

## TRIUMPH

### MAYFLOWER

p1 mayflower models

CLUB

p2 Insurance

p8 morris 1000 brake parts fit a Maythmer

og Lucas harn " "

pp 10/11/12 Timing, tappets, distributor, of pump, pistons

813 Vagour lock



# FLOWER POWER

#### THE TRIUMPH MAYFLOWER CLUB.

#### CLUB OFFICIALS 1983/4.

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When writing to a committee member and you require a reply, please enclose a stamped self-addressed envelope.

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Please note that all the above committee members fulfill their posts in their spare time and not as a full time occupation. So when contacting them other than by letter, please ensure that you choose a reasonable time of the day.

\*\*\*\*\*\*

#### Eds Piece.

My fourth mag, and the club is still going strong! Or so I thought until the National Rally last month, when only <u>four May-flowers</u> turned up - and all of those were committee members cars, so not one single club members car attended.

When the AGM comes along and my resignation as Rally Secretary is official, at least I won't feel as if I am letting the club down on the events side, as obviously most members are not at all interested in any events or gatherings of any sort.

You missed a very enjoyable day, and with lots of Razoredges and Roadsters there, fun was had by all - I hope!

On a lighter note, Janet & I (minus children) had a lovely week away in our Mayflower, which included retracing a 1950 Mayflower test route to Stilton, Crowland, and other Pilgrim Country' places! Then over the Pennines to stay at Carnforth, Lancashire, with keen members Sue & Ian Hodkinson and their new baby daughter Claire, for a few days. Then back to Lincolnshire via the Peak District, then finally returning home. A distance of 750 miles at 36mpg, with only one puncture and eight vapour locks.

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#### MODEL MAYFLOWERS.

Some of you may not know that there is a white metal kit of a Mayflower made by MIKANSUE 15, Bell Lane, Eton Wick, Windsor, Berks, SL4 6LQ, England. It is kit no.26 and I have put one together with superglue! Ed.

#### BOOK REVIEW

TRIUMPH CARS - the complete 75 year history. Authors: Dick Langworth & Graham Robson. Published by Motor Racing Publications Ltd.

Triumph Mayflower owners will probably turn instinctively to chapter nine of this excellent and well written book, to the section entitled "Mayflower - a second American invasion". But this would be unfair to the two co-authors whose work is the culmination of three years research.

The book contains a wealth of detail, not merely of the cars themselves, but also of the board-room decisions leading to new models and the personalities of the people involved.

Formed in 1886 to sell - believe it or not - sewing machines, the Triumph Company under its founder Siegfreid Bettmann did not produce a car until 1923, but from the 10/20 model of that year to the 1978 TR7 every model is covered.

In chapter nine, Mayflower owner Dick Langworth reveals the mixed reactions that the model met on its introduction in the U.S.A. One tester called it "a slab sided tobacco can, a geranium pot, a turnip" but after driving it changed his views to "a real treat on Switzerlands Matterhorn" and "a moghty little atom".

Book Review cont'd/ ....

The chapter contains eighteen illustrations including several of the rare drophead model and is as detailed in its coverage of the "watch-charm Rolls" as is the rest of the book.

The book is priced at £14.95, but Peter Burdge is hoping to get a discounted price for members.

#### Alan Fenton.

#### CAR INSURANCE.

Members may interested to know that Sun Alliance are offering a Collectors Car Insurance Scheme, through Insurance Brokers, Clarkson Puckle, details are as follows:

What Cars? Golden Age motor insurance is designed for all collectors' cars manufactured up to and including 1963, together with many 'classic' models built after this date which are now collectable due to the demand from enthusiasts.

The Protection. Full Comprehensive Cover arranged on an Agreed Value basis.

Details of Cover. 1, Social, Domestic and Pleasure use for up to 3,000 miles per annum. 2, Named Drivers aged 25 years or over with good driving records. 3, Automatic £50 Accidental Damage Excess. 4, Insured must own another car for everyday use.

The Cost. Golden Age premuims are very competetive, recognising the owners' special care and attention. There is no NCB to worry about. Here are some examples:

1935 Austin Ruby £2,000.
Proposer a ged 45, London Suburban Area £42

1960 Aston Martin DB4 £8,000. Proposer aged 30, Bristol Area. £65

1966 Triumph TR4A £3,000. Proposer aged 35, Nottingham Area. £56

For further details write to:

CLARKSON PUCKLE.WEST MIDLANDS LIMITED. P.O. Box 27, Falcon House, The Minories, Dudley DY2 8PF. Telephone 0384 211011

John Gogay is making good progress with the spares garage and he and I will be crossing the country to Bristol in the near future, in a Luton Transit to collect all the new and second hand spares for you all to start frantic Autumn/Winter overhauls. Ed.

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(Being naturally lazy, I have written the following article for both TROC & TMC mags, hence the over clarified contents!)

