dumping the throttle, go to the 50cc shooter assy as is stock with the 500. I've not found playing with the shooter jets to make much difference, but if chasing the best possible fuel economy, they are where to look as well.

Noel Delforce

Scott Wilkie spot on Scott I have never had a pump diaphragm problem. Holly whatever size is far superior to the best Stromberg. We knew that when we were developing the V8 all those years ago. 👍

Philip Crowther

Philip Crowther Tech Tip

Here's another "gem" from my distant, P-76 past. On an Owners Club run to some-bloody-where, many years ago, a Club member suffered a flat tyre. His spare, which was a 7" twelve-slotter, from memory, which he had never test-fitted, wouldn't fit on his front strut, because it didn't have the correct off-set, so the tyre's inner sidewall was fouling the strut leg, and the inner rim was fouling the tie-rod end, by a small amount. In those days, being nearly seriously engaged, for the sake of domestic peace and calm, for P-76 maintenance, I did most things on a poverty-pack budget, and when I needed a pair of spacers for my own bogey set of Hotwires, I made a skinny pair by butchering a pair of old, damaged P-76 brake drums. Think about it: if you only need a few mm of additional off-set, the faces of old brake drums will be ideal. Now, before the traditionalists start howling. try to remember that back then (as is often the case now), many P-owners had to run and maintain their cars on a fairly strict budget. On that Club run, we fitted the two "brake-drum" spacers to the member's car, and then there were no clearance problems. Sometimes, "bush-mechanic's" solutions can save the day. Anybody want to buy some second-hand, skinny spacers made from genuine P-76 brake drums? C'mon, Norm, speak up!

James Webb

Nothing wrong with using them as spacers lol. Common mod back in the day.

Michael Clarke

You could start your own museum phil!!

Philip Crowther

Michael Clarke G'day. Mike. I've already got a "museum" of ancient documents-my collection of the "Tech-Tips" I started writing back in the '80's, when Joe T's brother Roland was doing an excellent job producing the Owners Club newsletters, and many members were trying lots of different things to improve their cars. Our basic rule was: If a modification seemed to work O.K, then I'd write a Tech-Tip to share the information with Club members. Litigation and liability? What's that 4?

Norm Julian

Philip Crowther, why would I speak up? I haven't done anything dodgy since "Russell the love muscle" started inspecting my work. 🤔

Suart Brown

Norm Julian love the caveat in that statement

Bec Wood

Great story 🌈

Philip Crowther

G'day, Bec. I hope some of the stuff I post is of use to other P-76 people. Otherwise, as one former lady friend said- "You've wasted all that time and money on rolling relics"! She just didn't understand that boys need their toys!

Philip Crowther

Bec Wood_or girls 😊

Paul Berry

When I got my first P76 the front globe Bathurst wheels had washers behind them to get the clearance

Philip Crowther – Tech tips

Here's another "Tech-Tip" from the distant past, which just might make a maintenance job a bit easier for you home mechanics: Sometimes, fitting new universal joints can be a bit of a challenge. To make that job easier, ensure that all parts are absolutely clean, with no grot or rust anywhere around the castings where you intend to fit the new joints' caps. Before fitting the new caps to the tail-shaft or the yoke, ensure that there's a decent amount of grease inside each cap. Place each universal joint in the nearest fridge for at least 10 minutes BEFORE you attempt to press them into place. Likewise, place the relevant end of the tail-shaft outside your workshop, so it can be heated by the sun. Try to avoid driving the caps into place with a hammer, as doing that could dislodge some of the little rollers inside the caps, and they can be a pain to refit inside the caps. Using a bench vice, or a hydraulic press, to press the caps into place may be a better option. When they're correctly positioned, ensure that the locating circlips are fitted correctly. These are important items, to ensure that the caps can't work their way out of their correct positions. We're fortunate that the long handbrake cables, positioned as they are across the underside of the floor-pan, serve as a sort of safety strap to support the front end of the tail-shafts, in the event that a uni joint might somehow disintegrate. I've known two P's that had faulty tail shafts make the cars do a pole-vaulting routine when there was no hand-brake cable to support the front end of the tail-shafts, and they dug-into the road surface...nasty. Any time your gearstick has a nasty case of the "death-wobbles", it's time to give the tail-shaft a close inspection.

Scott Wilkie

Not bad. On the bench at Sydney driveline we only ever used mild steel punches for removal. installation as they allow for a bit of 'feel' on the way out & in. We held the tube in a pipe vice with it protected by rags. On assembly, while they come pre greased, we added a wipe of adhesive grease to the cups & rollers. Dismantle the joint into the cups & cross, place into shaft yoke & then line up a cup with one of the bores, put cross as far as one can into the cup & tap away until its more or less where it should be. Do other side likewise then move onto the yokes. Watch out for dropped rollers - not uncommon. You find out if one has dropped when trying to install the clips.

