

# Alvic

The Newsletter of the Alvis Car Club of Victoria

SEPTEMBER 2005



*Rob Sand's 12/50 on the recent VSCC two day event*

# The Alvis Car Club of Victoria (Inc)

A0017202F

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Meetings—third Friday of each month [except DEC/JAN] at 8.00pm. Newsletter Deadline—first Friday of month.  
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SEPTEMBER 2005

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## ALVIVACIOUS

Elsewhere in this issue there is listed the winners of the trophies that were presented at the last general meeting of the club. The winners are to be commended for their efforts and special mention should be made of the two new awards. Mention not just of the deserving winners but because each of the new ones has been sponsored by club members, thus continuing a tradition within the club. Our thanks to Marcia Barber and family for the "Bill Barber Book Award." It takes the form of a very attractively carved plaque to hang on the club-room wall and a generous book token for the winner. Congratulations to the winner and advice for the remainder of the membership: sharpen those pencils and get writing! At the start of the year the club decided to create an award for the "Best Presented Car" at the National Biennial Rally or at a nominated event in the intervening years. By the time this was awarded it had been sponsored by Andrew and Frances McDougall and is now known as the "McDougall Perpetual Trophy." A handsome shield for the club-rooms and a "puppy" for the winner to keep. It was a pity that this year there was no winner of the Basil Bowes Trophy. This is the club's only award for competitive motoring but no-one qualified. A feature of the litigious times in which we live. Congratulations to all the worthy winners and our thanks to the sponsors for their club-spirited generosity. Alviators are in for a special treat. The "Alvis Car Club of Victoria Fifty Year History" has been published and as part of the celebration of the important milestone there is a free copy for every financial member. It is a hard bound slim volume which gives pleasure to hold as a book and then much more pleasure to read. Our thanks to Chester McKaige for the research and the writing and to John Lang for the assistance he gave in layout and production. It is a pleasure to write this column this month. It is all about people doing good things for the club. If that happens it surely indicates that the club is doing some good things for its members. If there are other things that members want done please discuss them with a member of the committee. Or better still, remember that the AGM is only a month away.....!

JOHN HETHERINGTON

## SUPPER THE MCKINNONS

### **SUPPER**

*To restate the policy in regard to supper, please be reminded that if you do supper your out of pockets can be claimed from the supper jar that we all contribute to on the night. Please do not hesitate to make this reimbursement of your costs.*

## EVENT CALENDAR

- |             |  |
|-------------|--|
| Sep 16      | General Meeting  |
| Oct 1—2     | Essay run— <i>due lack of interest, no longer gazetted as a club run</i>   |
| Oct 16      | <b>Combined Pub Run with the Bentley Club (See flyer)</b>  |
| Oct 22 & 23 | Mt Tarrengower   |
| Oct 21      | Annual General Meeting   |
| Oct 29-31   | <b>Camperdown Weekend</b><br>Please note that the annual competition event at Camperdown has been cancelled for 2005. In its place we are planning another Weekend Away at this great destination. Note the weekend in your diaries and more details will be available soon. |
| Nov 12 & 13 | <b>VSCC 60th Anniversary</b><br>Please note: there is a dinner at Cope-Williams Winery on Sat 12th Nov—there will be an Alvis table. If you would like a place at the table—ring Sally McKaige 9557 1134   |
| Nov 18      | General Meeting  |
| Dec 4       | Christmas Party at the Langs   |



## THE CLUB AWARDS

In a change from the tradition of the last few years, the Club Award presentations were made at the August General Meeting.

The Simon Ramsay Mt Tarrengower Award was again won by Geoff Hood.

The David Muirden Clubman Award was won by John White.

The Bob Morrow Trophy was won by Chris Higgins for his 12/50 restoration.

The McDougall Trophy, a new award, for the Best Presented Car at the National Rally or at an event as nominated by the ACCV committee on the alternate years, was won by Trevor Eastwood for his 3½ litre Saloon, present at this years National Rally.

The Andy Hannam Trophy for most attendance at Alvis events in a real car, was awarded to Richard Tonkin.

The Basil Bowes Trophy was not awarded this year.

The Bill Barber Book Award, a new addition to the club trophies, was won by Chester McKaige for his editorial and other contributions to the club newsletter. The Trophy is in memory of the late Bill Barber, a stalwart club member for many years and proudly presented by Marcia and his immediate family. The award is in the shape of an open book fashioned from timber and is a worthy tribute to Bill's service to the club and reflects his love of words and quick wit. The photograph shows Marcia making the award to Chester, while Stuart, Ian and David Barber look on.

## LETTERS TO THE EDITOR

PO Box 306  
Mosman  
New South Wales 2088

20th August, 2005

Dear John,

Thank you very much for the August issue of "Alvic" and also the welcome extended to Sheila and me.

Warrick Hansted's article on a visit to Sydney and his comment "Sydney is an easy day's run now compared to the old road many of us remember" has prompted me to write to you with the following story:

My mother was the middle of three girls raised at "Ravenswood" in Ivanhoe (now a heritage listed property) and upon her marriage to my father, moved to Sydney where he was born, lived and worked.

My mother's younger sister, Gertrude, was somewhat of a tomboy and apart from gaining her pilot's licence at an early age, also purchased an Alvis. of which I have enclosed a photograph, also showing my mother and grandmother.

On an occasion when my mother visited Melbourne, about 1933, her sister decided to visit Sydney and drive the Alvis and invited my mother to accompany her. Knowing what a speed demon was Gertrude, my father forbade them to drive through in a day.

They left Melbourne in the early morning and reached the outskirts of Sydney at 5.00pm and in order to obey my father's wishes, booked into an hotel in Liverpool and stayed the night, then drove into Sydney the following morning.

I have no details of the car, which to me appears to be a Speed 20 and if there are any records available, my aunt was Gertrude Hope Kennedy and at the time of her purchase, her mother had moved from Ivanhoe to (I think) Kew, following the death of my grandfather. She would probably be listed in the directory as Mrs RW Kennedy.

So there you are, it was possible to do it in a day in the early thirties

The fastest I have ever traveled from Mosman to my office in Lt Latrobe Street was ten hours exactly, in the mid seventies in a Holden Caprice, but you could drive on the ton then and there weren't many cops around. Just as well!!!

Cheers,

Robert Peel

*What do we know about this car? I am sure Robert would like to know of its existence! It looks very much like a Martin and King body, very similar to Parky's car but the original owner's name does not correlate with Robert's information*

.....ed



# Alvis in the Outback 2007. South Australia.

A reminder.....

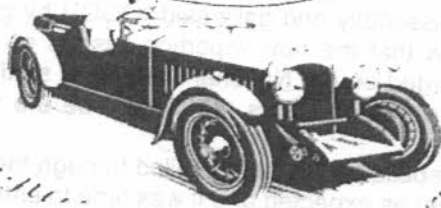
We are almost ready to start sending out statements and the first circulars to the 35 who have so far entered.

