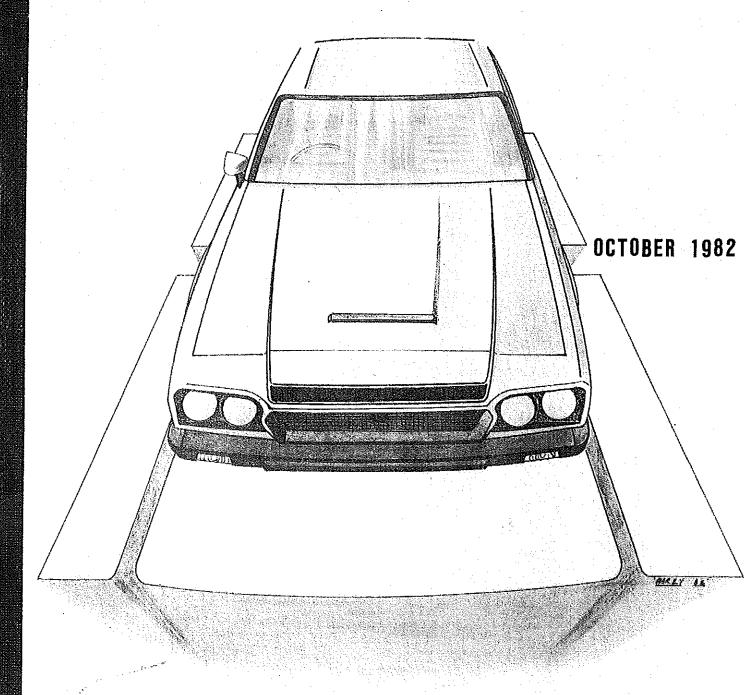
Vol.1#3







THE COURSE BY AND DIE OWNEDS OF THE

# EDITOR'S DILEMMA

Dear Members,

Let me welcome you all to yet another National "Anything But Average".

The Magazine, as predicted, is late again. Although it's three months between issues nothing seems to happen until three weeks before deadline. So again, bear with us, we're all very green at this editorial stuff.

Congratulations to N.S.W. who collectively boast about 150 members to date. Unfortunately the members directory was outdated before it went to print. My apologies to those members.

For this issue a special thanks to Hal Moloney (Newcastle)
Darryl Packham (Adelaide) Terry Johnson (Perth) Tony DeLuca,
Paul Patten of Patten Consolidated Press, Harry Zaglas and
Joe Torony (Sydney) and my dear wife (at home) for their mammoth
contributions.

For those that didn't help....well, there's always next time! Next issue early eighty threeish.

Cop you later.
Ed.



# Anything But Average



"Anything But Average" is the official publication of the "Leyland P76 Owners Club". It is not for sale to the general public. One copy per quarter is included in the Club annual membership fee.

In this issue

V8 Ground Shakers

Across the Gunbarrell Hwy.

Service Bulletin-Oil Starvation

Service Bulletin-Oil Levels

Service Bulletin-Dipsticks

If Only

Phantom Phlasher

Not Enough Eights

Taking the Clunk & Roll Out

Service Bulletin-Tie Bar Rubbers

By the way....

W.A. Supplement

S.A. Supplement

N.S.W. Supplement

If you would like to contribute (in any way), to the National Magazine, please do. Photos, etc., will be returned when production is complete. Send to the National Editor "A.B.A."

National Classifieds

P.O. Box 76,

Kenthurst. N.S.W. 2154.

No articles of this magazine are to be reproduced without the consent of the Committee.

IN THE INTEREST OF 'FREEDOM OF THE PRESS' ALL ARTICLES AND LETTERS IN THIS MAGAZINE ARE PUBLISHED UNEXPURGATED. HOWEVER DO NOT NECESSARILY REPRESENT THE VIEW OF THE EDITOR OR THAT OF THE COMMITTEE.

Part THO

# V8 - P76 Ground Shakers

This issue I have concentrated on the super torque motor and as promised the heads have been modified and tested!

Before I give details let me explain that everything is personal opinion only. There has not been any long term testing to ascertain wear factors and one modification may prove contraversal in that area. With those words of warning I cannot guarantee the same mods will work on your vehicles but every effort has been made to portray as honestly as possible the figures reproduced in this article.

### SUPER TORQUE

The mods were carried out on my wifes P76 V8 Auto which before modification had already been fitted with a Holley 350, 2 barrel carby and 2" dual exhaust system with balance pipe. The motor was in good condition, the heads probably reconditioned just before we bought the car for the valve seats were in very good condition. So here I had a perfectly good P76 that runs 16.254 seconds @ 84 m.p.h. at the local drag strip and I set out to improve it further without sacrificing any economy or driveability. The object was to test the vehicle as is with the stopwatch then modify the heads and put it back together without so much as chaning the oil and test it again.

Right! To begin, an unusable head was disected to see what the inlet and exhaust ports consist of. The inlet ports as in Figure 'C' proved to be reasonably unrestricted (note - inlet port is slightly cut off centre) and for the sake of good torque was not altered with the exception of grinding out entrance to gasket size. Please note there was no attempt to polish any portion of the inlet ports as I believe it to be a waste of time and reduces torque produced by motor. The inlet manifold had its ports ground out to gasket size at the gasket face only (again no polishing), see Figure 'A' showing manifold as standard and Figure 'B' for manifold ports after enlargement. The Holley 350 is mounted via an adapter with <u>no</u> enlarging of manifold in that area.

The exhaust ports were another story, see Figure 'D' and not that the arrow points to the largest restriction for exhaust gases, the valve guide. The restriction is that bad it's not possible to get your small finger by it. The solution was to remove them by shortening the guides to 2 5/16". (The port end of the guide is cut square).

See Figure 'F' for diagram of port after shortened guide in place. I again made no attempt to polish the port but if you've got the time or money it doesn't hurst although gains would be minimal. Next, the face of the exhaust valve was radiused to aid gas flow past it. See Figure 'G' for diagram of before and after.

