



# JANUARY-FEBRUARY, 1969

CIRCULAR No. 58 January-February, 1968

Published and Edited by J.D. Taylor, 1 Walker Rd., Mt. Waverley, Vic. 232-6331

President: M.G. Dodd 3 Oberon St., Forrest Hill, Vic. 878-5097

Vice President: W.A. Pearson 310 Cotham Road, Kew, Vic. Tel. 80-1738

Secretary: P.J. Carboon 44 Tunstall Rd., Donvale, Vic. Tel. 842-1738

Treasurer: W. Fock 58 Albert Street, Mt. Waverley, Vic. 27-4011

Spare Parts: A.J. Gray 17 Graham Place, Box Hill, Vic. 89-2559

Technical Committee: B. Kelsall Flat 7, 196A Park Street, Brunswick, Vic. 58-2597

Social: J.G. McLeod 8 Esta St, Blackburn, Vic. 88-2343

L. Keane 6 Busberry Ct., Hughesdale, Vic.

G. Gilmore 4 Thompson Street, Ormond, Vic. 58-2597

Spare Parts Representative In N.S.W.:

Mr. B. Polain 50 Seaview St., Balgowlah, N.S.W. 94-5508

Hon. Vice President: J. Coffey Dispensary Walk, Bendigo, Vic.

### **EDITORIAL**

So much has happened 'Newswise' since the last edition of the 'Javelin' that the bulk of writing to do on my part seemed offputting, so I put it off . . . That is until I received a letter from Mr. Sandercoe of Queensland that put my literary efforts to shame. The research and cogitation that Mr. Sandercoe has put into his contribution will be appreciated by all, particularly myself, but I must reiterate at this point that any articles 'Jowettwise' are appreciated and printed in the following 'Javelin', even though they may be not on the technical Level of Mr. Sandercoe.

Readers will be pleased to know that the Club has purchased a new (well almost) tripe-typer for a very reasonable sum, due to the negotations of Bill Pearson. At this stage we cannot guarantee a fully readable 'Javelin' as my handwriting needs an experienced interpreter, and the T.T. I believe, came from a typing school, so it will have to get out of the way of writing — 'The quick brown fox jumps over the lazy dog' . . . I once bought a vintage T.T. from a chemist shop, and no matter what keys were depressed it continued to write 'Take one pill three times daily', so I sold it to a girl who was training to be a chemist. She was very happy with it, except that if she hit the keys too hard it tended to break the bottle.

Where was I, Oh yes, the Club T.T. is in the capable hands of Joan Dodd, who is of course Maurices' long suffering spouse, and as an experienced typist was chosen out of thousands of applicants to be 'Custodian of the Tripe-Typer'. Unfortunately I shall no longer be able to rubbish Maurice on paper, particularly in this issue as he has volunteered to write up our appearance at the M.G. Car Clubs 'Concours d'Elegance'. Incredibly a couple of strange things happened at this function, firstly we booked space for 6 cars, expecting 2 or 3, and 12 or so turned up, not scruffy ones like mine, but real good ones, highly polished. The weather was perfect to hot, and we were nearest to the shade of some large trees.

A girl spectator, passing thru our group was heard to say to her escort, "Javelin? Isn't that the car that they're advertising a lot lately?"

Duncan Palm, who was nearest to the speaker when this pearl of wisdom was dropped, is going to take a long time to get over it.

Real good day all round and many thanks to the members who rallied to support the Committees' claims on this occasion. We can uphold our flag in any motoring company now. A couple of members even tended their apologies in writing. There is about 8 months to go now before the next C.C.D'E. so we may double our numbers this year – if a certain person would quit polishing his Jupiter Chassis and get on with the work, we could have 2 Jupiters to display as well as 24 cars, that would rock 'em.

Talking of Jupiters, Les Anderson, rang one night before Xmas and suggested I drop over to look at some slides. I don't think I asked "wot of?" but assumed they would be of Javs. C.C.D'E. etc. When I was confronted with a Jupiter in the Anderson drive my intuition told we something was on, but then I was introduced to Sue and Mike Allfrey who recently arrived from England with said Jupiter. I should explain, at this stage that I am not Pro-Jupiter, but being a Javelin owner for some 14 years has given me a degree of tolerance towards Jupiters, but after the Jupiter fans had finished drooling over cracked chassis, and doors with the bottoms rotten clean off etc., I fear I was getting just slightly sick of Jupiters.