Plenty of yokes from the era have flogged out bores now. It's acceptable to put a little Loctite retainer to keep them from spinning. Make sure clips are properly home, not always evident on internally clipped 21R's.

Also with the slip yoke free of the rest of the shaft, trial fit it on the trans output for large side play. They do wear as well & many are now junk. They can be found new.

With high HP cars we also check for spline twist on the output shaft, but that's never going to be an issue with a P 😊

Go over the tube for dents & other damage. They were all marginal in the day being made from .065 tube. any dents in the tube write it off..

& get it rebalanced..

James Webb

Never had to put a uni joint in the fridge for the last forty five years I've been doing them? 🙄 Each to their own I suppose. 👍

Scott Wilkie

James Webb runs the risk of picking up condensation moisture before installation as well. Given the diameters involved, it will do sweet FA, or no more than manufacturing variations anyway.

The one time I had success with heating/cooling was fitting normally press fit gudgeons into pistons on a Gardner marine diesel that was rebuilt in situ in a prawn trawler. Pistons were stuck on the deck in the NQ sun for an arvo, pins into the deep freezer. They fell straight in.

James Webb

Watch some of Tom Wood's videos on assembling Disco 2 front driveshafts with the cardan joint. The bloke is a wizard, just does it all with a hammer.

Philip Crowther tech tips

Remembering a modification that Joe T., the founder of the NSW Owners Club, tried way back in the early '80's, I'm modifying a set of original V-8 pistons, for future use in a weekend "boy-racer" P-76 project.

Joe relieved the sharp edges on the oil splash holes on a set of original pistons, and I believe that he also filed a small taper on the lower, outer edges of the piston skirts.

Paul may be able to confirm that they were the pistons used in the rebuilding engine for "The Budgie".

It will be interesting to see how well a set of 50-year-old pistons, modified in this way, handle the occasional dose of big right foot.

The rest of this standard-bore rebuild is well stock, except for some serious porting work on the cylinder-head faces of the inlet manifold to remove the "step" where the different sized ports meet.

David Walker

I wouldn't be using a set of second hand 50 year old pistons in anything, modified or not.

Scott Wilkie

50 years on the shelf, notwithstanding advances in casting tech & design, no problems 😊

David Walker

Scott Wilkie are you a qualified engine reconditioner?

Scott Wilkie

David Walker

I'm a materials engineer.

Aluminum does not degrade outside developing a layer of corrosion (self anodising) in air.

PS reconditioners are specialised machinists is all. It don't qualify them in materials science & metallurgy.

David Walker

Scott Wilkie Using worn out, old shit in your engine doesn't require a degree in metallurgy, just common sense.

Scott Wilkie

read comment again - not worn out old shit - "50 years on the shelf" shit..

I mean 50 year old new shit that's never seen an engine, as that's how your OP reads..

Andrew Kloot

David Walker and besides new pistons are dirt cheap if some one takes the rover v8 option under \$500 a set now days

David Walker

Exactly. That's what I use in every P76 V8 I have built.
Available from Nasons for dirt cheap.

Andrew Kloot

David Walker yep and precision international

Peter Kallenbach

The intake mod is what John GOSS did on my heads back in the mid 70's.

Scott Wilkie

Peter Kallenbach_'Port matching' is standard form for any optimised engine build. Some tuners hold belief that having a step in the backflow direction at the head to manifold faces is even better on the exhaust side.

Peter Kallenbach

Scott Wilkie_I can remember hand sanding the intake ports on the Austin A105 head before we Supercharged it in the early 70's that Dad had as a Speedway car.

Vincent Stok

50 year old pistons, relieved, weight matched, top ring groove re machined for one off custom-made top ring (by JP Pistons) chamfered where required with HPC skirt coating. The engine runs fine.

Piston to the right (crack in skirt) is a discard.

The original points distributor allowed timing variations of up to 6° cyl to cyl when worn...this didn't help matters.





Adam Woodward

Philip Crowther I know of a 4.4 that went into an airboat in the far north of WA. That was a std engine that had the original pistons meticulously cleaned up and chamfered around the oil holes. That engine gave many years of trouble-free service.

Drew Ritchie

Finding a block that has all its bores straight without any deviations off dead centre seems to help

Andrew Kloot

Drew Ritchie especially after 50 years

NSW TECH TIP - SPEEDOMETER IDENTIFICATION-

Here are the descriptions and matching part numbers of the various speedos used in P-76's.