We intend to make the call for the first instalment to be paid by the 1<sup>st</sup> of December.

Early entries from those who intend to be part of this great event will help the organisers immensely. Please enter ASAP!

More entry forms are available from your club or from the Duncan Scott' phone 0883384129 or [dcscott@optusnet.com.au](mailto:dcscott@optusnet.com.au).

1945 - 2005



# VSCC 60<sup>th</sup> Anniversary Birthday Party

**Saturday 12<sup>th</sup> November.**

**ANNIVERSARY RALLY.** A one day road rally in the central Victorian Region, starting on the northern edge of Melbourne and comprising morning and afternoon sections, punctuated by a pleasant lunch. Includes competitive and touring options, to suit all tastes, and finishes at our sixtieth birthday weekend headquarters at Cope Williams Winery at Romsey.

**ANNIVERSARY DINNER** Grand Dinner at Cope Williams enjoying fine local food and wine, with amusements to suit the occasion. Capacity for as many people as are likely to want to be there. Tables of ten, so organize your marque group or your company of friends.

**SUNDAY 13<sup>th</sup> NOVEMBER**

**THE GATHERING** The target is the largest assemblage of our kind of motor cars ever seen in this part of the world! The cricket oval at Cope Williams provides the most delightful locale and ambience for a garden party atmosphere where we can spend the day admiring our motors and talking with friends about the last sixty years (and the next) of fun with old motors. A luncheon will be available, or bring your own picnic. Prizes for the most liked cars, photo's for the 60<sup>th</sup> Picture book and an unforgettable visual feast. Make sure your car is there.

*With due acknowledgement to Martin Howson and the Newsletter of the Alvis Car Club of New Zealand—this is worth a check by all 3 litre Alvis owners and a timely reminder to all old car owners of the danger of ancillaries not properly attached to their cars.*

## **THE DREADED 3 LITRE HORN DROP SYNDROME [ and other problems ]**

- By Martin Howson [ Warkworth ]

### **WARNING !**

Just when you think everything is going well something comes out of left field to shake you to the core. Having failed a WOF because of :- [1] Wear in the lower King Pin Bushes and [2] Wear in the Idler Box, it was time to have a word with my mechanic to discuss where do we go from here and his first reaction after looking at the offending areas was one of disbelief because of huge engineering in the particular areas and if I had given the car a lubrication first then in all likelihood it would never have been a problem. This exact scenario was confirmed when after giving the car a lube it was resubmitted and passed its WOF albeit at a different testing station [I was not trying to circumvent the law of course, but it just goes to show]. Six months down the track, time from another WOF, the car was put on the hoist and the operator went straight to the front assembly and gaily said "OOOH by golly there is some wear in this front assembly isn't there?" It just goes to show that the new reporting system on a failed WOF is working, ie. If the vehicle fails a WOF then that failure is recorded on the National Data Base so that when that vehicle is resubmitted anywhere its history now precedes it. The matter of this rebuild will be the subject of another story because I digress ---

After having completed the front assembly rebuild and this time sailed through the WOF it was time to get on the road again. Short runs to confirm all was well went as expected and it was time to enter Northland VCC Branch "Far North Tour" [if you have never entered one of these rallies you don't know what you have missed]. In the interests of brevity, we completed the run, some 500 miles and were getting close to home. We called into Kaiwaka to pick up our dog from the boarding kennels and suddenly found I could not turn the steering wheel to port! At this stage we were in the confines of the kennels and I broke into a cold sweat to think that had it happened on SH1 at speed, things could have been a lot different. A look underneath the car did not show anything in the area that I had just spent a month getting to know intimately and I was thinking of phoning a tow truck to have the car taken home, being quite shaken up by the experience. I jacked the car up for further inspection and to my utter relief found that the right hand horn had dropped from its normal resting place alongside the wing support and was being cradled in the working mechanisms of the steering assembly, having completely locked up the whole thing ----- scary stuff ! Removal of the now mangled horn also cleared the problem and steering was restored to its happy norm, but now I think back on it I did notice the lightest of taps on the steering wheel earlier in the day and this must have been the horn dangling on its leads and touching the column, and on one of the few occasions that I had used the horn it did seem to be "more muffled" than usual. So what do you do then? Well of course you check that the left hand mounting bracket is secure. Well I did and would you believe that the very next time we drove up to Kerikeri less than a month later and only 150 miles since the last episode the left horn fell off, this time to fall on the road at about 5mph so no damage occurred.

**SO PLEASE CHECK YOUR HORN MOUNTING BRACKETS**

### **MORE ON THIS FROM THE ARCHIVES :-**

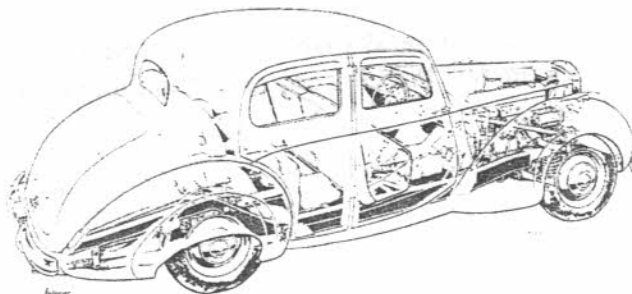
This is not an isolated case . From the February 1985 ACCNZ Newsletter :-

#### **A WARNING TO THREE LITRE OWNERS**

*A club member was very lucky not to have had a nasty accident recently. Six months ago the bracket holding the nearside [left] horn broke with no damage done to the car. Examination made it obvious that our old friend metal fatigue was responsible. A new bracket was made and the offside [right] mounting checked – all appeared to be well. On a recent trip the car was approaching a left hand up hill turn when suddenly there was no response from the steering. Fortunately the speed was low and the brakes worked well. A very shaken driver found that the offside horn bracket and the horn had dropped down amongst the steering arms, preventing the wheels turning to the left.*

*Once again our old friend metal fatigue was responsible. I think it would pay all Three Litre owners to either replace these brackets, or at the very least make sure that if a bracket breaks the horn cannot drop free. A twitch of wire or even a strong bit of string would suffice temporarily.*

I don't know about the "our old friend" bit though. Metal fatigue is the ENEMY !