The Allfrey Jupiter has a Rootes gear box with overdrive fitted and is the result of some 18 months work on Mikes part, and tolerance on Sues part. The body number is 7 (seven) and it is an SA model in restored order, and it will be our only going Jupiter in the Club here at present, as far as I know, but as I said earlier I don't know much about Jupiters . . .

Seriously though, we welcome Mike and Sue to the fraternity and hope to see them at some of our functions. Welcome also to Mr. L. Clunn of 20 Lynette Avenue, Beaumaris who recently joined the J.C.A. Mr. Clunn, it is probable that your P.E. belonged to one of our Ex Club members, so we could fill in the history of it if you care to ring one of the Committee.

**Spare Parts:** The top hose adaptors are now available and will cost something under 2 dollars each. I mentioned in the last 'Javelin' that the local manufacturers had ceased to make the top radiator hose, so we have gone to the P.E. style of aluminium adaptor with two straight hoses of different bores. The hose clips and adaptor will be available as a direct change over before this is printed, Alex Gray will know the price of the complete assembly by then too.

**Clutches:** Pressure plate assemblies reconditioned by Brelco have given us the best service in the past and we now have 4 on the shelf at a bit over 10 dollars each. Although these units are available over the counter almost anywhere, they will be a welcome addition to 'Alec's emergency service', and at a better price than most makers can chisel.

If the top hose adaptors turn out O.K. I am going to get my friend at the aluminium casting place to make some water pump pulleys for us, these should cost about 5 dollars finished and will stop the fan belt squeaking and running out of tension adjustment.

**Repairs And Mods:** Have been doing a bit on my own cars lately, most of it being forced on me, admittedly. Firstly the P.E. silencer inlet pipe started to leak noisily and as Alec had temporarily run out of new ones I got the bottom out of an old one off my previous P.B. cleaned about 3 lb. of soot out of it and welded a new bottom in it. It had been an original silencer sheathed in Zinc or some such material inside the casing. The P. E., which has always run too hot for comfort, now runs 15-20 degrees cooler at 65-70 m.p.h. having tried every other trick in the business to cure this heat problem before, I am a bit disgusted with myself for not thinking of the silencer before.

Incidently Javs do not overheat without extreme provocation in this country unless they are at fault in some way. Some years ago in the aforementioned P.B. we did 70 miles in one hour on an out-back dirt road in temperatures between 90 and 100 deg. F. The water never looked like boiling, but the oil must have as the pressure drop was significant, as I remember it.

Perhaps few people think of renewing float needles and seats in the carburetters until actual flooding occurs, but worn N & S's can be the cause of high fuel consumption long before flooding occurs.

We were tootling along in the P.E. at around 65 m.p.h. recently when I became conscious of a slow cyclic boom emanating from the engine, this is indicative of a rich mixture, just as a rich hunt at idle is, and fitting new N & S assemblies cured this sound and improved the fuel consumption by about 5 m.p.g. The needles in

the new ones protruded about 1/16-in. more than did the old ones, so the fuel level would be dropped by that amount.

I may have mentioned before that I use 55 compensating jets instead of the standard 50. The comp. jet in a Zenith influences the mid range power, and the main the top range, So an increase in comp. jet size helps torque for towing, acceleration and hill climbing etc. The idle mixture needs adjusting after fitting 55s and their effect is noticeable when driving, but the difference in fuel consumption overall is not noticable, as I usually get 35 m.p.g. on a trip fully loaded at 65 m.p.h.

Recently had a phone call from one of our Tasmanian members and during this conversation I was reminded of a modification I intended to try out years ago. The pieces of felt in the push rod covers seem a primitave device to me and give more trouble than they are given credit for. Firstly they block up, particularly in wet weather causing a high value of c/case depression from the breather valve which holds the fuel pump diaphragm down causing fuel starvation. Secondly, on a tired engine they exude oil which runs on the exhaust pipes and makes a crackling noise like a fish and chip shop.

The excessive crankcase depression is the most important aspect as the crankshaft seals allow air and grit to get in (which ruins them particularly the front one) and the grit reduces engine life.

