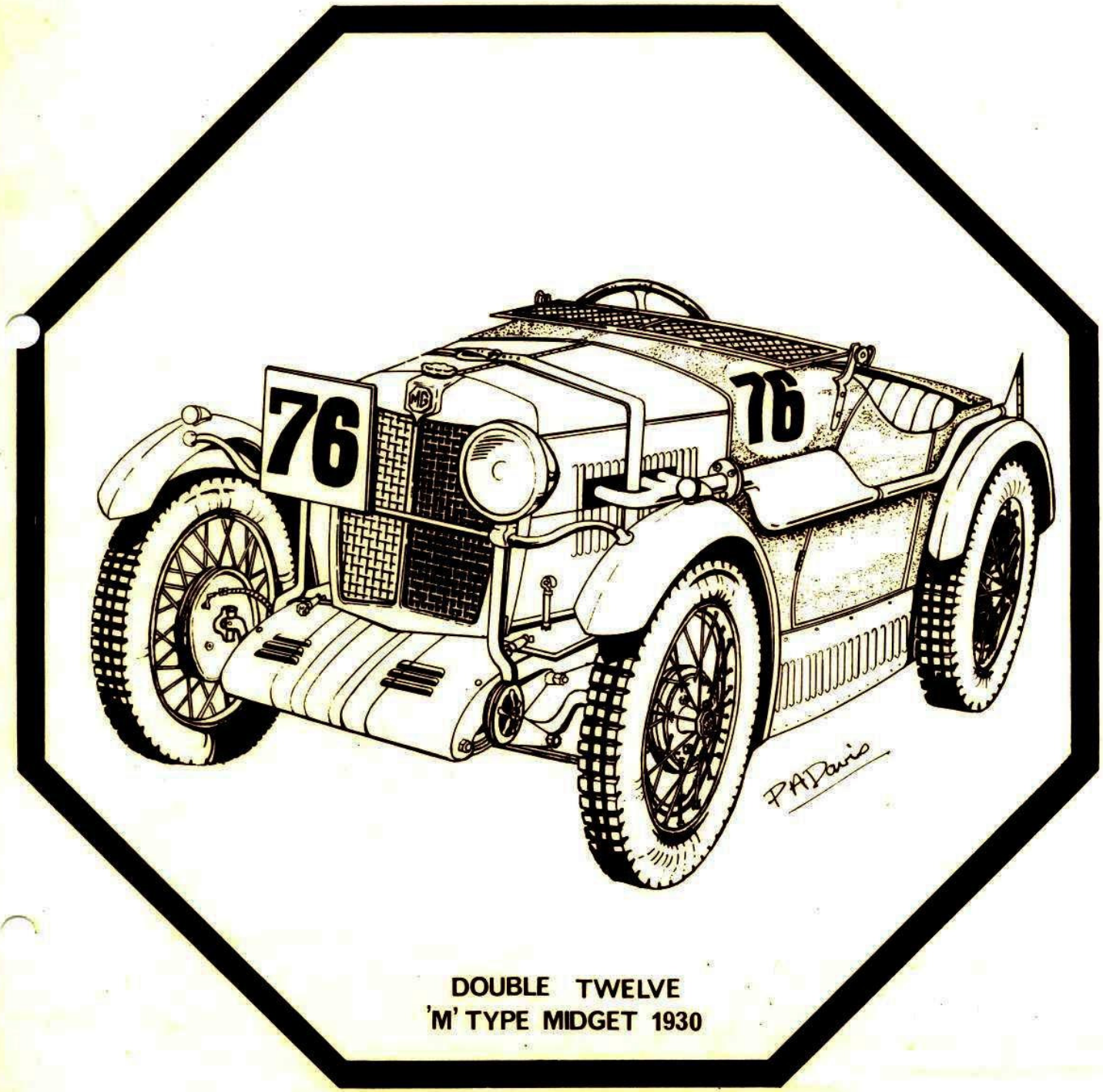
EXTRACTS FROM TRIPLE M REGISTER INFOLETTER 1-13



DOUBLE TWELVE
'M' TYPE MIDGET 1930

EXTRACTS FROM TRIPLE M REGISTER INFOLETTERS - Numbers 1 - 13 inclusive

Motor wheel services, 71 Bechlow Road, Shepherd Bush, London W.12, will rebuild your hub with a 4 or 4½J x 16" rim. Hub cap reshaping and rechroming service.

Flange gaskets (manifold to downpipe) are available under Hall's part number 40F15.
Shock absorber bushes for N types; BMC part No 21A1882.
Rubbers for headlamp bracket (where they pass through the rad) are more or less the same as a grommet BMC part No 4G6957.
Grommets for the steering column where they pass through the firewall can be made from the old type MGB gear lever grommet. Part No AHH 7170 and AHH 6486. Both parts are necessary.
People who do not like the metal spray finish for exhaust manifolds should try Zobo grate polish. - M.F.L.A.

