The Bulletin of the Alvis Car Club, Victoria

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This publication is the official newsletter and journal of the Alvis Car Club, Victoria. It is printed in an edition of approx. 100 copies by the Hon. Editors, and is issued free of charge to all financial Club members. Contributions and letters are always welcome.

# AUGUST GENERAL MEETING

8 p.m., Friday, 17th August, 1962 at the Clubrooms, 21 Edgar St., Glen Iris, S.E.6.

#### TREASURE HUNT

At the August meeting, the August event will be held. The Treasure Hunt will be a short one and will involve only about 1 hour's motoring around the Eastern suburbs. Remember to bring a Street Directory, some paper and a pencil. Sheets of questions and route directions will be issued at the meeting. After the general meeting (i.e., approximately 9 p.m.) members will leave on the Treasure Hunt, and they will begin to return from 10 p.m. on. Supper and refreshments will be available at the Clubrooms when cars return. It would be considered an advantage for members to arrange for a navigator for the event - all wives, girl-friends welcome.

The course will cover approx. 20 + miles, and will not involve any particularly bad roads. An average speed of 30 m.p.h. will be quite adequate for the event. There is no time limit for the event, provided that entrants must complete the course by midnight. Points may be deducted on a pro rata scale for arrivals after 11.00 p.m.

Entry fee is 4/- per car. Entrants should present themselves with a navigator. Members who cannot arrange one beforehand can probably find someone at the meeting. Points will be deducted for failure to find a navigator.

N.B. Everyone who attends the meeting must enter as a driver, navigator or passenger.

### BAS BOWES SPEAKS

\* We are sincerely pleased to learn that Jim Kilvington has now mainly recovered from the injuries he suffered when his Grey Lady was shattered (a complete write-off) on the bridge near Ballan, last January. After thinking things over, Jim has come to the conclusion that it was a miracle that he came through the ordeal alive. Having seen the remains of the car, I readily concur with this conclusion. Thank goodness he wasn't driving a Holden or Falcon!

I went to see him one Sunday recently to return some personal effects from the shattered car. Besides seeing Jim's cheery smile, was the added pleasure of his reminiscences of his thrilling earlier days when he rode a 500 c.c. Sunbeam, and his brother rode a similar-sized Norton, were Amateur Rider exponents on the now extinct banked-concrete circuit of the 'Motordrome' which, of course, was situated near the site now occupied by the New Olympic Swimming Pool.

Jim recalled that the 'Professional Riders' had no time whatever for the Amateur Riders, and that they used extreme measures to discourage the "Amateurs" from partaking in the events, such as tempering with the rivets in the chain links, or any other dirty trick which could result in their withdrawal from competition, not to mention their possible demise.

Because of the contour of the banking, the magic 100 m.p.h. lap speed was never attained at the Motordrome, but laps of 90+ m.p.h. were frequently accomplished, much to the delight of the spectators, and, one presumes, the promoters.

During one of the events, Jim was accomplishing just such a lap and he drew up behind a 'Pro', who obliged with the usual 'dirt' by waiting until Jim's front wheel drew alongside his back wheel and then veering his machine up the banking, so that Jim was forced toward the "Brink" so much that Jim's handlebar contacted the concrete safety wall which ran around the top of the banking. Both being determined that the other should not take the lead, they continued with sustained speed and still interlocked, and careered along with sparks streaming from Jim's handlebar as it grazed along the concrete wall for over half a lap. At this stage, Jim, only in his teens, astutely concluded that there did not seem to be any future in this caper, so he conceded defeat and withdrew. For all time, actually.

Jim has been connected with motoring all his life. He has experience of many and varied cars, starting with his father's air-cooled Vee Twin De Dion Bouton in which they motored the amazing mileage of 280,000 miles. That's a lot of miles even these days, let alone the early 1900's.

The cause of the loss of the Grey Lady was, in itself, remarkably odd. Just as Jim was doing a quiet 45 m.p.h. and keeping well over to the left of the road, was about to cross a bridge, the battery exploded, who knows why. The suddenness momentarily startled Jim and evidently caused him to apply the Three Litre's undisputedly rapid acceleration, which was bad enough, but he also swung the steering wheel leftwards. The resulting impact with the bridge wall completely ripped off the near-side of the car, with dire results to the whole body. But for the solid construction of the Alvis, it is extremely unlikely that Jim could have escaped destruction.