## ALVIS 3½-LITRE CHASSIS

A Refined Design, Combining High Maximum Speed, Acceleration and Quiet Running

### PART 2

#### Clutch.

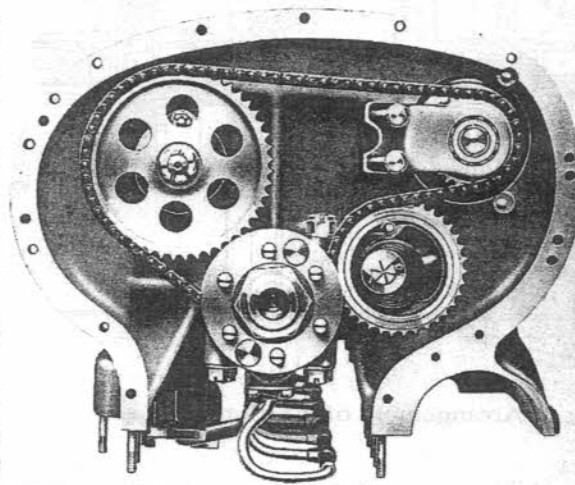
A Borg and Beck dry-plate clutch is employed. Attached by taper and key to the rear end of the crankshaft is a flanged sleeve carrying at one end the timing gear driving sprocket, while the other end is flanged. To this is attached by studs and dowels a large diameter forged-steel flywheel disc. Gear teeth are cut in the periphery of this disc for engagement with the starter pinion, while the front driving member consists of a cast-iron rim attached by bolts. The clutch driven plate is of extremely light construction. It is riveted to a small central boss floating on splines on the clutch shaft and it carries the friction material, which is riveted to it. To facilitate gradual engagement the central plate has a series of radial slots, the ends of the arms so formed being given a slight curvature. When in engagement, the driven member is held between the presser plate and the flywheel front driving member, the pressure being supplied by twelve coil springs. The coil springs are housed in sheet-metal cups spun over holes in a large sheet-metal pressing which is attached to the flywheel rim by the bolts that hold the rim to the flange. A Hyatt roller bearing is employed where the clutch shaft spigots in the end of the crankshaft, and a substantial ball journal race is fitted to the other end of the clutch housing, ensuring correct alignment unaffected by movement due to the flexible mounting of the whole power unit.

The clutch is actuated through a link and balance lever fitted with a ready means of adjustment. The actuating fork supports a trunnion carrying a carbon block ring that makes contact with a hard metal disc. This in turn is in contact with the three release toggle levers having small projecting ends which contact with the presser plate, withdrawing it away from the driven member. Grease gun nipples are fitted for lubricating

both the clutch withdrawal shaft and the ball journal bearing which supports the main clutch shaft and is housed in the rear end of the clutch cover.

#### Gear box.

Particular interest attaches to the arrangement of the gear box, which



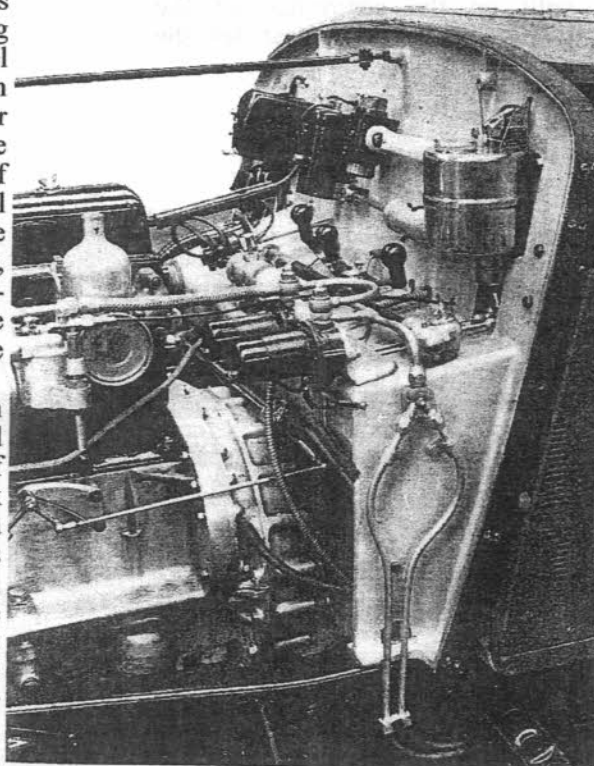
Automatic chain tensioner

is an exclusive Alvis design and is covered by three patents. Synchronmesh engagement is

provided on all four of the forward speeds, all the gears for these ratios being of the double helical type and in constant mesh. The synchronising mechanism provides a positive check against premature engagement of the dogs, enabling the gear lever to be pulled over forcibly and rapidly for a really quick change. The ratios are direct on top, 1.43: 1 third, 2.03: 1 second, 3.15: 1 first, and reverse 3.5: 1. A short intermediate shaft fitted with two fabric disc-type universal joints is arranged between the clutch and gear box. Here, again, the object is to eliminate any misalignment due to the flexible suspension scheme and also to obviate over-run noise. This connecting shaft is splined on to the first motion shaft, which is supported in a journal ball bearing and a roller bearing, the pinion being attached by very fine splines. The first motion shaft terminates in a flange, the rear end of which is machined with internal teeth engaging with a sliding dog clutch, whilst its periphery carries a ring which forms the male member of the synchronising cone clutch. The sliding dog clutch is double ended, so that by motion rearward it engages the third-speed pinion. The whole scheme is duplicated again for the first and second speeds.

The main gear shaft therefore carries three double helical gears and a spur gear always in constant mesh with the gears on the layshaft. Behind the fourth gear is the reverse. Except for the reverse, engagement in every case is through synchronesh cone clutches and dog teeth. We understand the Alvis Company were the first to employ a four-speed gear box so arranged.

The design necessitates a rather longer overall length than usual, particularly as intermediate roller bearings support the main layshaft, in addition to roller bearings at the front end and ball bearings at the rear. The cones



Electric pumps and fittings on dashboard.

assembled with the gears are of steel, while the outer elements sliding with the dogs are bronze with serrated internal faces. The selector forks engage with a central ring on the outside of the cage containing the sliding clutch faces, while inside the case is an internal groove engaging spring-controlled ball plungers for centralising the dog clutch.

When the hand lever is moved to change gear, the forks fitted inside the top half of the gear box slide the synchromesh unit in the required direction, the ends of the semicircular selector forks having lips which engage the central ring. The cone clutches first engage and gradually synchronise their motion.

The sleeve and dog clutch unit move together, but the clutch member has a limited rotational movement due to the fact that its three arms project through slots in the sleeve, and at the centre each slot is widened. The dog clutch therefore lags slightly, until the cones are fully in mesh and no slip is taking place between them, when positive engagement results.

