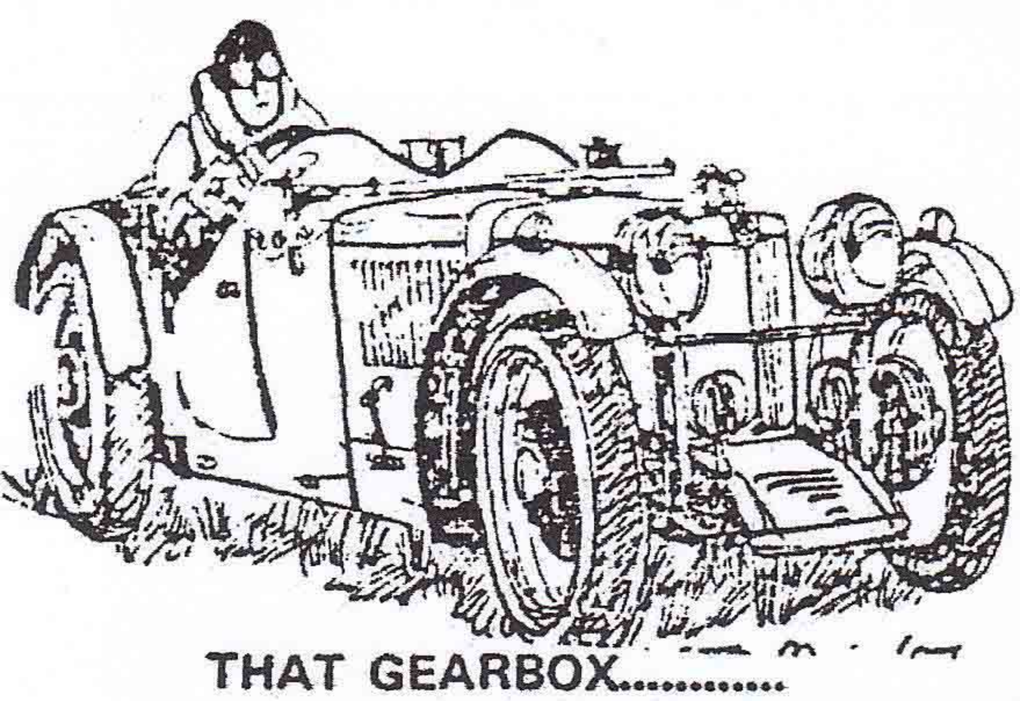


TECHNICAL ARTICLE (NONE J2)

Number 25

From Octagon Heaven

Resource: MMM Register Year Book 1976 Edition

SERVICE INFORMATION SHEETS

THAT GEARBOX.....

The E.N.V. Gearbox fitted to the C type Midget, J4 Midget and 12/70 Magnas has drawn considerable comment in its time. The mechanical details are similar though the method of engine support differs: the midgets sat on a gearbox X tube whilst on the Magna it hung on the back of the engine. There are two sets of ratios and I am informed that they are not transferable.

The box used on the C type midget was modified after seizure during and after its competition debue in the '31 Racing season. A plain bearing was replaced by a needle roller. The J4 is advertised as being available only with this box but the brochure clearly shows a preselector Wilson Box - did they get to the public in this form? It is also known that the early F types had the X tube racing box, the workshop manual and pictures of the prototype clearly show this, and the box I have came out of F0256, owned by Eric Taylor. It has the number 103 so that must mean at least that number of them somewhere.

The non - X tube box fitted to the bulk of the 1,250 F Magnas produced is a delightful box and the change from top to third is remarked on by 'Blower' in his article about using an F type. For those who have not used it the change is the 'wrong way round' compared to all other MMM Gearboxes.

However, the works was not so pleased about the box as shown by the following works Service Information Sheets. It is particularly interesting to note the clutch oiling problems - is this the cause rather than engine oil?

A last point about the E.N.V. Box is that it was used on certain pre-war A.C. cars - identical except the lack of the M.G. Motif.

SERVICE INFORMATION No. 1
The M.G. Magna.
Date of Issue January 1932
CONCERNING OIL LEAKAGE INTO CLUTCH HOUSING.

With reference to complaints which have been received the leakage of oil into the Clutch Housing.