This information comes from an old edition of ABA. Tony DeLuca also printed a similar article in one of the Owners Club Newsletters, but I don't have a complete library of the old editions, so I am unable to more accurately give credit.

"Deluxe" model speedos, no tripmeter.

V-8, Imperial dial, MPH- AYD 9085.

V-8, Metric dial, KPH- AYD 9087.

E-6, Imperial dial, MPH- AYD 9250.

E-6, Metric dial, KPH- AYD 9311.

"Super" and "Exec" model speedos, with tripmeter;

V-8, Imperial dial, MPH- AYD 9088.

V-8, Metric dial, KPH- AYD 9087.

E-6, Imperial dial, MPH- AYD 9251.

E-6, Metric dial, KPH- AYD 9313.

Philip Crowther Tech Tip!

This Tech Tip deals with the Kettering Curse! Yes, folks, I'm not the only non-tech P-nut in our wonderful Club who still has points flickering away in his distributor. Out there in P-76 land, there are literally dozens of P-nutz who are still using this system, which as we all know does not require the use of a diagnostic computer at tune-up time! However, there are a number of things, which we need to do to gain maximum service life and efficiency from our ignition systems when we're still using points to spit the spark.

For starters, fabricate a solid metal bracket and mount the coil nearer to the distributor. A shorter primary lead from the coil to the distributor cap means less resistance to the "spark", and that means a small gain in efficiency. Next, fit one of the newer ballast resistors to the system. The older styles of resistor are much more likely to fail at some inconvenient time, usually due to the resistor element breaking. This will give you an open circuit, and a total lack of spark. If this happens while you're driving along, the effect will be similar to someone turning the ignition key to the "off" position, ie, a dead engine!

Note that if your resistor does fail in this manner, you will still have spark while the starter motor is turning, and your engine will start to run, provided that your resistor by-pass wires are intact and connected properly, but when your ignition key returns to the "on" position, the engine will stop running due to the break in the ignition circuit caused by the broken resistor element. To check the condition of the ballast resistor in these conditions, simply pull the white power supply wire off the resistor terminal, and push it directly onto the coil "+" terminal. If the engine now turns, starts, and continues to run, then your resistor is faulty. Caution- if you leave a 12 volts resistance-type coil connected to a 12 volts supply for more than a few minutes, you risk burning out the coil, so in an emergency, you can use a spare tail-light globe and socket as a temporary resistor. Plug one of the spade terminals from the socket to the "+" supply wire, and fit a female crimp terminal to the other wire so you can fit it to the coil "+" terminal. At least this repair should get you home without cooking the coil.

Now we come to the points. These are a hard-working little item, and although they are often cursed as being a really nasty idea, the truth is that in 90% of situations where ignition problems are encountered, the fault really lies either in the manner in which the points have been installed, or adjusted, or else in some other component. As an electrical switch, a set of points has a pretty hard life, and if you do the sums, calculating how many times in say, a three-month period of everyday use, a set of points opens and shuts while doing service in a V-8 distributor, you will soon see that, all things considered, they do a rather good job! Now, let's look at a few tips on installing and setting points which should help you get better service from them.

- 1). The contact faces of new points are usually coated with a small amount of preservative grease which will do a good job of blocking the flow of current if it's not removed, so the first job is to wipe the points faces with a small piece of rag soaked in solvent, to remove the grease.
- 2). Sometimes, it also helps to lightly abrade the point's faces with a fine grade abrasive paper, to ensure good electrical conductivity.
- 3). To operate properly, the pivoting arm of the points must move freely on the pivot post. Some of the sets of points recently marketed have needed attention to the tolerances or clearances between the plastic pivoting arm and the metal pivot post, to cure a small amount of stiffness.
- 4). In addition, the metal spring arm on some points sets may need to be shimmed up away from the metal base with two or three small fibre washers so that it doesn't twist or distort when the locking nut is wound down onto the threaded spindle / post / whatever the hell you want to call that little metal stud onto which you secure the terminals from the condenser and coil negative (-) wire.
- 5). For the points to operate properly, the terminals on the wire' from the condenser and the coil negative wire must be electrically insulated from any earth contact with the points metal base plate, or the body of the distributor, etc. To achieve this, a small stepped plastic insulator is supplied with each set of points. The terminals on the wires from the condenser and coil negative lead are fitted to the smaller diameter section

of the plastic insulator, and the insulator is then carefully fitted onto the threaded stud / thingy/ post, and then the little nut is tightened to hold everything firmly in place. Please note that these little nuts have been carefully designed so that when you accidentally drop them, it is almost totally impossible to find them, no matter what kind of surface you drop them on!