The cure: I have soldered nipples both on the top of the felt housing and on the carby. intake pipes just above the convoluted hose. The nipples are ¼-in. outside diameter and a piece of plastic tubing connects each pair of nipples. The felts are removed an the rectangular hole blocked with cork, neoporene etc. the push rod covers now receive air filtered by the carby, air filter and the air stream is unrestricted by blocked felt.

Members intending to do this mod. should remember to drill thru the nipples <u>after</u> attaching them or all is for nought. Dissenting opinions should reach me at the earliest opportunity, lest I ruin an engine thru some technical oversight.

Various members from time to time have mentioned that they intend to replace their trafficators with flashing indicators. For what it is worth, I am finally getting round to it myself, after many years of banging the door pillars to aid the reluctant operation of trafficators. (N.B. from my own experience, I would say its easier to fit flashers than repair trafficators.)

After a brief conference with the Lucas man at our local branch of Brookland S.L.I. I replaced the front parking light assemblies with ones which incorporated a twin filament lamp. The glass stands out almost hemispherically so they can readily be seen from the side of the car. The Part No. is 52558. and they cost 2·76 each. Globe extra. They are a direct replacement for either PC-D or PE types, and are held on with self tapping screws which fit the original holes. The flasher unit I bought is Part No, 5057. and cost 2·80. and is able to cope with a third light such as a trailer or caravan might have, but operates on the car alone normally. It is a plug in unit but can be held with a simple clamp round its diameter. A socket is available for it, but for some reason it is a car part and not an electrical part so Brooklands didn't have it. The tail light fittings most suitable appear to be 1962 VW which is the smallest one incorporating a flasher globe. Later VW's have a larger unit and it is necessary to cut a piece out of the sheet metal adaptor to clear the fuel filler. This is no great hardship, but the smaller type are adequate and look less cumbersome. The cost is about 6 dollars each, new complete with piping, but as I have two cars to fit out I shall try the Wreckers for second-hand ones.

Incidentally the Morris 1000 type do not include flashers, so the VW is the only suitable one as far as I know. We had a visit from Dave Bargen (Qld) before Xmas, and his is one of the nicest looking modified Javs. I have seen. Dave has fitted 14-in. wheels, lowering the chassis height, chromed the grille etc., and done a power of work generally to modernise his Jav. Unfortunately the car still incorporates some typically Jav. faults, and left a trail of broken bits from Melbourne to Brisbane. Dave, I'll answer your letter here as I don't expect you'll mind and other members may learn something from your experiences. The gear box that fouled up in Melbourne, almost certainly broke a lock washer which was of the early thin type, and I have seen more of these broken than you could poke a stick at. We make a point of modifying shaft, the gear and the bush to take the thick washer. This costs 3-4 dollars plus the washer.

The piston that the top came off in Canberra would either have been a fatigued piston (70,000 miles-plus) a faulty one, or one regrooved to take deeper section rings, such as Cords.

The gear box that the Club provided here had an unknown history, so stripping 3<sup>rd</sup> gear could be due to almost anything. Also why it should catch and stop the car whilst reversing is a bit obscure. Sounds like a selection problem.

Why the engine should run a big end after 14,000 miles on a new Laystal shaft is a bit hard to answer from here, but it could be foreign particles in the oil, the bearing a loose fit in the conrod, bolts stretched under load, over revving etc. Do your wheels undergear the car, which causes the engine to over run? This would contribute to both the piston and the bearing failure. We intend to recondition the gear box you left here and send it up to you, but will let you know the cost first.

Secondly: If the Laystal isn't scored or under size I would simply fit a new bearing after checking the condition of the other three.

Thirdly: If any of you Banana-Benders intend to come South again, could you give us a bit of notice, so we can organise enough spares and labour to get you back home again? You caught us all either out or flat-out last time.

P.S. Dave, your water pump was leaking round the back of the seals due to a coroded housing, according to Hon. Pres. who dismantled it after you'd gone.

## **CARS FOR SALE**

Alec Gray had a call from Regans Motors in Balwyn re a P.C. Standard that was traded in, the previous owner, one Mr. Wingate bought it new, brush painted it in lettuce green inside and out, and ran it at minimum cost till it collapsed mechanically. Regans want 120 dollars for it. 'Nuff said.