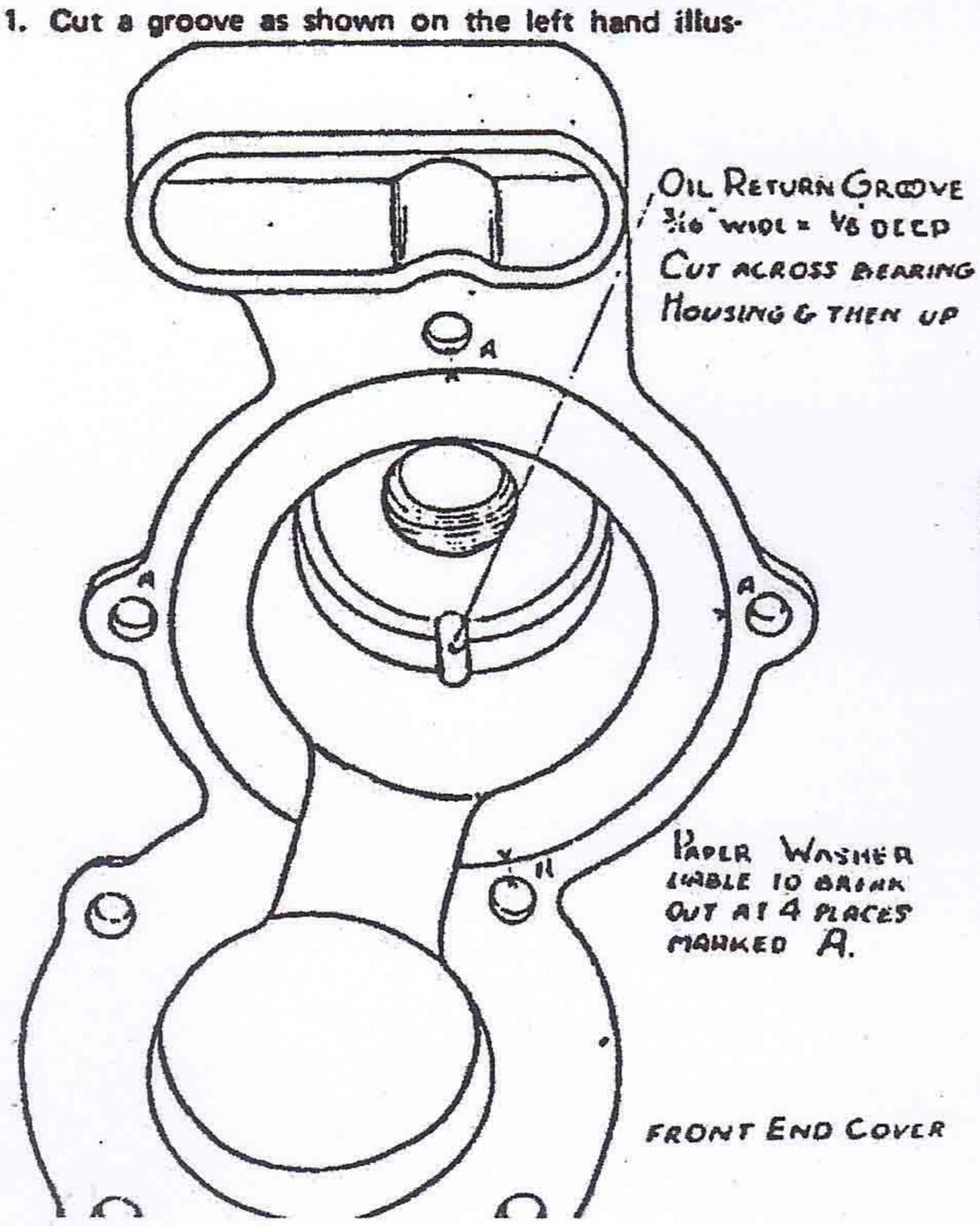
The illustrations show the Gearbox Front Cover and the First Motion Shaft, and the modifications which are required, in each instance in order to prevent a recurrence of such trouble. In addition to this it will be necessary also to clean or reline the Clutch as required, and fit a stronger type of Clutch Spring, of which Service Stores have a supply, and which are painted blue to avoid mistake.

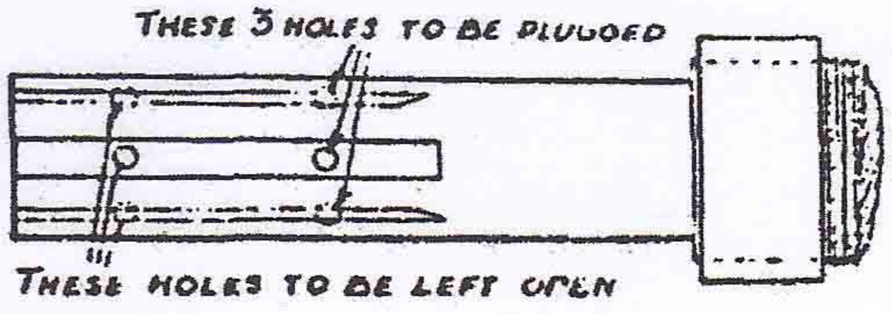
Points in connection with these modifications are as enumerated below.