6). The screw which secures the points base plate to the pivoted base plate in the distributor body has the same thread as those fine screws which hold most of a P's dashboard together, so you don't need to panic if you lose the original one! All you need to do to make a workable substitute is grind down the threaded portion of a spare dashboard screw to approx 3/16" length.

7). To set the points gap, carefully rotate the engine in its normal direction of rotation until the "10 degrees before top dead centre" timing mark on the crankshaft pulley aligns with the point of the timing marker on the body of the water pump. Next, loosen the distributor clamp bolt, so the distributor body can be turned.

8). Turn the distributor body slowly clockwise and watch as the plastic heel of the pivoting arm of the points "rises" as it meets the lobe of the distributor spindle. When the heel is on the peak of the spindle lobe, temporarily re-tighten the distributor clamp bolt.

9) I prefer to set the points in Targy to 12 to 13 thou, and I find that getting the correct adjustment is easier if I use one flat-blade screwdriver in the adjusting slots in the base plates to adjust the points gap and hold them in place, while using another screwdriver to tighten the securing screw.

10). When the adjustment is correct, loosen off the clamp bolt, and turn the distributor body slowly counterclockwise until the points appear to close fully. Turn the Ignition "on". Again, slowly rotate the distributor body counterclockwise until you see or hear the small spark as the points just crack open. A definite spark is a sign of good conductivity. A weak or faint spark can indicate problems in the system, such as dirty connections, or a faulty condenser.

11). Re-tighten the distributor clamp bolt. Your timing should now be pretty close to 10 degrees BTDC, set statically.

12). Remember to check that the little nut that holds the condenser and coil lead terminals is tight and also check that the points screw is tight.

13). Check the condition of the low-voltage connections on the coil. These have a nasty habit of looking alright, but there is often corrosion lurking underneath the connectors, which can easily cause misfiring and rough idling, so take them off the terminals for a good cleaning.

14). Remove each spark plug lead end from the distributor cap, and check the condition of the contacts inside the individual terminals of the cap. Again, corrosion, dirt or Moisture in this contact can cause mis-firing, or rough idling. A light spray with a good brand of W.D. spray will help to maintain good electrical conductivity

15). One last item to check is the operation of the advance weights and mechanisms in the base of the distributor. While the distributor cap is removed, fit the rotor button to the distributor spindle, or shaft, and turn it a few degrees clockwise, which is imitating what happens when the mechanical advance mechanism is "advancing" the spark. When you release the pressure on the rotor button, it should return fully to its original position. If it appears to stick

in a slightly advanced position, it may be necessary to strip the base plate out of the distributor body, and carefully re-tension the advance weights springs. Note that the rotor button should be able to move only a few degrees before spring pressure restricts its movement. I have found that with the crappy low-octane fuels, which we've been sold lately, a reduction in the amount of advance in the ignition timing has helped to reduce the amount the engine "pings" when under load. If the distributor spindle does appear to be sticking in the advanced position, a thorough cleaning of the mechanism inside the distributor body should cure the problem.

16). Targy is still running quite happily with an original-style of Lucas coil, which might mean that the coil is as old as the car! The most common reason for replacing a coil is when the insulation at the end of the coil falls,

and the high-voltage spark develops the habit of "tracking" from the insulated nose of the coil, across to the low voltage terminals, causing a major misfire. I have found that a few carefully placed blobs of Silastic around the low-voltage terminals will help to prevent voltage loss.

17). Finally, a good way to check on the general condition of the sparky stuff on your P Is to pop the bonnet one dark night, and let the engine idle for a while, while you have a good look around the engine bay. I have used this method on a few occasions to detect a faulty spark plug lead, or a cracked distributor cap, or a coil with a spark "leak" at the high-voltage end.

One lesson which has been reinforced by my recent experiences while rebuilding Kerry's Blue P and Danny's Bitter Apricot Super, is that you just cannot leave anything to chance. That one thing you don't actually check, clean or adjust, will be the one thing which plays up a bit later on, causing you unnecessary delays and giving you a big dose of the tomtits.

Remember, we're dealing here with cars and components which are about to celebrate their 30th birthday, so now, more than ever, aim for maximum reliability, leave nothing to chance and be thorough when you're servicing your P.

Different Boot Hinge configurations

The boot hinge mount was only spot welded on to the boot lid in early cars.



The boot lid bracket was then spot welded and mig welded on in later cars, due to spot welding alone not being strong enough.



Mods done to bonnets to miss wiper motor

The first bonnets - had the area here hammered in frame to miss the wiper motor



Early bonnets had a pressed metal panel welded in to clear wiper motor... 5,6/73 models only.