The last area to come in for alteration was the chambers. Figure 'E' shows where as much metal as possible was removed to unshroud valves. The arrows point to a sharp ledge (alloy) around both valves that were blended in with grinder. Do not grind chamber out past head gasket size for obvious reasons. Polishing of chamber won't improve horst power but will prevent excessive carbon build up. After all that 40 thousands of an inch were than milled from the head faces to raise compression ratio to 9.75:1 (STD 9:1). A word of warning here, don't mill head face much more or inlet manifold won't align up. As it was, my heads were cleaned up with surface grinder on the inlet manifold faces which helped with manifold line up. Finally a complete set of new springs were used in reassembly to make sure valves follow camshaft contour at high revs.

# HERE'S HOW I DID IT-

It is not necessary to have extensive workshop facilities, but it helps if you wish to do a satisfactory job.

# INLET PORTS TO GASKET SIZE:

Place a new gasket on to face of manifold or head, aligning bolt holes to properly position gasket then mark inside port holes with sharp texta or similar to show how far to grind out. I found very sharp files did a better job than using a power rasp, time being the only disadvantage. SHORTENED EXHAUST VALVE GUIDE:

I obtained a new set of valve guides and modified them before insertion (very hard without correct tool). In hind sight, seeing valve guide wear is minimal I would suggest grinding or drilling away excess of guide insitu (saves a lot of time and money). Slight relieving with the power rasp can be done directly below the exhaust valve seat (in the port) but don't go to extremes as the water jackets aren't far away.

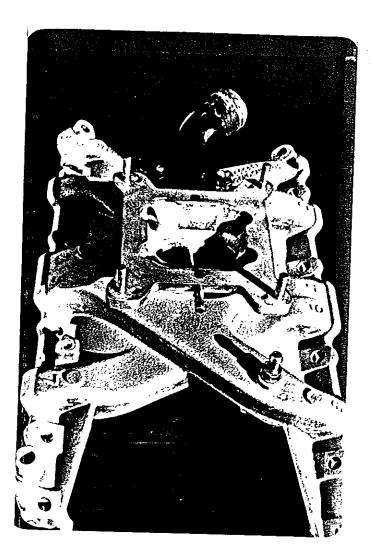


Fig.'I' 4 BARREL TO WW SPECO ADAPTER

MOD. FOR PVC CONNECTION &

SOME INTERNAL GRINDING

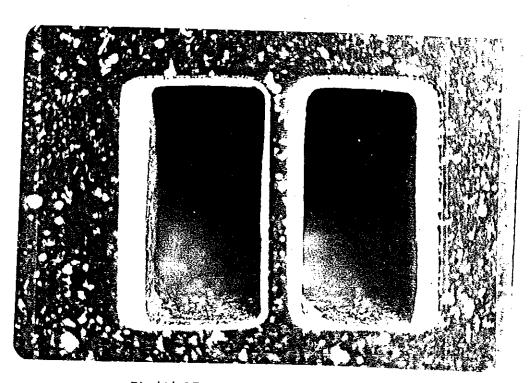


Fig.'A' STD. INLET MANIFOLD PORTS

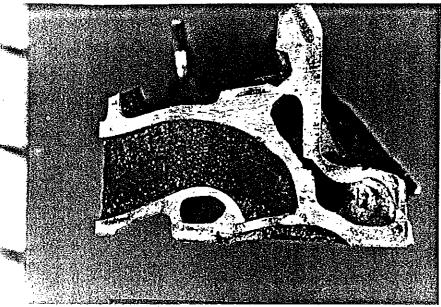


Fig.'C' V8 INLET PORT

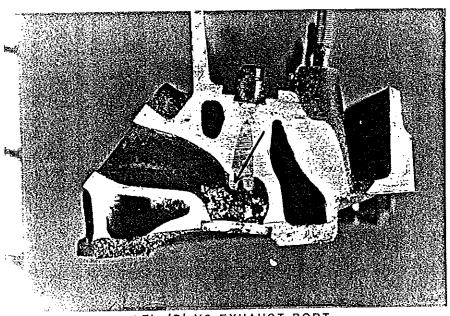


Fig.'D' V8 EXHAUST PORT

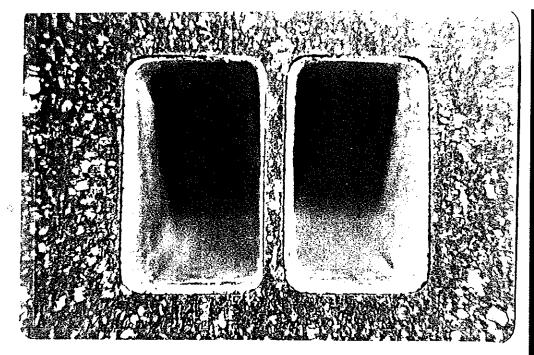
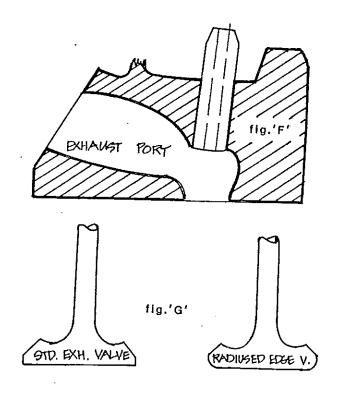