On some of the later MMM models the front axle was tilted back slightly with thin wedges between the axle and the springs to give the correct castor angle. Should therefore, you find your steering either vague or heavy in spite of having overhauled everything, it would be well to make sure that the wedges are fitted the right way round. It is thought that the re-fitting of these wedges should they have been discarded is particularly valuable if the car is fitted with smaller modern wheels with larger section tyres.
There are many different opinions regarding the adjustment of cable brakes. One way is to jack all four wheels off the ground, and then lightly apply the handbrake so that the tightest wheel just turns when you pull on the spokes. Next, adjust the other wheels to the same resistance. Don't forget to lock the adjusting nuts or the setting will soon be lost. There are two nuts per cable, one at the brake end, and one at the cross-shaft end, making 8 in all. The nuts on the rear brakes are difficult to reach, but M.F.L.A. recommends a spade-end spanner, otherwise the adjustment can be done at the cross shaft end. The advantage of adjusting with the brakes nearly on is that any play in the system e.g. worn cam bushes, is taken up. This I believe to be better than adjusting until the brakes are just rubbing with the handbrake off, and then slackening a turn. As the linings wear, the single master adjuster on the cross shaft can be tightened. On the N types this can be done whilst in motion. (Safety Fast? - ED).
A tip for refurbishing sidescreens and rear windows when they have become scratched and opaque, polish them with solvol autosol, or T cut, much cheaper than new celluloid.
The Complete Automobilist, 33 35 Main Street, Baston(?) nr Peterborough, Northants, are producing tandem windscreen wipers (state centres of pivots) and stock a good selection of parts for old cars.

Hillthorne Engineering Co, 188 Uxbridge Road. Hanwell, W 7 have been recommended to us for engine work and building up of crankshafts. Ask for R g Dormer (This firm did the work on Mel Jones J4 replica).

Ferrous Protection Ltd. Atlas Works, Coronation Road, N.W. 10 do alluminium spraying for exhaust manifolds and down pipes, also sand-blasting.

Chacksfields Engineering Ltd., 290 Northolt Rd. S. Harrow, Middx do engine reconditioning.

Harrow Auto Ignition Ltd., Lowlands Road, Harrow, Middx stock a wide range of Lucas parts, and recondition dynamos, starters and distributors.

W.J. Willies Ltd, Coachtrimmers, The Runway, S. Ruislip, Middx make a good job of leather and PVC upholstery.

Turner & Knight, Southfields Paddocks, Popes Lane, Ealing W5 do 16" wheels

John Bell, 36 Rivermead, Stalham, Norfolk is prepared to help local members with X ray crack detection, and dye pentrant work. Cost being nominal, e.g. 10/- for crank X ray. For non-locals he recommends Palmer X Ray, Penfold St. Paddington.

Peter Bloomfield says that for those members NOT addicted to originality, the back plates from a series 1 Morris 8 will fit J2s to convert the brakes to hydraulic operation. The front back plates of the Morris are needed for both ends of the J2, so you have to find two Morris 8s. The J2 drums can then be fitted straight on. (end of sacreligious information).

Neil Farnfield tells us that Dunlop rim and wheel division have made him wheel centres for 30/- each (Dec. 1969 Info). He commends Lang & Potter, Market St. Plymouth Devon, for hoods and sidescreens etc. Netheralls of Plymouth have wire mesh stone-guards. For re-chroming;. Plym Plating, Oveston, nr. Plymouth. For windscreeen and wing repairs, rubber mouldings, Edmund Metal Works, Sutton Rd., Plymouth are expensive but good, being specialist vintage coachwork builders. Neil also mentions that to obtain filter elements for P, L, K & N always find a Tecalemit stockist.

Elwin Sapcote warns M type owners about fitting rear main bearing sleeves without first checking to see that the oil hole in the sleeve lines up with the oilway in the crankcase. He has found that there is a difference of $\frac{1}{4}$" between early and later sleeves, in the position of the retaining screw hole in the outside of the the sleeve which can then misalign the two holes, resulting in lack of lubrication to the big-ends. If you don't know what that causes, then Elwin can show you!

To convert your headlights to modern requirements - the easiest way is to fit a double filament bulb holder - Lucas No 571576.

Stuart Reavill tells us that C.O.H. Baines Ltd., 9 Park Road, Tunbridge Wells, Kent, are most helpful in supplying rubber mouldings and extensions, generally costs seem to be 1/6d per foot (Feb 1970 Info).

For chrome plating in the Southampton area, Baddesley Ennel Ltd., North Baddesley, Southampton, are reasonably priced and produce an excellent job.

Also Totton Motors Ltd., 98 Eling Lane, Totton, Southampton, have ground rockers, vertical drive shaft, and reprofiled a camshaft.

