Daimler & Lanchester Owners' Glub in New Zealand Inc.

April-May 2008

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Club Badges for Sale

These may be ordered through the Waikato-Bay of Plenty Club

Costs of the badges are: \$10.00 Unresined

\$13.00 Resined

Information required is the names to go on the badge together with your branch. Payment is required at the time of order.

All enquiries and orders to:

Maureen King

Secretary

Waikato-Bay of Plenty Daimler and Lanchester Owners' Club

17 McDowall Place

Hamilton

Ph: 07 8552434

April-May 2008

From the Driver's Seat ... A Message from your National President



I would like to thank the Club for the wonderful support and condolences during my recent bereavement. It was a great comfort and very humbling.

The National Rally is rushing towards us at a rate of knots, however preparations are well in hand and I'm sure the Club can look forward to lots of fun and fellowship amidst our classic cars. I would like to encourage as many of you as possible to come and join us in Pukekohe. We deliberately chose Pukekohe to avoid Auckland traffic, and of course it's close to the Glenbrook Vintage Steam Railway and the Counties Hotel suits the occasion very well. Hope to see you there. If you're not there you can't share.

Ed Hayhoe

Entries for an art contest at the Hirshorn Modern Art Gallery in DC. The rule was that the artist could use only one sheet of paper.

Getting Up To Speed ... A Word from your National Secretary



A warm welcome to this month's new members.

- Jin-Ho Lee of Glenfield Auckland has a Daimler Conquest ex Anthony Billing car.
- Danny Gray of Hillcrest Auckland has a Daimler V8.
- Arie and Els De Kort of Paraparaumu have a Daimler Conquest.
- an Brown of Titirangi, Auckland has a V8250 owned for over 20 years!

Great to see these older models finding new owners.

A reminder that SUBS were due 1st March, If you have not yet paid, please, do it NOW.

A note or two on the magazine, if we don't get reports, we end up with a pretty boring magazine. If you are asked to report on an event, don't think up excuses. It doesn't involve much time or effort, can be emailed, typed, handwritten or whatever. We all eniov reading other members viewpoint. Also had a lack of photos for the last edition!

Letters, technical reports, restoration projects all make interesting reading. Member profiles are also welcomed, some have great tales of their cars and experiences with the club.

Our club now have a considerable number of DLOC-UK magazines from 1970 to 2005 from Roy Tilley. I hope to be able to reprint some of the many excellent technical articles therein.

We now receive an exchange magazine from DLOCUK. "The Driven Member" We now receive magazines from UK, North America, Australia plus a number of local clubs. All of these are available on loan to Branches on request.

Your comments on the magazine would be welcomed, anything you would like to see more or less of, new ideas etc.

The National Rally is only a month away, your bookings should be all done and dusted! The agenda and reports are enclosed with this magazine.

The Rally Trophy list is as follows:

SILVER TRAY, presented by the Daimler and Lanchester Owners Club, Great Britian. to mark the first All New Zealand Rally, Awarded for Overall Winner National Concours.

TROPHY Class 1. National Rally Concours Event, Best Pre 1960.

TROPHY Class 2, National Rally Concours Event, Best Post 1960.

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TROPHY Class 3, National Rally Concours Event, Workhorse.

TROPHY Class 4, National Rally Concours Event, Best Jaguar.

TROPHY. Spare Parts Division, Best Presented Daimler or Lanchester.

SILVER CUP. Roy Tilley Trophy, Best Conquest or Century.

SILVER TRAY. Peoples Choice. Presented by Mary and Mac Hunter on the occasion of their visit.

SILVER CUP. Concours D Elegence for SP250. Donated by King Country Vintage Car Club.

TROPHY. Wingfield Trophy for best V8 over 100000 miles.

TROPHY. Smiths Regrinds Trophy.

TROPHY. Rei Budden Sheriff Trophy.

PLAQUES for Concours.

Best SP250, Best Sovereign, Best Open car, Best Lanchester, Best Majestic Major, Best Daimler V8. Best Conquest. Best Century. Best Jaguar.

Also Trophies from Canterbury Branch,

Ladies Trophy, Silver Tray.

Presidents Trophy donated by Mr and Mrs L.D. Wason.

Workhorse Trophy.

Daimler V8 Trophy.

Looking forward to seeing you at the Rally,

Mike King



Round the Bazaars ... Daimlers on the Run



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Past outings of the Walkato-Bop Branch

20th January

Arthur and Mary Jones were our host for a very enjoyable gathering of members at their home at Whiritoa Beach. It was a pot luck lunch with a great variety of food and plenty of it. The branch supplied the meat and the chief cook being Arthur himself with the able assistance of Murray Burt. Between them both, everything was cooked to perfection. The day itself wasn't the best beach weather, but at least, it didn't rain and it wasn't cold at 21 degrees. It was pretty blustery though and straight off the sea, so plenty sea spray. Arthur was very busy before everyone arrived cleaning all the windows and the glass around the deck. A big job keeping glass clean when by the sea especially when windy. The day passed very quickly with plenty chatter going too and fro across the room. A big thank you Arthur and Mary for your very kind hospitality (as always).

