The M.G. Car Company Ltd.

M, D, F & J. Models

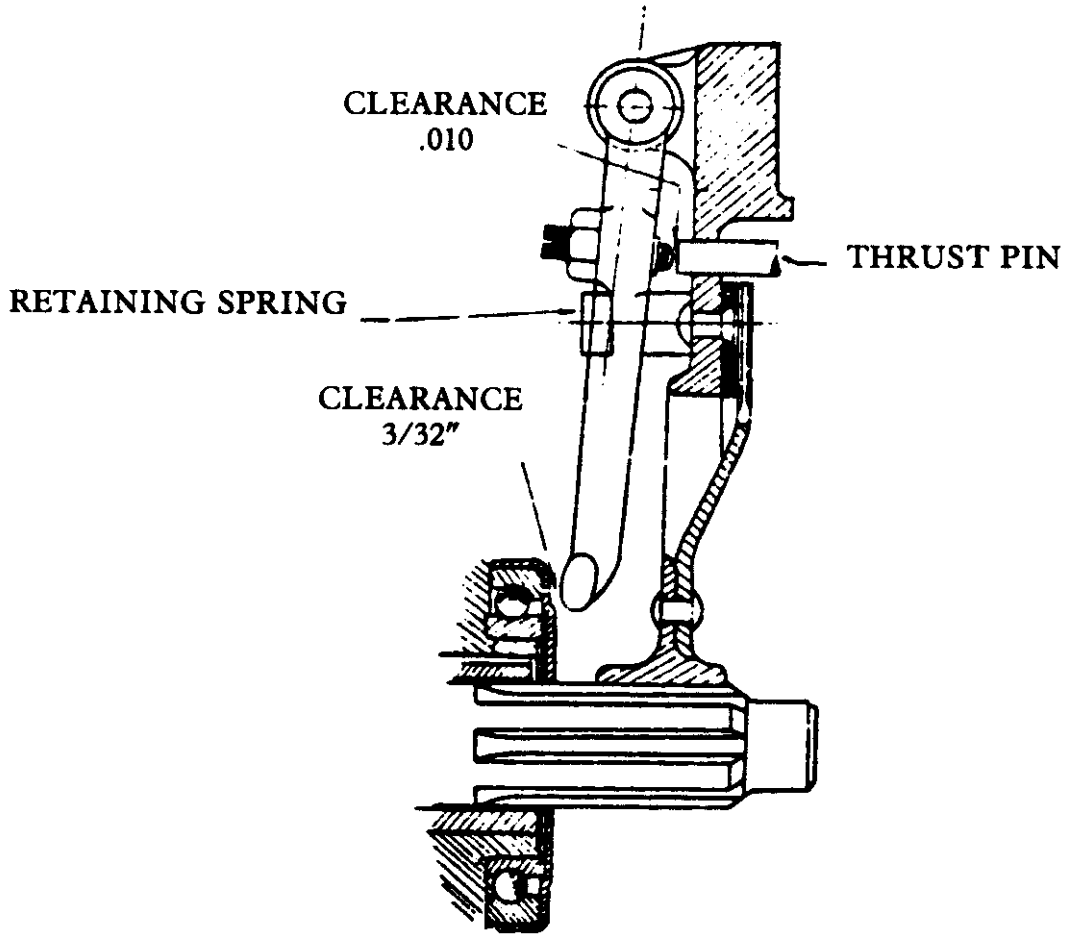
Date of Issue: December, 1933

Service Information Sheet No. 11

CLUTCH ADJUSTMENT

It has been thought advisable to issue information regarding clutch adjustment as cases have come to our notice where incorrect adjustment has caused excessive wear to the clutch fingers. The first adjustment is between the clutch fingers and the clutch thrust race. The clearance should be measured by a gauge 3/32 in. thick (see drawing), care being taken to get the same clearance for each finger.

The second adjustment, which is equally important, concerns the amount of movement the clutch fingers have between the retaining springs and clutch operating pins. The duty of the retaining springs is to prevent the fingers fouling the thrust race. These springs, therefore, should be set carefully to allow a .010 in. gauge to be inserted between the clutch adjusting screw and the clutch thrust pin, as indicated on the drawing.



The M.G. Car Company Ltd.

K, L, P, N, KN & PB Models

Date of Issue: June, 1934

Service Information Sheet No. 12

VALVE CLEARANCES

It has been found necessary, owing to valve take up, to alter the valve clearance from .006 in. for both inlet and exhaust valves to .006 in. inlet valve, .008 in. exhaust valve.

The clearance is taken as before (i.e. between the camshaft and the valve rocker).

