# TRIPLE M REGISTER INFOLETTER

INFOLETTER No 25 December 1973

MMM mutterings - Mike Hawke

Having just put the copy for the 1974 Year Book to the printers (via Peter Davis) I am fed up with typing so will spare you any mutterings except to wish all a Happy Christmas and a successful and competitive New Year.

Over to Phil Bayne-Powell:

John Adams is now firmly in charge of all the new parts which are being prepared by C.K. spares Co. whose policy is basically to continue along the same lines that we have established during the last six years of supplying parts for Register Members. Therefore C.K. Spares do not intend to duplicate items offered by other concerns, unless a higher quality or an effective lower price is felt to be desirable for the good of members. The stock list is being trimmed, some items listed this month will not appear again. We shall then be able to supply and concentrate on those items which are generally uneconomic for a full-time commercial undertaking, mainly due to the research, work drawings and a large slice of patience required. In this line are obviously crankshafts, camshafts, pistons, crown wheels and pinions and such like.

In the near future we are arranging F type camshafts, KE965 exhaust valves, wing bolts, new rockers, door hinges, and more bucket seats which have proved popular.

The F type camshafts have not yet been priced, but we hope that next time we shall be able to quote this and ask for your orders to be placed.

On the J crankshaft side we must again apologise to all those who are patiently waiting for the batch that was expected in October, this looks like being January now. We have put all the pressure we can on this but do not want to jeopardise further batches. However the good news is that two extra people (already booked in) are going to be lucky on the last batch of 12 cranks to be produced at £85, Also, a further 12 are being made after this last batch is complete. The metal has already been arranged - which is one of the problems nowadays - and so we ask all those interested to send their name and a minimum of £25 deposit for this further batch of J/M/D crankjs, To keep the price down I have decided that these will be dealt with direct by me so that we save about £10 of VAT. Even so, the price is going to be £98. So your cheques should be made payable to me rather than C.K. Spares.

C.K. Spares will operate on a realistic profit margin, but nevertheless, some prices will be increased and the list includes some of these new prices this time. We are selling only to M.G.C.C. Members, so please quote your M.G.C.C. membership card No, or MMM Register No. when ordering parts, as many outsiders are trying to benefit from a service that has always been intended for MMM Members. In addition, John, Nigel and I are putting in our own time and effort arranging these parts for you. To cater for all and sundry is not our intention, when it is taking time that we could be using to look after members requirements.

Some words on postal charges. Generally all prices are 'post included', unless specifically stated. The exceptions are overseas goods and large items such as cranks and bucket seats. Cranks are delivered by special arrangement, collected or sent B.R. at £1.90 is the cost of a J2 camshaft to Germany!

Incidentally, an s.a.e. is a welcome courtesy with your enquiries. Without this a prompt reply cannot be guaranteed and it does help us.

Bluemels have sent us some more black Brooklands steering wheels which work out at £9.30 + 93p VAT. So, while you are going over the rest of your car this winter, smarten up the cockpit with one of these. One point I might mention on these is that one or two people have found that the hole in the boss needs grinding out a bit to let the wheel sit on the shaft in the correct place for the clamping bolt to pass through.

On 6 cylinder crankshafts, we have been unable to get our J crankshaft man to do these because machining such a length from a billet causes distortions. The six P type cranks that have been produced have showed this tendency. We may be approaching Laystalls.

Water pumps are a source item as well as desirable and Barry Foster is embarking on P/N pumps to the original pattern. ND L and K type pumps are different to the P and N type ones because the shaft housing is longer and offset. Barry reckons the final cost may be about £25. Contact him direct if you are interested. He is also making up an F type exhaust system and may be prepared to make others if asked nicely. His address is 25 South St. South Petherton, Somerset TA13 5AE.

On the subject of water pumps, many P type suffer from overheating in this country and fitting is often believed to be the answer. However, in doing this one is only treating the symptoms and not the cause. It is essential to thoroughly clean out your block, cylinder head, and radiator, removing the water jacket plates to get rid of all the encrustations. I have even run a drill in the head/block waterways to get them back to their original diameter. To prevent these reforming one is urged to use rainwater in the radiator whenever possible. If a water pump is fitted to a P type in good order it will be necessary to blank off part of the radiator even if the car is blown, raced and trialled. John Adam's own P type is a case in point. The advantage of a water pump is that it lessens the chance of the head cracking if the carbs. are running too weak.

We must apologise and rectify a mix-up over the J and M camshafts. They became mixed, so please would you check your J and M camshafts. If you look at the cam from the front (of the engine) the first four lobes of the M type cam are all at about $90^{\circ}$ to each other. Reading from the front the lobes will point South - West - South - East, whilst the J cam will have lobes pointing South - West - East and South. Please return all cams which are not what you wanted to John Adams who will promptly send you the right type.