Neil Farnfield brings up an interesting point resulting from looking at the front aspect of cars at Cheddar, and this is that MMM have positive camber on the front wheels, and if this is not correct, steering can be adversely affected. There are places such as Carlton Forge, West London Repair Co. and others that will check your axle for camber, and king pin inclination and also for distortion in the stub axle, and they will put these items right as well.

David Potter tells us that Jack Lummis, Viaduct Road, Chelmsford Essex, has completely re-upholstered his J2, including seats, panels, carpets, new hood, side screens and tonneau all for £35! (Feb 1970 Info) So there is now no excuse for not having these things done!

John Purdom, 16 Anson Grove, Porchester Hampshire, has replaced the trunnion cross tube on his NA, and if anyone else is contemplating this somewhat tricky job, John will be glad to give any advice.

For shot blasting, stove enamelling, plating, Metalion Ltd. are recommended at North Acton Road London NW 10. 01-965-4677 (Mr. Hearne). Kigass Ltd., Kigass House, Chappel Street, Leamington Spa, are helpful with queries etc, on their installations. Also most bearings are obtainable from Henderson's Bearings, Colville Road Acton W3.

For shot blasting and 2 coats of stove enamelling a wheel, Fran Ernst (of the hinge KN) suggests H. Renzland Ltd., London Road, Copford, Colchester Essex. He has made up solid copper gaskets from 16 swg copper, using a No 17 Enox hole cutter and if there is enough interest he will be prepared to make up gaskets (High Birch Poultry Farm Ltd, Weeley Heath, Clacton, Essex)

Ian Collins, 22 Freemantle Road, High Wycombe, Bucks says that Formula E - made by Plus Gas - is very good for metal priming and rust killing, and, for thorough chemical cleaning and paint removal Skalene 2602 is very useful, obtainable from W. Canning & Co Ltd., P.O. Box 288, Great Hampton Street, Birmingham 18.

The 9" wide rubber section between the rear of the front wings and the running boards can be replaced with the roof sealing strip from a Minor 1000 Traveller. The part number may be 1/a 7057 but don't trust it too much. (exciting isn't it?) NA $\frac{1}{2}$ shafts are Regent part no A 745 and are the same as TC types. The locknut on the rear hub bearing is virtually the same as the one on a $2\frac{1}{4}$ litre landrover front hub locking washer (I feel I ought to try that sentence again, but I expect you can work it out from there). The part number for the cream and brown MG badge is BMC AJJ 11B. For the tandem wiper fitting with the threaded cross bar in black as fitted to Ford Populars, try Trico A80E. For later cars with spider and needle roller propshaft universal joints, replacement spider and rollers are under Quintin Hazell number QL 11502. J2 clutch thrust bearings are Ransome and Marles LNtj $1\frac{1}{2}$". J2 spigot bearing - Hoffman LS7V2. A black horn push and dipswitch is obtainable from Lucas - 31262 model HD77. And a black ammeter for the octagonal cluster 36047. N type camshaft bearings are/were Glacier C5005WH; and J2- C3012. For those wishing to replace the cork oil throwers in the rear axle with brass ones as per T types, the dimensions are O.D. 1.232" I.D. 1.007" length 1.070" oil groove 11/16" pitch. Oversized cork ones from BMC range can be made to fit.

Bluemels steering wheels can be reconditioned by Blumels Bros. Ltd., Welston, Coventry. They will also supply 4 spoke Brooklands steering wheels with MG centre motif and black rim.

Luvax shockers and Hartfords can be reconditioned by Replacement services, 106 Lockwood Road, Huddersfield.

The $\frac{1}{8}$" O.D. half hard brass piping for chassis lubrication system is obtainable from J. Smith & Son Ltd., 42- 54 St. John's Square, Clarkenwell, E.C.1.

Bob Hughes recommends Thos Hamlin & Co Ltd., 64 Monmouth Street, Bridgewater Somerset for engineering work, e.g. white metalling, steering box bushes. This firm are quick and helpful having done MG work pre-war.

Chairman recommends Saunders & Ralph, Lower Ashley Road, Bristol 6 for similar sort of things, including machining obscure objects for making home made blower pulleys, and other agricultural obscurities.

MMM Librarian Irv Bramson has manuals for D, F1 J1 and J2, KD, KN, K3 supplement, L, M, NA and PA PB. Also photos of most cars. Books available: MG Workshop Manual. Tuning and Maintenance of Midgets
M.G. Companion (Ullyett) Flat Out (Eyston) The Sports Car Pocket Book. The Vintage Motor Car (Clutton & Stanford) Restoration of Vintage and Thoroughbred Cars (Wheatley & Morgan) and last but absolutely not least, your actual MMM Bulletins 1962-68. All items charged at 5/- per month with 50/- deposit. Further details from Irv 'imself (April 1970 Info)

We gather that standard A30 pistons are equal to 57mm + .030" gudgeon pins as P type but not fully floating. Comp height 11 thou. on high side, compensated by being concave topped. Worth investigating as these are cheap and prolific.