\* Firefly Restoration: Members will be pleased to learn that Derek Holyoake is doing a magnificent job on the restoration of his Firefly. The car has literally been pulled down to the last nut and bolt and is being re-built with meticulous care. Derek, being an ex-navy type, makes sure that everything is ship-shape before it is re-installed. No half or near measures here. The progress of the work is necessarily slow and tedious, and it will be some time before we can all see the completed job, but you will all agree that this is the only proper way to restore a car.

\* Les has another F.W.D.: "If worth doing, do it well" really does pay dividends. A good example of this is Les Lee's FWD. He now owns two such cars as he recently acquired the Broken Hill (N.S.W.) FWD 12/50, and this makes some of us turn green with envy. After making the 1,000 odd mile return trip one weekend in July and bringing the engine home, Les found on examination, that it was all the ex-owner, a Garage proprietor, had claimed it to be. The engine had been beautifully reconditioned, including the blower which, incidentally, showed no signs of the rotors or the housing ever having been in contact with one another, and as it has just had new bearings fitted, this blower is 'as new'. Did I say Green with envy? I meant, of course, Vivid Green!

When the chassis, which will follow by road transport later, arrives and Les had checked and re-assembled the whole, all he has to do is fabricate a new body. We have already seen the craftsmanship in body-building of Les and his father on his Silver Eagle, so we are quite sure that the FWD 12/50

will make not only us Alvists, but all vintagents drool.

\* "He who hesitates is lost!": The ruth of this adego, or something in that vein, was recently brought home to me rather forcibly. Two or three years ago, Graeme and Jane Quinn, Terry Plummer, Simon Ramsay, Bob King and myself went for a prowl in the current Quinnmobile to look for a Ducksback,

reported to be at Dunolly, 117 miles from Melbourne.

On arriving at that gold mining town, we eventually located the remains in the yard of the local Caltex agent. The chassis had been converted into a mobile saw bench, and was without the Alvis works. In their place, but crosswise (east-west) was an old Yankie donk (Red Seal, I think) connected to a circular saw. Near the fence was the remains of the Ducksback body, which sported aluminium panelling in surprisingly good condition, although the wooden frame was much the worse for decay. Unfortunately, the Caltex agent was not at home and we therefore had to leave without doing any business. We were not greatly perturbed because we had his address and his telephone number, and it was decided that one of us, no-one in particular would phone and arrange for the purchase of the remains. That, of course, is where the rot set in, for although there was much talk of action, no one in particular ever phoned the agent.

In the meantime, Simon Ramsay bought an SA 12/50 from an old odd bod, who had built his own body. He was an old boiler maker and the body, if nothing else, was a fine example of the art of boiler-making. If Lawrence of Arabia had had such a body on his famous Rolls Royce, his safety would have been even more assured as, after all, his Rolls Royce armour-plated

body and car weighed a more three tons.

The old bod supplied the information that the Victoria Police had originally purchased two Ducksbacks of the SA 12/50 variety, but had sold one almost immediately to a private buyer. The car he was selling was the one they had retained and used for sometime before it also was sold to a private buyer. Just where or when this car's d.b. body had parted company is not known, but he had inflicted the boiler-body on the poor SA's chassis.

Simon, with the aid of a hacksaw, jemmy, sledgehammer and various other torture weapons, eventually succeeded in removing this "pride and joy", and the remains are to be seen at the back of Alvista, where they stand as a voritable monument to the gentle art of boiler-making.

Sy and I felt that the Dunolly Ducksback was likely to be the other of the two Police cars, so we decided to make another trip to Dunolly and buy, at least, the remains of the d.b. body.

This time the Caltex agent was at home, but alas we were too late. He had sold all but the chassis-sawbench to a scrap metal merchant and the lovely undamaged ali panels of the lovely d.b. body were no more. There remained only a few engine accessories which Simon promptly purchased, so that is the end of another Alvis - an SA 12/50.