Mr. Parker of 2 Parklane, Mt. Waverley, Phone 277 1758 wants to sell an El PC standard with 'clean' body and trim, but with a broken crankshaft. The car has been on blocks for some time and has tyres that may be suitable for towing. 'Nuff said again.

Christ Church Hall, Wood Street, Hawthorn, has been booked on the following evenings for General Meetings, which include the Annual General Meeting.

I shall see you then,

John Taylor – Hon. Editor – J.C.A.

April 11<sup>th</sup> Annual General Meeting; June 13<sup>th</sup> General Meeting; August 8<sup>th</sup> General Meeting; October 10<sup>th</sup> General Meeting; December 12<sup>th</sup> General Meeting.

# MORE ABOUT WHEELS ON THE JAVELIN

# By K. E. Sandercoe, C. Eng., B. E. (Mech.), M. I. Mech. E., M. I. E. Aust., A. M. Inst. T.

Mr. Willson's article – 'Wheels on the Javelin' (December, 1968) – prompts me to expand and comment on some aspects of it. First, I quote data mainly extracted from the Tyre and Rim Standards Mannual issued by the tyre and Rim Association of Australia, with explanatory notes.

Tyre Size	Std. Rim	Max Tyre Sect.	Alternate Rim	Max. Tyre Sec.	Permissible Rim *			
5·25 x 16 (i)	3·00D	5·25-in.	3/50D	5·45-in.	3½J, 4J, 4·00E			
5.60 x 15 (ii)	3¾ J	5·60-in.	4J,	5·70-in.	3·50D			
	(iii) 4JJ)	5⋅70-in.	4½J	5·91-in.	4·00E			
	4J)		4½JJ)	5∙90-in.				
			4½J)					
5.90 x 15 (iv)	4J	5·90-in.	4½J	6· 10-in.	3·50D			
	4JJ)	5∙90-in.	4½JJ)	6·10-in	4·00E			
	4J)		4½J)					
Tyre Size	Max. Tyre	Loaded Radius	Revs/Mile	Max. Recom.	@ PSI			
	( <b>Sect</b> ,) (v)	(Std. Rim)	(Std. Rim)	Load (lbs)				
5·25 x 16	5·45-in.	12.78	774	750	30			
	5·65-in.			'A' 980	36 (?)			
5·60 x 15	5·50-in.	12.26	807	825	26			
	5·70-in.			1080	32			
5·90 x 16	5·70-in.	12·45-in.	795	900	23			
	5·90-in.			1170	32			
Price: 5·2	Price: $5.25 \times 16 = 16.20$ ; $5.60 \times 15 = 16.20$ ; $5.60 \times 154$ JJ &4J = $17.35$ ; $5.90 \times 15 = 18.35$							

- (i) Australian Tyre and Rim Standard Manual, first edition (1958).
- (ii) Australian Tyre and Rim Standard Manual, second edition-August 1967 revision.
- A Approximately equivalent to \* (by analogy; no up to date figures are published) the change arises from the current rayon cord material being an improvement on that available earlier.

NOTE 1: Each of the above symbols refers to all figures to the right of it, unless otherwise indicated; the following symbols refer to all figures in the column below each.

- (iii) DUNLOP retail price list No. 471, effective 14.8.68.
- (iv) Appears only in first edition, T & R Standards Manual.
- (v) Not in T & R Standards Manual; obtained from DUNLOP.

NOTE 2: The rim fitted to my D9 PB is 3.00K (not the 3.00D recommended in the Australian Standard, nine years later). I have been unable to obtain details of the 3.00K profile but differences from the 3.00D would be slight and certainly not critical.

NOTE 3: The HOLDEN Model FJ was fitted with a 4J rim and equipped with  $5.50 \times 15 \times 4$ -ply or  $5.90 \times 15 \times 6$ -ply tyres, according to sub-model. G.M.-H Brisbane has no information on the offset of the well.