David Taylor tells us that the 3 litre Austin engine rocker gasket will do for K.L and N types.

Belts suitable for side-mounted Marshall blowers are Ferodo V 575.

An idea for replacement of valve guides if MMM ones are no longer obtainable is to use Cooper S bronze valve guides, which will fit after the outside diameter has been reduced. They are a bit shorter.

Now to all those people who have a later C.V.C. Regulator to their cars, these will apparently not stand up to the high amperage that MMM dynamos put out - 6 amps. The C.V.C. Regulator is only designed for 3 amps, and the excess amps will eventually burn out the contacts as they have on Spares sec's Allingham.

When setting up the end float on the white metalled front bearinged engines, make sure that there is adequate clearance behind the dynamo bevel wheel and the front housing; the white metal thrust washer needing to be proud of the latter by more than the end float. If this is not obtained the bevel wheel will be bearing on the housing and although at one end of the end float will spin easily when at the other end it will feel tight.

Spares Sec. has heard indirectly that Smiths Instruments at Oxgate Lane, Cricklewood, London N3, are able to supply new 2" supplementary instruments with original faces of British Jaeger pattern.

Peter Cranage (11a New Coventry Road, Sheldon, Birmingham 26) has just had his N type converted to shell bearings; if others would like to try it contact D & C Pearsons, Wilson Works, Warwick Road, Knowle, Warwics. They will also do specialised machining including making pistons to customers specifications.

We hear that McIntosh Eng; 71 Steven street, Byker, Newcastle upon Tyne, will build up and reprofile J type cams for £10 less if over four; also rocker renovations at 10/-. This we feel is the best answer for J or F Type camshafts as they won't be suitable for modification like the P type camshafts now offered by the Spares Section. McIntosh Eng. say that they have road and race profiles for all MGs. (June 1970 Info).

Tony Miles tells us that the equivalent to the P/N type oil filter TEC FG 2347 is GUD 219 and reminds us of bearing numbers for the P type (and other similar bearinged cars). Front hub bearings: SKF6205 and SKF6304, rear hub bearings: R & M 3LDJ40, diff carrier (2): R & M LJT35 or SKF7207B pinion inner: Hoffman RB25 or R & M MRJ25, pinnion outer: Hoffman 325CD.

Colin Tieche (147 Wembley Hill Road, Wembley, Middx.) can get stronger clutch springs made up, 95lbs, a set of six costing 35/-. Also triple valve springs to K3 pattern can be made up for four cylinder, 50/- and 75/- for a six cylinder engine. (June 1970 Info)

Mike Hewson tells us that he obtained special extra strong Roper & Wreaks clutch springs from Herbet Terry Ltd., for £3 per set. If members are unable to obtain gaskets, composition, ones may be made by Grantham Man. Co., Grantham, Lincs asking for John Cottam.

Auto Tempo Meter Co. Ltd., 140/2 Kings Cross Road, London W.C.1. can overhaul rev counters and other instruments.

Devcon Ltd., Thcale, Berks, produce various materials for moulding (Devcon C) for building up ali or steel castings (Devcon F), for building up surfaces subject to wear (Devcon WR)

From David Taylor here is another way to convert your headlamps to double dip: To convert the original headlamp reflector to take sealed beam unit bulbholder, a pair of broken modern sealed beam units are required. Mark the top of the

Units, as once the broken glass is removed there is no marking for top. Also the connection cap is needed. Now the bulb holders are removed from these sealed beam units; these are pressed in and the inner rim can be levered up fairly easily. Next the MG reflectors have to be cut out to take the new sealed beam bulb holder; put the sealed beam reflector on top of the MG one, face down, the MG reflectors is then marked with a sharp point using the sealed beam unit as a template for the bulb holder hole, which is then cut out with a small pair of scissors. Now the new bulb holder will fit into the back of the MG reflector, and requires the rim to be knocked over, this is best done with a mandrel to fit in the back of the bulb holder to prevent the reflector being distorted.

This completed reflector can now be sent off for resilvering and on return the glass can be stuck to the reflector with black bostic using a rubber washer between. This can now be mounted in the headlamp rim using clips made out of 18 s.w.g. piano wire.

Ian Collins has had an axle straightened by Lorking Forge Ltd., as mentioned in the annual, at a cost of £5., but warns other members that they finish the job with a kind of underseal unless asked to leave it off. (August 1970 Info)

Mike Panow, 1 Normanshurst road. Borough Green Sevenoaks Kent recommends Stewart Eng., Bective Road, Putney S.W.15, as being very helpful.