The M.G. Car Company Ltd.

J, K, L, P, N, KN & PB Models

Date of Issue: June, 1934
Revised and Re-issued: February, 1936

Service Information Sheet No. 13

VALVE TIMING

When it is required specially to tune an engine the following remarks in respect of valve timing will be of assistance and are in addition to the instructions laid down in the Manuals.

It is possible for a person not acquainted with the engine to set the rockers in various wrong positions which will cause considerable variation of timing on the corresponding valve.

The correct procedure is as follows:—

1. Set the rocker eccentric bush in the position shown in Fig. 1 for the J. Type and that as shown in Fig. 2 for the K., L., PA.,N., KN. and PB. Type models.

2. Insert the correct feeler gauge between the valve rocker and the cam.

3. Shorten or lengthen the valve stem until it just reaches the rocker. It is not possible, owing to the probability of wear of the rocker face, cam face or valve, to give a definite length of the valve stem.

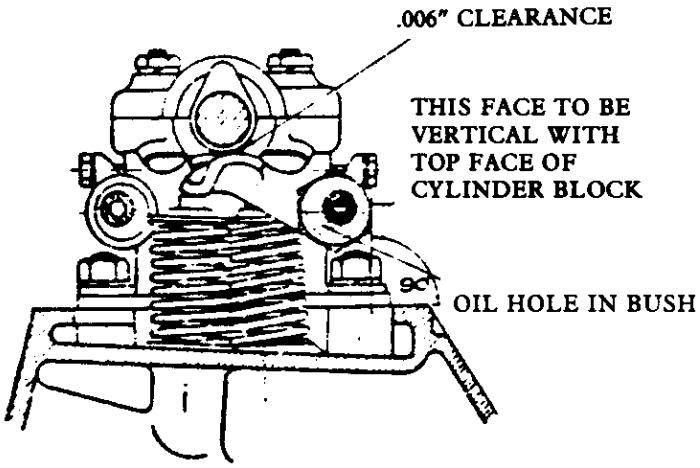


FIG. 1
SHOWING POSITION OF ECCENTRIC BUSHES FOR J. MODELS

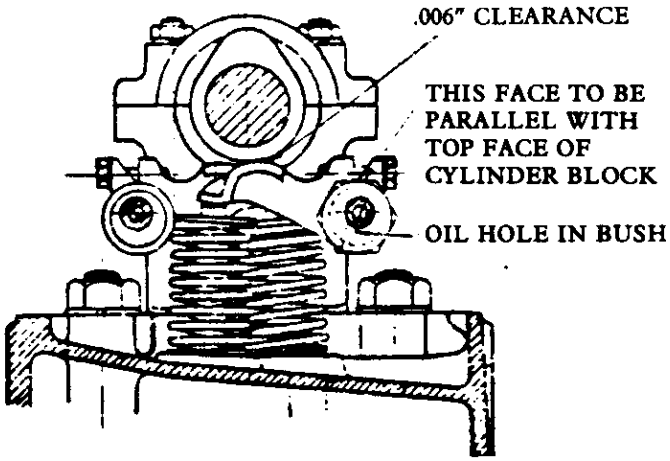


FIG. 2
SHOWING POSITION OF ECCENTRIC BUSHES FOR K., L., PA., N., KN. AND PB MODELS

Note:— To shorten the valve stem, grind the end carefully on a fine emery wheel, using a "V" block to steady the valve. The end of the stem must be square or very slightly raised in the centre.

To lengthen the valve stem, regrind the valve with its seat, providing the amount is not more than .001 in. to .002 in. If in excess of this measurement it is advisable to re-cut the valve seat with a suitable seating cutter.

It should be noted that the tappet clearances given above are for checking purposes only in the case of K., L., PA., N., KN. and PB. models. The final clearances are .006 in. Inlet, .008 in. Exhaust (ref. Service Information Sheet No. 12).

All Models

Date of Issue: June, 1934

Service Information Sheet No. 14

PROPELLER SHAFTS

The propeller shafts fitted to our standard models are designed to withstand torque loads and whirling speeds in excess of that required by these models in their standard condition.

It will be readily understood, however, that if an increase in engine performance (i.e. higher engine speeds with an increase of maximum horse-power) is required, a propeller shaft must be fitted that is capable of transmitting the additional power.

One or two cases have come to our notice where standard models have been specially tuned, and in consequence the power units have developed a greater maximum horse-power, together with higher engine speeds, transmitted through a standard propeller shaft. The result is that, owing to the increase in torque and revolutions per minute, these shafts have been over-stressed and failed.