## 1984 JOINT NATIONAL RALLY BLENHEIM PALACE

As with all our National Rallies, the planning for this years started just after the last one, when we try to find somewhere that is both central to all and cheap.

Eventually, after some well known venues had wanted £300 plus, just to let us use their grass, Blenheim Palace were pleased to welcome us forfree, with a reduced admission charge per car into the grounds.

The formula was our well established one, followed by motorised games, human games, and finally prizes.

The day for me started in the usual rally way, with loading the estate car up with equipment, cones, ropes, banners, tables etc; and the Mayflower with people ( I had to toss a coin to decide whether to take the Renown or Mayflower) and setting off at about 7.0'Clock in the morning in the direction of Blenheim, about 80 miles distance.

Within an hour of arriving, thanks to all the committee members of both clubs (and Janet and her dad Pete) the rally area was set up and the steady stream of cars were arriving.

The final numbers of cars attending were 14 Razoredges, 4 Mayflowers and 13 visitors of which 5 were Roadsters.

The disappointingly low attandance from Mayflower members would have been non-existant had Peter Burdge, John Gogay, Ron Hagger and my own 'flowers not been there - all committee members!

It was particularly delightful to see the likes of Rustom Patel, Bob Fitsall, Bob Barlex (with fiancee?) and others from the Triumph Roadster Club at our little do, and the sight of Rustom eagerly tackling the driving tests was well worth watching.

After the morning concours judging by Stuart Langton and Colin Copcutt of TROC and Peter Burdge and guest TMC member Reg Montgomery from New Zealand for TMC, the motorised games and tests were tackled by 18 cars, my own Mayflower having no less than 4 complete goes at the hands of different drivers.

The childrens games of 'Pin the Bee on the Flower', Hub-Cap on head racing and three-legged fan belt race, seemed to go well and the adult games of Wheel Rolling, welly Throwing and Hub-cap on Head with Piston on stick race were the sudject of much amusement and I hope, enjoyment for all.

The sight of some of our committee members trotting around cones balancing a Hub-Cap on their head and holding a piston on a stick can only be captured in a photograph. All serious Classic Car event stuff this!!

After Mike and Edith Webber of TMC had gathered in & collated all the results, Tom Robinson did his final act on the P.A. while the prizes were presented by Phil Hall of TMC and Ed Lacey of TROC.

The speed at which all those present helped to clear things up at the end of the day, just before a large flock of sheep decended onto their rightful grazing area, was quite amazing!

#### GREATFUL THANKS ARE EXTENDED TO THE FOLLOWING:

Firstly, to Mr. Duffie, the Administrator of Blenheim Palace for allowing us the use of their grounds.

To Stuart Langton, Colin Copcutt, Peter Burdge and Reg Montgomery for the concours judging.

To every committee member (and their wives) of both clubs who were each assigned a job on the day, and who all carried out their tasks without hesitation, thus making my job much easier.

To Malcolm Warren of Club Triumph, who once again gave his time and the P.A. system for our use.

To Gordon French and Colin Copcutt of TROC for bringing the white posts and bases, (and taking them away).

To Ed and Daphne Lacey for the excellent TROC spares layout.

To Reg Varney and Stuart Langton who organised to main cups and sheilds.

To Janet for all her help in preparing for the Rally.

I hope those of you who came, enjoyed the day and that we will see you all next year which is planned to be a weekend event to celebrate the tenth year of TROC.



"Looks like someone got here first..."

15, Cheviot Close, Newbury, Berks.

Dear Malcolm,

Once again, help! Where do I get balljoints to fit a Mayflower? Reg tells me that there are none among the spares, and although I've written to John just in case, I expect he knows. It's the bit I've outlined in the enclosed photocopy I mean, designated by my garageman 'top swivel joints'. He says there is excess wear, and won't let me pass the M.O.T. What other make will fit? The included angle is nothing like right, but although unusual this surely does'nt make them unique?

It is infuriating that there is nothing at all wrong with the car, nothing whatever to make me stop using it - just that it is now illegal!

We are hoping to move soon, I'm blowed if I'm going to hire a trailer just to .....I wonder what the fine is if your'e caught....

Any bright ideas? I'd be very grateful.

Regards,

Cynthia.

By the way, I enclose an offering for the magazine which you may print if you find it amusing. If you think it's a bit long by all means do a précis.

CC.

Cynthia M E Lydiard Cannings 15 Cheviot Close Newbury, Berks RG14 6SQ

I had been out in Speedwell (my 1951 Mayflower) since a quarter past eight that morning, and it was now about four o'clock. I was working, and in that time had covered some fifty miles, village to village and door to door. I had three more calls to make, but they were scattered and there were another twenty miles or so ahead of me before I would reach home. Still, I had relaxed, feeling myself on the home straight, and looking forward to a cup of coffee, when there was a sudden power surge and the car reacted all about me.