24th February

Outing to Mt Maunganui Airport Museum which is along side the Military Museum. A double warmy and both excellent. The weather was shocking with vertually persistant rain, but it wasn't cold. (90% of the displays were indoors so the weather wasn't really an issue.) This is a must see Museum (if you are in the region) with many aircraft (civilian and military) on display as well as many items on display in cabinets and you can view videos just at the push of a button. The military museum is of the same calibre – all excellent. We had our lunch in the (on site) cafe, beautiful food all at a very reasonable price. Prior to viewing the museums we used 'The Board Room' for our AGM (thanks to Arthur who arranged this for us). Even though the day was wet, we had an excellent day with a good turn out of members. Prior to Zoe and I leaving home on this day, We had a phone call from Len Nicholson. It was great to hear from him and he was good for a chat. He

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was ringing from Waihi. The reason for his trip back to NZ was to a surprise visit for his sisters birthday. I asked Len if he could join us at the Airport but his day was all spoken for. He would have very much liked to have been with us this day. Len has sold his V8 that he restored while here in NZ and he is no longer a member of the Daimler Club in Perth. They aren't the friendly bunch like he experienced back here and he felt like he wasn't really being excepted. Len is still a member of DLOC New Zealand and enjoys receiving the magazine. Len said he recently bought a brand new X Type Jaguar and is very pleased with it. Hopefully next time Len visits NZ, the timing is right for him to attend one of our outings. Len, vou'll be reading this, just a thought has come to mind, it would be great if you could (some time in the near future) write an article to the magazine of your experiences since you left NZ, such as your experiences with the Daimler club over their and how they didn't recognise your Lanchester as a club vehicle etc etc. This would make for interesting ready and I know many members would be interested in what vou're up to.

Bruce Henderson

Manawatu Meanderings

Dannevirke "Wheels with Attitude" 3rd February 2008

An overcast morning, nine members and five cars made the trip to Dannevirke for the annual "Wheels with Attitude" display and swap meet. This was the first time this season that we erected our Gazebo, it took a while as we recalled how to assemble the frame! The sun soon came out, making the effort worthwhile. The usual variety of cars, trucks, indeed anything with "Wheels" was there to peruse and admire. The bits and bobs being sold attracted lookers and buyers, you never know what goodies you might find! We met up with several of our Hawke's Bay comrades, these days are great places to meet like minded enthusiasts and to introduce prospective members to our club. The local sponsors had donated a large number of goodies, given away in various categories and spot prizes.

Had a good trip home in the Dart, with a quick stop in the gorge to grab the camera for a shot of the "WAB", Feilding's restored steamer (see photo). Drivers were more intent on looking at the car than were they were going! Another good "Daimler day".

Mike King

Trip to Wellington 17th February 2008

The sun was shining and it was another beautiful day as the small collection of Daimler Club members headed of to the beautiful Lower Hutt area, to join

in the action at Trentham Park. With over a whopping 800 cars there was a fantastic turnout as usual, with a wide selection of British motor cars from Daimlers to Morries, Rovers Bentleys just to name a few , there was definitely something for everyone's tastes. It was decided the tent wouldn't be erected and most of the members were just happy to bask in the sun. There were a few stall selling books, food and general car parts; you could even get your cars brakes tested for only \$5.00. About 3.00 the day started to come to a wrap with the warmth of the sun starting to depart slowly as well, another very successful day and certainly enjoyed by all DLOC Members. Thanks to all members for coming and being part of another successful British car day.

Andrew Williams

On Sunday 24th February, we met at the Shannon Domain for the Shannon Car Show. We had a good turnout, coming from Taihape, Hawke;s Bay and from all over the Manawatu and Horowhenua. We met at about 10am at the show after some of us experiencing a traffic jam in Shannon, must be a first time for the district. After many hands helped to put our tent up we settled down to enjoy the day, although rain threatened, it held off.

There were about 200 cars including 9 Ferraris, a big turnout of Daimlers and Jaguars, also most other Classics and hotrods. I even noticed a very nice red RMW.

The Kids were also catered for with miniature hot rod rides. There were also a few stalls selling books etc. There must have been a food stall. I noticed Andrew fueling up with some good tucker!

Prizes were given for various classes, included was a Mk2 Jaguar, AC Cobra, Mercedes, Monaro, Ford Coupe, a very expensive GTHO Falcon and a Chev Bel Air, a good selection of vehicles.

About 2000 people attended raising about \$4000 for the Shannon people.

The prize giving was bought forward to 2pm as the rain was getting very close. Most people started moving out soon after.

A very enjoyable Day

Brian Wolfsbauer

OTAGO

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April-May 2008

Articles of Interest ...



Technical Topic ...

TESTING AND ADJUSTING FOR GEARBOX SLIP

(from the DLOCNZ June 1971)

Note that the following applies to all Daimler and Lanchesters with fluid flywheel and pre-select gearbox.

Should it be suspected that any gear is slipping, test for slip in the following way:

- 1. Apply the handbrake and start the engine.
- 2. Select and engage the gear concerned.
- 3. Depress the accelerator pedal.

If the engine revolutions rise it is an indication that the gear is slipping and requires adjustment. If the gear is correctly adjusted the car will pull against the handbrake and the engine will tend to stall.

NOTE: It is important to differentiate between flywheel and gearbox slip.

Should the gearbox need adjustment, carry out the following instructions:

- 1. Remove transmission and gearbox covers.
- 2. Make sure that the gear requiring adjustment is disengaged (when adjusting reverse and first gears do not select neutral since this will partly engage the two gears).
- 3. Slacken the locknut and turn the adjuster screw half a turn in a clockwise direction, in other words screw in.
- 4. Unhook spring eyes from their pegs.
- 5. Mark the top of the pull rod with a pencil and screw back one turn, anticlockwise.
- 6. Replace the springs on their pegs.
- 7. Select and. engage the gear affected and pump the pedal sharply until the pull rod nut ceases to rotate. Adjustment is now complete. The gearbox cover should be replaced provisionally and a further test for slip should be carried out.

Fierce Takeup. Adjustment.