David Taylor, our regular contributor (where are all the others?) elaborates a bit further on the point about using C.V.C. units with MMM cars. The J.K.L and P dynamos have field coils of virtually the same resistance as modern dynamo, and using the C.V.C., unit the third brush is removed and the field wire to it connected to earth. This is workable under most conditions, but tends to burn out the armature when over 8 amps are being continuously used. BUT an N type dynamo has field coils of less than one third of a modern dynamo and this is why spares sees C.V.C. unit gave up operating.

David has had a 4 brush set up, which he reckons is the best one can do with MMM cars. The armature for this has to have 42 coils of 9 turns per coil of .032" diameter wire LAP-wound. If only 8 turns are used (which is possible if not enough room for 9 turn) the cut-in would be about 1,200 to 1,400 rpm. As 4 brushes are needed a second positive brush at 180° to the existing positive brush is required and connected to it, and a second negative brush likewise positioned, the field coil lead from the third brush being earthed. The cover should be removed or drilled to allow enough air for cooling.

A recommended firm for fitting valve inserts is Paynes of Worcester Place, Oxford, and also recommended are Saunders & Ralph of Ashley Road, Bristol. Both of these firms are recommended for any machining jobs.

Wallace Birtwistle recommends the use of double acting Armstrongs for fitting to J/P types, these are DL/R 5626 units with links 7557. The lever arm requires some slight bending and part of the chassis flange needs to be slightly relieved. The parts are obtainable from Beason-Cooke, 31 Onslow Road, Southampton, and most likely at any Armstrong dealer. The actual work can be done by members with facilities or else St. Marg's & Pope Ltd., 22/28 Onslow Road, Southampton will be able to do the work.

Richard Burke sends us the following concerning M type camshaft lubrication: Members who are rebuilding these cars may find that when the rockers are adjusted and the engine started no oil may be coming from some of the rocker oil holes. The immediate assumpton is that the rocker or cam is worn and that the eccentric bush has been turned to a 'blind' spot. This is not always the case as the M type rockers are positioned by means of distance pieces and a nasty great spring which is quite capable if inducing wear in the eccentric bushes and/ or the distance pieces, so that the oil is cut off by axial movement of the

pivot. This is solved by removing the pivot, and cleaning it and the hole in the shoe. The pivot pin has helical scoring in it which when lightly oiled should prove reliable. Sometimes the brake return spring is fatigued, but these can be replaced, but please don't put extra return springs onto the brake lever arms on the back of the backplate, as these don't overcome the problem at source.

Chris also brings up a good idea about changing the brake shoes positions over in the drum. Also he suggests re-assembling the brake cams in the opposite brake drums. Now unfortunately, one cannot change these over as the cams are are different, the woodraft key being in a different position. This has to be fitted so that the key is on the opposite side of where the cable connects to the lever arm. Also the cranking of this lever should be towards the back plate so that the run of the cable is parrallel to the back plate. The angle between the cable and the brake lever should be less than 90 degrees when the brakes are off, so that the lever passes through the 90 degree position when being appoied.

Terry Dickie recommends Thomas Try Ltd., Cambridge Yard Hanwell London W 7 for their 'Trypasit' building up process; they also have facilities for grinding down after the chrome, nickel or copper has been deposited.

Mike Griffiths. 8 Springfield Road, Ash Vale, Aldershot, Hants, can supply a lot of new MMM parts, such as wiring looms at about £5, any windscreen made up due to Mike having a lot of Auster's stock also original Brooklands aero screens, but unfinished. Most of the wing nuts taper locking rings dome nuts are also available, as well as the original Auster windscreen plaques. Silentravel door locks are stocked, M.G. Badge, also radiator and spare wheel badges are sold. New rad caps and rubber rings are supplied together with aluminium running board strips with rubber made up to any length. The sidescreen wing nuts and mounting tube are supplied, also N type half shafts, hub locking washers windscreen foot mouldings, bonnet corner rubbers, petrol tank and bonnet rear rest rubbers and the rubber at the rad where the wing stays connect. A lot of these are extremely useful items which is why they have been quoted in full. (Jan Inf 1971).

A summary from the Chairman on cracked cylinder heads (replies from members having been 'mislaid' in the meantime):
'In the meantime, I think I can summarise by saying that the following are helpful towards NOT cracking your head:- Always run with the mixture tending on the rich side; when doing engine rebuilds always clear out the mess inside the sater jacket plates; always clean out the water holes in head and block to their maximum size, particularly the row of holes nearest the exhaust valves; a solid copper gasket is probably beneficial, as it conducts heat away more readily than a c/a gasket; try not to run your engine with either excessive advance or retardation of the ignition timing, as these cause extra heat in the combustion chambers; ensure that your exhaust valves are seating properly and run with a rocker clearance of 10 thou unblown or 14 thou blown, instead of the usual 8 and 10 usually recommended, for the exhaust valves.
If it still cracks ..... well you either weld it by the furnace method (NOT a cold electric weld) or you have inserts fitted, and try to look cheerful about it.'