It lasted a split second only, and left me almost wondering if I had imagined it. Then it happened again, this time followed immediately by the exact opposite, a complete loss of power. This took the car behind as much by surprise as it took me, and for a moment there was a further complication threatened; but his brakes answered, and the problem was passed back to the car behind him, and so down the line. The lane, after all, was narrow, and steep, and in their impatience at climbing it at twenty, with no chance of overtaking, everybody was driving far too close.

But my care now was for my troubles, not theirs. I leapt and juddered onwards and upwards and a glance at my ammeter showed it up and down like a yoyo, off the dial at both ends. Obviously I must stop and investigate, but, stop here and no-one would get past. A sharp bend at last revealed a spot at least two and a half cars wide, and thankfully I pulled over.

As soon as my tail had roared past I was able to get out and open the bonnet. Nothing obviously wrong, but then electrical faults are never obvious. It's usually a connection somewhere, hidden deep in the heart of a bit you have to turn the whole car upside down to get at....

I am even less of al electrician than I am a mechanic, but I have been known to make running repairs, so I pulled and prodded at leads and plugs and - that's it! It's that bit there! The coil.

Now, I am not even <u>quite</u> sure what a coil does, but it is electrical and it must be important or it would't be there. Given that premise it cannot be right that both the brackets holding it (yes, both!) should have sheared through, leaving it completely free to bounce up and down as Speedwell and I, singing, enjoy our daily excursions along our local bits of rolling English road.

Still, none of the wires had pulled loose, and it seemed to me that merely fixing the coil reasonably firmly back in place would enable me at least to limp the ten miles or so between me and home. A pity about these three calls, but the shortest distance at the slowest pace now seemed called for.

Only trouble was that I had nothing to fix it with. No string, no wire, and trousers and sandals even meant no stockings. Elastic waist too. No belt. And I was miles from anywhere.

It was at this mournful stage of my reflections that the empty countryside sprouted vocal chords, and made me jump.

"Got trouble luv?" it said.

I spun round. Being pre-occupied with the car I hadn't really registered where I was, or taken in the tall fence beyond the ditch beyond the bushes at the side of the road. But that was where the voice had come from. Even now....

But then he moved, and I spotted him. I was being watched by a figure in camouflage, complete with rifle and radio. I had broken down beside the perimeter fence of Greenham Common airfield!

I breathed again, and managed a not very sensible reply.

"Yes. You wouldn't have a piece of soft wire about your person, would you?".

He gestured to his charge. "How many miles would you like?"

Slinging his rifle, he beckoned me over. "I'm not allowed to leave the fence", he apologised, unwinding a reinforcing strand as he spoke, "But can you manage with this?". And he handed me part of the fence he was supposed to be giving his life and his honour to defend.

Even then my troubles were not over. I bounced back across the ditch with my prize, but discovered to my chagrin that tying loose coils on firmly again is a two-handed job. One-handed as I am, I was struggling.

I don't say that I couldn't have done it, at least well enough to make my way slowly home; but that wasn't good enough for my military ally. Before I knew it a Black Maria drew up beside me - he'd radioed the base for reinforcements.

Before my startled gaze out tumbled a very small police constable, a medium police constable, and a large police constable, accompanied by a middle-sized but oh so very much in charge Sargeant. I explained the problem, and under his direction the small constable played cat's cradle with the wire, while the large one gave him helpful advice, and the two medium sized gentlemen discussed the car with me.

I expect they enjoyed the break from routine as much as I enjoyed all the attention; and the Peace Women must have been lying quiet that day; at all events they were in no hurry to go.

They made a good job too. With no worries I was able to complete my last three calls, and if I hadn't happened to have a couple of spare brackets at home that piece of wire would probably be on the car yet.

Even so, I didn't throw it away. It's not everyone that has a historic piece of Greenham fence in their possession, presented by the army and endorsed by the constabulory.

It lives in the car now, a trophy, ready and willing to help solve my next roadside emergency.

#### CYNTHIA LYDIARD CANNINGS

P.S. "You'll get me shot" said my military friend as he dismantled the fence he was supposed to protect. Grateful as I was, I am English, and took it all for granted. It didn't actually occur to me for some days that, if I'd broken down however innocently in some countries, that near a Security base, it might have been me that got shot!

(I found this letter recently, and thought it might prove interesting. I've sent him a mag. and hope for a reply.)

P.O.Box 191 Nth Brisbane, 4000 QLD, Australia. 3.10.79.

Dear Mr. Varney.

I am enclosing cheque for £5 for my membership fee.

My name is Mr.G.A.Howard, I am member No.53. I live on a mountain with my son 1600 feet above sea level, sixteen miles out of Brisbane. I am the man with the most Mayflower cars in the world, I have twelve (12). I only drive two, a black one and a maroon one, I also have two Renowns "2000" which need a lot of money spent on them. I would like to own a Roadster.

Will be writing to Peter Burdge next week to order some parts and tell of some experiences with the Mayflowers.

We are now in spring over here, but it feels like autumn.

Trust you and the members are well.

Thanking you, G.A. Howard.