- \* New series Alvis Park Ward: Did you know that Alvis Limited have introduced a Series II TD 21. The Series II differs from the Series I, by having Dunlop disc brakes on all four wheels instead of Lockheed disc at front and drums at rear. The twin fog lamps are now set in apertures in the guards instead of on posts. The Series II has a different set up for the reversing lamps and rear number plate illumination.
- \* 4.3 Diff. Carrier: Mention in the June issue of "Alvibatics" that Dr. Winter had the misfortune to break the differential of his 4.3 saloon close by Peter Menere's Garage at Brighton brings to mind that this Club has in stock in the Spare Parts Service, a brand-new 4.3 litre Differential carrier and pinion housing. By the way, if you want a set of new spark plugs, contact breaker points, headlamp bulbs etc.. order them through the Spares account, and we will supply you at slightly less than retail prices. Quick service, too!

#### FOR SALE NOTES

- \* ALVIS FRONT-WHEEL-DRIVE. This 1928-9 car is at present in Adelaide, but has been seen by some members and is reputed to be in very good order. The owner is asking £230 for it, and interested parties may contact Bas Bowes for further particulars.
- \* ALVIS SC SPEED TWENTY DROPHEAD COUPE. This 1935 car is in excellent mechanical order, and is a most attractive car. Finished in Carnation Red enamel in very good condition. All original tools and equipment. Rides well, drives well, and always an eye-catcher. £330 spent in last 1000 miles. Rarely used 500 miles a year. Is available from David Muirden at £500.
  - \* ALVIS SPEED TWENTY-FIVE SALOON. John Murray's 1940 model car, at present stored in Melbourne, is for sale at £350. Grey saloon in good condition but needs re-wooding in several places. Goes very well, and very fast. Contact Basil Bowes for further details.
  - \* ALVIS THREE LITRE DROPHEAD COUPE. Dr. Gove's TC 21 Drophead Coupe in Al mechanical condition (over £400 spent in restoring to as-new). The body is also in excellent order. Resides in Adelaide but will be delivered to Melbourne. Conatct Bas Bowes.
  - \* VINTAGE ALVIS PLATE CLUTCH LININGS; Suit 12/50, Silver Eagles. Pre-drilled, and mounted on pressure plate. Cost at £6 set.

#### SERVICE SECTION:

Concerns: 14.75, 12/40, 12/50, 12/60, 16 & 20 Silver Eagles, Crested

Eagles, Speed Twenty, Firefly, Firebird, 32 Litre, Speed 25

4.3 Litre.

Excludes: FWD, Silver Crests, 12/70, SA Speed 20, TA 14, Three Litres.

## REPLACING FABRIC COUPLINGS ON VINTAGE & POST-VINTAGE ALVISES.

There are two types of fabric couplings on these cars:

1) Clutch-to-gearbox cardan shaft couplings.

2) Tail-shaft universal couplings.

Type 2 are only used on the early vintage cars and are much larger in diameter than type 1. Couplings of Type 2 are usually replaced by a modern universal joint system, when the old device wears out. This is certainly a good idea, but if the purists want to replace the original couplings, they are available at £3 each, from Gardner Waern Couplings, (Part No. GW 69) and are of excellent quality. Avoid like the plague any attempt to sell as a suitable substitute blank discs of unknown fabric strength, and without the appropriate triangular plates. (R & M Bearings are agents for the GW Couplings, and in Melbourne their address is 587 Elizabeth St.)

Hereafter, when referring to fabric discs, type 1 only is meant ( i.e., the clutch-to-gearbox shaft type of coupling).

## Causes of failure:

The main causes of failure of fabric couplings on Alvis cars are:-

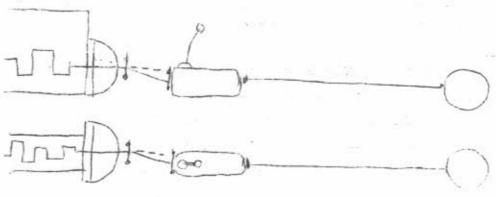
- 1) Brutal treatment to the transmission as a whole by reckless drivers.
- 2) Holding bolts working loose, or worse, falling right out.
- 3) Misalignment of units joined by the coupling.
- 4) Inferior quality couplings, or couplings of insufficient strength.