To adjust any gear for the purpose of eliminating fierce take up, proceed as follows:

1. Remove transmission and gearbox covers.

- 2. Make sure that the gear requiring adjustment is disengaged.
- 3. loosen the locknut on the brake adjuster screw and turn the screw in an anticlockwise direction.
- 4. Tighten the locknut and pump the gear pedal until the pull rod ceases to rotate.
- 5. Adjustment is now complete.
- 6. Replace gearbox cover provisionally and test.

Faulty Selection

By using the selector control and gear engaging pedal incorrectly a false neutral nay be obtained and the pedal will appear to be jammed. To rectify this condition, select the gear required and press very hard on the pedal. The first half of the stroke will be exceedingly heavy but after pressing the pedal through its full range of travel normal engagement will return.

While on the subject of gearboxes and for the benefit of any member who does not have an instruction manual for their Consort or Special Sports it is recommended that the oil be changed in the gearbox every 6000 miles. The correct grade is SAE 30 and the box holds 5 pints. It is of course best to drain the gearbox after a run while the oil is still hot and so any sludge that has formed will be drained off. While draining and while the floorboards are out lubricate all control rod joints and linkages with an oil can.

Also while on this job undo the speedometer cable bolt and remove the cable assembly. Pull out the inner cable by its square end and wash in petrol as the grease has probably hardened with age if it has not been done for several years. After drying give the cable a coating of grease and gradually twist it back in its outer casing until the retaining shoulder is flush with the end face of the cable ferrule. Finally replace the cable and clamp by means of the retaining bolt, making sure the drive from the gearbox meshes with the cable end.

Hint

New cork rocker cover gaskets which have been perhaps sitting on dealers' shelves for many years are sometimes shrunk and very brittle. They can be pre-shaped by placing over the top of the cover while driving for a few days, prior to fitting. The cork will absorb the fumes making it supple and less prone to breaking when fitting.

Club Caps for Sale

Dark blue with tan peak.

"Daimler" embroidered on front – \$15.00 each
Orders to
Mike King, 21 Miller Street, Palmerston North

April-May 2008

TECHNICAL TOPIC ...

ALUMINIUM ALLOY HEADS

(From the DLOCNZ July 1971)

Many Daimlers, from the Special Sports onwards, are fitted with Alloy Heads, and due to the harshness of the water in some areas are prone to corrosion. Proper service is the obvious answer and Electrolysis may be prevented by the addition of Zinc or Magnesium strips to the cooling system. Also some "Antifreeze" products such as Smiths "Bluecol" and a similar Castrol product give excellent anti-corrosive protection. However, should a head be found to have corroded, it is INADVISABLE to have it ground as this will, in most cases, result in the loss of valuable metal around the water-ways and further enlargement of already corrosion-enlarged areas. Furthermore, reduction head height upsets tensioning, and increased compression upsets the balance and idling of the engine.

The recommended repair is as follows:

The corroded areas should be cleaned as well as possible and filled with the same type alloy as the head. A similar unusable head or water-heated inlet manifold provide an excellent repair material when molten and impurities are removed by pushing a "de-gassing" tablet to the bottom of the molten alloy. Impurities will rise to the surface enabling them to be skimmed off.

Prior to filling in holes, the head must be free of all steel studs, brass fittings areas should then be filled, allowing the molten alloy to fuse into the existing met etc., and then pre-heated to the temperature at which it will ignite straw. The corroded areas should then be filled, allowing the molten alloy to fuse into the existing metal. Flux must not be used since it will allow corrosion to occur in the "weld" between the old and new metals.

Next, roughly grind the "run-in" metal to approximately level with the surface of the head and with the aid of a new head gasket, trace out the positions of the waterways. Drill out to original specifications and level off by filing crosswise with a fairly coarse file, taking care not to damage the surrounding area.

Prior to refitting repaired head, the surface of the engine block must be free of warping, high and low spots and stretched areas around the stud holes, caused by frequently blown head gaskets.

Procedure

10

Remove head studs, level pistons and pack cylinders with cotton waste. Using an old piston ring as a template, cut out six pieces of cardboard and push down on top of cotton waste. Also pack push rod holes to prevent cutting materials and metal falling into engine.

Using coarse emery cloth with a toolmaker facing plate (a 5/16" piece of plate glass will do a good job also) grind the surface of the block, working back and forward entire length, in a semi-circular motion. The high and low spots will soon become apparent. Continue grinding until an evenly clean surface is obtained. This method preferred to machine grinding since the latter method is carried out under high pre resulting in worn bearings in the machinery, and consequently "surging" occurs approximately every 4". Should these surges appear over the partition between cylinders, blown head gaskets result. The same situation results in machine ground heads.

Replace studs. Having ascertained that the block is completely level, check the head for any warping that may have been caused by the heating and welding. Refit head on to block (without gasket) and sight along between block and head. Should only the centre of head rest on block (when either or both ends have lifted up) pack an equal number of washers on the four central studs between block and head and pull down equally on both ends until level. Similarly, if centre of head has warped away from the block, pack ends of head and pull down on centre studs until relevelled. When level, the block should then be hand-ground to remove high spots a was the block. Once again machine grinding is not recommended, since it usually grinds off more one end than the other, producing varying compression figures between 1 and 6 cylinders.

Unless an alloy of the same hardness as the head is used in the welds, the knifeedge of the ridge of the head gasket will not settle in evenly and with the heating and cooling of the engine, spider-web cracks will appear around the welds, resulting in the return of the old problems.

Tension alloy heads only when the engine is cold. Re-check tension after ten miles running, again after 200 miles and later at any time it is considered to need re-checking.

Also from the Australian Daimler Journal:

Notice to Conquest Century owners. At about 100,000 miles, the bolts holding the crown wheel in differential begin to move – sometimes one snaps off and wrecks the diff. Owners are recommended to remove the cover of housing the check bolts for tightness and seal well afterwards.