Cullaford Farm, Spreyton, Crediton, Devon. 6.5.84.

Dear Mr. Bath,

I got hold of your name and address through Classic Cars. I have in my possesion a 1950 Triumph Mayflower. It needs a little attention. Could you also advise me about spare parts for this model.

As you can see, I live in the West Country. Exeter is my nearest town. Would you know anywhere that I could obtain bits and pieces.

I have the original log-book and number plates. Engine size 1247 cc. Reg. LVC 620. (1952) Saloon. Chassis TT18573DC. It might mean something to you.

Yours faithfully, P.J. Courtier.

25 Sandford Road Sale Cheshire. 21.6.1984.

Dear Malcolm

In the new issue of Flower Power you ask about Morris 1000 braking system parts fitting a Mayflower. I have completely re-built the system on mine and found that virtually all Morris 1000 parts are the same but I think that they are from later Morris 1000's as I had no difficulty at all im obtaining them from local shops. One part which does not fit is the main cup in the master cylinder because the Morris 1000 cylinder bore is narrower (by 1/32" I think). My local stockists found another repair kit (for what I can't remember) which was of similar bore to the Flower, so bits from both repair kits were used.

The parts which I found the same were:

- 1" Brake Drums
- 2. Brake shoes (including springs and snail adjusters)
- 3. Wheel cylinders (front and rear) and therefore repair kits.
- 4. Front flexible hoses (net sure about the rear flexi because mine has been modified slightly).
- 5. Master cylinder repair kit (apart from main rubber cup already mentioned).
- 6. Male connectors for brake pipes (this means new pipes can be made up quite easily).

The brake backplates look the same but I haven't tried any interchange.

One little point I've found is that because of the design of the wheel cylinders, i e. a cup which pushes the piston rather than a collar round it, repairs to the cylinder seem to move more often, probably because the bottom part the cylinder base doesn't come in contact with the piston and doesn't become damaged as easily.

Hope you find this useful.

You might also be interested to know that if a horn fails, the innards of later type Lucas windtones are exactly the same, although the body shape is different. Those later ones are easy to find in scrapyards, and the innards swapped over (make sure of course that it is correctly 'Low' or 'High' rate).

> Yours sincerely GEOFF BASKETTER

#### TRIUMPH MAYFLOWER COUPE

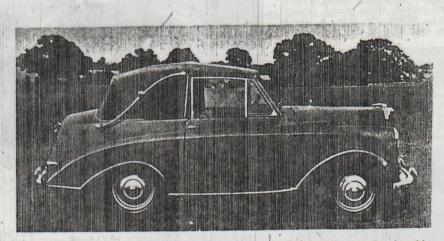
ORIGINALLY, that very attractive car, the Triumph Mayflower, was produced as a saloon only. But there are so many users of a car of this economical size who want it as a fresh-air vehicle as well as a closed one that it is now being offered as a two-door four-seater drophead coupé. The characteristic knife-edged style and the interior capacity of the new coupé are very similar to those of the saloon, with a divided bench front seat which tilts and folds forward to give access to the rear folds forward to give access to the rear compartment, where there is a wide seat with side armrests.

The wide doors carry winding drop windows which can remain up when the head is folded. There is a centrally

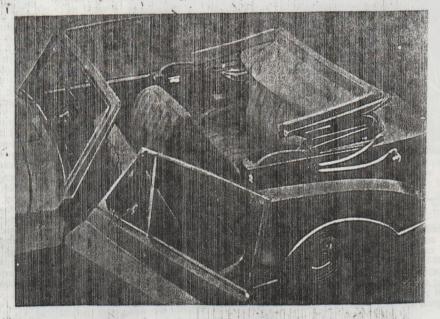
head is folded. There is a centrally hinged glass ventilator flap at the front edge of each window. With the head up the car has a very smart appearance. The head is clipped by two toggle joints to the top of the fixed windscreen structure, and when these clips are released the head can be folded neatly back to an almost flat position. At the back of the body is a locker of large capacity.

On the Mayflower the instruments are grouped in the centre of the facia with large shelves on each side. Pro-vision is made for the incorporation of radio and heater as extras. Main points of the chassis specification are a four-

of the chassis specification are a fourcylinder side-valve engine of 1,247 c.c.
developing 38 b.h.p., in unit with a
three-speed synchromesh gear box and
single-plate clutch. Final drive is by
hypoid bevel.
Independent front suspension is by
wishbone and coil springs, and halfelliptic rear springs are used. Lockheed
two-leading-shoe hydraulic brakes are
fitted. Overall dimensions, length 13ft,
width 5ft zin, height 4ft zin. width 5ft zin, height 5ft zin.



(Above) The new drophead coupé on the Mayflower chassis. (Below) Comfortable seating, whether open or closed.



TO THE FOLLOWING CAR CLUBS:-

Pre 1940 Triumph Owners Club (Colin Eastwood) The Standard Motor Club (R. Morris) The Vintage Triumph Register.