A note from Spares Secretary: Has anyone ever replaced a head with the exhaust valve in the inlet hole and the inlet in the exhaust hole? Well, with some crass ingenuity I managed it! The engine kept spitting back through the carbs, and one of the dashpots was bouncing up and down like a dervish. The head then came off again as broken rings were suspected - and found, in another cylinder. Also if one cylinder is showing signs of being very wet this is another sympton - also produced, incidentally, by a plug not firing. Often a cause of misfiring or erratic running may be traced to the distributor, where the spindle may be sloppy in the body, also the pin holding the driving dog onto the spindle may be sloppy. So it is a good idea to check your distributor.
Another little gem, for the diagnostic's dictionary, is if the dynamo yoke can move up and down, often causing broken vertical drive couplings, it means the nut and locking washer have come off the bottom end of the dynamo, and are playing merry games with the gears below.

enable the P type clutch to be used. If the shaft is to be exchanged, this also involves removal and exchange of the layshaft herringbone gear that is in constant mesh with the gear integral with the splined clutch shaft, to preserve them as a matched pair. It appears that all the gearboxes will similarly interchange as units and that the majority of the internal parts (except J1 and early J2) will do likewise.

Don't be fobbed off with 90/140 Multigrade gear oil instead of 140. While there is no doubt that its lubricating properties are equivalent at elevated temperatures, this hardly helps when at normal temperature it oozes past the gearbox oil thrower onto the clutch and past the assorted half shaft and hub seals onto the brake linings. 90/140 is similarly not so good for chassis lubrication.

To prolong bearing and tooth life, fit an 'Eclipse' magnet to the gearbox drain plug to collect any metal particles. one of their standard range fits nicely into the recess and being drilled can be secured with a copper or aluminium rivet.

An alternative to the well known process of vertical drive restoration involving the use of Torrington roller bearings is simply to replace the original Hyatt rollers and sleeve with a bronze bush. It is necessary to grind the shaft, removing all traces of wear so that it is truly circular and parrallel, oil is provided by teeing off a supply from the pressure side of the restrictor pin and feeding into the offside oil pressure take off point.

B. Wimmer recommends Thorton Heath Shot Blasting Co, 9 Lancing Road, West Croydon. They charged 80p to shot blast and aluminium spray an exhaust manifold for a PA. (July 1971 Info)

Geoff Coles tells us that solid skirt pistons should be set up with 6 thu skirt clearance, and for a <u>real</u> job each piston should be measured individually, as there can be small discrepancies, and the appropriate bore taken out 6 thou greater than its piston size, (that is maximum piston size if they are oval ground). Also Geoff says that big-end clearance should be 3 thou.

Mike Ellis (59 Ullswater Crescent, Plas Newton, Chester) answers Richard Burkes query about track rod ends. The track rod should be fitted under the track arms but the sttring arm is fitted above the arm. A Triumph gear knop (part no 131246) tapped 5/16 BSF fits the M type gear lever and is the same size as the original. Mike recommends F.G. Stephenson, 105 Henry Street, Liverpool 1, who shot plasts rebuilds, primes and stove enamels wheels at £3.00 each. Mike has run through the December 1936 Autocar adverts to see what colours were appearing on the cars, this can therefore be read in conjunction with Mike Allison's article in the last but one Safety Fast (old style):

<u>P types</u>	Two tone Blue	(silver wheels)	<u>J Types</u>	Black
	" " Green			Green
	" " Red			Black and Red
	Black	(blue upholstery)		Blue
	Black	(red upholstery)		Black and Blue
	Blue			
	Red		<u>C types</u>	Green
<u>Magnas</u>	Black	(Silver wheels)	<u>Magnettes</u>	Red
	Black	(red wheels)		Black and Blue
	Blue			Two tone Blue
				Black and Silver (red upholstery)

For your F, J and M type body drawings contact Bob Hughes (Renfrew Cottage, Goosenford, Cheddon Fitzpaine, Taunton, Somerset)

Members are advised that Lipsombe and Hessey of Windsor who advertise that they can make gaskets, make these out of a hard asbestos without copper faces and this can only be used once.

rocker. It is best to remove the spring and make up a longer distance piece (or infill the exact amount with washers). This reduces friction on the rockers and is recommended for all MMM cars.

Also allied to the above point about lack of oil; sometimes on starting up no oil to the head is ob ained. One check is to make sure that your home-made gasket at the head restrictor pin hasn't been flattened out by tightening so that it restricts the oil way of the restrictor pin.

Another fault is on the head casting, the oil feed from the restrictor pin passing along a horizontal gallery to join an angled gallery leading to the camshaft, these meeting at right angles. Sometimes these drillings are not quite taken in far enough so that they don't meet over their full width and cause a blockage so it is wise to check these galleries at an early stage.