Only One Month to Go

11th National Rally 2008

Hosted by Auckland Branch
Register your intention to attend now!

2nd-4th May 2008

OGLE SX-250 SPECIAL COACHWORK FOR THE DAIMLER SP-250

(From Daimler Gold Portfolio 1959-1969)



Though the body was still incomplete when these photographs were taken, some idea of the clean lines of the car, and of the increased passenger space, can be obtained.

Inspired originally by a single order from a customer, subsequently increased to five, David Ogle Ltd., Letchworth, are adding the 2½-litre, vee-8 Daimler SP-250 to their range of special-bodied cars, a range which began with the Riley One-Point-Five and went on to the B.M.C. ADO15 Minis. The car is being shown on stand No. 68.

The new body is a very pleasant looking – though not rakish – two-four-seater coupe in glass fibre reinforced plastic. It is compact, though providing somewhat more room for the rear seat passengers than does the standard product. The driving position has been improved, and the leg room increased. The interior is trimmed throughout in pale grey Suwide, with a contrasting grey carpeting, and a- walnut facia is fitted. External finish is in sable (brown) cellulose, and the car is designated the Ogle SX-250, the SX being prompted by John Ogier's Essex Racing Team.

Price will be in the region of £2,000 to £2,500, though it is hoped that, when production gets under way, this may become less.

Several modifications have been carried out to the chassis frame, many of them made with a view to increasing stiffness. Steel hinge-pillars have been fitted at the forward edges of the door apertures, extended forward by tubes to the front of the frame and panelled in sheet metal. Thus, the doors are hung on to the chassisframe, via the hinge posts, instead of on to the glass fibre body. A sheet-metal engine bulkhead is used. The doors close similarly against steel shut-pillars, extended backwards by a tubular structure to the rear of the chassis.

A double sheet-metal rear bulkhead, in A-formation with the apex uppermost,

forms the rear seat backrest and the front of the luggage compartment. Channel-section risers are welded to the top of the frame members at the rear, increasing their depth so that the spare wheel can be housed beneath the floor of the luggage locker. At the sides the body is carried on false sills along the sides of the frame.



Headlamps will be covered by Perspex panels shaped to conform to the contours of the body panels. The bonnet panel was not intentionally in a second colour; it had yet to be sprayed.

Rodney Jaguar Rover Spares Ltd

17 Clayden Road, Warkworth Ph: 0800 4 JAG PARTS (0800 4 524 727) Fax: 09 425 7234

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New Zealand's largest stockist of new, used and rebuilt parts for Jaguars and Daimlers from 1950 to current models.

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JAGUAR - DAIMLER - ROVER - LANDROVER - RANGEROVER



Manawatu members at Wheels with Attitude.



Feildings WAB, Manawatu Gorge.



Robin Thomas Dart. See Marketplace.



Model A Motorhome Dannevirke.



Variety of displays at Wheels with Attitude.

SP 250

(From The Driving Member, Vol 7, No 6)

At the New York Motor Show in the Spring of this year (1959) a prototype of the new Daimler sports car – then called the Dart – was introduced to the public. It was designed specifically with the requirements of the North American continent in mind, and most of the first year's production will be exported to the U.L.A. and Canada. Supplies for the home market will begin in January of next year.

Of moderate size and weight, the SP 250, as it is now called, has a wheelbase of only 7ft 8in, a front track of 4ft 2in and weighs just under one ton, including 5 gallons of fuel. As the engine develops a maximum of 140 bhp at 5,800 rpm this gives a bhp per ton figure of 142, which should ensure outstanding acceleration. Maximum speed is in the region of 120 mph.

Apart from the engine, which is described later in detail, the new car is of conventional construction, with a separate box-section chassis, coil spring and wish-bone front suspension, and live rear axle with semi-elliptic springs. It is interesting that glass fibre has been chosen for the body, and its suitability for the specialist car produced in relatively small quantities is now well recognized.

In the modern manner comfort and weather protection are regarded as important attributes of the sports car body, and separate bucket seats for driver and passenger are provided; there is a small bench seat behind for children, which could be used by an adult sitting transversely for short journeys. Good protection for open car motoring is provided by a fixed panoramic screen and stainless steel-framed in glass windows in the doors. A soft folding hood with wide rear windows completes the protection for bad weather. Luggage space is generous for a car of this type he boot, of ample depth, extending across the full width of the car behind the rear wheel arches.

Few men have done more design pioneering and produced more successful engines than Edward Turner, managing director of the Daimler Company. His first was the famous Ariel Square Four, which he conceived when an agent for the make in Peckam, London; as a result he was invited to join the company to see it through into production. He also put on the market the first really successful vertical twin motorcycle engine when he joined Triumph, although Val Page had produced such a design earlier. It is not surprising, therefore, that the Daimler vee-8 engine bears many of his imprints; in fact, it is understood that he personally laid out the original schemes before the design office took over.

The cylinder block and crankcase is a single iron casing split on the crankshaft centre line, with the left-hand bank off-set forward of the right-hand one by 0.785in. Over-square proportions have been chosen, the bore being 3.0in (76.2mm) and the stroke 2.75in (69.8mm), so that the engine can be operated satisfactorily up to 6,000 rpm, at which speed the mean piston speed is only 2,750ft per min.

A study of the power curves reveals that it is a very efficient unit, with a peak output of 140 bhp at 5,800 rpm, equivalent to 56 bhp per litre, and exactly 10 bhp per litre per 1,000 rpm; few engines reach this efficient yardstick figure at their maximum power. Perhaps of more importance in an engine of this type is that these maximum powers have not been achieved at the expense of bottom end performance b.m.e.p. is 151 lb sq in at 3,600 rpm arid exceeds 150 throughout the range between 2,000 and 5,000 rpm.