Another tip that is well worth keeping an eye on is for when bolting on M or J water jacket plates. Make sure that the studs are only long enough to go through the block wall. If they are any longer, there are four positions where they will come into contact with the casting round the head studs and consequently will, on tightening, put the block wall under pressure and cause it to crack.

The Silverstone Sprint was very good this year, although it was entirely patronised by the MMM Committee N type club ! The honours finally went to Allison who clocked 2 min 52.8 sec for the standing and flying laps, just a squeak in front of Peter Cranage in the M at 2 min 53.2 sec, only $\frac{1}{2}$ sec separating them. David Cranage came 3rd at 2 min 55.6 sec. and then the road-going cars. The ND actually finished a meeting on full song and I just beat Colin Butchers by about 8 secs. Len Bull unfortunately didn't make it. Colin and I drove up on a very fresh morning and enjoyed the clear open roads that are available at that time of day. It must have been cold because, after stopping for mother nature, I found the throttle stiff and not closing properly. It turned out to be nearly iced up!

I have been turning out a few odds and ends now that the PA Airline Coupe has gone and the Abbey bodied drophead coupe has been eased off my conscience by Anthony Littlejohn. The parts I have to offer are:

1 pr N type rear wings
1 P type bonnet
1 F or L windscreen and mountings (less bottom rail)
1 N type bulkhead with most fittings
1 P type " " " "
P type radiator core
P type half-shafts and hubs
Several 4.50 x 19 tyres
NB running boards - poor
1 pr curved headlamp brackets
1 pr straight " "
1 M type steering drop arm
1 pr N type front trunnion carriers
1 steering column bracket
1 spare wheel aluminium mounting boss
1 pr front cable locating blocks (bolt into the chassis channel)
1 pr L type side valences to bonnet
1 N type windscreen
2 P type windscreens, one with wipers etc.
1 pr P type running boards
2 L type inlet manifolds
Several 2nd-hand Brooklands steering wheels
1 pr N type windscreen brackets
P/N type oil filter bowls
N type inlet manifold
Aluminium P/N/Q flywheel housing
2 crankshaft breathers
1 pr radiator brackets
p pr radiator brackets
2 P type radiator to cylinder head brackets
3 steering arms (bolt to back plates)
3 door catches
1 P type bulkhead throttle assembly

If you want some cylinder head gaskets try Keith Taylor, Newstead, Mill Lane, Hemingborough, Selby, Yorks.

For one-off parts or batch turning, milling or drilling you could go to Speedefficient Engineering Co., 5d High Street Addlestone, Surrey.

Whilst for engine rebuilds and restorations, forgings, castings and machining of one-offs Alan Wragg, Sherwood Restorations, Blidworth Lodge, Rigg Lane, Blidworth Notts.

Radiator and headlamp grilles can be supplied by S.J.A. Dale Son Ltd., Wagg St. Congleton, Cheshire, (ask for J.C. Dale).

For radiator and specialist sheet metal work as well as honeycombe to original pattern try Oatway Bros. Ltd., 7 Woodfield Rd., London W.9. (ask for Nick Oatway)

David Taylor, 13 St. Helens Rd., Brigg, Lincs, wants an aluminium bellhousing for ENV pre-selector gearbox (early K type) large oil sump for ENV Pre-selector as used on K3s, a Marshall 85 blower and associated parts suitable for a K3. David has for sale a P type windscreen frame and brackets, P type spare wheel carriers and a J2 chassis with log book and plate.

Nick Sands (address at the end) has a virtually new set of 5 dunlop 4.75/500 x 19 tyres that he would like to swop for a set of 4.00 x 19 His have done less than 1,000 miles. Alternatively he would sell. Also he needs a set of bonnet catches for a J2 and an outside mirror. Finally, he has for sale a brass plate from an F type rocker box. Now we have an APPEAL. Has anyone a sales leaflet for the C, Q or R types which he would be willing to lend to Nick so that he can reproduce it and add it to the list of items which he, as MMM Librarian has so ably produced? Please write to Nick.

Tony White needs an L1 body complete/incomplete especially the bit between the bulkhead and the petrol tank for his half naked Continental Coupe. Tony also needs a complete bolt on blower kit for his PA which he would give his brand new Centric 260 as a swop. (Note. I believe he may already have swapped this big Centric as this bit just missed the last Infoletter) Tony's address is Turle House, North St., Somerton Somerset.