Another lazy mans' tip the Chairman can offer is to sufferers with leaky rear axle seals, if you have oil all over your rear wheels and brake linings, and don't understand the mysteries of rear wheel bearing oilseals and bits of cork cylinder, try putting $\frac{3}{4}$ pint of oil in the diff, instead of $1\frac{1}{2}$ pints. There's still enough for the crown wheel to slurp all over the essential cogs and things, but not enough to get thrown down the axle casing to mess up your oth otherwise incredible stopping power.

For all those who suffer with clutch slip on P and N types due to oil getting past the rear main bearing thrower, I suggest you try fitting Payen oil seal type C155 in the flywheel housing. You will need to take the housing sleeve, plus a block, front main, and a crankshaft to your local machine shop who should then be able to do the job painlessly

Sterling Vitrious Enamels (35 Lockfield Avenue, Brimsdown Estate, Enfield, Middx. Tel: Howard 2187, Mr. Clark) are recommended for vitreous enamelling of parts such as PA exhaust manifold.

Nick Mould had his brakes relined by Mintex as noted by the Year Book (1970?) and they were picked up later the same day, costing £6.10. 0. (Dec. 1970 Info)

When replacing front axles and springs it is often easier to take off the front axle, disconnecting the brake cables and knocking out the pin securing the steering drop arm to the drag link. This then allows the whole assembly to be taken out, once the front spring bolts are withdrawn.
If the trunnions are being replaced, check them first for clearance on the spring itself, before assembling, often, especially with new springs, an amount of filing is required to increase the trunnion slot, so that the spring runs freely through the trunnion.
Graphited oil eased between the leaves of the springs before assembly is a worthwhile u dertaking allowing the leaves to flex better.
When replacing old cables with new ones, it is necessary to undo the wheel end of the cable first, allowing enough slack to unwind the cable from off the cross shaft pulley; similarly attack the inboard end of the new cable first. Some modern cables differ from previous types in that they lack the slot in the adjuster stops on the backplates. These allowed the inner cable to be pulled out, when the adjuster nut had been undone from the stop, and the new one refitted without removing the stop. Nowadays these stops are solid, without the slot, so that the old stop has to be taken out (it being threaded through the backplate, and a locking nut fitted inside the backplate) To replace the new stop it is best to drill the hole out, instead of turning the whole new cable round and round, as you do up the stop which is attached to it.
Sometimes the brake shoes seem to be binding and this is due to an accumulation of troubles the inner cables may be causing binding due to lack of oiling, or else the brake cam is seizing in its bush due to lack of greasing, or another overlooked part is the brake shoe pivot. This may be seizing up due to the aluminium of the shoe oxidising, and preventing theshoe moving freely about its

Richard Burke, brings up a point about M type track rod fitting. 'Profile' shows them hung under the steering arms. Morris Minor literature shows them fitted over the track arms, whereas MGs seem to be underslung. It also appears that if the steering column is raked low the steering arm can touch the track rod. This comes into its own when in Huddersfield, where one can perform the feat of hooking the track rod over the steering arm nut, causing the steering to lock up solid. Has any M type man light to shed on this phenomenon?

Diana and Dave Dwyer tell us that gaiters for the front springs can be made up from BMC Part no IG 3667 which is the clutch lever to bell housing grommet as fitted to MGAs Magnette, Cambridge etc. The centre hole needs careful enlarging and removal of the external flanges.

Anchorlonie Ltd., Station Road New Southgate, London N 11 stock nearly all MMM bearings, as well as taper roller bearings that fit the front hubs. These are Ransome & Marles MJ20 and RAM LJ25 for the out and inner normal ball race or else NACHI 3809 and SKF 30205 for the outer and inner taper bearings. When fitting the spacer must be removed between the two bearings and the hub nut tightened to 5 lb-ft torque then slackened to the nearest hole for split pinning.

Wallace Birtwhistle suggests the modern 'hydraulic' type of oiling nipples for the centralised lubricating system allowing higher pressures to be used without the oil leaking out the side of the oiler. The size of these is 12mm x .75 pitch and the the part no NA 5806 obtainable from the Gun and Nipple Division of Tecalamit (engineering) Ltd, Plymouth, Devon, PL6 8LA or ordered through a Tecalamit dealer who can still do the filter elements.

Brian Gothard has been looking for a replacement for the spring washers and has found the WMO pre load waved washer is a good substitute. These are made by George Emmott Ltd., Oxenhope, Keighley, Yorks, ref no EPL 4, the dimensions are 10.5mm I.D. and 15.5 O.D. the free height being 1/16th compressing to 1/32" under a 4 lb load. They cost Brian 13/6 for 25 and he machined about .020" off the spacers so that the loading is similar to original.

Tony White recommends Bristol Wire Wheels, 1 Victor Road, Bedminster, Bristol BS3 3LW shotblasting and stove enamelling £2.50, also wheel rebuilding.