This degree of efficiency arises from the use of a segmental spherical combustion chamber, in which the valves, placed at an included angle of 70 deg., are spaced equisistant from the vertical centre line. The combustion chamber is comparatively shallow, so that with a compression ratio of 8.2 to 1 the piston crown needs only slight dome and shallow cutaways for valve clearance. It is apparent that the compression ratio could be increased considerably without the need for a severe hump on the piston.

Edward Turner's motor cycle experience is obvious in the valve gear or, more particularly, the tappets. It is almost universal practice in automobile engines to use a flat-faced tappet and a convex-flanked cam, but the majority of motorcycle engines use a round-nosed follower and straight-flanked cam: this combination is in the Dart. It is claimed that it gives more latitude for modifying the cam form reduce accelerations and, hence, spring loads. One disadvantage is that the tappet cannot be designed to induce rotation to even out wear. The tappet block is an iron casting which also forms a cover to the tunnel between the banks of cylinders. Rotation of the tappets, which are of steel. Stellited on the working surface, is prevented by flats on the tappet block. Two rocker shafts are necessary with this des and the rockers have equal length arms for the push rod and valve operating side. The exhaust and inlet push rods are not in line and the angle of the tappet has been chosen to bisect that between the two push rods, to reduce side thrust. Ball end seatings are used top and bottom for the push rod, with a screw and lock-nut adjustment at the rocker end. The camshaft is placed high in the block approximately 7in from the crankshaft. It is chain driven, with a Revnolds hydraulically loaded rubber block tensioner on the slack side and a nylon anti-thrash pad on the tight side. This high mounting undoubtedly has been chosen to keep down the length of the push rods which are only 5.75in overall. To compensate for the expansion of the aluminium cylinder head at operating temperatures, composite push rods with case-hardened steel ends and duralumin tubular centre sections are used.

The two cylinder heads are identical, with individual and circular ports for inlet and exhaust. Austenitic cast-iron is used for the seat inserts, and these are cast in position with a back taper on the outside diameter. The sparking plug is placed vertically between the valves, low down in a sealed tunnel attached to the aluminium valve covers. To prevent entry of water into the plug pockets each lead has plastic bobbin, which is pulled out with the lead when replacing a plug.

The connecting rods appear to be immensely stiff, with a very wide blade section. Big ends are split horizontally and the rod half can be passed through the cylinder bore. The halves are held together by two 3/8in-dia bolts and self-locking nuts are used. With a centre-to-centre length of 5.75in, the stroke-to-length ratio is 2.09, quite long by modern standards. The gudgeon pin is fully floating in the piston, which has a noticeably deep skirt – one advantage of the long connecting rod. Above the gudgeon pin there are two narrow compression rings and an oil control ring.

As in all modern vee-' engines, the Daimler uses 90deg spacing for the four crankthrows. There are five mains with copper-lead bearings of 2in dia, the width of the three intermediates being 0.625in, the front bearing 0.875in, and the rear 1.5in. Big-end bearing diameters are 1.75in, and the width of each lead-bronze shell is 0.75in. The mains have a back feed from the main central oil gallery; a diagonal hole from each main takes the oil to its adjacent big-end, and each journal is drilled to reduce rotating mass. This lightening hole also connects with the oil drillings from each adjacent main, and forms an effective sludge trap. At the front of the crankshaft there is a bonded-rubber type of damper and, bolted to the pulley extending forward from this is the cooling fan for the low-mounted radiator. Two piston-ring seals are used at the rear end of the shaft.

Six bearings support the camshaft, one outrigged beyond the spiral gears for the distributor and oil pump. These gears are mounted vertically and the oil pump is a gear type, with inbuilt relief valve. On the inlet side there is a gauze filter; the oil is passed through a full-flow filter before reaching the main gallery.

The water pump is mounted forward of the right-hand cylinder bank, and there is a split outlet feed to the left-hand bank. A triangular vee-belt drive is taken to the dynamo, which is located high up, vertically above the crankshaft. Water is fed directly into the cylinder block, then by cored holes to the head, the outlet from here being taken to a jacket around the box-section mounting for the two carburettors on the induction manifold.

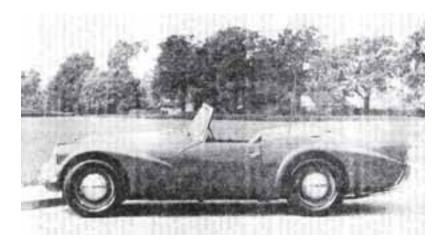
Using the maker's nomenclature of designating the blocks left and right, the firing order is 1L, 4R, 2R, 2L, 3R, 3L, 4L, 1R. There are, of course, many combinations of firing order which can be used with a vee-8 and that chosen on the Daimler results in a firing sequence down the left bank of 1,2,3,4, and on the right 4,2,3,1. A one-piece induction manifold is used, but there are two separate systems. The $1\frac{3}{4}$ in semi-downdraught diaphragm type S.U. carburettors are diametrically opposed at the centre section of the engine. Each feeds four cylinders in a double-tiered arrangement. The outside cylinder of one bank connects to the nearer of the two inner cylinders on the opposite bank.

Much thought appears to have been given to ease of accessibility, and for those interested in using the car for sporting events there seems scope for increasing performance without over-stressing.