Fig.'B' INLET MANIFOLD PORTS TO GASKET SIZE



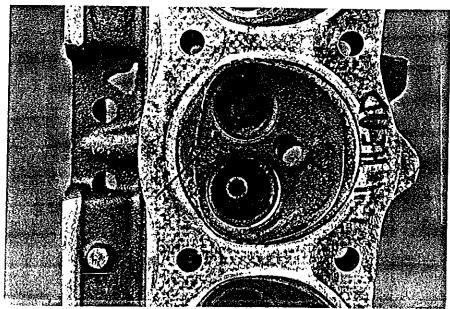


Fig.'E' SHOWING WHERE TO UNSHROUD CHAMBERS

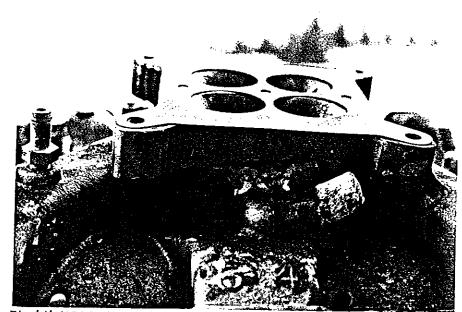
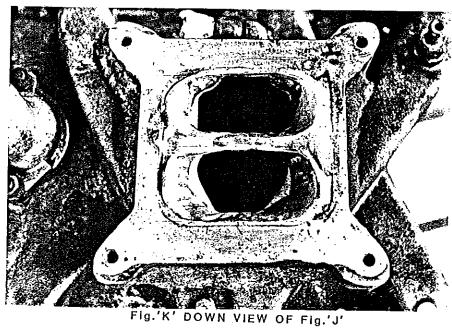


Fig.'J' HOLLEY PLATE WELDED TO GROUND OFF STD.MANIFOLD



### RADIUSED EXHAUST VALVE FACE:

Suprisingly the valve metal is like that of the guides and is not hard but can be ground, files or sandpapered. I placed the valve stem in the chuck of a large electric drill which was clamped in a vice, just like a mini lathe. I then proceeded to file, sand and polish the exhaust valves to a smooth radius (a proper lathe would be better).

## CHAMBERS, VALVE UNSHROUDING:

Here the right tool for the job is a small round rasp bit in a flexible drill extension. Be careful those rasp bits really chew into the heads and don't damage the steel valve seat inserts.

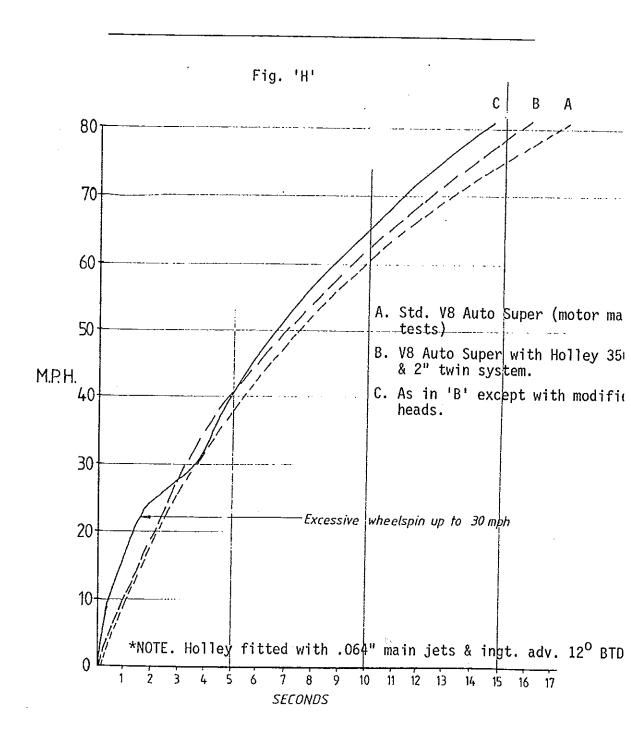
If your old valve seats and faces are too pitted or burnt they will have to be professionally reground before hand lapping the valves into the seats.

### HEAD FACE SHAVING:

Don't try to remove .040" from an alloy head with a surface grinder as the pores of the wheel will clog and then gouge at the head. Have the .040" professionally milled off and then surface the face. It cost me \$60 per pair at John French Engines (Adelaide). TESTING-

After all that, the heads were gingerly re-installed on to the car. I now started to have doubts whether these mods would actually work or not. Eventually it was all together and the motor fired first time (thank God). A short drive to my "test road" didn't seem to give the impression of any performance improvement, but testing started and a problem reared its head that I've never had before. Bad wheelspin occurred when throttle was flattened from standstill on dry bitumen. Even worse if the torque convertor was "loaded up" by holding foot brake with left foot and raising motor to around 1200 r.p.m. before take off. The car would wheelspin all through 1st gear and only stop after transmission had selected 2nd gear. The above is not recommended for long tyre life but is an indication of how much the car had improved. The stopwatch showed that even with the poor starts due to wheelspin the car would make mockery of its previous best times and would shatter the standard P76's performance. See graph in Figure 'H' for performance figures. With the altered heads I cannot see why the standing quarters shouldn't be in the 15 seconds. It will be tried next drags.

Vehicle - V8 AUTO SUPER, (RRE-257), 90,000 + Miles, ½ tank petrol, 17°C, dry bitumen, left in drive for all figures (no manual shifting).



So that's it for the super torque heads, in summary this is a list of mods as the vehicle runs in graph 'C'.

- 1. Holley 350 two barrel via adapter with .064" main jets.
- 2. Twin 2" exhaust with balance pipe and STD manifolds.
- Ignition advanced 12<sup>0</sup> BTDC.
- 4. Compression ratio raised to 9.75:1 (heads shaved .040")
- 5. Exhaust valve radiused.
- 6. Exhaust valve guide removed from port.
- 7. Valves unshrouded slightly in chambers.
- 8 Inlet ports at gasket sizes at faces only.

### GROUND SHAKER

Not much progress in this area, the heads will be basically as for the super torque but with more port enlargement and polishing no valve size increase will be recommended as they come close to the cylinder bores. I am assured that standard valves will flow 340 H.P. with port mods. I have modified a 2 barrel manifold by cutting out a six inch square hole from the centre right through from top to bottom to expose all ports into one huge hole. A plate will be welded on the bottom and the water heating has been removed from the bottom of the manifold. Fuel distribution to cylinders may turn out to be a problem but only time will tell. On top is welded a one inch plate cut to holley four barrel pattern.