You have received our last three issues of 'Flower Power', but I have not received any of your magazines.

If you think that our Clubs have nothing in common, or you are just plain careful with your mailing list - O.K. But if not, please send me one of your magazines, or this will be the last one of ours you will receive. Ed.

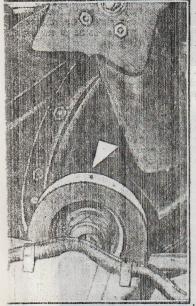
#### PRACTICAL MOTORIST AND MOTOR CYCLIST

IIS car is fitted with a four-cylinder engine, which has a cylinder bore of 63 mm, and a stroke of 100 mm., a cubic capacity of 1,247 cu. cms. A ression ratio of 6.8 is employed.

38

e crankshaft is accommodated in three ion type, white metal lined, steel-d bearings. Crankshaft thrust is taken wo steel-backed white metal covered washers, which fit into a recess med on each side of the rear bearing

e by side valves are used and are ted by flat-based chilled cast-iron ts, which bear directly on the camshaft. carly batches of engines a special cast-alloy was used in the manufacture of imshaft, but all subsequent engines are with a case bardened steel camshaft. with a case-hardened steel camshaft. amshaft is provided with four journals are mounted directly in the cylinder. The camshaft is located endwise by



.-T.D.C. of Nos. 1 and 4 pistons

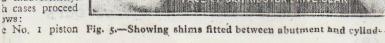
e-hardened steel plate which also modates end thrust, chilled cast-iron tappets are accom-ed in cast-iron guide blocks, which are the by four bolts to the cylinder block. entre pair of bolts also secure the disr and oil pump drive shaft abutment, r this reason are longer than the outer

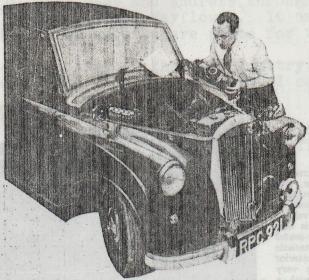
oil pump is of bmerged double ype and driven ertical shaft on is pegged a gear, an integration of which the cam for on of the petrol. The helical

n this shaft is by a similar hich is cut on mshaft.

#### at Ignition ning

e may be occawhere a new itor has to be or the helical gears are dis-inadvertently. h cases proceed





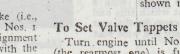
on T.D.C. of its compression stroke (i.e., with both valves closed). T.D.C. for Nos. 1 and 4 cylinders is indicated by the alignment of the pointer on the timing cover with the hole in the crankshaft fan pulley, as shown in Fig. 1.

Where the distributor driving shaft is correctly fitted, and the helical gears are appropriately engaged, the offset slot at its upper extremity will be as shown in Fig. with the engine in this position, i.e., T.D.C. of compression stroke for No. 1 cylinder.

of compression stroke for No. I cynnder. It is now necessary to fit the distributor in its correct position for ignition, which should occur 2 deg. before T.D.C. To do this first set the Advance/Retard plate one division on the scale toward "R." Assemble the distributor on the cylinder head with its clamping bolt slack.

The distributor body should now be rotated in a clockwise direction until the points, which should have been already set to the correct gap of 0.010in, to 0.012in,, are just commencing to separate. It is now merely a question of tightening the clamping bolt and afterwards advancing the adjuster one division until the pointer is aligned with the central or neutral marking, i.e., the ignition will then be occurring 2 deg. B.T.D.C. The car should then be taken on the road and ignition set to just pink at 30 m.p.h. under light load, whilst using regular (Pool) petrol.

Where the distributor oil pump helical gears are disengaged for any reason it is



Turn engine until No. 8 valve (the rearmost one) is fully open and then set No. 1 valve (front one), the tappet for which will be on the back of its cam, or its concentric position. Set tappet for No. 1 valve to 0.015in. Continue to turn engine until No. 7 valve is fully open and adjust clearance for No. 2 valve. Continue in this way setting the rear valves fully open and set clearance on one of the and set clearance on one of the front valves so that the number of the two valves total "9." Thus 8 and 1, 7 and 2, 6 and 3, 5 and 4, 4 and 5, 3 and 6, 2 and 7, and finally with No. r valve fully open set clearance on No. 8 valve.

pression stroke) until the offset slot at the upper end of the drive shaft assumes the position shown in Fig 2.

There are two methods of actually adjusting the clearances first by using three spanners with different sized jaws, viz. ½in. A/F for lock nut, 13/32in. A/F for flats on tappet and 7/16in. A/F for adjuster screw. The second method disposes of the 13/32in. A/F spanner for the tappet flats and employs a wedge between the and employs a wedge between the two adjacent tappets as shown in Fig. 3.