Recommended is Thurston Engineering, Station Road, Thurston Essex, for general engineering such as making up 12 HT head studs (£5.50) and building up rockers with stellite (£3.15) (July Info 1971)

David Taylor sends us some more information about dynamos. The top bearing is normally a LJ½" ball race. This often works loose in the dynamo top plate, the reason being that all bearings have a small end float and the dynamo bottom bearing which is clamped in place has more than the smaller top bearing, so moving the outer ring in its housing. This can be overcome by using a R & M LRJA½" bearing, which is a single lip roller race and is the same size as the ball race. It should be fitted with the lipped edge of the outer race at the top, so that the bearing can be assembled on the armature and the plate just pressed on.

John Seymour-Howell sends us a good selection of information. Wolseley gearbox s used on the MMM cars listed have the following ratios:

	1st	2nd	3rd	4th
J1/2/3. L1/2, PB	3.58 : 1	2.14 : 1	1.36 : 1	1 : 1
KN, NA, PA	4.18 : 1	2.32 : 1	1.36 : 1	1 : 1

If you covet high first and second ratios for your standard PA, a J box will fit the PA clutch housing and accept the PA clutch. It is also likely to be less worn than an L box which will also fit, except that either the L clutch must be retained, or the long splined clutch shaft must be exchanged for a P or J type to

Barry Foster (39 South Street, South Petherton, Somerset) is offering blower kits using a modern blower capable of 25 psi, with manifolds and fittings for a J2; manifolds and mounting plates in allow with MG motif; Price £25 - £30. P type rocker cover nuts at 10. Cutters are also being produced to make up M,C,D, and J and F carb manifolds, oil pump front and rear housing gaskets; and sump and rocker cover gaskets for the M, C, D and J and head gaskets for the J type. Send letters with your orders now so that demand can be gauged. F type clutch cover plates are also being produced. J type wingstays at £2.50 are offered.

David Taylor (13 St. Helen's Road Drigg, Lincs) tells us that Austin A.30 lock tabs can be used for big end bolts of 5/16" diameter, also A 30 valve stem s aling rings are suitable for al MMM valves and will prevent oil going down the valve guides. Double-S Exhaust Services (Archway Ways, Cockpit Hill, Collompton, Devon) made up over 11 feet of stainless steel piping for £13.50 including carriage. (Sept. 1970 Info).

John Adams says that good replacements for the round cork gaskets at the top of the external oil drain pipes are the rubber seals from the Triumph 5T pushrod towers. The Triumph 5T is for the uninitiated, a motorbike!

Colin Cooper tells us that Messrs Loyne Ltd., (Margaret Street, Ashton-under-Lyne, Lancs) have shotblasted and stove enamelled 5 wheels at a total cost of £4.00 and have capacity suitable for tackling large items such as a hassis. Contact David Williams 061-330-7124

Another shotblasting firm is Impact Finishes, Slough Trading Estate who do all chassis for £5.00, also wheels and other items using glass spheres to give a good finish. Geoff Smith tells us of Edgware Motor Accessorites (120 High Street, Edgware, Middx) have a wide selection of rubber sections, such as bonnet sections, windscreen rubber, wing piping, tank strap rubber ($8\frac{1}{2}$p per foot), running board to wing 'T' rubber. also $\frac{7}{8}$" and $\frac{5}{8}$" ru ning board treads with rubber inserts, a variety of sponge rubber sections, upholstery piping vynides and fittings.

A really first class handbook of firms doing work for old cars has been published by Pioneer Publications Ltd. (in co-operation with the V.S.C.C.) 3 Wyndham Place, London W.1. It is called 'The 1971/72 Veteran and Vintage Car Directory'. It only costs 50p and will save answering many of the questions this publication can solve. So I suggest everyone gets a copy.

Mike Smith (24 The Roman Way, Newcastle upon Tyne) can still supply the 1" square sorbo rubber for the top and sides of the P type bulkhead at £1.00 including p & p.

Morris rear axle cork oil return bushes are suitable for MMM models. Ref No 11148.

A useful tip, as used by the works, to strengthen your back axle and maybe prevent crown wheel and pinions stripping, is as follows:
Before replacing the diff. take off the back axle rear cover plate, take out the bolts holding this cover plate together with the bolts that hold the diff. unit obtain some high tensile bolts of the same size (or next size up of you prefer) of sufficient length to pass through the rear holes and emerge through the front holes with suffiecient thread to pick up the diff. carrier; also make up some tube distance pieces to fit between the two flanges of the axle casing inside The rear cover plate is replaced, the long bolts put in the holes passing through the tubular distance pieces to emerge at the front of the axle casing to take the diff. carrier which is then bolted up solid. No nuts can turn inside and the whole axle casing is boxed up solid.

For your winter engine overhaul Thompson Engineering Co, (Beulah Hill, London SE 19) will overhaul your engine including white metalling thd line boring, as well as building up crankshafts with their arc welding process on production of your club membership card, they will allow members 10% discount.