The Bulletin of the Alvis
Car Club, Victoria

1962

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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. 80 copies by the Hon. Editors, and is issued free of charge to all financial Club members. Contributions and letters are always welcome.

### DECEMBER GENERAL MEETING.

## & XMAS PARTY

8 p.m., Friday, 21st December, 1962 at the Clubrooms, 21 Edgar St., Glen Iris, S.E.6.

Agenda:

- 1. Official Business.
- 2. General Business.
- 3. The Hon. Secretary will give a short address on his recent trip to Adelaide in search of some Alvis members there. It will be illustrated by some colour slides. (By the way, any member who would like to bring some of his own slides along to show the meeting, should feel only too welcome to do so.)

The Xmas Party will consist merely of a social gathering in conjunction with the Docember Meeting. Members are urged to bring wives, girlfriends, or other friends along to swell the gathering. It would be appreciated if members could endeavour to bring some contribution to the supper and refreshments.

#### GREY LADY OWNER

Members who have noticed a well-cared-for croam Groy Lady Saloon around the Melbourne streets, will be pleased to learn that the owner arrived at the November Meeting, full of enthusiasm for his Alvis. He is Ken Jones, of 9 Albert Jones Court, Eaglement. It is very promising to notice more and more of the Three Litre owners joining the Club, and giving us the benefit of their experiences with these smooth, comfortable yet spertive cars.

### LOSS OF MAGNETISM IN MAGNETOS

- from the "Motor Manual", 1920.

When a magneto has been running for several years, it is sometimes found that the intensity of the spark produced has fallen off to a certain extent. This is most probably due to the permanent magnets having lost a certain amount of their magnetism. The magnets themselves are made of a special steel, and it depends upon the quality of this steel just how long the magnets will retain their magnetism. They may be confidently expected to retain their magnetism for at least five years, and then the magnetism can be restored at small cost by the makers or agents.

The magneto as fitted to Alvis cars is one of the most reliable accesories fitted. If the contact-breaker, slip-ring, and distributor are in good order, any trouble can usually be traced to either the external wiring or to the sparking plugs.

Sometimes difficulty is experienced in starting and misfiring is met with, and this is usually some fault in the switch connections. This can be easily proved by detaching the switch wire from the contact breaker cover, when the engine should start easily.

Another trouble sometimes experienced in damp weather is that the rocking arm in the contact-breaker sticks on its bearing, and the platinum points are thus held permanently apart. A total cessation of firing is the chief symptom of this. The rocking arm should be removed and the fibre bush slightly increased in diameter. The centre serew can be used as a reamer.

Oil sometimes gots onto the slip-ring and causes faulty contact between the brass ring and the carbon brush, resulting in misfiring. The carbon brush should be removed, and if glazed, it should be roughened on the side of a safety matchbox. The slip-ring should be cleaned by wrapping a petrol-soaked rag around the end of a scrowdriver, and by rotating the armature shaft with the petrol rag held against the brass ring.

Any adjustment to the platinum points should be carried out with very great care. Platinum is a very valuable metal, and in order to make the price of magnetos as reasonable as possible, an excessive supply of platinum is not provided; therefore, any adjustment in the nature of filing should be carried out as sparingly as possible. A specially smooth file may be obtained for trimming platinum points.

These constitute practically all the troubles that may be met with in magneto ignition. If anything more serious is experienced, it is advisable to send the magnete to a reliable auto-electrical agent who specialises in the repair of these instruments, as the fault will most probably be found to be some internal irregularity such as the breakdown of the insulation in some part of the circuits or coils. Sometimes, bearings can seize or cellapse, and specialised equipment is needed for correct replacement. Enthusiastic do-it-yourselfers, while with the best intentions, can definitely do much more harm than good. It should be mentioned that major faults are rare as magnete construction is now so highly standardised that errors of manufacture are easily avoided.

#### SECRETARY'S NOTES

\* Si to make TA 14 chassis:

A few weekends ago, Simon Ramsay, Basil Bowes and myself headed for the TA 14 advertised in November Alvic for sale at £40. The price had come down since then, and the car was purchased at a real bargain price. It was in quite good condition, except for the portions damaged in the accident. The mechanical condition was sound and the body from the bonnet back was reasonable. Si is hoping to remove the body and sell any or all of it to members, and make the classis into a sprint car. This should work out a successful and inexpensive venture, considering that very little will need to be spent on the mechanical side. The body parts are mostly in good shape, in particular the rear seats which are in very good order - just right as a replacement for a tatty set from some other member's car. The doors have been jarred out of alignment a little, but otherwise seem to be reasonable.