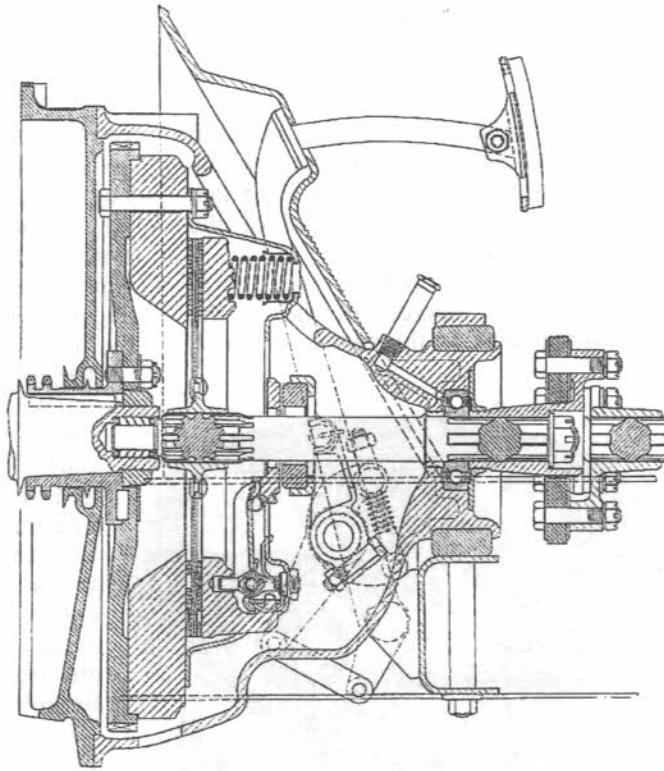
The front end of the third motion shaft spigots in the clutch shaft where a Hyatt roller bearing is fitted. Adjacent to this is a series of

oil retaining rings. The lay-shaft is machined with parallel splines, on which are mounted the four gears in a central bearing. Grooves and spring rings are employed to locate

speedometer drive is mounted by parallel key on the universal joint flange, which in turn is attached by splines to the rear extension of the main gear shaft.

To engage reverse a long forked member extending down to the lower half of the box, engages with a double-width gear sliding on a plain pin bridging a recess formed in the casing. On the current models a spur-gear pressure oil pump is situated at the front end of the box and is driven by the layshaft. Oil is forced through ducts into the spigot recess in the constant-mesh pinion. From here the oil finds its way along the full length of the mainshaft centre, radial holes leading it to the constant-mesh pinion bearing and to the first, second and third double helical gear wheels, all of which are mounted on needle rollers.

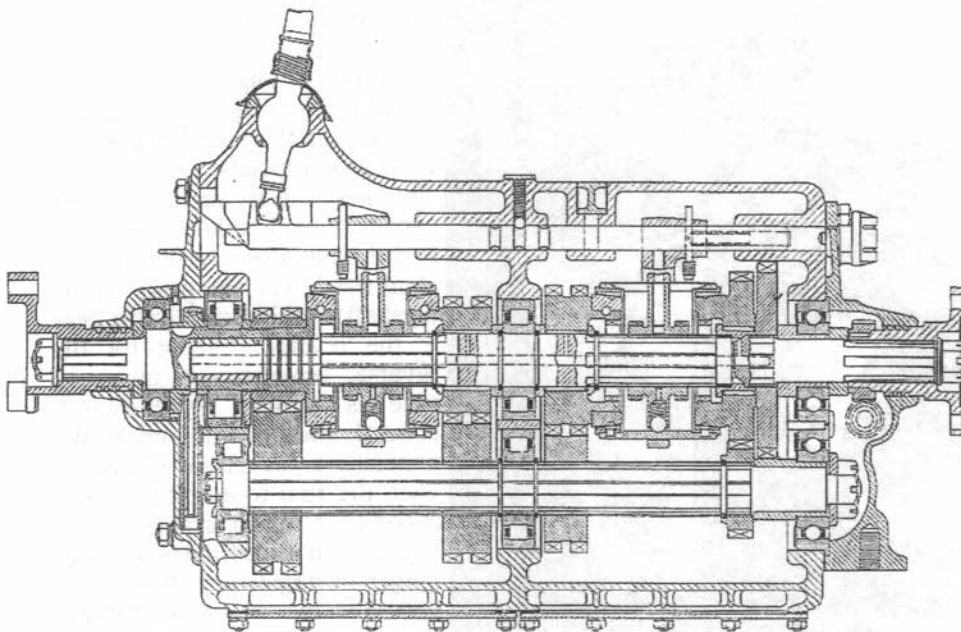
A three - point suspension scheme is adopted for the gearbox unit, and is almost a replica on a smaller scale of the engine mounting. At the front end, two extension arms are mounted on diagonal frame members, the third point being on a cross member beneath the front universal joint of the propeller shaft. At all three attachments the load is taken on thick rubber washers.



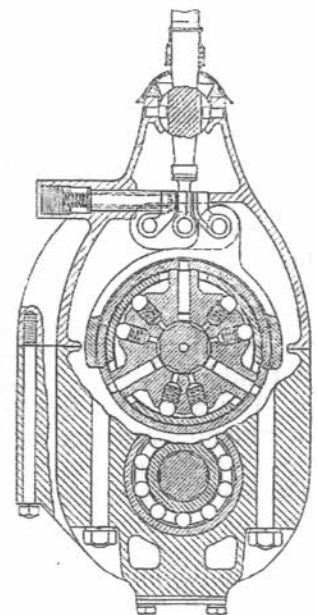
Arrangement of the clutch

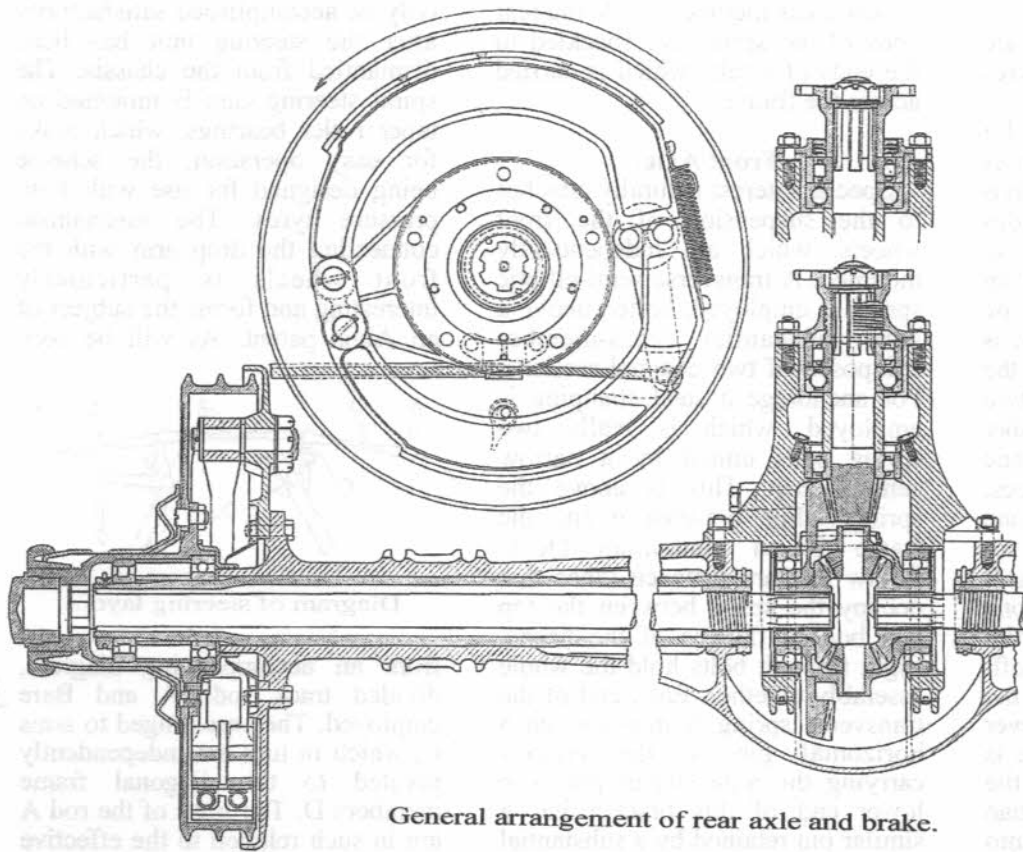
the bearing and the spur gear, end location being unnecessary for the double helical gears. A roller bearing is fitted at the front end and a ball journal at the rear. The gear box is made in two halves split on the centre-line of the mainshaft. A skew gear for the