Of these, the last is probably the most usual in Australia, although it is the hardest to diagnose. But there is ample eveidence to suggest that most Australian cars are equipped with sub-standard fabric discs. I have soon a few cars here which have covered large mileages, and after 30 years are still running on the original couplings. These cases are rare after this period of time and miles, but it does suggest that the original design was quite sound. I can see no reason why a good quality, strong coupling, properly aligned and fastened, should not last the life of the car, if the car is driven in a reasonable manner. The original Hardy Discs were of special construction, employing amongst other features, a laminated fabric structure in which the threads were progressively staggered to minimise tearing, and the rubber vulcanising process penetrated to even the innermost fabric layers. This, combined with the thickness of the disc, gave especial strength. And they were really strong - and so they should bo - after all, the couplings were basically designed as tail-shaft universal joints, which do receive terrific strains. Clutch-gearbox cardan shaft couplings transmit and dampon jorks in the drive, but are not required to flox and twist whilst rotating. Therefore, a good disc should last many, many years once correctly installed.

Failure 1: This speaks for itself, and the whole car, not to mention the transmission, will suffer excessive wear in double-quick time, so that failure will not be peculiar to the fabric disc. Actually, the disc will tend to minimise the snatch in the transmission caused by such handling, as it absorbs the initial shocks from the clutch to a certain extent, but as it takes the strain into itself this will tend to make the disc wear quicker.

Failure 2: Obviously any component in a car transmission not adoquately secured to the rost of the transmission, will fail swiftly. This is usually caused by negligence, as the bolt should not fail if properly tightened and secured by a lockwasher, split pin or other locking device. The bolts should always be of H.T. type, and should be a tight fit in the bolt hole in the disc, so that there will be no slack which could rapidly wear these bolt holes oval.

Failure 3: Misalignment should not in itself cause failure, but merely accelerate the wear, by making the discs act as tail-shaft universals, and causing the fabric to flex both ways, and thus increase tear stress. However, as discs are designed to perform this function they should be quite long-lasting despite considerable misalignment in the cardan shaft. This lack of alignment can usually be detected in a gear lever subject to vibrations that increase as the car moves faster - at high speed they can even jump the car out of gear, although this symptom can also come from badly-worn tail-shaft universals.



Misalignment (exagerrated) can be either of above or a combination of both. The solution is to raise or lower engine or gearbox, or re-align for right or left side bias. The use of a pointer bolted temporarily into one of the spider holes will indicate the movement required. The pointer pointer should be just long enough to bridge the gap between the two spiders, as shown, and the point should register with the corresponding bolt hole in the other spider, and when retated, it should register equally well with the other two bolt holes. If not, the units are out of alignement.

should register

A common cause of misalignment is a failure to adequately secure engine hold-down bolts or gearbox bolts (particularly on the Vintage cars); and these units gradually work more and more out of alignment as the car is used. Detecting this can be hard, for the pointer test with car and engine stationary may well register correctly but, with the car in motion, may work itself into bad misalignment.

When the engine is revved hard, or even bounced around on the chassis over rough roads, this may jerk the engine out of line. The bolt holes on one of my 12/50 chassis had been opened out to more than twice their original size by the perpetual movement of the bolts. This doubles the possible misalignment into which the engine can work itself. And all because of carelessness when tightening the mountings. The post-vintage cars went far to eliminating this problem, as their mountings tended to allow movement in the mounting rubber only.

Failure 4: The usual replacement discs here are of Italian origin and are actually universal joints for some Simca and Fiat 1100 cars. Not only are they usually unable to stand the strain of Alvis power for very long, but they are expensive (£2/10/- each plus tax). The locally made Hardisco (Hardie Rubber Co.) are of good quality and are slightly cheaper, but are no longer available except on quantity order of 25 or more, and a waiting time of up to 3 months. Vanguard, in Elizabeth St., can only supply very inferior blanks, without the triangular plates, which have a useful life of about 1 week. Some alternatives, therefore, would be very handy. The situation is as follows:

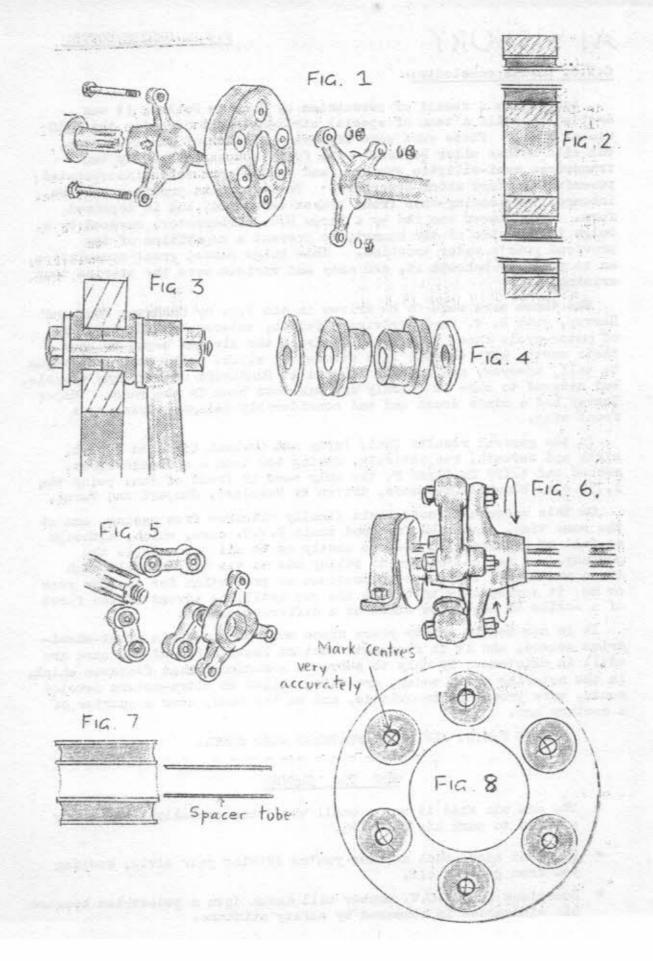
- 1) Gardner Waern use a similar transmission drive, and their discs are interchangeable with the Hardy disc. The agents for G.W. Flexible Couplings are R & M Bearings, 587 Elizabeth St.). Part No. 66 is the correct disc. Also, the whole GW Coupling is an ideal replacement for the whole set of spiders and discs. They come as blanks as far as the shaft is concerned. They would require the appropriate splines or keyway to be cut onto them. These couplings and discs are highly recommended and are reasonably priced at £2/1/3 plus tax for the discs.
- 2) Apex Bolting Co. (268 Geolong Rd., West Footscray) will make up discs out of 7 ply transmission belting and drill the appropriate holes, but you have to fit your own traingular plates. This costs about the same as a ready-made disc.
- 3) Discs are available from Alvis Ltd. @ 19/6 ea. sterling. This means at least a month to wait and about £3 cost when customs, freight etc. is added on.
- 4) Twiflex Transmission Coupling links ( from Ludowicis, Bonnie Teare etc) can be converted simply and effectively, although they give a much stiffer action. My old Speed 25 has been running for 3 years now without any sign of wear. This system relies on contrifugal force to make it more or less self-aligning. Figure 5 & Figure 6 illustrate this system, showing the three separate links and their attachment to the spiders. Each of the links contains 2 silentbloo bushes. These links cost about £1/10/- cach. They are relatively cheap, however, when their long life is considered. They are not suitable for the front coupling on vintage cars, since they cannot provide the support for the clutch shaft spider. One real advantage on post-vintage cars is that the spiders do not have to be removed for any replacement. Their one fitting problem is that the I-D of the Silontblocs is larger than the 3" bolt. This requires a spacer tube as in diagram, Figure No. 7. This can be procured in a longth of about 1 ft. and out to size later. Now and longer H.T. bolts will be required. Cut the spacer tube a little longer than the inner metal bush on the Silentbloe, so that the spacer tube will pinch onto both bolt and inner tube when the bolt nut is tightened down hard. If the couplings are roughly aligned and left

tightened only to finger tightness, the engine revved hard, and the nuts finally tightoned vory hard immediately after, this pinching action will lock the links into correct alignment.