\* New roof for Clubrooms:

Now that the bright weather is with us, Basil hopes to renovate the shed, including the Clubrooms, by replacing the entire roof with a modern roof. All that is needed, is a party of workers one weekend to pull off the old galvanised sheets and fit the new. While this is being done, help is needed to clean up the shed beneath the roof to make way for storage of spare parts and a 12/40. It is suggested that this working bee weekend be the weekend (Sunday mainly) immediately following the December Meeting. This is close to Xmas it is true, but it hoped that enough members will be free on this weekend to make a reasonable working party.

\* Drink at Meetings:

There have been some complaints about ungentlemanly behaviour at or after Meetings recently. This seems to be due to some members having a little too much to drink. For a Car Club, whose members are to drive their cars off after this drinking, this is very unfortunate. Also, Basil Bowes should not be expected to receive complaints made against people who happen merely to be on his premises. I cannot help but feel personally that several members have regarded the meetings as less of a meeting to discuss Alvis matters, and more of a booze party. If members want to drink to excess, they should do it at home where others are not involved. It is suggested respectfully to members that they observe reasonable moderation in this matter in future. I must emphasise that I am not referring to most of the members present at meetings, nor am I suggesting that drink should be completely banned. I do, however, feel that cries of "Hurry up and finish the meeting so that we can have a drink!" is putting quite the wrong complexion on the aims of the Club as a whole and giving the wrong reason for holding the monthly meetings. In discussing this matter last wook, the Committee decided that General Meetings should be run rather more formally, and that a definite programme should be provided, such as speakers, slide sessions, service nights, quizzes, Treasure Hunts and the like whenever possible. When the organised Club meeting has closed, natter can then continue as usual.

\* PLEASE-PAY Noticos:

We apologise to any members who may have received a 'please-pay-your-sub' notice last month, if they have actually paid. Such members should disregard the notices. The handing-over of the books revealed that there were still some members who have not paid the 1962 subs. Notices were therefore posted out, but it may be that there were some mistakes made.

\* Road Tests of Good Cars:

It has been suggested that the Club, in "Alvic" should run a series of full scale road tests on cars within the Club that are in good condition, and whose owners are willing. I would like to know how many mombers would be interested in such a move. It would involve two 'testers' spending an afternoon with the car and its owner, and giving the car a complete description and estimation and put it through its paces for performance, comfort, ride, and any other pertinent features. It is suggested that cars such as Les Loo's FWD, Mrs. Morris' Three Litre, John Cole's Silver Eagle two-scator to montion a few which come immediately to mind, should be given a test now that they are in excellent condition, so that the Club will have a definite record of them for posterity. For it does happon ( the recent fate of Bob King's lovely Brescis Bugatti proves the point) that cars can be here one day and gone the next. Other cars would be encourged to sock the limelight by offering for a favourable road test. If the test of any car seems to warrant it, the test will be sent, with photos, to magazines such as Sports Car World and Whoels, to try and publicise the marque. I fool that this suggestion can do nothing but good.

\* Alvis & Service Data:

In roply to my recent (successful) roquest for more Service information the Service Department of Alvis had this to say:

"We will see what can be done about letting you have copies of the essential parts of letters which reply to customer's queries. It is an interesting suggestion.

We can sympathise with you over the lack of information in relation to servicing matters for many of the Alvis cars, as unfortunately this company has not found it possible to produce workshop manuals for their many and various models. This means that in very many cases, the writer has to rely on the memories of the elder of the company's employees. A few of these are still engaged in the Car Service Department and some of them were employed by Alvis in the building of the various models at the time of production, but it is difficult to build up reliable records. Occasionally of course, we have a car similar to that which is the subject of an enquiry in our own Repair Shop, and it is then an easy matter to sort out the answer to the problem."

Once again, Mr. Brown of the Service Department has proved of inestimable assistance to Alvis owners in far distant places. We only wish we could say the same of the Sales and Public Relations Departments.

\* Association of One Make Car Clubs:

We are now a member of this body so that we can take advantage of its insurance policies, and also be affiliated on very favourable terms with C.A.M.S. Members are advised that they are now entitled to attend any events or meetings of the Association if they would like to do so. Notices of the activities of the Association will be placed on the Clubrooms notice-board when they come to hand.

- from "Vintage and Thoroughbred Car", Nov. 1955.

front wheel drive Alvis, when it was first conceived, was many years ahead of its time; this, together with the fact that it was a very expensive motor oar, probably accounted for its never having "caughton". It's primary purpose was competition and cars were entered at Le Mans - driven by S.C.H. Davis and the late Major C.M. Harvey. Major Harvey used these FWD cars in competition at Shelsley-Walsh and various other meetings with no little success. They were seen probably at their best in the 1928 Ulster T.T., where they ran unblown. But for a bad spin near the end of the race, the Alvis would almost certainly have beaten the winning Lea-Francis, driven by K. Don, and running unblown. As it was, it came second.