On the subject of big end bearings using shells, Kevin Mersey and David Taylor have written letters which might get a few minds ticking over.

"It was suggested that a considerable amount of white metal is necessary to take the 'high stresses' and that shell be rings broke up under the strain. I don't see where high stresses come from. Our engines normally run on a c.r. of less than 8 : 1 and therefore the shock loading is usually less than on modern engines using shell bearings. The relative long stroke of our engines will increase bearing loadings, but against this is the fact that lighter alloy rods are used and that revs. do not normally exceed 6,000. The smaller journal length may have something to do with it, but is the difference significant? Also the journal width of 1.625" is on the small side compared to modern engines using shellbearings and of similar capacity.

Your view that the cooling problem is responsible seems much more likely. The rate of heat transfer away from the bearings depends upon two factors, heat conducted through the shell to the con-rod and heat transferred to the oil. About the first we can do nothing as the shell and con-rod do not make intimate contact as with white metal so the heat transference is poor. Against this is the fact that the con-rods are of alloy which has a good thermal conductivity. We can do something about the second, we can reduce the oil temperature or increase the oil flow. Reducing the oil temperature is simple, fit an oil cooler. Increasing the oil flow is not so easy, but it can be done by increasing the capacity and pressure of the pump and increasing the bearing clearances. The pressure can be kept at a maximum by a careful rebuild of the oil pump and to prevent oil starvation at high revs. could the inlet be machined out and a large oil intake pipe fitted? Could the oil flow be doubled by fitting a modified oil pump in water pump hole on P and N types? We would then have twin oil pumps. It might be worth trying, if someone has the necessary facilities. Increased bearing clearances permitting increased oil flow could be obtained at the crankshaft grinding stage (main and big ends) or perhaps Triumph make racing bearings with extra clearances for their Bonneville machines. These rods may significanly increase the life of shell bearings. Has anyone tried any of these?."

KEVIN MORSEY

"Shell bearings as mentioned in the Infoletter. Some time ago I wrote how I fitted VP 295 type shell be rings to my L type. These are white metal type shells and have run with an 8.5 : 1 c.r. for over four years. I often run at 6,000 rpm and occasionally up to 7,000 rpm. The crankshaft was metal sprayed to return it to standard size and the result has been constant oil pressure. However, to be honest, I did make up a larger capacity oil pump with the same gear face width per journal as the P type. The P type oil pump is identical in size to the K, L and N types, and both run at $\frac{1}{2}$ engine speed. The face width of the P type pump is $\frac{7}{8}$" for 7 journals. Thus I made gears with a $1\frac{1}{4}$" (10/8in) face width for the ten journals of the 6 cylinder engine. A simple $\frac{3}{8}$" packing, dowelled in place, was needed for the top of the pump. Thus, a P type should be able to convert to shell bearings with no trouble, but the 6 cylinder car, having less oil per journal, may suffer from a lack of cooling as M.B.H. mentions.

The theory of shell be rings is that the 'Thin wall' of white metal is far less able to be squeezed out than the greater thickness of white metal used on directly metalled bearings. As the crank is ground the position with the original bearings is made worse because the white metal thickness is increased. A shell bearing always has a constant thickness of white metal, the thickness of the steel backing just alters to suit. Thus, the same white metal in a shell bearing will take a much higher load than a directly metalled be ring. The only reason why a shell bearing should break up is if the clearance is wrong to start with. Lack of oil could cause excessive heat and wear.

Triumph con-rods are fitted with a better qurlity bearing metal shell than white metal. This is equivalent to the pre-war racing white metals (or even better)

Mini (British Leyland) shells can be fitted to Triumph rods by grinding a small groove in the shell ends. These are an intermediate type of bearing met being better than white metal but not as good as the metal used in the Triumph shells. Mini shells are available in many undersizes.

There are two sizes of Triumph con-rod, the 500 cc type and the 650cc type (both twins). They are exactly the same except that the first has a $1\frac{1}{2}$" dia. journal and the second a $1\frac{5}{8}$" dia. journal. However I am not sure whether the first were ever available with shells as the early ones run direct on the crank. As to the life of these rods, they were designed to run in motorcycles of larger cylinder capacity than MMM cars and they last indefinitely there, so, in all but blown MMM cars their life should also be indefinite.

The excessive end float of the Triumph rods on MMM cranks should not affect the bearing performance. I personally do not like it but how can one alter it? How does one make the spacers mentioned?".

DAVID TAYLOR

Flexo-Steels, 40 Hill St. Kingswood, Bristol BS15 4EB can supply a wide range of steel tension and compression springs.