### Propeller-shaft.



Gear box with synchromesh engagement for four speeds





General arrangement of rear axle and brake.

roller bearing. The crown wheel is bolted to the differential cage, which is mounted in two robust ball journal bearings adjusted by means of shims. Adjacent to the splined inner end, each axle shaft has an oil retaining scroll rotating in a clearance hole in an aluminium bush. This effectively retains all oil in the central casing. Aluminium is selected for this bush, as in the event of rubbing being caused by the shaft losing its alignment due to some minor accident, seizure might easily occur were a tougher metal employed.

Each wheel hub runs on a journal ball bearing and a roller bearing mounted on the outer extension of the axle tube. The whole

construction is noticeable for its robustness generally. The differential casing is a steel drop-forging, while the main axle member is an aluminium casting, reinforced with a high tensile steel tube at each end, combining strength and lightness. Each end terminates in flanges generously radiused, to which the brake

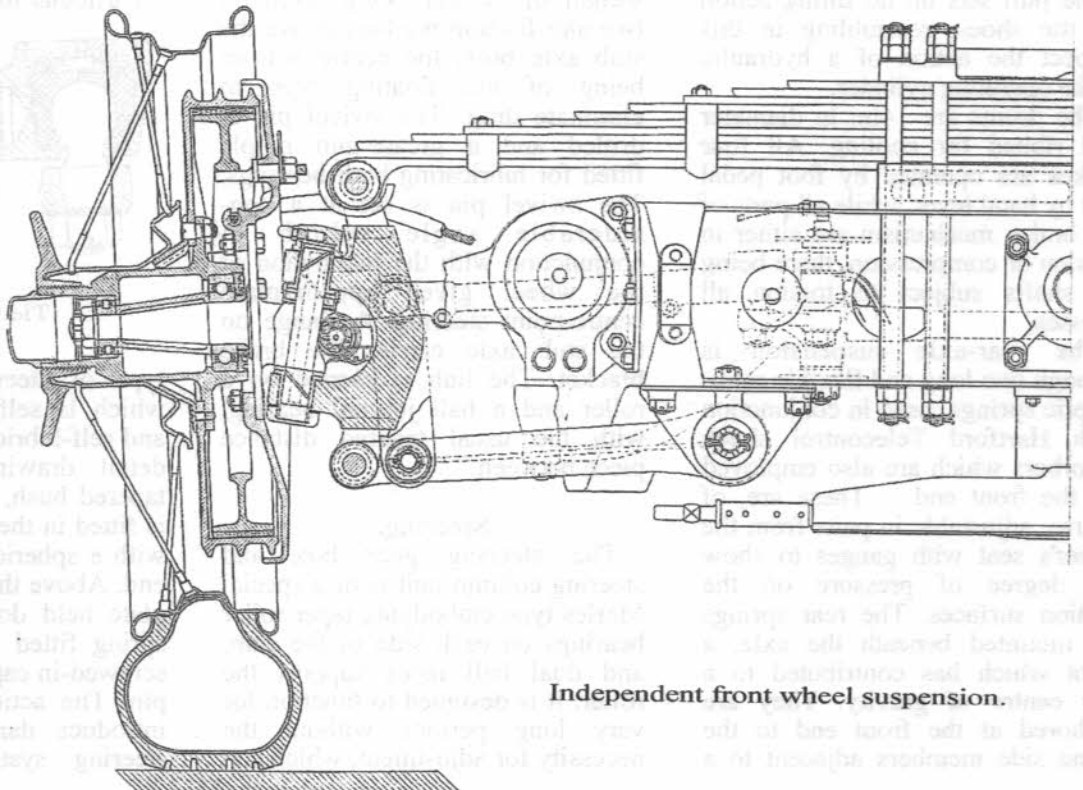
A Hardy Spicer needle roller bearing-type propeller-shaft is fitted, the front or sliding end being lubricated from a grease nipple. The tubular shaft is of exceptionally large diameter and the makers state that the safe speed is well over 6,000 r.p.m. giving an appreciable factor of safety against "whirling" and consequent vibration.

exceedingly good acceleration figures previously mentioned.

The bevel pinion shaft is mounted in three robust bearings. Two of these are roller bearings, the third being a special ball bearing to take end thrust. On the latest design an oil-retaining device, in the form of a composite leather unit, is fitted adjacent to the

#### Rear axle.

A full-floating type of rear axle is adopted, the final drive being through spiral bevel gears. These and the bevel type differential gears are of nickel-chrome case-hardened steel. Alternative axle ratios are available, these being 4.11 or 4.33 : 1. These somewhat high ratios result in the engine seldom exceeding a moderate speed. For instance, on the first-mentioned ratio an engine speed of 4,500 r.p.m. corresponds to 66 m.p.h. on third and 47 m.p.h. on second gear. These ratios and the ability to change gear rapidly obviously account for the



Independent front wheel suspension.

brackets are bolted. Single nut central fixing wire wheels are fitted with 5.5in. Dunlop cord tyres on 19in. rims.

A car primarily intended for high speeds obviously presupposes good brakes, and the special Alvis patented arrangement provides brakes that are self-energising, so that no external servo mechanism is required. The main feature is the use of a floating cam. Each shoe is pivoted on a pin on the left of the arrangement drawing. The two shoes are held together on the other side by two return coil springs, one of which is anchored to both shoes, while the other is anchored to one shoe and the back plate. The intention is to neutralise the usual tendency in a normal brake for one shoe to be dragged on to the drum while the other is pushed off. When the brakes are applied, the shoes are forced apart by the lever action to which the brake cable is attached, but as the effect of the spring is greater on one shoe than on the other, one shoe comes into contact with the brake drum before the other, after which the lever action is applied to the second shoe. In this way gradual retarding effort is obtained with the least possible pedal pressure.

The brake cable is attached to the actuating lever, passing through a slot in the brake shoe, a guide on the brake bracket hub, and through a hole in the brake bracket flange. Being exactly in the centre, the cable pull sets up no tilting action on the shoes, resembling in this respect the action of a hydraulic brake operating cylinder.

The drums are 14in. in diameter and ribbed for cooling. All four brakes are operated by foot pedal and by hand lever, while all parts of the brake mechanism are either in tension or compression, there being no shafts subject to torsion all stresses.