#### To Set Valve Timing

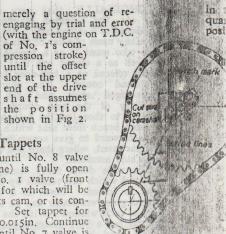
Where timing gears are marked, on the assumption that the engine is in a dismantled condition, the following procedure should be

When the crankshaft and camwhen the crankshaft and cam-shaft timing gears have been aligned, fore and aft, with a straight-edge, fitting or removing shims from under the crankshaft gear until these are in the same plane, the crankshaft gear can be plane, the cransshaft gear can be fitted and this gear and the loose camshaft gear should next be encircled with the timing chain and the latter gear offered up to its spigot on the camshaft, by trial and error, until the scribed markings shown in Fig. 4 are matched and the cut-away in camshaft is as shown. The alternative pair of shown. The alternative part of set-screw holes in the camshaft gear provide a half-tooth variation in timing. Turning the camshaft gear back to front, from any posi-

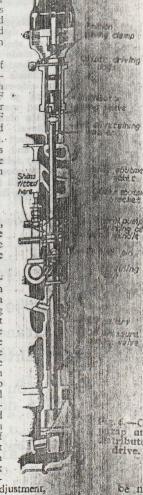
tion, gives a quarter-tooth adjustment, whereas the use of the second pair of holes

## June, 1958

Setting the Ignition ' Distributor and Oil P and Connecting Rod



Timbe Mark mark



on Timing and Valve Tappets, Removing the Dil Pump Driving Shaft and Checking Pistons By T. P. POSTLETHWAITE

in this reversed condition allows a threequarter-tooth variation from the original position. ा थ

It is important when matching these markings that the driving side of the timing chain is kept tight and that neither the camshaft nor crankshaft are moved, Having matched the timing

markings and rechecked these, whilst holding the timing chain tight, the set-screws can tightened and the locking plate engaged with the flats on the hexagonal heads.

#### Distributor and Oil Pump Drive Shaft

markings.

ion

t driving

sleave

retaining

ner abutment bracket

Petrol pump perating cam and spindle

iving pin

retaining

11 gallery il pressure

Fig. 6 .- Oil pump and distributor

drive.

The oil pump and distributor are driven by a single vertical shaft. The shaft runs in a flanged bush, which is pressed into the cylinder block at the bottom of the tappet chamber.

The spiral gear is integral with a cam which actuates the petrol pump by means of a short rod. The gear is located on the vertical shaft by a pin, which is retained by a clip (see Fig. 6).

#### To Remove Distributor and Oil Pump Driving Shaft

Remove distributor assembly after disconnecting the electrical leads from the sparking plugs and the coil and removing the securing nuts and spring washers. Detach tappet cover and packing after removal of the two domed securing sleeves. Withdraw the securing sleeves. two set-screws which secure the outer abutment bracket to the inner one and remove the latter bracket. Take care not to drop the packing shims into the sump (see Fig. 5). Remove the two bolts which secure the main abutment bracket and inner ends of the two tappet guide blocks to the cylinder block. Withdraw main abutment bracket. Remove petrol pump and with draw operating spindle. Remove the driving pin retaining clip (see Fig. 6) and withdraw pin. The driving shaft can now be lifted out of the engine.

#### The Oil Pump

The pump is of the double-rotor type and provides much more oil than is actually required, and little wear is likely to be experienced during the normal life of the car.

The only possible attention, apart from collapse due to a defective part, which is not likely until some 200,000 miles have been covered, will be the elimination of end float in the rotors. This can

be met by lapping the joint faces on the rotor casing and cover assembly.

"F" " G" "H' 2.4803in. 2.4799in. 2.4802in. 2.4807in. 2.4806in. 2.4810in.

Where cylinder bore wear exceeds 0.007in. and 0.005in. at top and bottom of the bores respectively, a rebore is necessary if a satisfactory repair is to be obtained. Oversize pistons, normally available from the factory through local dealers, are +0.020in., +0.030in. and 0.040in. Selective assembly is not used with such pistons.

When it is necessary to exchange a piston this only entails the removal of the sump, the withdrawal of the bearing cap, noting the offsetting of the connecting rods and

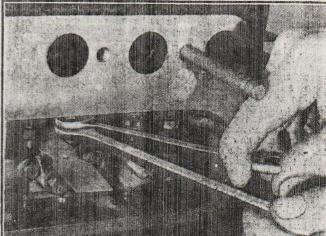


Fig. 3.—Setting tappets utilising two spanners and taper wedge.

Two compression rings are fitted, the lower one of these being tapered (see Fig. 7). The tapered ring must be fitted with the larger diameter downwards. The being

If it is required to remove the oil pump

for any reason it is

merely necessary to

withdraw the sump and to remove three

The pistons are of aluminium alloy and

are provided with a

split skirt; this split must be fitted towards the camshaft side of

nuts.

Pistons

the engine.

correct fitting posi-tion is identified by the etching of a "T" on the upper face of the ring. The compression rings fitted to a very few early cars were of the parallel type.

Selective assembly of pistons employed in the factory, three piston sizes being used, viz.: "F" (small), "G" (small),

Fig. 7.—Show-ing correct position of special piston

ring.