#### **COMMENT 1:**

It will be seen that the  $5.60 \times 15$  and  $5.90 \times 15$  have rolling radii (when fitted to the recommended Australian standard rim) which are respectively 0.960 and 0.975 (by my slide rule) of that of  $5.25 \times 16$  and therefor they lower the effective final drive gear ratio by 4% and  $2\frac{1}{2}\%$  respectively (with corresponding odometer and speedometer error), i.e. from, say, 4.875:1 to 5.07:1 and 5.00:1 respectively.

### **COMMENT 2:**

With one combination, Mr. Willson noted a reduction in understeer but felt that '... the higher front pressures I used may have done this'. Tyre pressures certainly can have a noticeable effect on steering characteristics; they also affect the life of the carcass and the rate and pattern of tread wear. Using the International Standard allowance of 150 lb. per passenger the tyre loads (for my PB) and corresponding pressures (using only the First Edition, T & R Manual, to give a common standard of comparision and assuming the centre of gravity of front passengers to be 62-in. from the rear axle, and rear passengers 24-in.) are:

	Driver	Dr. + Fr. Pas.	Dr. + 2 Fr. Pas.	Dr. + 1 Fr. Pas. + 2 R Pas.	Dr. + 2 Fr. Pas. + 3 R Pas.
Loads (lbs)	Front: 660	706	752	741	804
	Rear: 590	619	649	734	821
Pressures (PSI)					
5·25 x 16	Front: 24	27	30	29	33
	Rear: 20	21	23	29	35
5.60 x 15	Front: 18	20	22	22	25
	Rear: 14	16	17	21	26
5·90 x 15	Front: 15	17	19	19	21
	Rear: 12	13	15	18	22

Abbreviations: Dr. = Driver; Fr. = Front; R = Rear.

Hence if Mr. Willson used a pressure in the  $5.25 \times 16$  which was high for the load (say 50 p.s.i; with only the driver) and one in the  $5.60 \times 15$  which was normal or low (say 20 p.s.i.) then a difference in handling could be expected. Also, because of different cross-sectional shapes (i.e. profiles) the effective centre of the contact patch of a 5.25 when turning a corner of given radius at a given speed, will not necessarily coincide with the effective patch centre of a 5.60 relative to the central plane of the wheel. Further, if the HOLDEN well is offset (central in the Javelin), the patch centre will be displaced by the amount of offset.

Another difference arises from the lesser rolling radius of the  $5.60 \times 15$  since, to a first approximation, the original design calls for the centre line of the king pin, produced, to intersect the road surface at the effective centre of the contact patch of the tyre. With the lesser rolling radius, the king pin inclination (and the Javelin has more than most) causes this intersection to be closer to the vehicles centre line than with the  $5.25 \times 16$ . Similarly, castor will also be slightly reduced. Unfortunately I have no experience or information to indicate just how noticeable are the effects due to high pressure, change in profile and reduction in rolling radius, either individually or in combination.

#### **COMMENT 3:**

It will be noticed that, for driver and 2 front passengers + 3 rear passengers, I quote pressures (for the  $5.25 \times 16$ ) of front - 35 p.s.i., rear - 55 p.s.i. corresponding to tyre loads of 804 lb. and 821 lb. These are appropriate for a tyre of 6 ply rating but can be subject of debate with 4 ply, with its maximum recommended load of 750 lb. at 30 p.s.i. I prefer to exceed 30 p.s.i. for 5 – and 6 people occasions but this is a personal preference, If my vehicle were carrying 5 or 6 people most of the time if I wished to obtain OPTIMUM LIFE of carcass and tread, then I should use 6-ply. However as my Jowett seldom carries this load and is never off the bitumen (in contrast to my Toyota 'Crown' station wagon, it is more economical to retain the original fitting of 4-ply.

To still further confuse the interested owner, the  $5.25 \times 16$  is probably now made with a rayon (fibre and/or material) which will withstand more flexure and the accompanying higher temperature than was the case when the first edition, T & R Standards Manual was published in 1958.

If this is in fact the case, the tyre will carry a greater load for the same pressure as originally or, for the same load, the pressure can be reduced. How much? I don't know, and hence my use of symbol 'A' earlier.

The tables published by each Tyre and Rim Association are formulated on the basis of OPTIMUM LIFE of carcass and tread under stated service conditions, It is quite safe to make reasonable departures from the recommended figures but tyre life will be reduced in proportion to the degree of departure.