Later models had this dimple pressed into the bonnet as one piece.



Bonnet Crumple Zones

All bonnets up to 6/74 had only one crumple zone crease.



Bonnets made for the rest of production had an extra crumple zone on the outside rib.





Fiberglass bonnet – Nev Humphreys

Front Crumple zone areas

In cars built from the start of production no crumple zone was included in the inner guard.

As shown below.



Bonnet Catchers



It was believed that the bonnet release arm was on the right side of the engine bay but due to a driver's death they moved the fuse box and opening lever to the left side for safety.

The moving of the fuse box also caused electrical problems with the starter as well.

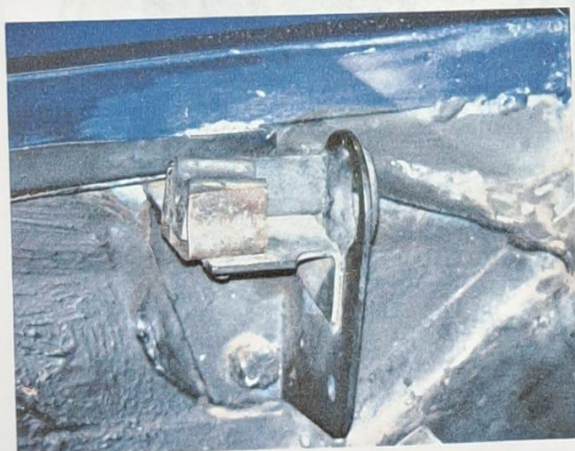
Bonnet rubbers over the years



Bonnet rubbers on 5/73
models only



This rubber was used on
6,7,8,9/73 models



From 11/73 onwards these
rubbers were used

Auto gear shift

Boomerang shifter on brochures



Phillip Crowther Tech Tips

Another recycled "Tech-Tip": One of the causes of rust on P-76 bonnet support panels, and the "eyebrow" panel in front of the bonnet, is the fact that often, the factory painting process didn't seem to get adequate paint on the undersides of these areas. Recently, I've also seen some P's that have been resprayed, but for some reason, those areas seem to have been missed. HOS is as rough-as-guts, paint-wise, but about six years ago, I wire-brushed those areas, and painted them with a bitumen sealing mixture, when I first converted him to a V-8 four-speed and put him back on the road. Despite him going bonnet-deep into floodwaters about three years ago, there's no sign of rust on the undersides of those panels. Maybe that's something that P-nutz should pay special attention to, because resprays aren't exactly cheap these days, and no-one wants to see rust-bubbles appearing on newly painted surfaces. I'm thinking that sill ends and the bottom end of rear "dogleg"/wheel arch panels may also rust because of a lack of "factory ' paint.

Philip Crowther - MORE P-76 WIRING MODS Tech Tip

Mr Crowther of the NSW P76 Owners Club published this useful set of tips in their Feb/mar Leyland Post as referred to in The Oz Trail. This sets out some useful ideas for us in everyday wiring maintenance or repair.
Republished in the Penzed76 May 2003!

When I started cleaning up the Bitter Apricot Super which was to become Danny's P, I noticed that the wiring loom was damaged in several spots. Typically, most of the damage was due to either exposure to excessive heat, or crushing of the wiring loom.

In all cases, the damage could have been avoided if some extra care had been taken to secure the wiring away from heat sources, and hinges and linkages. On all P's which still retain a "standard" engine bay wiring layout, the main loom from the fuse-box around to the headlights is very likely to suffering damage, as the insulating tape cracks with age, and the supporting brackets tend to develop rusty, sharp edges.

Many P's also suffer from chronic voltage drop as a direct result of the wiring becoming corroded or brittle; both conditions increase the internal resistance of an electrical conductor, so a useful modification for P's with near-standard wiring looms is to eliminate sections of old/corroded wiring and therefore shorten the route that charging current from the alternator has to travel to recharge the battery. This Tech Tip details the procedure I used recently to tidy up the engine bay wiring on both Kerry's "new" Blue P, and her son Danny's Bitter Apricot Super.

The engine bay Wiring of both P's had been seriously "got at" by Bodgie Bros. wiring experts, and both harnesses had sections which were heat damaged and crushed. With each P, before I "attacked" the wiring harness, I fabricated a bracket to mount the coil and ballast resistor near the lower, outer end of the alternator top bracket.

This meant that I could discard the lengthy coil lead, and use instead one of the commercially- available short leads.

These are usually about 12" or 30 cms in length, and I've been told that a shorter coil lead means less resistance to the spark, so you should have a slight gain in performance.

Also, the engine looks a bit neater when the coil is mounted closer to the distributor.