As pure interest only Figure'I' shows my own street manifold with a 4 barrel to W.W. speco adapter. Note the PCV modification to allow a 465 CFM Holley to be fitted. The centre has had some grinding to ease mixture flow. The ports have been taken out to gasket size at the head face which seems to add a sharpness to performance at high revs.

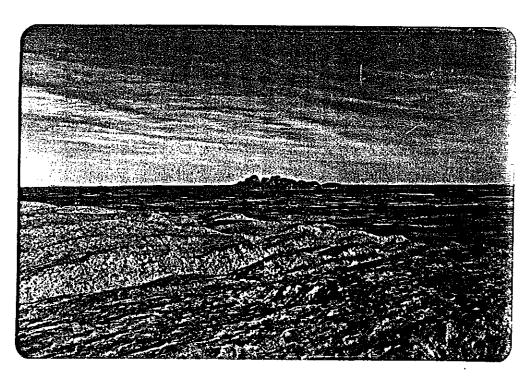
Figure 'J' and 'K' show how well an alloy plate welds to a standard manifold that has had the 'top' ground off. Still entrance into manifold is only slightly better than adapter version due to way inlet passages run which limit opening up allowed.

No promises for next article but the super torque and ground shaker will continue.

.....to be continued

# CROSSING THE GUNBARREL BY P76

by HAL MOLONEY



END OF JOURNEY THE 'OLGA MOUNTAINS' FROM TOP OF AYRES ROCK

During the seventies, my family and I had managed to take our P76 to most parts of Australia including Tasmania.

I also had a bash at the Repco Trial (of which I will write later) which covered all states except Tassie, so where could we go now to see something different.

An eccentric friend suggested we have a crack at the "Gunbarrel Highway" which looked attractive. But could a two wheel drive negotiate it.

The Land Rover Club said we were crazy and that it could not be done. A letter to "Carnegie" Homestead which is on western extremity of the track produced little. They informed us they could supply fuel, thus cutting our fuel distance from 1400 km to 1100 km. Of the track, they had not travelled it but thought maybe a car could negotiate it.

Preparations were made to have a go taking the P76, a Peugeot 404 and an ex Repco Commodore. Permits had to be obtained to travel through aboriginal lands which included Warurton Mission and Docker River. Giles Weather Station was out of bounds to everyone and subsequently no permit was issued to us.

The P76 already had two fuel tanks and under body protection, so little work had to be done. The main job was to replace the competition motor with a rebuilt standard unit as well as inspect every part of the car that could give trouble and fit a two way radio.

We were ready to depart Newcastle at midnight on June 5th. The Peugeot having left 3 weeks earlier for W.A. and the Commodore 3 days earlier, travelling by way of Adelaide to pick up a flying doctor radio.

We had reached Cobar by early morning and Port Augusta by late afternoon having had two flat tyres on route. A couple of hours rest then on again arriving Norseman W.A. 8 p.m. Wednesday turning north we headed through Kalgoorlie and Menzies towards Wiluna. At one service station while checking out the old cars out back I noticed a P76 in the shed covered in dust and tyres flat. Upon inquiring I found it was left in 1975 because of some engine fault (V8) but was never collected by the owner who has never returned.

We met up with Dave and Mary in the Commodore at Leonora and ran up to Wiluna together. The Peugeot had already arrived at Wiluna which would save us any delay. Wiluna is a part deserted mining town which has a very depressing look about it.

The police at Wiluna were relectant at first to let the P76 go because it wasn't 4 w.d. and neither indeed were the Peugeot or Commodore.

Our permits were in order so they allowed us to go with a final warning that we would probably get stuck.

The 300 kilometres to Carnegie were uneventful and as promised we were refuelled from an old hand pump bowser. At this point an astonishing fact revealed itself for the first time, and that was the fuel consumption figures which showed the P76 equal to the 4 cylinder Peugeot and much better than the Commodore 6.

From Carnegie Homestead, which is where "The Gunbarrel" officially starts the track began to deteriorate considerably. We also had our first sighting of wildlife, a herd of wild camels.

Camp was made near Mount Nossiter which placed us well into the Gibson Desert.

The following day we passed the only other vehicles seen on the track. They were the Toyota 4 W.D. Club of S.A. and were quite shocked to see a P76 doing the trip. One Toyota crew member had a crack at the P38 but I assured hime our ride was more comfortable than his and our trip more of an adventure. He was astonished to find the P76 had covered 500 km of 4 w.d. tracks in the same time it took his Toyota to cover 200 km.

Our progress through the Gibson Desert took us by way of Mount Beadell en route. At Jackie Junction we turned south to Warburton Mission for supplies. The 60 km took several hours and on arrival we took Mary to the hospital as she wasn't well, whilst I replaced a tyre destroyed earlier. The store knew how to charge, as the coke was \$1 a can. We were told not to produce cameras or photograp! whilst in the mission which was surrounded by car dumps with about 50 cars in each dump.

Our refuel at the mission again showed us almost on par with the Peugeot and well ahead of the Holden with our records showing 6 km per litre, we had planned for 3 km/l.

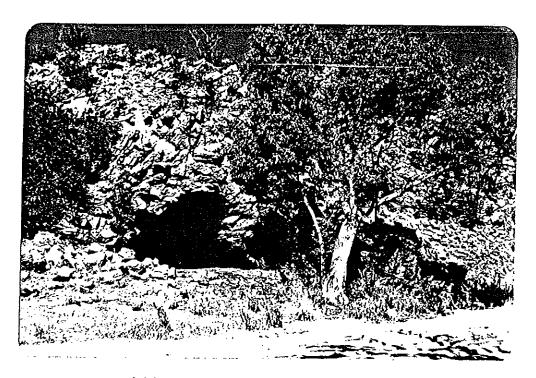
Four km out of Warburton the road forked, one road proceeded north the other east. The road north went back by Jackie Junction then to Giles Weather Station the other was the "cut" road to Giles.