The rear-axle suspension is through two long and flexible semi-elliptic springs, used in conjunction with Hartford Telecontrol shock absorbers which are also employed for the front end. These are, of course, adjustable in pairs from the driver's seat with gauges to show the degree of pressure on the friction surfaces. The rear springs are mounted beneath the axle, a point which has contributed to a low centre of gravity. They are anchored at the front end to the frame side members adjacent to a

robust cross-member, while the rear ends of the spring are shackled to the ends of a tube which is carried across the frame.

### Front Axle.

Special interest naturally attaches to the suspension of the front wheels, which are independently mounted. A transverse semi-elliptic spring is employed, bolted above a very substantial cross-member composed of two channel sections. For anchorage a steel stamping is employed, which is really two spring pads united by a narrow central strip. This is above the spring, while between it and the frame is an aluminium block. Below this are distance tubes that occupy the space between the top and bottom flanges of the frame. Eight through bolts hold the whole assembly together. Each end of the transverse spring is mounted on a horizontal pin in the bracket carrying the axle swivel pin. The lower end of this bracket has a similar pin retained by a substantial radius arm pivoted beneath the frame side-member. The inner fulcrum end of the radius arm is mounted in between dual brackets with needle roller bearings. Excessive movement of the radius arm is prevented by a rubber pad mounted on a triangular sheet steel bracket attached to the frame side member.

The axle swivel pin is carried in plain bearings above and below, the weight of the car being taken on two anti-friction washers above the stub axle boss, the centre washer being of the floating type to eliminate drag. The swivel pin is drilled and a grease-gun nipple fitted for lubricating both bearings. The swivel pin is set at a considerable angle, which in conjunction with the inclination of the wheel gives approximate centre-point steering. A flange on the stub axle carries the brake bracket. The hub is carried on a roller and a ball journal bearing, with the usual tapered distance piece between.

### Steering.

The steering gear box and steering column unit is of a special Marles type embodying taper roller bearings on each side of the cam, and dual ball races support the roller. It is designed to function for very long periods without the necessity for adjustment, which can

only be accomplished satisfactorily after the steering unit has been dismantled from the chassis. The spiral steering cam is mounted on taper roller bearings, which make for easy operation, the scheme being designed for use with low-pressure tyres. The mechanism connecting the drop arm with the front wheels is particularly interesting and forms the subject of an Alvis patent. As will be seen

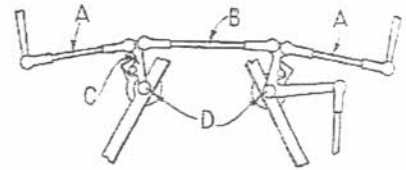
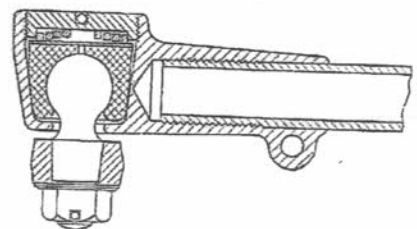


Diagram of steering layout.

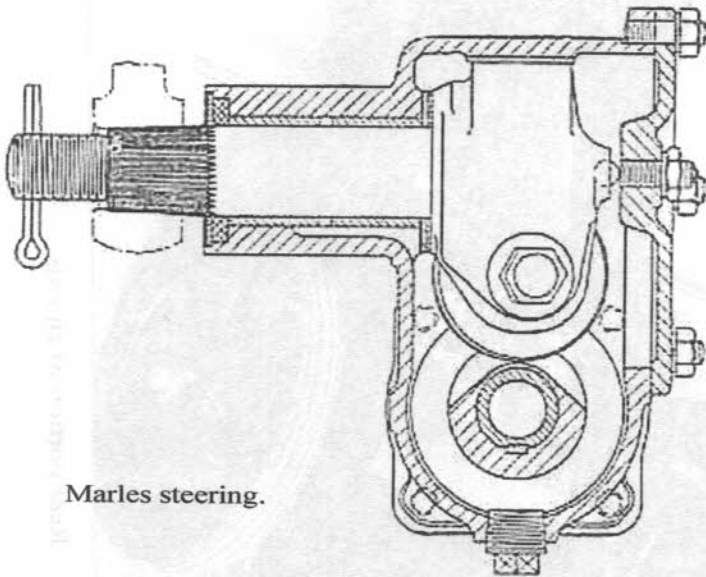
from an accompanying diagram, divided track rods A and B are employed. They are hinged to arms C, which in turn are independently pivoted to the diagonal frame members D. The links of the rod A are in such relation to the effective length of the transverse suspension members that relative movement of the road wheels and chassis do not subject these end rods to compression or tension. The steering is thus independent of the load on the front spring. A further feature of the patent is that damping may be introduced at the points D, thus creating a steadying effect without materially affecting slow movements.

Particular interest attaches to the

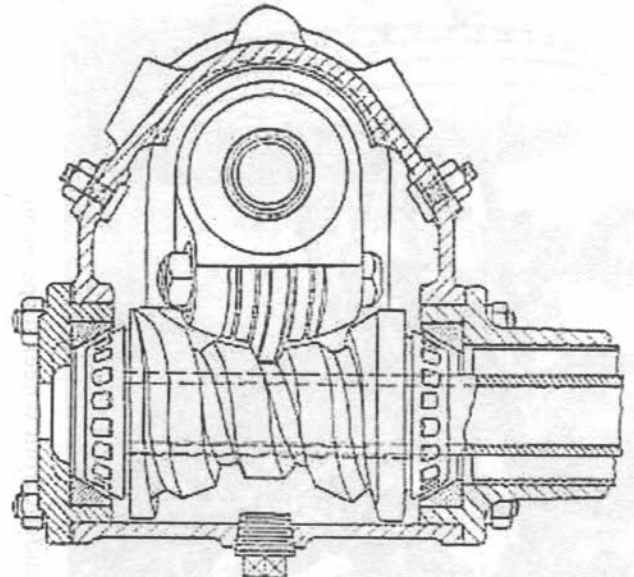


Tie rod ball end

type of steering joint employed, which is self adjustable for wear and self-lubricating. As shown in a detail drawing, a lignum vitae tapered bush, split into four pieces is fitted in the rod end. It is formed with a spherical recess for the ball end. Above the bush is a thin metal plate held down by a 70 lb. flat spring fitted within a recess in a screwed-in cap retained in turn by a pin. The action of the bush is to introduce damping action in the steering system while allowing



Marles steering.



freedom of movement in the positive plane.

The front wheels are adjusted to toe out at the front from lin. to tin. Adjustment for this is provided by the threaded end couplings of the track rod. The steering box is supported in a short standard bracket bolted to the frame side member. In plan the steering column is not parallel with the centre-line of the chassis, but converges inwards towards the steering wheel. The steering column rake is readily adjustable after slackening off the two bolts in the supporting bracket on the scuttle dash and the clamping bolts of the steering box cradle.