### **COMMENT 4:**

The lowest pressure shown in the (first edition) tables for 5.60 and 5.90 sections is 22 p.s.i. Hence, where I have shown lower pressures, they have been assessed by extrapolating the tables. The second edition manual recommends even lower pressures.

This indicates that the  $5.90 \times 15$  has a load capacity in excess of that needed for well balanced equipment on a 'JOWETT JAVELIN'. This is also a reasonable conclusion to be drawn regarding  $5.60 \times 15$  if the load seldom (in terms of miles) exceeds the equivalent of 4 adults.

### **COMMENT 5:**

For driver + 1 front passenger + 2 rear passengers (clearly the optimum load for a Javelin) the load per tyre, and hence per torsion bar and per axle, is virtually the same all round. This is due directly to the genius of the design, who incorporated the further logical step of having front and rear road springs the same. I know of no other vehicle with this feature, further exemplified by the single, central side jacking point, which the aforesaid genius also arranged to be co-incident with the central door pillar. I dips me lid.

## **COMMENT 6:**

Would I like a Javelin with 15-in. wheels? Not on your life! (With all due respects, Mr. Willson – every man to his own poison). Ever since I have known the Javelin I have had the fancy that it looks like a dancer, poised on her toes. Fitting  $5.60 \times 15$  (let alone  $5.90 \times 15$ ) will drop her down on to the flat of her feet – another fancy of course, but that is my view.

Further I unashamedly belong to the school which prefers to maintain the original as closely as possible. The only variational favour are replacement of cloth trim with fabric-backed p.v.c., modifying the oil filter to prevent its draining when the engine stops, replacing ordinary plywood with marine or exterior ply and the like, so that the essential design is retained and in 100 - 200 years time, it will clearly appear to have been so retained. I consider that the JOWETT 'Javelin' is one of the outstanding designs in the history of British automotive engineering and hence is worthy of being maintained in a condition which demonstrates this.

Restorer's Note: The symbols used in this article were rather confusing. It is possible that a modern computer cannot properly replicate a typed O with a + typed over it - the Roman numerals may have helped.

## M.G. CAR CLUB'S CONCOURS d ELEGANCE HELD ANNUALLY AT LILYDALE

As promised by our worthy Editor (J. Taylor) I have put together a few notes on our most successful run to Lilydale on December 8<sup>th</sup> 1968. This can be a most interesting day for the motor enthusiast as just about every type of car can be seen, and examined, in many instances in very nearly original condition.

Back to the Javelins, we managed a very good attendance for the day and some four vehicles including my own were judged. The winning car was then entered in the final judging.

At this stage it might be an idea to give you an outline of the judging procedure. Each entry receives a card with name and vehicles details shown at the top. There approximately 10 sections each divided into three or four parts on the front and reverse sides of the card.

To elaborate – A section on the vehicle's interior would look like this:

### **Interior Trim**

A. Soft trim condition.
B. Originality
C. Floor covering
D. Trim above door sills.
3 p.

The points are tallied for each section and the final score entered on the card. As can be appreciated a vehicle capable of showing high scoring in every section of the card (including under chassis details as well) is very good and may then have a chance of taking out a final award.

The final placings of the four Javelins judged from our group were:

- 1<sup>st</sup> Alec Gray's very fine black Deluxe P.C. with approximately 520 points.
- 2<sup>nd</sup> Les Anderson's attractive metallic green standard P.E. with approximately 450 points.
- 3<sup>rd</sup> Peter Carboon's original dark green standard P.C. with approximately 400 points.

My apologies for the inaccuracy of the points score, but the entry cards somehow disappeared after the judging, hence the guesswork.

It is to be noted that next December, if not before, we can have our cars improved to a state where a final award is a possibility. Certainly both the Anderson and Carboon Javelins are potential winners with a bit more spit and polish.

The winning vehicle in our class was a 1967 HR Holden Premier, (fancy being beaten by a rust bucket). In this, the Holden as against a Javelin can be at a disadvantage, as the final scoring is based not only on vehicle condition but also its age. The older car naturally being a higher scorer on originality.

Next time how about more entries from 'Club Members' instead of leaving it to your Committee.

M. Dodd – Hon. Pres.