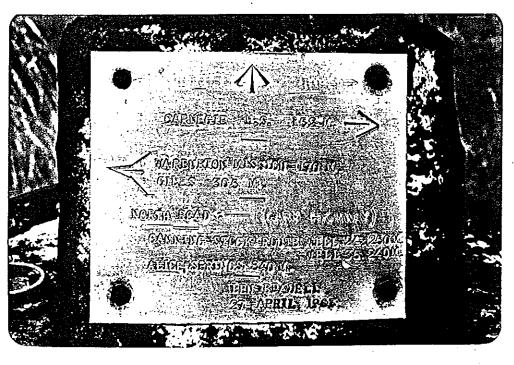
LAST FUEL STOP FOR 1000Km 'CARNEGIE HOMESTEAD



CROSSING SAND HILLS NEAR GILES WEATHER STATION



LASSITERS CAVE , HULL RIVER



PLAQUE LEFT BY LEN BEADELL
ON CARY HWY INTERSECTION AT EVERARD JCT

The P76 went via the cut road whist the others went via Jackie Junction. The cut road was incredible, full of corrugations which necessitated the use of 1st gear for 90 km which took nearly 5 hours. The sand hills were also getting higher, reaching 15 metres in places and causing some concern as we were just struggling over.

The corrugations shook the elements out of the globes leaving us eventually with one low beam and one driving light which became a real strain driving over the sand hills at night.

Another feature of the cut road was the deserted cars littering the road. Just before dark we received a surprise to find a White Deluxe P76 abandoned by the track. The car was in tact except for boot lid and wheels, it even had the keys in the ignition. We obtained what spares we could before continuing.

We aimed to camp just near Giles Weather Station as we did not have a permit to enter and had been told it was out of bounds. On an intersection 2 km from Giles was an old 200 litre drum with "Giles Welcome" painted on it. What should we do without our permit and here was an invitation, it was 11 at night and the corrugations and sand had knocked us around.

We need not have worried as we were indeed made welcome and allowed to camp overnight and witness the release of a weather balloon next morning. The people there said they did not know of another 2 w.d. car to cross the Gunbarrel, but one chap was there in 1965 when Evan Green called in the Austin 1800, he said Evan did not tackle the Wiluna Road as we had, having passed through Laverton instead.

Next day we proceeded to Docker River then to Ayres Rock stopping to inspect Lassiters Cave on the way. Poor Lassiter couldn't find water and as we stood there we realised his plight as we had only seen one small rock pool in 1400 km.

At Ayres rock we reported to police our arrival, they showed little interest until the policeman asked "make ov vehicle" which we replied Leyland P76. The 2 minute report became an hour long discussion on P76's. He even ignored our muffler which the sand had eroded away.

The following day showed no sign of the others two cars so we notified Police of their pending arrival and continued east.

The Gunbarrel Highway was made by Len Beadell to offer a route to the west and allow recovery of rockets fired from Womera.

Len left several plaques on the highway which are still in place.

I've included some photos, I hope you find them interesting.



PARTS OF THE TRACK WERE ROUGH (NEAR MT BEADELL)



P76 ABANDONED ON GILES RD KEYS STILL IN IGNITION 230 ODD CARS LEFT ON THIS ROAD

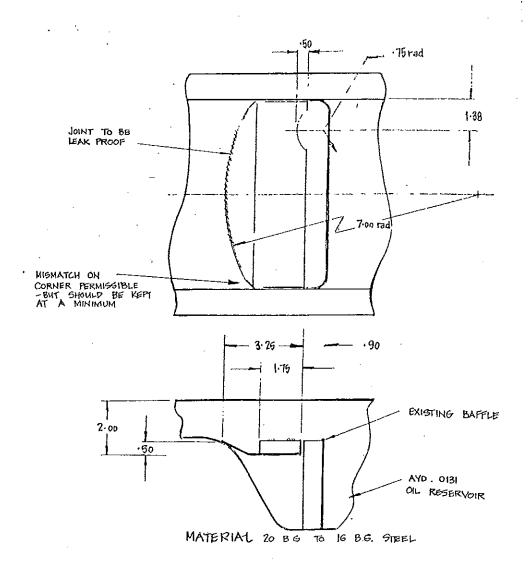
# OIL STARVATION V8

ed in a small

Oil starvation under heavy braking has been encountered in a small number of vehicles.

This problem can be rectified by manufacture and fitting of a reservoir baffle as shown in the attached drawing. In addition, vehicles having engines prior to the numbers listed below, should be fitted with oil pickup assembly Part No. AYD 0253.

4400-2905	4406-1003		
4401-1178	4408-1023		
4402-1440	4412-1049		
4404-1592	Others 1001 ON		



# ENGINE OIL CAPACITIES

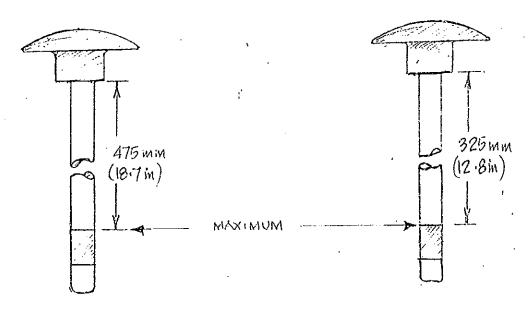
SERVICE BULLETIN Field reports have been received indicating discrepancies in Engine oil capacities, refill quantities and dipstick graduations.

The following dipstick graduation dimensions and capacity figures are correct.