The specification is an interesting one, and a good many people may be surprised to hear of the up-to-date features which it includes. The suspension is fully independent on all four wheels. The rear wheels which only serve to held that end of the ear up, and as somewhere to put the rear brakes, are mounted on massive quarter elliptic springs and rather elaborate radius arms, which turn in huge ball races (very expensive to replace).

The front wheels, which have quite a lot to do, being responsible for both the drive and the steering, and most of the braking as well, are suspended by eight quarter elliptics, which are damped by peculiar little devices which clamp onto the springs and are supposed to provide the necessary shock-absorbing by restricting the movement of the spring leaves. This they fail to do, and most owners have fitted some additional damping, usually a pair of large friction dampers.

The steering arrangements are peculiar to this car, and need some explaining. The steering column itself is set at an angle in the cockpit, the driver having to sit in one corner. It passes by way of a fabric universal joint to a steering box of massive proportions and hence to a short track rod situated behind the engine. From this trackrod run two long drag links, one to each wheel, this arrangement being necessary because of the very low build of the car. The steering itself is very pleasant to handle, provided it is in perfect condition, and that one is used to front wheel drive, which requires a different cornering technique from normal. It is very high-geared (about one turn from lock to lock) and is, therefore, rather heavy, but the driver has a feeling that he can steer the car through the eye of a needle, so accurate does it seem.

The engine of the Alvis is a development of the famous 12/50, but with several differences. It has a capacity of 1,482 c.c., is supercharged, and has a single overhead camshaft, driven by a long train of spur gears. From this train of gears, at the front of the engine (flywheel end) the various auxiliaries are driven. Magneto and water pump on the offside, dynamo and supercharger on the near side.

The valves are in line, as in the normal 12/50 (they are in fact, the same valves) and are operated through dashpots, the clearances being adjusted by means of small steel shims. As may be imagined the adjustment of the clearances is not a task to be undertaken lightly. Fortunately, it need only be done when the head has been dismantled. The procedure is as follows: assuming the camshaft is already off, put all the dashpots

in position without any shims; assemble the camshaft in its three white metal bearings, and measure all the gaps, making lots of notes on a piece of paper; it is now necessary to do a little sum for each valve to determine the thickness of the shims required. Insert the necessary shims, put everything together and check the gaps. If no mistakes have been made, there is a reasonable chance that they will be somewhere near correct.

The blower is made by Alvis, is a Roots type and gives a boost of 5 lbs p.s.i. The engine, with its huge finned two-gallon sump, is backwards in the chassis, and is in a single unit with the gearbox and the final drive with its straight cut crown wheel and pinion. The pinion shaft is also the gearbox main shaft. It is in this department of the car that Alvis had quite a number of brain-waves (or brain storms) some good, some bad. One of the bad ones is the drive for the speedometer, which is driven direct from the crown wheel by a very peculiar little gear and a very long cable.

The front brakes are one of the features which were well in advance of 1925, in which year the car was designed. They are inboard, being belted direct to the differential casing, and are two leading shoe. The two leading shoe mechanism is external and easily adjusted. It is a design poculiar to Alvis. These front brakes are operated by a single cable (modified on some cars to a con rod) to a compensator, which although most effective, is also exceedingly vulnerable, being low and right in front. The braking system is very powerful indeed, fully up to modern standards.

The performance of the car is good. The few production cars which were sold to the public, and there were loss than a hundred made in all, were guaranteed to do 100 m.p.h. in racing form. In touring trim, they were good for 85 - 90 m.p.h.

The cornering is, as with any front wheel drive car, superb, and the terms of oversteer and understeer cannot, of course, be applied. When the point of breakaway is reached, which is much later than with a conventional vehicle, the car simply slides on all four whoels, and maintains a perfect line through the corner ( or the hodge according to the judgement of the driver). It is this cornering ability, together with the powerful braking and the excellent ride provided by the all round independent suspension, that makes the car such a joy to handle.

The werst feature is its highly complicated construction, which means that everything is horribly inaccesible. In order to reline the front brakes, it is necessary to dismantle the front of the ear, lift the engine, gearbox and final drive out of the chassis, and to remove the front hubs. One finds, in fact, that almost any job is a major operation.

# Dotails of Alvis 12/50 (Late Models)

Tappet clearances (engine hot) .003"
Firing order 1. 2. 4. 3.

Valve timing: Inlot opens at T.D.C.