Our Service Department are able to supply a propeller shaft to meet these requirements on request, providing the maximum engine r.p.m., and if possible, maximum horse-power developed, is stated on the order.

We shall be very pleased to give any advice or other assistance on request being made to our Technical Department.

The M.G. Car Company Ltd.

All Models

Date of Issue: June, 1934

Service Information Sheet No. 15

HUB FITTING TO REAR DRIVE SHAFTS

Instances have come to our notice which make it apparent that it is not generally understood that the rear axle drive shafts are fitted to the rear hubs under pressure.

Drive shaft splines have in some cases been filed to make them fit, with a result that independent movement takes place between the hubs and shafts which is accentuated by continued acceleration, deceleration and braking.

From the foregoing it will readily be understood why the diameter of the drive shafts seem to be too large for the hubs, also that it is necessary to employ a suitable press when fitting, the pressure required being a minimum of 6,000 lb. with a maximum of 12,700 lb. Drive shafts must on no account be filed.

The M.G CAR Company Ltd.

All Models

Date of Issue: June, 1934

Service Information Sheet No. 16

CRANKSHAFT OIL DUCT PLUGS

It is of the utmost importance that crankshafts are balanced to a fine degree, both statically and dynamically, to eliminate bad vibration, harshness and periods in the power unit.

Great care is taken with the crankshafts fitted to our engines, and for this reason it is as well to draw attention to the plugs that seal the oil ducts.

After an engine has been in commission for some time and an overhaul is necessary, the crankshaft oil duct plugs have to be removed to enable the oil duct to be thoroughly cleaned and all sludge to be removed. It very often happens that these plugs are damaged on removal, and therefore have to be replaced by new ones. This is where great care is necessary, as plugs of two materials are used, steel and aluminium, depending entirely upon which is necessary for the balancing of the crankshaft. If steel plugs are replaced where aluminium plugs are removed the balance of the crankshaft will be seriously affected.

In addition, the length of the new plug must coincide with the length of the old one.

It is always advisable to have a supply of both plugs readily available, to prevent any possibility of fitting the wrong type.

The M.G. Car Company Ltd.

All Models

Date of Issue: August, 1934

Revised and Re-issued: February, 1936

Service Information Sheet No. 17

FITTING PISTON RINGS

Attention is drawn to the fitting of piston rings (maximum and minimum gap to allow for expansion.)

It has now been proved by calculation and experiment that a 57 mm. or a 60 mm. diameter piston ring must have a minimum gap of .006 in. The maximum gap permissible is .010 in.

Where pistons are lapped the gap must be adjusted after lapping.

In the past it has been the practice when fitting piston rings of 57 mm. to allow a ring gap of.004 in.

The M.G. Car Company Ltd.

C, D, F, J, K, L, P & N Models

Date of Issue: August, 1934

Service Information Sheet No. 18

GROUP NIPPLE LUBRICATING SYSTEM

The Service Departments have found numerous cases of very dry and partially seized rear spring trunnion bushes, and we have come to the conclusion that the average owner does not lubricate these points sufficiently.

Owing to the length of pipe through which the oil has to travel before reaching these points, the operation of forcing oil through the bushes takes quite a little time, and unless oil is forced through until leakage is apparent, one can never be sure the bushes are lubricated.

After investigation it has been agreed to fit open feed plugs to the rear spring trunnion bushes instead of the adjustable type (which allows the oil a much easier and consequently a quicker path).

All cars fitted with the adjustable plug at this point should have the needle valve removed, and the preceding points should be adjusted (if necessary) to the figures detailed below.

The number of turns given against the various points is from the shut position (i.e. the needle valve screwed in as far as it will go).

The correct setting is as follows:—

Steering box, 1 turn.
Steering column, ¼ turn.
Brake cross shaft, ½ turn.
Front spring rear shackle, ½ turn.
Rear spring front shackle, 1½ turns.

The above setting is correct for all models except the N. Type, when the brake cross shaft is ¼ turn and the front spring rear shackle is ¼ turn.

The M.G. Car Company Ltd.

K1, K2, K3, L, KN & N Models

Date of Issue: December, 1934

Service Information Sheet No. 19

WATER PUMP

A new gland nut retaining spring has been designed to supercede the original type coil spring.

This spring is more positive in action and eliminates the possibility of water (which may leak past the gland) finding its way into the sump past the spindle sealing felt, owing to it being trapped by the coil spring.

This modification is very simple to carry out on all existing pumps.