The dashboard is a particularly robust aluminium casting and the instrument board is also an aluminium casting, supported in turn by two cast aluminium brackets, rubber washers being interposed beneath the heads of the attaching bolts.

#### Frame.

Orthodox in form, considerable interest attaches to the detail of the frame construction. An unusual feature is the form of the side members, where they are pierced both front and rear to allow for axle movement. At the front, each side member is formed with an approximately rectangular hole through which the steering-rod connection passes. The front end of the side-member terminates in a slotted bracket, to which the bumper bar support is attached by two studs. The rear portion of the frame is parallel in plan, tapering slightly from the dashboard to the front dumb irons. In side view the

frame is parallel for the major portion of its length, there being a very slight rise at the front end, and rather an abrupt rise over the rear axle.

This portion of the frame is formed with an inverted U-opening of considerable height to allow for axle movement. The open end of this vertical slot is closed by an extremely shallow U-shaped member of inverted channel section attached by four bolts. An arc of rubber is fitted both top and bottom in case of excessive axle movement.

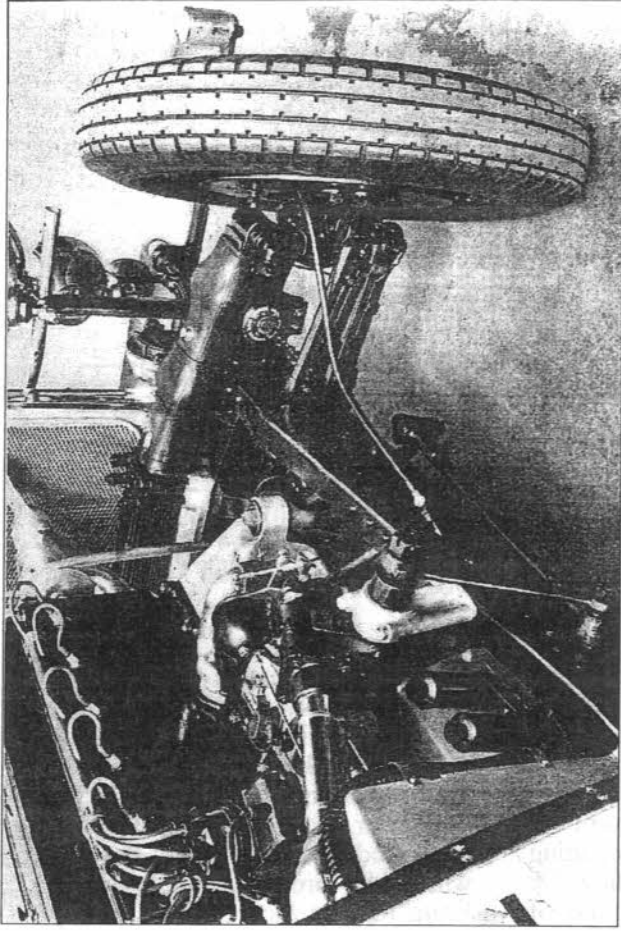
Seven cross-members are fitted. At the front end just behind the radiator are two channel-section members arranged back to back, close together but not actually touching. These two members form the anchorage for the front transverse spring and are tied together by the spring pads. They are further reinforced by two diagonal stays, the rear ends of which form junctions with the side members approximately halfway along the engine.

The next cross-member is fitted behind the clutch, while a similar one is arranged behind the gear box. Both of these are channel section with the open side towards the rear. Between these members are diagonal stays which meet beneath the rear suspension support on the power unit, and, in addition to reinforcing the frame, form an excellent support for the gear box and are also utilised for the brackets carrying the balance levers of the braking system. These stays are also of channel section.

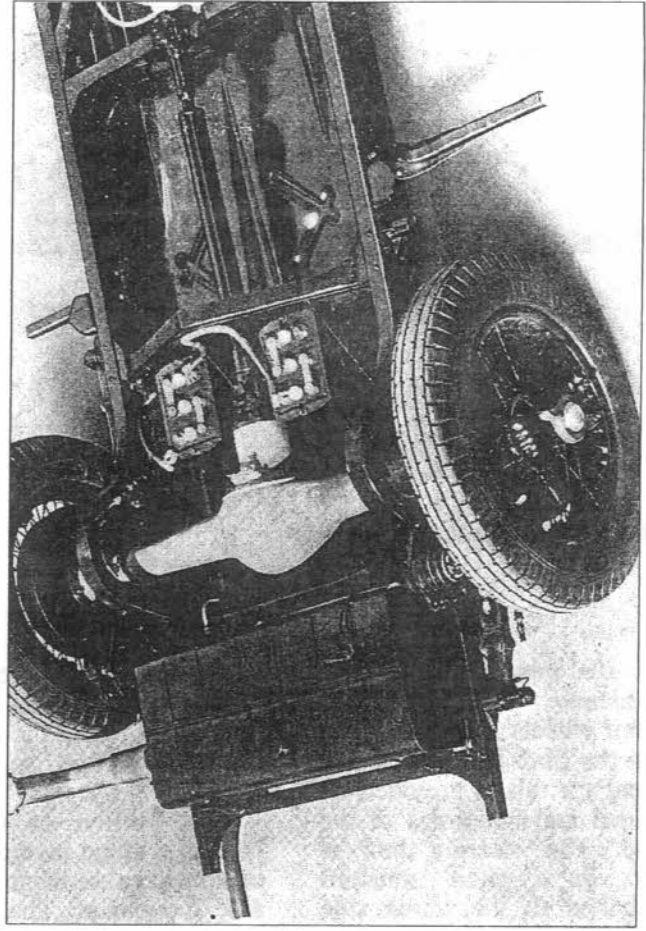
An unusual form is adopted for the next cross member bridging the

frame adjacent to the front anchorage point in the rear springs. This is of triangular form, being considerably higher than the rest of the frame and fitting behind the seat riser. It is pierced with an elongated central hole through which the propeller shaft passes. From its rear face the two battery trays are supported. The space between these two cross-members is shown in the drawing as being filled in with a thin sheet metal rectangular undershield, which is stiffened by shallow ribs pressed in it. To obviate any drumming that might arise in certain circumstances, it is being replaced by metal strips and a wood flooring. On each side of the petrol tank is a channel-section cross-member, the forward one being set at a slight angle.