(mean), and "H" (large), the sizes varying by 0.0004in. The bore sizes for these three sizes of pistons are:

the markings on these components for reassembly.

Connecting Rods and Big End Bearings The connecting rods are offset as shown

in Fig. 8, and have nominal centres of 74in. Precision type bearings are fitted and no hand scraping of these is permissible.

The standard crankpin size is 1.750in., 1.7495in. Where undersized bearings are fitted their sizes are stamped on the back of the shells. The standard undersize bearings obtainable from the factory are-0.020in., 0.030in. and 0.040in. Where crankpin wear exceeds 0.002in., regrinding of the crankshaft is required if a satisfactory repair is to be effected.

#### Main Bearings and Thrust Washers

Whilst it is possible to exchange the

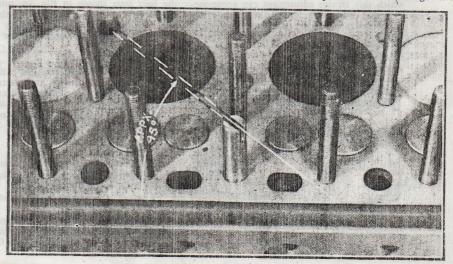


Fig. 2.—Position of offset and slot at upper end of distributor driver shaft with No. 1 cylinder at firing point.

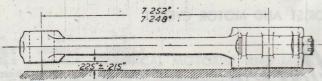


Fig. 8.—Showing offset on connecting rod.

centre main bearing fairly easily without removal of the engine unit, the removal of the front and rear bearings can best be effected after removal of the engine owing to the necessity to remove the sealing blocks,

The normal end float of the crankshaft is 0.004in. to 0.006in., and where these dimensions are seriously exceeded new thrust washers should be fitted. In order to exchange these thrust washers, as well as removing the engine, it is necessary to detach the gearbox as a unit; remove the rear sealing block, which is secured by two screwdriver slotted screws and two bolts for oil retainer, and then withdraw the rear bearing cap after unscrewing two bolts. Oversize thrust washers + 0.005in. are obtainable from the factory through the local dealer. Where insufficient end float exists after fitting a new pair of thrust washers, the steel sides of the thrust washers, i.e., the plain side, should be rubbed down on a piece of emery cloth placed on a flat surface.

The standard size of the crankshaft jour-

nals is 2.0000in., 1.9995in. Undersized bearings -0.020in, -0.030in. and -0.040in. are available. Where undersized bearings are fitted the size is stamped on the back of the shell. If worn clearance exceeds 0.006in. (dry), regrinding of the shaft is necessary if a satisfactory repair is to be expected.

#### The Clutch

The clutch (see Fig. 9) is of the single dry-plate type, consisting of a driving plate assembly splined to the gearbox constant pinion shaft's forward extension; a cover assembly and a release bearing which is operated by a fork mounted on the clutch cross shaft.

As wear occurs to the friction facings (A), the outer ends of the release levers (B) will move with the pressure plate (C) closer to the flywheel, and the inner ends of these levers will move outwards with the release lever plate (D) thus reducing the clearance between (D) and (E). It will be understood, therefore, that as this necessary clearance of 1/16in. (.0625in.) is reduced by wear it is necessary to restore it by suitable adjustment of the fork which carries the release bearing carrier. This is effected by alteration of the adjusting nuts shown in Fig. 10. Fig. 10.

There is obviously a limit as to the wear which this service adjustment can accommodate and when this limit is reached it will be necessary to replace the centre, or driven plate, assembly. The fitting of new friction facings to the driven plate is not recom-mended. The exchange of the centre plate assembly entails the removal of the gearbox

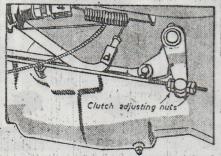
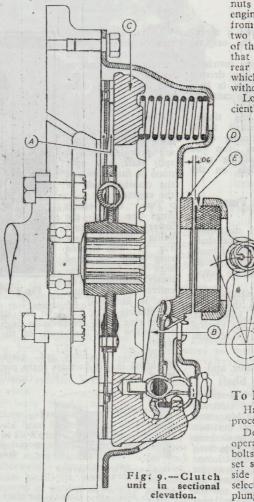


Fig. 10.-Clutch adjustment.

unit and the with-drawal of the cover assembly. The removal of the gearbox is covered later in this article when dealing with that unit.

screws should be slackened off a turn or two at a time to allow for the extension of the thrust springs.

After exchange of the centre plate, which does not require any alteration to the clutch cover assembly, nor, indeed, must such be attempted, it is merely necessary to adjust



the four nuts shown in Fig. 10, until there is an inch of free movement at the pedal pad, which represents the necessary 1/16in. clearance between (D) and (E) (see Fig. 9).

#### Setting Release Levers

This should only be required when it is found necessary to renew any parts in the cover assembly, or a complete clutch over-haul is required. It will be found more satisfactory to obtain a reconditioned clutch in exchange for the one at present fitted.