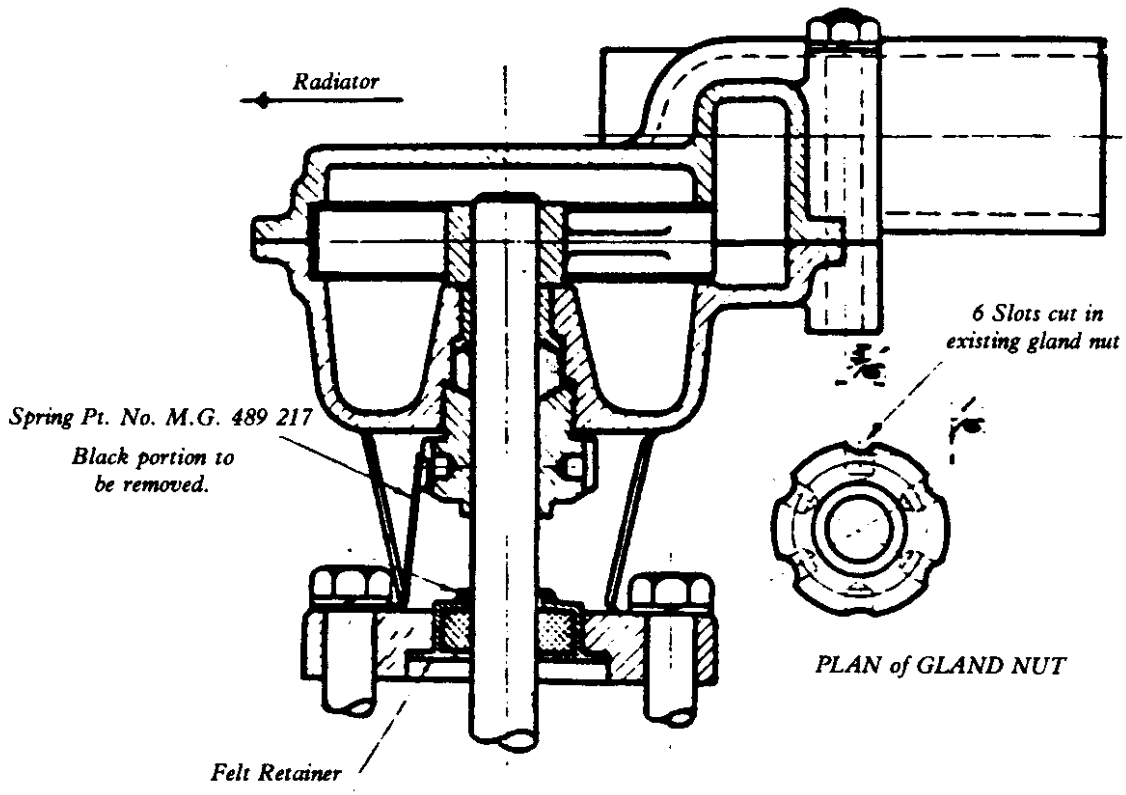
The existing gland nut is slotted to receive the new spring.

The coil spring spigot is removed from the spindle felt retainer.

The new retaining spring is secured by means of the front set screw which secures the pump to the front bearing housing.

The water drain hole is increased from ⅛in. diameter to 5/32 in. diam.

Supplies of the new spring, Part No. M.G. 489 217, can be obtained on application being made to our Service Stores Department. Price 9d. each (retail).



The M.G. Car Company Ltd.

P N & K N Models

Date of Issue: December, 1934

Service Information Sheet No. 20

STEERING COLUMN RATTLE

Several complaints have been received regarding a rattle which had developed in the steering column of the Bishop cam type steering gear.

On investigation it was found that the rubber ring which should be situated equidistant between the top and bottom of the column was misplaced, which allowed the inner mast to rattle against the outer tube.

Care must be taken to see that this ring grips the inner mast sufficiently to prevent it moving out of place.

The M.G. Car Company Ltd.

F, J4, L, P, N & K Models

Date of Issue: June, 1935

Service Information Sheet No. 21

ELONGATION OF HUB STUD HOLES IN BRAKE-DRUMS

Cases have been brought to the notice of our Service Department regarding the elongation of the hub stud holes in the brake-drums, due to the braking torque. This applies to all models fitted with 12 in. diam. brake gear, in addition to all K. Type models.

As a result of an investigation it has been found that the spring washers as fitted had insufficient grip to prevent movement taking place at the hub studs, which in course of time resulted in the elongation of the holes in the drums.

To rectify this difficulty, spring washers having a larger diameter than formerly, and consequently an increased length of gripping edge, are now fitted under the hub studs as standard on P.N. and K.N. Type models.

These washers, to Part No. X. 493 5, are 13/16 in. O.D., and can be obtained on application to our Service Stores Department.