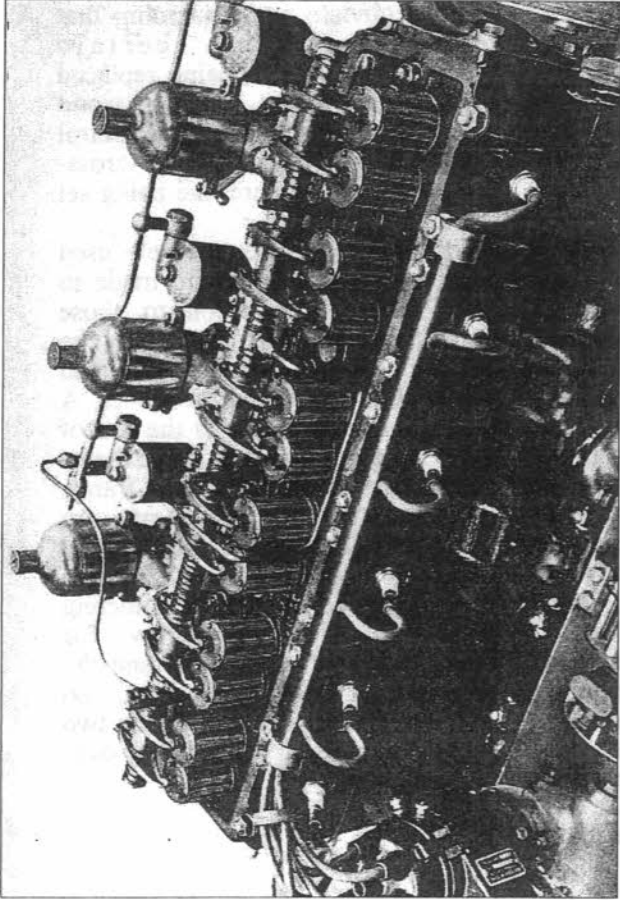
Rubber is very extensively used wherever attachments are made to the frame. In addition to those previously referred to, it may be mentioned that both the tank and radiator are mounted on rubber. A more unusual feature is the use of this material wherever the exhaust pipes are attached to the frame. These attaching members are mainly composed of bent-metal strip and are sufficiently long to prevent conducted heat affecting the rubber. They allow for expansion and contraction and the rubber eliminates vibration, so making for the comfort of the two passengers sitting immediately over the silencer.



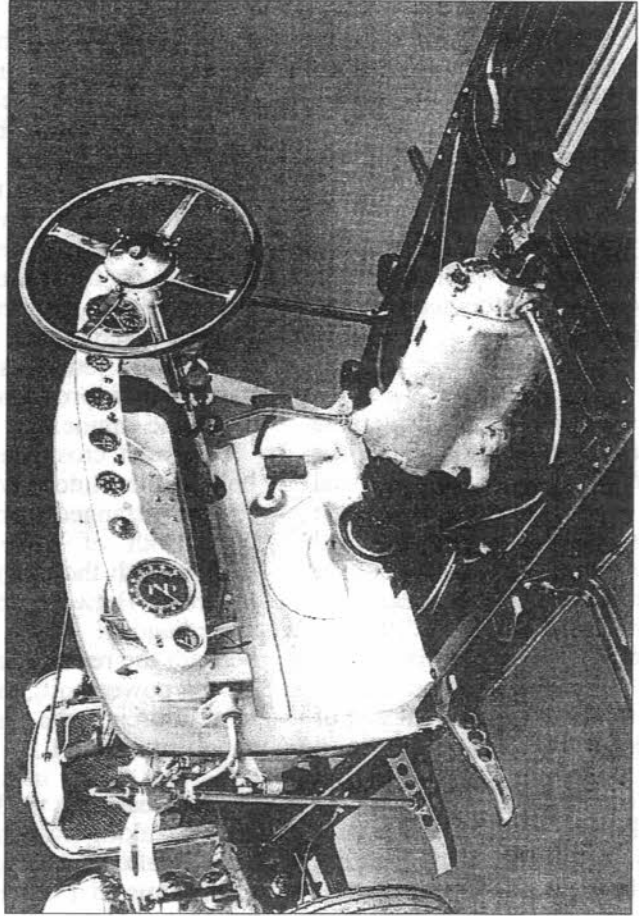
Independent front wheel suspension



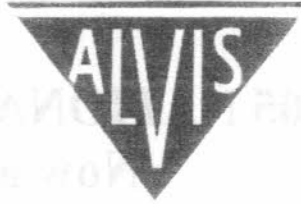
Rear portion of chassis



Valve and rocker gear.



Aluminium dashboard and gearbox.



## *Get off your Butts!*

*"Don't sit home on a Sunday being bored, the footy's finished for 2005"  
"Geelong won (I hope)"*

*Put your driving gloves on, dip the oil, check the water and mosey on down  
to the Woori Yallock Hotel for lunch on Sunday 16<sup>th</sup> October for a joint  
Bentley & Alvis Club run.  
Alvises go faster than Bentleys!*

Organised by Max Bacon and Chester McKaige

Assemble Brandon Park Shopping Centre Car Park Melways Ref 71 D9.  
Car Park is adjacent to Mobil Service Station. Time 10.30 am for 11.00 am start.  
A very pleasant 45km run has been organized to the  
Woori Yallock Hotel 5964 7201.  
Route directions available at the car park.

*RACV Roadside service for any Alvises that breakdown on 13 11 11*

*The organizers state:*

*"The Woori Yallock Hotel is an old style pub with a good menu and a good view."  
(Unfortunately the beer runs out at about 11.00am every Sunday!)  
BUT! The company will be good!*

*Bookings must be made with Chester McKaige by 11 October on 0407 113 516 or if  
you are not mobile phone literate on 9557 1134*

*Chester also mans the complaints department if you can't follow the directions*

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(Can be provided on VHS if required, {PAL format only for both DVD and VHS})

Thanks to David and Carol Head, Tony and Bennie Hannam, Dean and Christine Prangley and Maritta for providing the excellent footage.

## WANTED:

SP 25 Hand Brake lever arm. Generator louvered band to cover brushes. 2 x 1/2 Ball and wing nut as located on threaded brake rods. Pass light Glass--2 of. Gear Box mounting brackets--offside, nearside and rear. Likely, models other than the SP25 will share the componentry.

Michael Lavender, NZ Alvis Club

Call Collect 0064 33255704 (New Zealand)

## WANTED:

### TA14 Parts

- Radiator Grill - mine's a mess following a prang in the '50s
- Driver's Side Headlight - to replace a non-standard fitting resulting from the same incident
- Rear Lights - any parts
- Jack - preferably with a round lifting peg (as opposed to the square one on most cars)
- Distributor Manual Advance Linkage - the lever attached to the engine end of the steering column tube and the ball jointed link from there to the bell-crank attached to the block.

Alternatively, if there's a moribund but straightish TA14 out there needing a home, I'd consider that.

Mike Williams - phone 0418 478947 or e-mail to mikew@tassie.net.au

## WANTED:

3 litre TA-TD  
Flywheel & clutch assembly  
Flywheel housing  
Manual gearbox  
Clutch pedal & linkage hydraulic or manual.  
Gharre Dalliston (07)5546 1998

## WANTED:

Pair Bosch 10 inch diameter Headlamps JG 240 or JG280 and a pair of Bosch side lamps J120.  
Ring Geoff Hood (03) 9842 2181

*If your advertisement appears on this page and is no longer relevant, please notify the newsletter editor.*

*John Lang .....ed*

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