Dipsticks should not be remarked unless they vary from the dimensions shown.

'442' - V8 Underside of knob to 'Max' mark. 475 mm (18.7 in.)

'262' - E6 Underside of knob to 'Max' mark. 325 mm (12.8 in.)



Capacities - '442'			
Drain and Refill	-	3.0 litres	(5.25 pints)
0il Filter	-	0.74 litres	(1.30 pints)
Remaining in Reservoir	-	0.57 litres	(1.00 pint)
Remaining in Galleries	-	0.57 litres	(1.00 pint)
Capacities - '262'			
Drain and Refill	-	3.4 litres	(6 pints)
Oil Filter	-	0.67 litres	(1.36 pints)
Remaining in Reservoir	-	0.57 litres	(1.00 pint)

# IF ONLY....

Phil Crocker

The time: July 1983

The place: Leyland Australia's Headquarters, Zetland, N.S.W.

The event: The knighting of Mr. David Beech (father of the P76)

by her majesty, the Queen.

Since the introduction of Leyland's incredibly successful P76 in July 1973 we have seen some truely remarkable changes throughout the Australian Motor Industry. The most notable of them being;

- The success of Mitsubishi's Sigma.
- 2. The discovery of at least twice the world's known deposits of oil in Bass Strait which has caused the price of petrol to drop by up to 15¢ p.l.
- and 3. G.M.H.'s dramatic collapse due to the swing toward big cars (consequence of 2 above) and away from the medium sized Commodore.

A hush surrounds the Leyland executives, journalists and invited guests as the Queen arrives.

The ceremony is to honour Mr. D. Beech's contribution to the Australian Motor Industry.

With the formalities complete, Sir D. Beech arises and the Queen departs to another official function.

Now a surprize. Instead of being offered refreshments we are ushered into a larger room to our left. Inside the room is a sheet covered vehicle. Little did we know that Leyland had picked today (the 10th anniversary of the P76) to unleash its new model.

Sir D. Beech thanks us all for our attendance and then proceeds to announce the latest figures which show;

Leyland	376147	Passenger	Vehicles	to 30/6/83
Ford	187763	If		II
Mitsubishi	160985	II		11
G.M.H.	94623	41		11

A loud cheer erupts from the pro Leyland crowd.

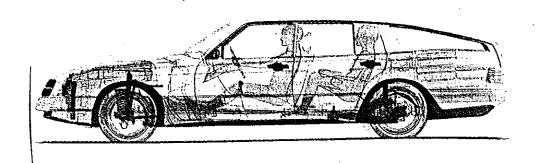
Then Sir D. Beech moves toward the covered vehicle.

"Ladies and Gentlemen, on behalf of Leyland Australia I have great pleasure in unveiling the new FORCE 12!." With a flick of the wrist he removes the sheet.

To the untrained eye the exposed vehicle could be mistaken for a face-listed version of the Force 7 Mark Three. But a closer inspection reveals the truth. "TURBO" badges beneath the "LEYLAND V-TWELVE" (that's right V12) badges on the front panels, twin chrome exhausts, unique mag wheels made specifically for the Force 12, electrically operated sun-roof (standard) and distinctive Gold leaf paint work. Silver paint is also available, this being the only option offered on this model.

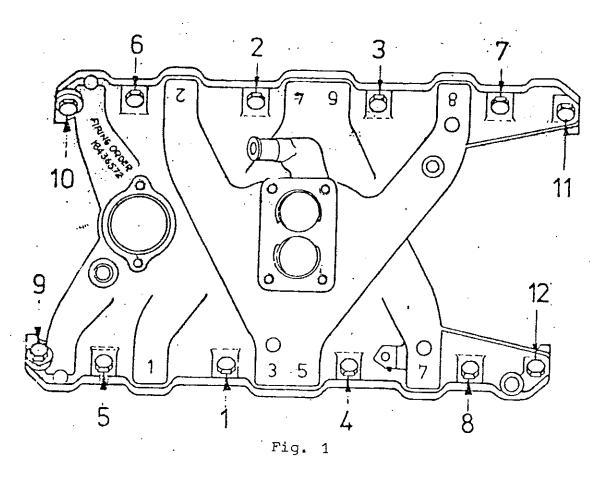
The rest is standard and includes, power windows, AM/FM cassette stereo, computer control, digital instrument read-out, cloth seats, air conditioning with outlets from and back, tinted windows, headlight covers, Leylands magnificent new clutchless Four Speed Transmission, 4 wheel disc brakes, side protector strips etc. etc.

Like I said, "If Only ....."



SERVICE BULLETIN ASSEMBLY OF INLET MANIFOLD - V8 When investigating manifold gasket failure or poor idling on V8

engines it is imperative that the manifold retaining bolts be checked for length. There should be ten 1 1/2" x 3/8" and two 2" x 3/8" bolts at points 9 and 10 in Fig. 1. Instances of 1 3/4" bolts being used instead of 1 1/2" bolts have been reported. These can bottom on the threads and not fully clamp the gasket.



When replacing a manifold gasket it is recommended that an even application of adhesive be applied to both sides of the joint washers. One of the following adhesives should be readily available in the field 3M-EC 776, 3M - 1099 or Pliobond. After application a half hour minimum dry off period must be allowed.

An improved oil proof gasket will shortly be introduced in production which can be easily identified by its mottled dark grey colour as compared with the current whitish coloured material. This later type gasket does not require any adhesive.

To minimise manifold distortion and maintain alignment between manifold and heads the following tightening procedure is required:

- 1. Fit valley cover gasket, align with ports then fit and tighten rubber end seals to pull valley cover gasket fully home.
- 2. Start all fixing screws by hand.
- 3. Run all screws down in sequence until contact with manifold casing is made, i.e. finger tight. If this if not done the first screw torqued will tilt the manifold in the valley and tightening the screw on the opposite bank does not correct the misalignment.
- 4. Tighten in sequence to 13.5 20 Nm (10-15 lbs. f. ft. Torque)
- 5. Tighten in sequence to 34 41 Nm (25-30 lbs. f. ft. Torque)

NOTE: If this is a repeat failure remove the left hand cylinder head and refit with a new gasket. Do not tighten the cylider head until the manifold has been aligned correctly then tighten the head bolts to the correct torque.