#### The Gearbox

A gearbox having three forward gears and reverse is fitted. Synchro-mesh is provided on the three forward gears.

To remove the gearbox as a single unit

proceed as follows:

Disconnect battery lead? Disconnect clutch coupling rods from housing by removal of the split pinned nut, which secures the trunnion to operating lever in the clutch operating cross shaft, and the split pin and plain washer which secures a second rod to the fixed bracket on the housing. the two transverse gear operating cross shafts from the selector shafts by removal of two bolts and self-locking nuts. Remove pro-pellor shaft after withdrawal of the four bolts and self-locking nuts, which secure the rear universal coupling to the driving flange on the rear axle. Remove centre steering tic-rod after slackening the lock nuts and screwing rod out of sockets. Detach exhaust downtake pipe from manifold afterwards placing lifting jack under engine sump using a wood packing to prevent damage. Remove nuts and bolts which secure housing to engine. Having detached petrol pipe clip from detachable cross-member, remove the two self-locking nuts which secure the rear of the engine to this member. After ensuring that the jack is taking the weight off the rear cross-member, remove the two bolts by which it is attached to the chassis frame and withdraw.

Lower the engine on the jack, just sufficiently to enable the clutch housing to clear

the toe board, pressing as it is drawn back to disengage the constant pinion shaft from the clutch assembly. The necessity to lower assembly. The necessity to lower the rear of the engine is the reason for removal of the steering Centre rod.

Reassembly requires approximately the reverse procedure to that described above for removal. Where it is necessary to remove the clutch for any reason, or where the centre plate is moved relative to the cover assembly when withdrawing the unit, it will be necessary to centralise it before offering up the gearbox with a suitable mandrel. Fig. 11 gives the dimensions of a suitable mandrel. A mandrel can be made less elaborately from wood, provided the two smaller diameters are as given, to fit into the splined centre of the clutch and the bush in the end of the crankshaft.

#### To Dismantle Gearbox

Having removed the unit from the car proceed as foilows:

Detach the top cover, withdraw the clutchoperating shaft after removal of locating bolts and actuating fork. Remove the taper set screw from the side of the casing (R.H. side for R.H.S. Models), which secures the selector rod. Withdraw the selector locking plungers after extracting the split pin located screws. Screw out speedometer drive secur-ing set screw and pull out gear. Remove gearbox extension and paper packing after withdrawal of six securing bolts. Tap out the selector rod from the rear of casing after

first removing the wired stop screw.

Remove the countershaft and reverse pinion locating bolt and after withdrawal of the countershaft front cover (located by two wired set screws), tap the countershaft out with a suitable length of tube (0.787in outside diameter × 53in, length), leaving the tube in the countershaft gear to retain the 48 needle rollers fitted.

(To be continued) 21/2 23/8

11.-Mandrel for centralising cluss Fig. centre plate.

- September 2nd S.T.I.R. IX Rally at Broughton Castle, Banbury, Oxford. Lets make sure that T.M.C. are not whitewashed with a poor an attendance as our own NationalRally. See you there.
- November 23/4th Brighton Classic Car Show. Again we will be combining with T.R.O.C. & T.R.C. for this major event.
- September 29/30th Northern Classic Car Show. T.M.C. have their own stand at this show with members Geoff Basketter and Ian Hodkinson and their families displaying three Mayflowers in a prime spot at this show, which is sponsored by Practical Classics Magazine (my only regular car magazine. Ed.) The show is at the Belle Vue Exhibition Halls, Manchester and is open from 10.am to 6.pm. so please go along and see Geoff, Ian and the others if you can.

\*\*\*\*\*\*

I've just cured the dreaded vapour lock in a brutal manner. I have fitted an electric fuel pump to the bulkhead and rerouted the fuel lines. Also I have removed the mechanical pump and operating rod and fitted a blanking plate over the hole. I dare it to conk out now. Do you think the concours judges will notice? Ed.

I hear on the grapevine that John Davey, elder statesman and mentor of all things Standard Triumph'ish, is not very well at present, even in hospital I believe.

We at T.M.C. wish him a speedy recovery and hope to see him at the S.T.I.R. Rally on 2nd September.

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The rally results will be published in the Autumn Mag - room permitting.

#### 'TAILPIPE'

Yet again, acknowledgements must be made to Tom Robinson and family (especially Richard, who proof reads this lot), who arranged for printing and distribution of this mag.

(I think the typewriter's beginning to smoke!!!)

\*\*\*\*\*\*\*

I need techincal articles etc. for printing in future mags, so please me anything Mayflower-wise. (Especially while Janet is still quite keen on typing). ((Whatever gave him that idea.JB))

Next issue will be the Autumn edition due out in November. All information to me by end of October 1984 please.

See you at S.T.I.R,

Bye-Bye. Ed.

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S.T.I. R. IX Hally It Broughton Castle, Banbury, Oxford.