C.K.SPARES DEPT. John Adams

Price list to M.G.C.C. Members only including VAT. Please quote M.G.C.C. Membership card no. Please make cheques payable to C.K.Spares Co. Ltd.

| | |
|---|---|
| J.M.D.C. water jacket plates | £2.03 |
| J.M.D.C. white metal camshaft bearings | 4.95 set |
| P.A. Decoke sets | 2.75 |
| P water outlet manifolds | 6.00 |
| Valve cotters | 15 pair |
| P.K.L.N. plain water jacket plates | 88 each |
| Rocker shaft belville washers | 55 set |
| M.D.J.F. big end nuts and bolts | 26 each |
| P.L.K.N. main bearing housing bolts (H.T. Steel) | 1.43 pair |
| P white metal camshaft bearings | 6.21 set |
| K.L.N. white metal camshaft bearings | 7.95 set |
| J.F. choke and slow running rods and knobs | 2.20 set |
| Octagonal dash panels, unchromed | 4.12 |
| Centre panels, unchromed | 4.12 |
| N front aprons | 9.07 |
| Rear axle cork oil retainers | 22 pair |
| Shock absorber transfers for types 506, 502, 108 | 33 pair |
| Large instrument bezels, unchromed | 1.10 |
| P type ten-tooth speedo drive pinions | 3.57 |
| Rear axle tab locking rings | 13 pair |
| F.J. brake pull-off springs | 20 each |
| Black Bluemels Brooklands steering wheels | 10.23 each |
| P.L.N. brake cam bushes | 20 each |
| M.J.F.D. brak cam bushes | 44 each |
| Marles Jeller steering box hemispheres | 1.00 set |
| Door rubbing plates | 3.00 set |

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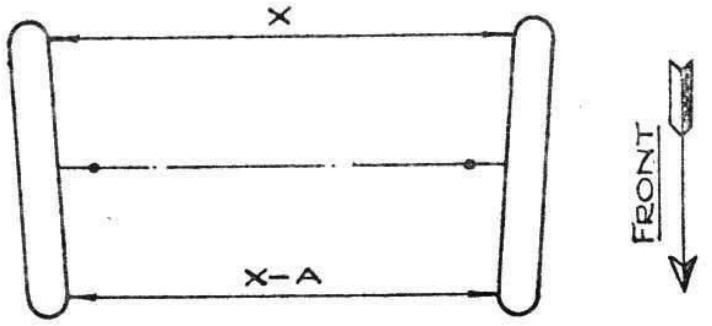
# Service Information Sheet No. 64

## FRONT WHEEL TOE-IN

The correct amount of front wheel toe-in is listed below for the various models.

It must be noted that if trammels are used for obtaining the adjustment, it is essential that the same spot on the wheel RIM at the same height from the ground is used for both the rear and front measurements. This is to prevent wheel buckle from affecting the readings obtained. If, however, a wheel alignment machine is used, wheel buckle does not affect the reading; incidentally, this type of machine calculates the correct amount of " toe-in " on all axles irrespective of the geometry of the front axle.




| *Model.* | *Toe-in "A"* |
|---|---|
| M., VA. ... ... ... ... ... ... ... ... ... ... ... | $\frac{1}{8}$ in. |
| D., F., J., L., PA., PB., NA., SA., TA., WA., TB. ... ... ... ... | $\frac{3}{16}$ in. |
| K1., K2., KN. ... ... ... ... ... ... ... ... ... ... ... | $\frac{1}{4}$ in. |
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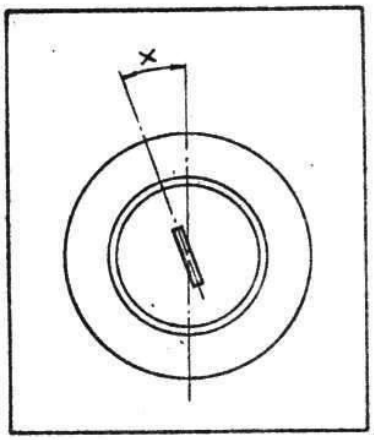
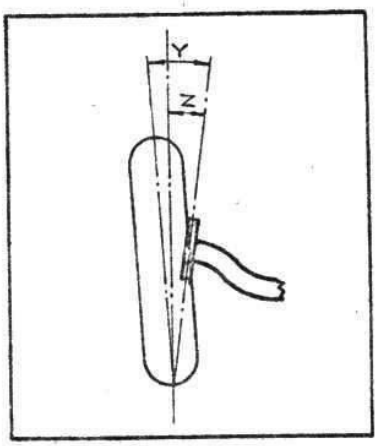
# *Service Information Sheet No. 61*

## STEERING ANGLES




B - BEAM.
P - PACKING.
S - SPRING.