Daimler for very many years have manufactured both cars and commercial vehicles with epicyclic gear boxes, so that a conventional dog-engagement box, as fitted to the SP250, is something of an innovation for them. It has a light alloy case integral with the bell housing and there are single helical constant-mesh gears for the upper three of the four forward ratios, synchromesh of the baulk ring type being employed. Selectors are connected to a short lever carried on a rearward extension of the gear box lid. An extended tailshaft is supported by a bearing at the rear end of a separate housing – also forming the rear engine bearers – bolted p behind the gear box. This arrangement reduces propeller shaft length and makes provision for the fitting of an overdrive unit, which is planned for this model. Gear box ratios are closely spaced as befits a car of this character, and with a final drive ratio of 3.58 to 1, top gear mph per 1,000 rpm is 20.6; 5,800 rpm is equivalent to 100 mph in the 4.41 to 1 third gear ratio.

Chassis

Of simple design, the chassis has to box-section side members, 3in deep and 2¼ in wide, parallel for most of their length and passing beneath the rear rude. They are joined by open channel cross members and a central cruciform bracing which also supports the engine rear bearers, hand brake pivot and twin exhaust system brackets. Stiffening the front of the frame at the mounting points of the front suspension assemblies is a cross member made up of two large similar pressings, welded together to form rigid box sections. Fabricated supports for upper wishbone fulcrums and coil spring abutments are welded at this point to each side member, braced by diagonal tubes and tied together across the chassis by a tubular member which can be unbolted to simplify engine installation. Forward extensions of each side member provide rigid mounting points for a front bumper. Chassis pressings are 14 s.w.g., and there are 26 mounting points for the glass-fibre body. Each is Packed with Balata (a type of belting material) to align it on assembly and prevent squeaking end fidgeting.



A Salisbury hypoid rear axle is mounted on semi-elliptic springs, each having six leaves 2in wide, with anti-friction interleaf buttons; they are shackled at the rear, and all the pivots have Metalastic rubber bushes. Rear dampers, of the Armstrong lever type, are carried in brackets on the chassis side members. Front suspension is by Alford and Adler, with unequal length top and bottom wishbones. Lower wishbones are steel forgings, across each of which is bolted the coil spring seat pressing with its lower attachment point for the concentric telescopic damper. The lower steering swivel is a screw thread bearing and the upper wishbone – a two piece fabricated pressing – has a spherical joint at its outer end. All other wishbones pivots are rubber bushed.

Steering is by a cam and lever box bolted to the front extremity of the frame, with the arm operating directly on the centre member of a three-piece track rod by means of a rubber-bushed pivot. A similar pivot at the opposite end of the centre rod is supported by an idler lever.

Girling disc brakes are fitted to all wheels, with disc diameters of 10.625in at the front and 19in at the rear. Front discs are provided with shroud plates to protect the inner face of each disc from scoring. Separate calipers for hand brake operation are fitted to the rear brakes, operated by a horizontal fly-off type lever between the seats, by cable, bell crank and rods in the usual manner. Bolt-on pressed steel wheels with four studs are standard equipment, but centre-lock wire wheels may be obtained at extra cost.

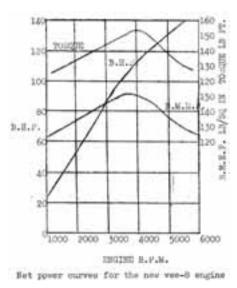
Mounted well forward and low down, the cross-flow radiator enables a very low bonnet line and air intake level to be attained. Carried vertically above the rear axle, the 12gal fuel tank is between the occasional seat and the luggage boot, with the filler in the middle of the decking behind the cockpit. A heavy-duty S.U. electric fuel pump, fitted near the tank in a corner of the boot, is protected by a detachable cover.

Body

Manufacture of the glass-fibre body takes place entirely at the Daimler works; it is completely self-supporting and contains no metal reinforcement. Thickness is between 0.125in and 0.25in, and several separate mouldings are bonded together to form the complete shell. The floor is a single moulding which includes the propeller shaft tunnel, rear seat pan, fuel tank platform and rear wheel arches. Others make up the gear box cover, engine bulkhead with toe-board, boot platform and hood stowage shell. The main body skin, to which the other units are bonded, is a single moulding extending from air intake to tail. Certain features of its shape have been chosen to increase rigidity, in particular the heavy swaging above the wheel openings and the flared edge around the cockpit. Doors and bonnet and boot lid also are glass-fibre mouldings. The rear-hinged bonnet is secured by a catch with its cable release in the cockpit, and held in the open position by a hinged stay. The boot has a deep rear wall for rigidity, and the spare wheel is carried horizontally in a well

in the luggage platform. Jacking points are reached through a hole in the floor (with detachable cover) ahead of each front seat. The jack is lowered through one of the openings, and operated from inside the car.

The well-laid-out cockpit is thoroughly equipped and is of pleasing appearance. Bucket seats have correctly curved squats for good lateral support, and all seats are covered in a high quality pleated leather. Leather is used also for trimming the padded facia and, at extra cost, for the rim and spokes of the sprung steering wheel, which has horn button and turn indicator switch at its centre.



A large dial rev. counter and matching speedometer are in front of the driver, and the remaining instruments are in a panel at the middle of the facia. They comprise fuel contents gauge, water thermometer. oil pressure gauge and ammeter. Below them, in a line, are the lamps and panel light switches, ignition and starter switch, choke and wiper control. Other minor controls are below the middle of the facia. where the quadrant for the heating and ventilating controls is also placed - this equipment is available at extra cost. compartment with lockable lid is in front of the passenger. The gear lever projects from the top of the carpeted gear box cover. and the fly-off hand brake is fitted at the right of this cover. All carpeting, including

that for the floor, is leather bound at the edges, and there are rubber heel mats. Front hinged doors are wide for easy entry and the squabs hinge forward for access to the rear seats. There is a map pocket in each door.

Unusual items of extra equipment for the SF 250 are front end rear bumpers. On the standard car, overriders are fitted on brackets at the rear only, and at the front a plated pressing between each end of the air intake and the wheel opening gives some protection to that part of the body.