- 5) Another variation of my own (Figure 1) is a modification of the Layrub system. The main trouble with the fabrics are that they have too much flexing area between bolt holes down which they can tear. This is particularly bad if the triangular plates are not used. It occured to me that if the disc could be made of solid alloy, and the required movement confined into a rubber bush or bushes that are well secured into position, wear should be very rare. The alternatives are the Silentbloc bushes ( preferable ) as shown in Figure 2. The disc would have to be accurately machined to suit the bushes, taking great care (Figure 8 ) to mark off the bush contros very accurately, and making sure that the diamter of the bushways ensure a tight press fit of the Silentbloc outer bush. A cheaper, and probably quite reasonable, alternative is the use of simple rubber flanged shackle bushes ( probably standard ones cut down for longth to suit) as in Figure 3 and in exploded form in Figure 4 . I suspect that those bushes, however, might have a tendency to squeezo out under the pressure. These alternatives require also that the thickness of the disc be increased (as with the Apex Belting discs) and this may require a corresponding shortening of the jack shaft on the vintage models. Most post-vintage models would not need alteration.
- 6) I have heard of mixed success with such measures as bolting the spidors solid, cutting discs out of wood, metal or thick leather, or replacing the whole shaft with a modern Hardy-Spicer short tail shaft (This was done as standard on the 4.3 cars) However, I personally feel that some floxibility is desirable to protect the gearbox and diff. from excessive loading. On the other hand, the flexible disc is known to give trouble (for whatever reason) and the solid drive has no apparent troubles, being used almost exclusively in modern cars

# \*POINTS TO REMEMBER:

- a) The thicker the coupling, the longer-lasting it is likely to be.
- b) The coupling bolts should ALWAYS be dead tight and secured in some effective way. Nyloc or Simmonds nuts are probably the simplest method. Use only H.T. bolts.
- c) Do NOT use fabric discs without triangular platos.
- d) Avoid inferior quality discs.
- o) Whon fitting, check alignment of ongine and gearbox, and secure all mountings.
- f) Make sure that the bolt holes are a tight fit over the bolts.
- g) Do not habitually drive like a maniac.
- \* Recommended: Gardner Waern discs No. GW 66 soom to be the best quality disc roadily available over the counter in Melbourne. DAVID MUIRDEN.



## G.N.S. Davies concludes:-

Largely as a result of persuasion by Charles Follet, it was decided to build a team of special straight-eight cars for the 1930 viewer T.T. These cars were improved versions of the 1929 cars, but with rather wider bodies. The front suspension was by two transverse semi-elliptic springs, and radius-arms which incorporated powerful Hartford shock-absorbers. Following the previous pattern, inboard, two-leading-shoe front brakes were used, but in improved form. The blower was fed by a large S.U. carburretor, covered by a bulge in the side of the bonnet, to prevent a repetition of the previous year's water troubles. This bulge caused great speculation as to what lay beneath it, and many and various were the stories thus arising.

The three cars were to be driven in the T.T. by Cushman, Paul and Harvey, with H. W. Purdy driving a fourth, entered by D.K. Mansell, of motor-cycle fame. Early in the race the Alvises began to show their worth, with several laps at over 72 m.p.h. The pace soon began to tell, however, and Cushman stopped at Dundonald with engine trouble, but managed to cure it quickly and was soon back in the race. Major Harvey had a minor crash and was considerably delayed wiring up a front wing.

In the general results Paul, Purdy and Cushman finished fourth, sixth and seventh, respectively, giving the team a splendid first, second and third in Class F; the only cars in front of Paul being the 1,750 c.c. Blown Alfa-Romeos, driven by Nuvolari, Campari and Varzi.

On this successful note Alvis finally withdrew from racing, and at the same time, abandoned for good their F.W.D. cars, which, although so full of promise, had been so costly as to all but cripple the company. A radical change of policy was on the way, and although the conventional 12/50 was to continue in production for another year or so, it served only to bridge the gap until the advent of the first of a series of new types aimed at a different market.

It is now nearly thirty years since work on the Alvis front-wheeldrive ceased, and it is fortunate that at least a few of the cars are still in existence, if only to serve as a reminder that features which, in the motoring world today, are being hailed as ultra-modern develop ments, were proved at Brooklands, and on the road, over a quarter of a century ago.

MORE F.W.D. ALVISTORY FEATURES NEXT MONTH.

# NOT TOO CLEVER

- \* The man who said it was a small world was probably looking for a space to park his Speed 25.
- \* Frequent maps, such as when you're driving your Alvis, keeping you from getting old.
- \* Sometimes an R.A.C.V. member will knock down a pedestrian because his windscreen is obscured by safety stickers.