The following information has been compiled to assist service stations when checking the steering gear on the various models. It is not intended for use in repairing damaged steering parts and attention is drawn to Service Information Sheet No. 10 on this subject.

| Model | Castor Angle "X" | Knuckle Angle "Y" | King Pin Angle "Z" |
|---|---|---|---|
| M ... ... ... | 3° (B Nil—P 3°—S Nil) | 9° | 6½° |
| D, J, F ... ... | 6° (B 3°—P Nil—S 3°) | 9° | 6½° |
| L ... ... ... | 7° (B 3°—P 1°—S 3°) | 9° | 6½° |
| K, KN, TA ... | 6° (B 3°—P Nil—S 3°) | 10½° | 7½° |
| P, PB ... ... | 8½° (B 3°—P 2½°—S 3°) | 9° | 6½° |
| N ... ... ... | 8° (B 3°—P 2°—S 3°) | 10½° | 7½° |
| SA ... ... | 4° (B Nil—P Nil—S 4°) | 10° | 8° |
| VA ... ... | 4½° (B Nil—P 1½°—S 3°) | 10° | 8° |
| WA ... ... | 6° (B Nil—P 2°—S 4°) | 10° | 8° |

These sprints are a very good start for competition motoring, for there are only 6 cars spread out round the track and it is very useful to be able to try different lines or approaches to corners without having to worry about the rest of the pack fighting for position as happens at Race Meetings. It was interesting to follow the TCs into Woodcote because they were a lot slower round the corners and I had to lift off or else sweep wide to go outside them. It shows what better suspension our cars are blessed with. That's enough of the joys of racing, let's see who wants what, who has what and who does what.

P.M. Wansborough, 103 Blenheim Gardens, Kingston on Thames, Surrey needs a PA dash panel and instruments, petrol tank, headlamp reflectors and glass, door latches, side lamp lenses, Alette horn, spare wheel carrier, front head oil drain pipe and seats.

Michael Linwood, 18 Victoria Road, North Chingford, E.4 has snapped his J2 steering drop arm and would be grateful if someone could provide him with another.

Nigel Woor, 80 Poplar Drive, Royston, Herts, Tel: Royston 41106 has for sale newly chromed P type windscreens £6 each, mixture and slow running chromed rods complete with octagonal knobs, foot starter, windscreen wiper motor. Also an F type EMV gearbox. Nigel is in need of the following for his P type rebuild: reverse stop, brake cable information plate, mileometer and trip, dash lamps, centre and overtaking mirrors, front oil drain housing for vertical drive, MG badge for spare wheel carrier.

Richard Knudson, 21 Franklin St. Oneonta, New York 13802 USA would like headlamps and rear wings for his J2.

D. Pither, 2 Hitcham Close, Milman Rd, Reading RG2 OHS requires a PA block, crank oil pump, distributor, camshaft, seats and exhaust system and manifold.

Andrew Booth, Woodlands, 14 Burford Ave. Salisbury, Wilts, now has Charles Shepatone's old K2 and is in the process of restoring this very rare car. He needs two brake drums to replace those whose liners have come away from the drums and a front axle as his is badly bent and would be weakened by straightening. Also his preselector gearbox housing is in very bad shape being welded and cracked all over. Can anyone help here?

Brian Fogg, 5 Shearbrook Lane, Goosfrey, Nr. Crewe, Cheshire, has for sale a pair of P type front wings. Urgently wanted is a complete PA octagonal dashboard instrument cluster or a brown faced ammeter, one brake cam greaser, one single-way chassis lubrication union (adjustable) to fit front spring trunnion, one Lucas LBD140 headlamp bowl and a dippable reflector unit.

Ed. Taylor, now back home at Flat 2, 47 Seaview Crescent, Mulgrave, Victoria, Australia, after his long stay over here, supposedly to do civil engineering, but I suspect he came to get parts to finish off his J3!! However, he forgot to collect a good vertical drive shaft and a Hurles Weller steering drop arm, so if anyone can help him out, please contact him

Roger Daniell, 26 Cranville Rd., Wigston Field, Leicester, is progressing well with his Q type and is looking for some 5.50 x 16 Dunlop Racing Tyres and an M type back axle casing.

Dave Bennett, 4 Pool Corner, Tockington, Bristol, had a set of +0.040 PB pistons that we had made recently, but due to a change of plan now offers these for sale. So form a nice queue for we cannot see these being offered again.

D. Goulden, 21 Euclia Av. Gappenhall, Warrington, Lancs wants a pair of P type swept wing stays.