There are a number of items of extra equipment in addition to those already mentioned. These include an adjustable steering column, radio, reserve petrol unit and switch, tonneau cover, windscreen washers, cigar lighter, wheel discs white walled tyres and a detachable hard top.

As this model will be sold in America, where many motorists have no experience of driving a car with a manual gear box, a Borg Warner fully automatic transmission is available as an optional extra.

DAIMLER APPRENTICE, Part 1

(Reproduced with permission from Jaguar Heritage issue 11)

John Box recalls the days of being an apprentice at the mighty Daimler works.

I was a Daimler apprentice from 1952 to 1958 during one of the Company's most prolific hut, sadly not profitable periods. I participated in the production of pieces of magnificent vehicle engineering in which a humble bracket had become an art form. I had an opportunity, as a teenager, to drive cars that, in today's terms, were worth over £200,000 each. I worked with draughtsmen and artisans who had the most astonishing skills at their fingertips. I learned the nuances of vehicle handling and behaviour and developed an ear for the varied cause and sources of vehicles noises. The design practices of wood framed and steel bodies were a particular fascination as were the particular mysteries of bus chassis design. I have spent 50 years in the industry and watched the decimation of British engineering but never forgotten all those people who selflessly passed on their knowledge.

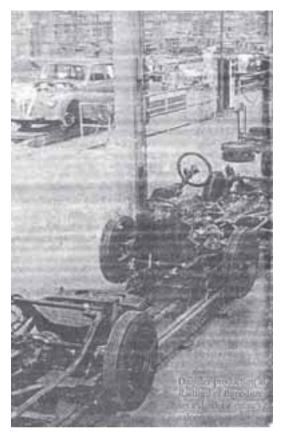
Early Start

That I ever became a Daimler apprentice was due entirely to an uncharacteristically enterprising move by my father. I suppose my interest in cars had developed before my teens but my technical knowledge was confined to the contents of 'The Wonder Book of Cars'. We lived in a small village in Westmoorland which became the county's only seaside resort when the tide was in. There were not many car owners and, at the latter end of the war, very few were on the road. We were privileged in that father's occupation allowed the use of our Austin 8 and I was sometimes able to sit on his knee to steer the car when he declutched. When the war ended and cars began to re-appear, quite a selection was available for my appraisal. There were several Austins and Morrises, a couple of Vauxhalls, an Armstrong Siddeley, Pontiac, Jowett, Fords and two Daimlers. The Daimlers always impressed me, 'whether it was the Royal association or the soft whining noise they made or maybe that they were so arrogant you were supposed to know by whom they were made without any visible display of a maker's name.

Apprentice

My grammar school was totally disinterested in anything technical and so we gradually drifted apart with me doodling cars and manufacturing wondrous devices from Meccano instead of doing my homework. I wanted to be involved with the motor industry and in that case it would have to be at Daimler but there was a problem. Apprenticeships are geared to an educational curriculum and therefore new intakes occurred in September and I was already into the autumn term at school. A further hiccup was that unbeknown to us, it was the practice of most manufacturers to absorb their annual intake of apprentices from school leavers of employees or dealers, plus a few short term graduates from university.

From the correspondence between father and Jack Fuller, the Daimler Apprentice Supervisor, the prospect looked gloomy. It was at this point father played his ace. He arranged to meet Jack Fuller at the factory in the knowledge that face to face contact could often resolve a problem that correspondence has failed to do. He returned triumphant from his visit. The Company would start me on January 2, 1952. provided that my course at Technical College was done at evening courses after work. They would endeavour to find lodgings for me and I would be paid thirty-five shillings (E1.75) a week. It was clear that my earnings would not meet the outgoings on board and lodging, and sundry expenses. However, it came to our notice that there existed a "special aptitudes" grant operated by the government to assist school leavers to balance their budgets in the first years of their employment. I managed to impress the local



administrator enough to be allocated a weekly £3 lodging allowance, which I would collect at the Coventry Labour Exchange. This was a godsend, as it would leave my meagre pay unsullied.

I was to lodge with Mr and Mrs Oscar Camefi in Woodclose Avenue, Coundon, Coventry. I would take my bicycle, as it was only 10 minutes ride to the factory. Oscar Camell was the Company Commissionaire. I arrived at Coventry on a dismal day, the railway station was still showing signs of wartime dilapidation but I remember being impressed by a bright yellow Coventry Climax engine in a glass showcase on the station forecourt. Oscar was there to meet me and between us we managed to get my bicycle onto the bus and made off to my new "home" for the next 12 months. Nearly all the non-resident apprentices in Coventry's engineering trades, and there were hundreds of us, were housed in lodgings, mostly the families of factory employees. The system had burgeoned during the war when thousands of workers were drafted into the city to feed the insatiable requirements of the war effort.

(Part 2 next issue)

Hitting the Road ... Daimler Events Diary



auckland branch proposed calendar

April 6th 2008

Pukemiro Bush Railway Trip Ring Neil 6205000

May 2nd, 3rd, 4th 2008

National AGM and Rally on the first weekend in May in 2008

The venue is Counties Inn in Pukekohe. It has 18 rooms but there are 2 Motels within 100 vds with plenty of rooms. The Counties has a conference room, restaurant and bar and a large open space at the rear for the photo. For more information see vour magazine.

May 2008

An English Car Parade down Tamaki Drive to Vellenoweth Green in St Heliers were the cars will be displayed. This will raise the profile of the English car Movement as it is estimated that over 5,000 people will view the spectacle. Ring Bryan 6305172.

June

Mid winter lunch

July 27th

10 Pin Bowling

August 24th

Go Karts

September

Film evening at Westwind or possible DVD evening.