Now, this is the procedure I followed to tidy up the engine bay wiring.

- 1: Disconnect the positive battery lead!
- 2: Remove the screws, which hold the wiring in the retaining clamps between the fuse-box and the left headlights/ parking lights.
- 3: Carefully remove the old insulating tape from around the harness, from the fuse box connections right through to near the battery tray.
- 4: Dismantle the connections from the battery terminals. Mark all the wires with tags if you think that you may have trouble remembering where they will go when everything gets put back together!
- 5: Wipe all the wires with a rag soaked with degreaser to remove all old adhesive and dirt. New insulating tape will have trouble sticking to dirty wires!
- 6: Carefully examine all wires to check for burns, chafing or cracking. Likewise, -examine all spade connectors for corrosion, etc. Dirty or corroded connectors must be replaced.
- 7: The first major modification is to shorten the wires which go to the various functions in the

actual engine. Identify the following wires:

Main alternator (charging) wire-large diameter, brown cable.

Alternator field wire -small cable, brown with yellow trace.

Oil pressure switch wire -small cable, white with brown trace.

Temperature sensor wire -small cable, dark green, with. blue trace. Ignition wire (+ to coil) - small cable, white. Ballast resistor (+ to coil) -small cable, white.

Tachometer (pulse) wire -small cable, white with black trace.

AirCon compressor wire -small cable, black with red trace.

8: Separate and cut off these wires from the main harness near the battery tray, and with two exceptions, you should have sufficient lengths of cable to route them directly from the inner left guard across to the engine.

The two exceptions are the oil pressure switch wire, and the aircon compressor switch wire. These two will need to be extended using short lengths of spare wire and spade connectors, in order to reach their respective functions/sensors.

The other wires should be long enough to comfortably reach their respective functions/sensors.

9: Temporarily lay out each wire to its function or sensor.

Test the positioning of all wires before cutting off any excess length.

It is preferable that this "new" shortened harness is positioned across the top of the timing cover, tucked in behind the base of the distributor, and kept away from hot areas such as exhaust manifolds and radiator hoses.

Once you have established a safe route for the "new" harness, lightly tape the individual wires together and place the harness in its (proposed) final place.

Again, check that the harness does not rest across any sharp edges, or lie next to any sources of great heat.

10: When you are satisfied that the harness is positioned safely, carefully remove it from the engine and use good quality electrical tape to re-wrap the entire length of exposed wiring.

Wind the tape onto the harness at an angle of about 45° so that the tape overlaps itself for half of its own width, all the way along the harness.

This effectively means that a double layer of tape protects the harness.

It is also a good practise to use some sort of plastic cladding around harnesses where they pass across surfaces, which are prone vibration or heat.

11: Where-ever possible, use new connectors. Old connectors have a nasty habit of working loose at the worst possible time.

12: To tidy up the engine bay a bit more, identify the surplus wires on the inner right-side guard, and cut them off the original harness down near where the horn wires (purple, with yellow trace) leave the original harness, and tape over the stubbed ends of the original harness to prevent the entry of moisture.

13: It is very common to find that the large brown cable, which on most P's is the original main power supply cable to the fuse-box, has severe corrosion around the spade connector where it joins the fuse-box.

In extreme cases, the power supply to the ignition and light switches can be interrupted when this connection becomes dirty or corroded.

One quick fix for this problem is to unscrew the fuse-box, and fit some kind of spacer to keep the base of the fuse-box well above the surface of the inner guard.

This has the effect of helping to keep the connections to the fuse-box drier.

14: It is also a good idea, while you have the fuse-box unscrewed, to remove each of the wires from the terminals, one at a time, and give each terminal a thorough cleanup with a soft wire brush.

A light spray with W.D. will help delay the re-appearance of corrosion on the terminals.

15: I mentioned in a previous Tech Tip article that fitting headlight relays to your P's wiring system should give you brighter headlights, as well as making your wiring system safer.

It is perhaps timely to repeat some of the warnings associated with that work:-

The main power supply wire which brings permanent (unswitched) power from the battery to your P's electrical system is capable of carrying more than enough current, in the event of a short circuit, to really fry your P's entire front wiring harness, depending on where the fault occurs.

Most Auto Accessories shops sell in-line fuse holders, which can provide up to 30 amps protection to a wiring system.

I prefer to fit two in-line fuse holders, side by side, to provide power and protection to the headlight relays, and another 30 amp in-line fuse holder for protection of the power supply to the functions and accessories controlled by the ignition switch.

Always fit the fuse holders close to the battery "+" terminal, and ensure that the (heavy) power cables are mounted well away from sharp edges and heat sources.