Further to this bulletin it has been found that with continued failure of the inlet manifold gasket a further modification is necessary.

Remove all gasket material from the metal gasket assembly, coat both sides with Silastic 732 RTV adhesive/sealant and assemble components as outlined in the above procedure.

Courtesy of LEYLAND

# PHANTOM PHLASHER

Joe Torony

One of the surprizing ommissions from the original specs for the P76 was a headlight flasher.

Most people who have driven a car so fitted, especially on the highway, will swear by them and consider them a very important accessory. Not only are they a very handy warning device for close work (horns tend to frighten drivers) but for long distance highway warning they are without parallel. They are also useful for greeting other P76's and most people would be aware of the other and sometimes cost saving use that they are put too!

If you agree with all or at least some of the foregoing read on as I am about to show you how you too can become a "Phantom Flasher".

You will need the following list of item for this project.

- 1. 1 x 12v relay (horn relay or 30 amp Hella Cube)
- 2. 1 x momentary on 'Switch (push button type)
- 3. ½ metre of light multi-strand hook-up wire
- 4. 2 metres of 2.5 mm auto hook-wire
- 5. 8 female and 2 male spade connectors
- 6. 12 mm dia. heatshrink tubing or insulation tape

Most of the bits and pieces I found out of my junk box, the only thing I needed to buy was the push button switch which I bought at 'Pre-Pak' Electronics at Lewisham Hts. for \$1.50.

Now lets start cutting. The most tricky part of the job is the push button. After much thought I decided to position the button on the end of the trafficator stalk, as this seemed to be the most convenient place and so it has proved.

Basically there are two approaches. One is modify the existing knob to accept the push button switch and the other is to manufacture a new knob with the switch incorporated. If you have access to a lathe the second solution is a natural but the standard knob will work quite well.

Firstly, unscrew the trafficator stalk and remove the knob, it is a push fit. The switch body in 10 mm is 10 mm in diameter so a hole of this size needs to be drilled in the knob. (Ref. Fig. 1.)

Next, two exit holes for the wires need to be drilled at a slight angle to clear the solder tag on the switch (see Fig 2.)

Trial fit the switch into the newly formed cavity and make necessary adjustments to the angle of the solder tags so that they enter the holes properly. When satisfied that everything will fit, solder a 250 mm length of the thin hookup wire to each tag. Feed the wires through the exit holes and press switch firmly into the cavity. Take care not to damage the switch by pushing on the button. I used a suitable scrap of tubing in the bench vice so that pressure was exerted on the body of the switch only. To facilitate this the switch knob may be removed by gently pulling on it.

If all has gone well, you should now have a trafficator knob with a push button switch firmly embedded into its top.

Replace the knob on the stalk by pushing it back on making sure that it is fully in position.

Using a suitable length of the heatshrink tubing, form a sheath for the switch, knob and wires along the stalk just short of the spanner flats.

Fit back and admire your handywork for a few moments and rest in the sure knowledge that from here on its all downhill!

Assuming that you are using a Hella Cube type relay notice that there are spade connectors on it.

One side of the relay body you will find a wiring diagram which will explain the function of the connectors.

All that is left to do is to connect up the circuit according to the wiring diagram following, noting these points.

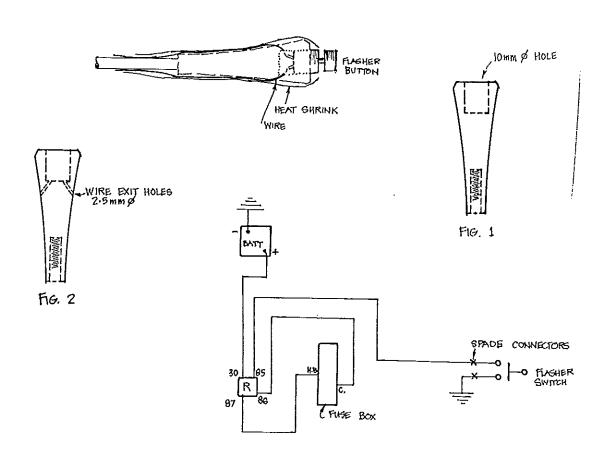
- 1. Mount relay on the inner-guard near the main fuse box.
- 2. Move the high beam wires on the fuse box (blue and white) from the top to the bottom spade connector and connect the output lead from the relay to the top spade (No. 87 on relay).
- 3. The relay input lead is connected directly to the battery positive terminal (No. 30 on relay).
- 4. One lead from the stalk goes to a convenient earth point under the dash.

5. Contact 86 on the relay is connected to the cigar lighter spade on the fuse box? The other lead goes to relay contact No. 85.

The spade connectors are incorporated in this part of the circuit to allow easy removal of the trafficator stalk.

Now, double check all the wiring and gingerly press the flasher button. You should be rewarded by the muted click and flash on all four headlights! (two if you're a Deluxe person). You will note that even the high-beam warning light in the instruments will flash!

Happy Flashing.



# NOT ENOUGH EIGHTS

Hal Moloney

Until the advent of the P76 V8, there was only one car that was sold by "Leyland" name. That car was the magnificent Leyland Eight, built between 1920 and 1922 by Leyland Motors Ltd. now of course Leyland Motor Corp.

The car was designed by Parry Thomas who in 1924 broke the land speed record with the car attaining 214-57 km per hour. The car was chain driven which proved fatal for Thomas, for during another record attempt, Thomas, who had a habit of leaning out of the car for better visability, has his head torn off when the chain broke.