October

Run to Westbrook vineyards for lunch with run

November

Garden visit to Parnassus Farm & Gardens, Huntly

December

Christmas lunch with a run

Walkato/Bay of Plenty

Sunday 30th March

All Car Clubs Car Show and Swap Meet

This is held at the Ta Awamutu Racecourse, Racecourse Road Te Awamutu. There is a good attendance of car clubs with a wide range of vehicles to view.

The Swap meet commences at 7.30 am and our car display needs to be set up by 9.30 am. Let's have a good attendance of cars and members. Bring a picnic lunch, sun hat, chairs etc and enjoy the picnic atmosphere.

May 2nd-4th

National Rally hosted by Auckland Branch.

June/July

Mid-Winter Celebration

10 pin bowing and dinner Saturday night followed by luncheon on Sunday.

Dates and Venues to be advised in next magazine.

Any enquiries please phone Maureen on 07 8552434.

Hawke's bay

Weekend 2-4 May

National Rally hosted by Auckland Branch

Sunday 6 April

Branch AGM 12.00 Lunch at River Valley Café, 627 State Highway 5, Eskdale. After lunch the meeting is to be held at Kirkland's property 234 Hedgeley Road, Eskdale.

Sunday 20 April

Timed run with British Car Club - venue to be advised

Sunday 18 May

Jaguar Hosted Event — Details to be advised

Friday 20 June

Fish and Chip & Film Evening

Saturday 12 July

DLOC Mid-Winter Dinner.

Keep this date free as this is always a popular event

Manawatu

March 30th Manawatu Branch AGM

11am at Pauline Goodliffe's followed by BYO luncheon.

Sunday April 13th

Songbird Gardens Pohangina Valley.

Meet at the Ashhurst Village Church parking area at 1pm. Entry plus Devonshire tea \$9 each.

May 2nd-4th 2008

National Rally hosted by Auckland.

Sunday May 18th

Tui Brewery Tour of the factory and museum.

\$12.50 per person includes 3 handles of local beer (Tui for those who are a little slow). Meet gorge car park at 10 am. Tour starts at 11 am.

June Mid Year Dinner

Meet at the Tokomaru R.S.A at 11 am. \$20 a head with the date to be confirmed.

Sunday 6th July

Monthly meeting 10.30 am at Pauline's.

Sunday 27th July

Southwards Car Museum.

\$10 per person. Meet at Ohau Weigh Station at 10 am.

Venue for lunch to be decided later.

We have also been invited to join Wellington Club for their annual "Dawnbreaker" on April 20th. This popular event is for the EARLY BIRDS! Reporting time is 6.15am at the New World underground car park, Lyttelton Ave, Porirua, event followed by a hearty breakfast. You must book to reserve your breakfast seat, phone Dave or Sandra Bray on 04 2339927.

Also we have been invited to return to Wellingtons Gymkhana on the 25^{th} May. Those who attended last year will recall having a ball on the grass. Phone for further details.

Member's Market



WANTED

DAIMLER DS.420 Hearse.

A request has been received from overseas for assistance in locating any of the above which may be currently located in New Zealand.

Mechanical condition of the vehicle is not important but the body structure must be reasonable and restorable.

If you know of such a vehicle could you please contact:-

Peter Mackie, PO Box 8446, Havelock North 4157

or email peter.mackie@slingshot.co.nz

DLOCNZ magazines December 1995 to June/July 2003 free of charge for collection. Also wanted in exchange, August /September 2003 to August/September 2004 issues.

Contact Roy Tilley, rmt@xtra.co.nz or phone 04 5660850

Right hand front shock absorber for Consort. Contact Mike King mwking45nz@hotmail.com or phone 06 3571237.

FOR SALE

1960 Daimler SP250 immaculate in red with beige leather interior. Chrome wire wheels, soft and hard tops, tonneau cover. Featured in NZ Classic Car July 2006. VCC registered. History available. Full and faithful restoration in the 1990's. Stunning Sports Classic, great performance, very reliable, low miles.

Enquiries to Robin Thomas, 03 4778312 (evenings) or 0274 320776.

robin.thomas@xtra.co.nz

(Plus Photo)

Jaguar Parts

Overhauled 3.8 Distributor 9-1c.r. \$75 Rev counter + water output elbow excellent condition \$20 Cam timing gauge , NEW, \$20 Full set of valve shims.

Front cross member + closing point. NEW \$120.

Grill saddle panel. NEW. \$30

Radiator, disassembled, low mileage, \$75

Chromed air filter container, servo filter, fuse box, \$20

Pair of boot springs, \$15

Clutch slave cylinder resleeved with piston and new seals. \$40

Brake master innards. \$10

Hubs, discs, wheels and hubcaps. \$40.

Calipers \$10

Steering idler assembly reconditioned (sleeved) \$40

Front windscreen (used) \$25

Clutch alignment tools, gearbox needle roller alignment tools(shafts) \$20

Steering box (disassembled) \$30

Rear spring, \$10

Spring compressor \$15.

LOT PRICE, \$585 or near offer.

TOOLS

2x ring compressors. \$20.

Torque wrench ½" drive 10-54nm, 6-40lbft, 80-560gcm, \$110

Torque spanner ½" drive 20–110lbft (dual scaled imperial and metric) \$130 4" 3 jaw gear puller. \$10

LOT PRICE \$260 or near offer.

Contact Nick Carter 06 3571713 or view at 161 Monrad Street, Palmerston North.

The Classic Car Clinic

Units 1 & 2, 673 Gt North Road, Grey Lynn

(up driveway from Gt North Road on the right)

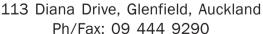
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