16: Obviously, if you're going to fit other heavy-current items like electric cooling fans, or road-melting spot lights which are a big drain on your electrical system, you will need to install extra relays and fuses to provide the power and protect your P's wiring system.

Remember when you're planning your wiring modifications that it is entirely likely that at some future time, when you least expect it, one or more of your relays may simply die, so design your new wiring system so that in the event of a fault occurring, you can access your system to fix the fault, without having to strip out the entire dash-board.

I know of one P-nut who went to the trouble of routing all of his P's wiring through channels and sills, etc, and when a serious amount of moisture got into his system and caused major corrosion problems, the only way to restore and guarantee reliability was to strip out most of the "new" wiring, and install a more accessible, standard harness!

I'll continue with this series next month, maybe! If any member has any questions about these wiring mods,

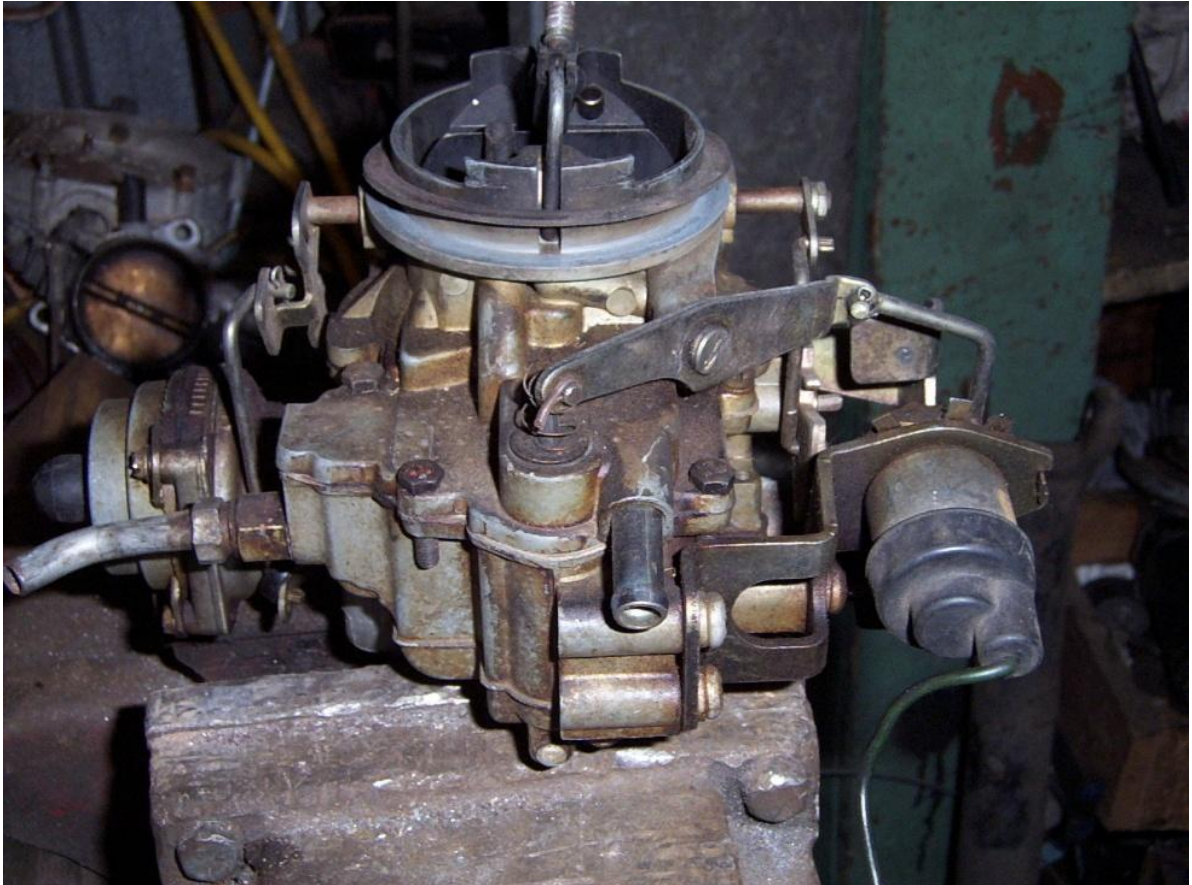
I would be too pleased to offer further assistance.

Please just remember that I am still working weird shift-work hours, but I will return your calls just as soon as it is politely practical!

Stromberg WW Identification

How do you tell what your 2 barrel Stromberg carby is off? Many owners have their carbies reconditioned or replaced over the years and end up with carby parts off a Holden 253 or Ford 302.