The Leyland was reputed to have been the best car in the world during its short life. The motor was a straight eight of 6.9 litres s.o.h.c. developing 200 h.p. at 2800 r.p.m. The engine used small leaf springs for valve return instead of the common coil spring.

During its 2 year life span only 18 cars were made, of which none survived. However, one car now owned by Leyland was made up in 1927 from parts being held in store. It is a short chassis sports model.

The Leyland 8 was discontinued in favour of Leyland truck production.

So there you have it, a Leyland 8 in 1920 and another in 1973. Both acclaimed as excellent cars technically. Both 8 cylinders, one had only a 4 speed transmission and the P76 an option of 4 speeds. Both ran roughly a 2 year life span and were both 4-9 metres in length and weighing approximately 1300 kg.

The Leyland Eight held the land speed record in 1924 and the P76 held the Targa Florio Trophy in 1974.



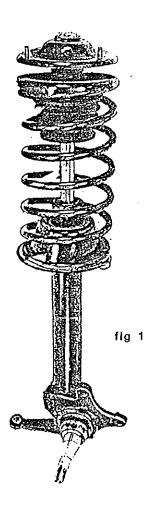
# TAKING THE CLUNK & ROLL OUT OF YOUR P76

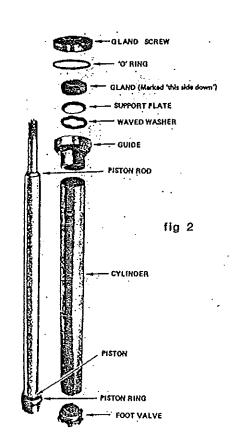
Terry Johnson

This is the first in a three part series dealing with improving the handling and ride of your P76, and covers the sagging front end problem.

In the case of those owners who just wish to restore their struts to the orriginal specifications you have two options open to you.

- 1. You can replace those worn struts with bright shining new units at a cost of \$203.48 plus 20% sales tax each as shown in figure one.
- 2. A repair kit part No. HYL-4755 is available from Sydney parts priced at \$36.98 plus 20% sales tax each, and anyone with a small ammount of mechanical skill following the instructions as laid down in the service manual should be able to repair the shock absorber section (Fig. 2) without a great deal of trouble.





Exploded View of Shock Absorber Components

NOW,

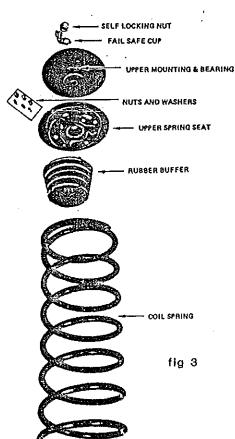
If you are really dinkum about stiffening up the old front end, make the P go round corners as if its on rails, and maybe do a bit of the boy racer thing, turn the page and read on.

To obtain the nearest thing to radial tuned suspension on a P76 the installation of the Monroe Wylie GTC 600 heavy duty trail blazer gas strut replacement cartridge, will go a long way in helping you to reach this goal.

These units are available from Coventry Motors and Girlock and priced at \$100.49 per pair including sales tax, are definately a much better, simpler and quicker method of repair for only \$6.00 per side more.

All those parts shown in figure 2 on the previous page are replaced by one simple replacement cartrige by following the procedure set out below.

Raise the front end and place safety stands under the chassis members. Check the rear wheels first. Remove the road wheels, disc brake caliper and the discs. Place a jack under the strut and compress the coil spring, when compressed install at least three clamps over the coils to keep them in a compressed position for later removal. Disconnect the stailizer from the control arms, disconnect the ball joint stud from the suspension strut. Now remove the three securing nuts that hold the unit in the tower. The strut can now be removed from the vehicle and taken to a bench or similar place to be worked on. Making sure that the spring is safely compressed, undo the nyloc nut and remove those parts as shown in figure 3.



Now remove all those items shown in figure 2 drip in the GTC 600 cartridge and tighten the lock nut securely. Reassemble and install back on the car in the reverse order of disassemble and removal. Consult your work manual for the basic removal and refit procedure if you are in any doubt. This is a simple job but without care can be very dangerous, so remember you are the only person responsible for own safety, check the rear wheels, use safety stands and clamp that coil spring down if it flys off when you undo the nyloc nut it could take your head with it, so take care.

Next month, take the bounce out of your rear.

# SERVICE BUILETIN

### TIE BAR RUBBERS

Where vehicles are operating continuously under adverse conditions, the tie bar rubbers may not achieve their anticipated life expectancy.

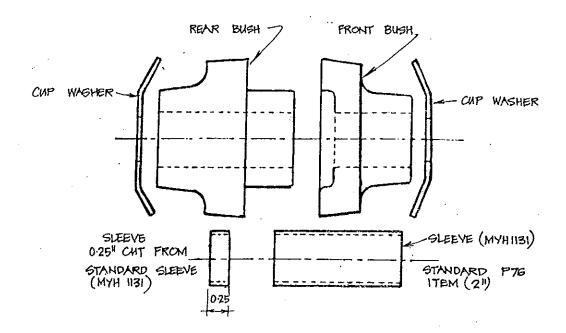
In this event, a heavy duty replacement package is available under Part No. HYL 5080.

These rubbers require an additional 6.3 mm (0.25 in) sleeve to be fitted to the rear bush on assembly. This sleeve can be cut from a standard MYH 1131 sleeve.

Assemble the components as shown in the sketch.

DO NOT use a lubrican on the bushes.

NOTE: The effective length of the tie bar is reduced to 276.2 mm (10-7/8 in) when using this package, and the twin-lock nut torque remains unchanged at 68-95 Nm (50-70 lb.f.ft).



Ford bushes and washers can be used as they are the same parts.

- 2 C60A 3A140D rear bushes
- 2 D4DW 3A225AA front bushes
- 4 C60A 3A142D washers