Inlet closes 50 degrees after BDC.
Exhaust opens 55 degrees before BDC
Exhaust closes 10 degrees after TDC.

### SPECIAL TA 14 COACHWORK

This is in the nature of a "Points for Guidance" Instruction when special coachwork is fitted to the TA 14 chassis. It is primarily for the benefit of coachbuilders. It will ensure that the vehicle is as correct as possible when it leaves the coachbuilder's hands and it should help eliminate quite an amount of adjustments and rectifications later on.

1. DRAWINGS. Every coachbuilder should be in possession of the following drawings:-

Coachbuilder's Drawing No. C 2395 or C. 4003. Instrument Board Drawing No. B 10163 & SPB 20.

Bulkhead " " B 10112 Dashboard " " B 10115 Wiring Diagram C 2661

Tools and Accessory Layout C 2858 & C. 2859.

- Amongst other details shown on these Drawings, the following points should be carefully watched:
  - a) Clearance around pedals.

b) Spacing of pedals.

c) Clearance around gearbox (note lagging of gearbox tunnel.)
The gear box rocks appreciably on its mounting rubbers.

d) Clearance between carburettor air intake and bonnet.

- e) Apertures, size and position, for gearbox and rear axle oiling.
  - f) Apertures, size and position for jacks and petrol tank unit.
    g) The Packing List (sent with the chassis) will show the
- 3. WEIGHT. A total unladen weight of 26 cwts is recommended (chassis weight is  $16\frac{1}{2}$  cwts.)

location of all parts sent in the boxes.

- 4. INSTRUCTION PLATE: See that the chassis number (and Type TA 14) is stamped on the Name Plate which should be affixed to the forward side of the souttle or bulkhead under the bonnet. The chassis number is also seen on the front tubular cross member above the front apron (for cross reference).
- 5. INSTRUMENT BOARD. See that there is ample space between the instrument board and dash, so that such parts as speedometer cables, wiper cables and other wiring parts are not bent too acutely. Easy bends give less trouble in service. Also, arrangements must be made for the accessibility of all instruments and parts behind the instrument panel.
- 6. INSULATION: Good insulation on the floor and dash will play a big part in refining the vehicle. It will keep down noises and provent heat from entering the body. For a similar purpose make sure that all apertures are closed with leather, felt or rubber.
- 7. WIRING: See that mitable grommets or other rubber protection is properly fitted where cables pass through any metal panels. Any chafing must be avoided at all costs.

8. AFTER-BURN DEVICE: Data Sheet No. 80, together with Drawing No. C. 2377 gives all the necessary information for coupling up and adjusting. One point is to stress that the accelerator lever comes back against a definite stop on the dashboard. If this is not seen to, there is no datum whereby to set the device. An adjustable screw in the scuttle dash or a welded-on stop on the lever is suitable.

## DATA SHEET NO. 89.

29th October 1947.

## TA 14 SPARKING PLUGS.

Champion L.10 or Lodge H.N. are fitted as standard.

If any trouble, such as oiling up or misting occurs, it is possibly due to an excessive use of the choke, but an improvement might be made by changing to the alternative type.

## DATA SHEET NO. 90.

29th October 1947.

# TA 14 TIMING CHAIN TENSIONER

Up to approximately Chassis No. 21250, a 72 link timing chain with a Reynolds Automatic Chain Tensioner was fitted.

It has been found in some cases that the automatic tensioner sets up a vibration at approx. 1,800 r.p.m. especially on the over-run. Mechanically there is no objection to this, and it is doing no harm in any way. Where, however, a complaint is sufficiently serious to warrant eliminating this noise, a 66 link chain with no automatic tensioner can be fitted. This converts the lay-out to the same design as the pre-war 12/70. To fit the new timing chain is a relatively small job, and the procedure is as follows:

\* Remove the radiator and front timing case cover (after suspending the engine), withdraw the timing gears and tensioner complete, discard the tensioner and replace the timing gears and 66 link chain, replace the timing case cover and radiator etc.

A few points to notice:-

a) Leave the tensioner bracket attached to the crankcase (there is no need whatever to remove it).

b) Make sure the camshaft timing is not altered.

c) Check for any fouling of the timing chain on the nearside bottom stud boss in the timing case housing. This can be chipped or filed away to give extra clearance. If any fouling has occured, it will be obvious from marks on the boss.

New 66 link chains can be supplied free of charge from the Factory in exchange for the 72 link chain.

(ED. NOTE: Further to Data Sheet No. 89 above, it has been found that Champion J 18 Y (Holden plugs) are a satisfactory replacement and have been found in at least one case to cure oiling up.)