The WW was fitted in Australia from about 1968 to 1980, with a major change being the introduction of emission control in 1976. These carbies look different to the P76 one, which was only subject to idle emission laws. A typical emission carby is shown below:





It has an idle solenoid and a float chamber vent. So yours definitely doesn't look like this, but it doesn't run right? Then you have to turn your carby over and look into the throat area just above the throttle when slightly open. There will be a small brass jet sticking out, and above it will be a row of small holes, the idle progression holes. They are DIFFERENT for various versions of the WW, and affect the idle and above idle phases.

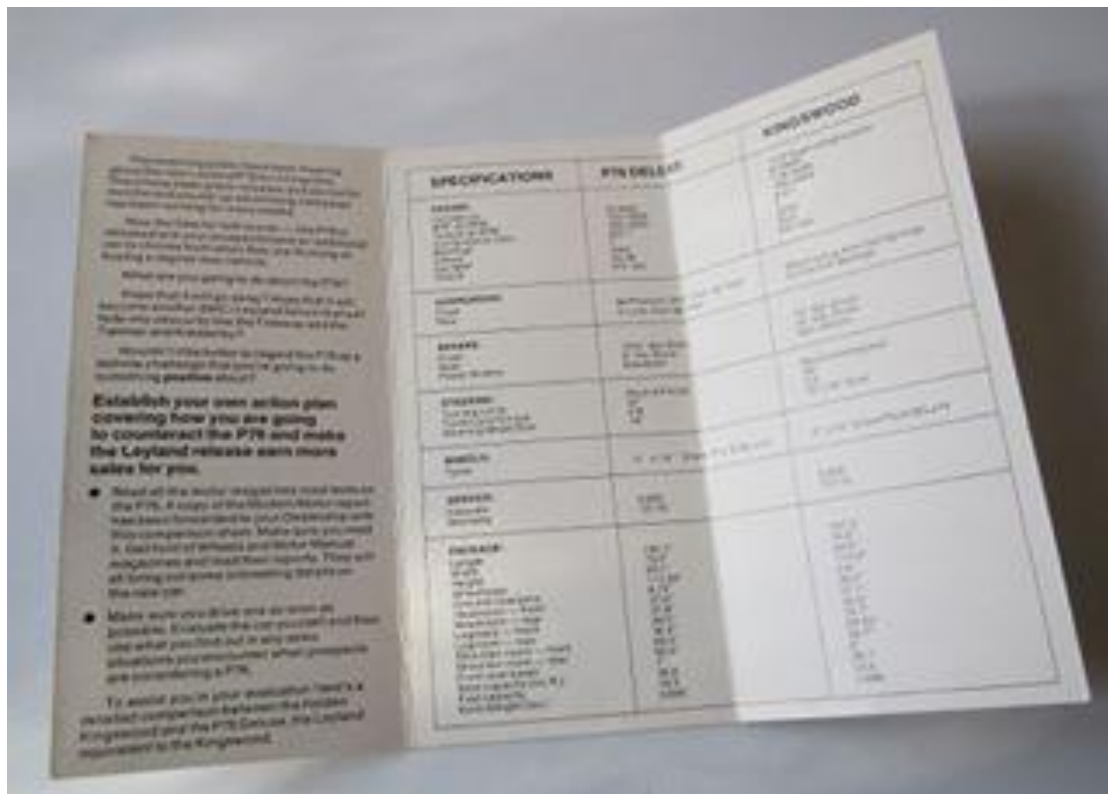
The left pic shows three small holes above the brass jet. This is a P76 one. The right pic shows four larger holes in a line, being off a Holden. There are versions with two holes, but I don't know what they are off. Using the Holden base plate will give lean and erratic off-idle performance, driving you nuts. Other things such as jets and power valves can of course be checked against the workshop manual, but the base plate variations are not described.

Jilden

GMH document

When the P76 was first released GMH produced a competitive sales guide to help their salesmen ward off the large car market share challenge from Leyland. With the copy I acquired there was a cut-out side view picture of a P76 sedan that had been modified by hand to create a station wagon. Who did the art work and for what reason I guess I'll never know.





Information about this Magazine

The magazine was made up from paperwork received from 2020 National that was delayed due to Covid. We thank members and friends of the P76 community, Publication from the many clubs in Australia and New Zealand for the use of the information.

I would like to thank Mr. Philip Crowther and others for the many technical articles, and we ask that you please read the disclaimer on the front of this magazine.

Additional technical information can be sourced on the web site www.leylandp76.com/technical.html

The Queensland P76 Club hopes you enjoyed your stay at Stanthorpe Qld.

We thank the community of Stanthorpe for their hospitality and look forward to your returning the Granit Belt in the coming years.