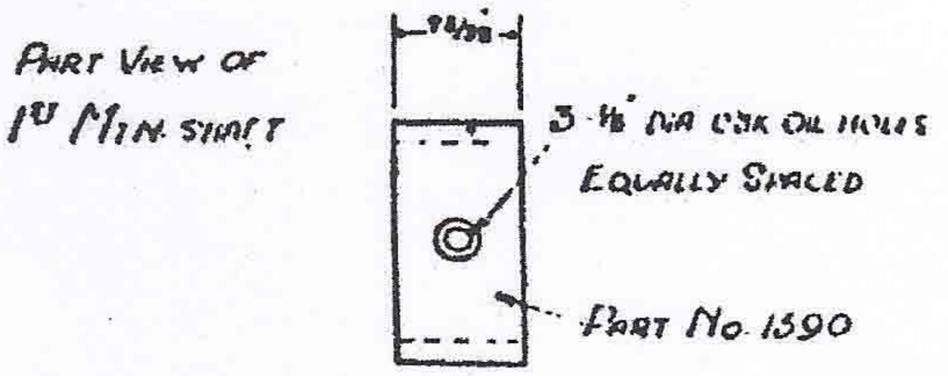
1. **Cut a groove as shown on the left hand illustration, in the lower portion of the Bearing Housing in the Front Cover.**
2. **Fit a collar over the shoulder of the First Motion Shaft shown in the right hand illustration to restrict the amount of oil fed to the Splines.**
3. **Plug the three rear holes in First Motion Shaft where shown.**
4. **When reassembling the Front Cover care should be taken not to break the Gasket round the stud holes, as a leakage will occur at these points if such is the case. It is advisable to cut the holes in the Gasket on the small side so that they form a good seal at the points marked A.**

It should be noted that these modifications are being made on all Magna Units now being assembled at this Works.

Stronger springs, and the collars mentioned, may be obtained from the Works.



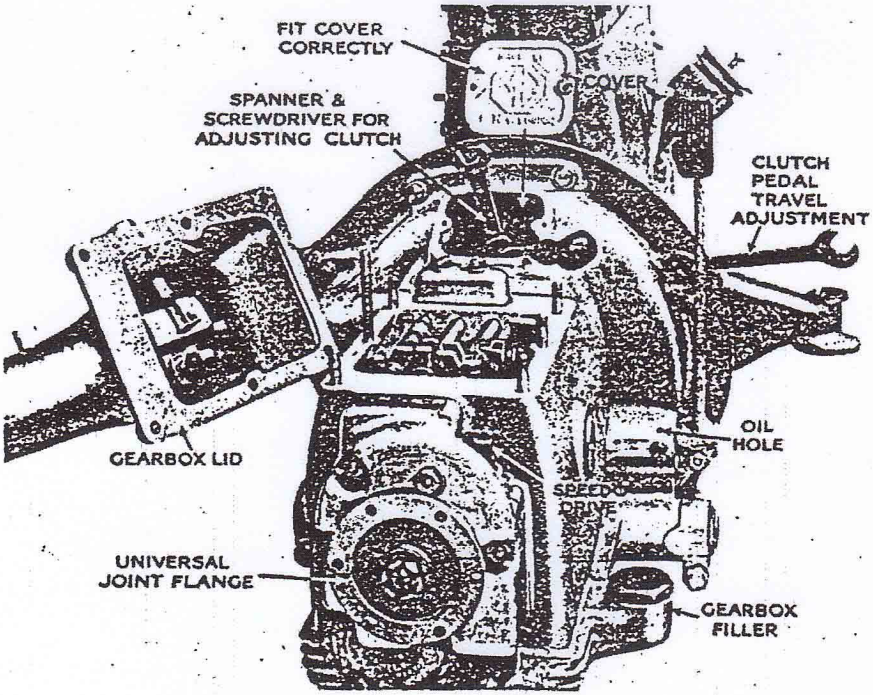




SERVICE INFORMATION No. 4
The M.G. Magna
Date of Issue January 1932
REMEDY FOR STIFFNESS IN CHANGE SPEED MECHANISM.

With regard to the Magna four-speed box, it has been observed that the change speed lever becomes stiff after some use, resulting in difficulty to move the lever through the gate. This is due to the fact that the forks on the change speed rods have moved slightly, causing the slots on the forks to become out of alignment when the gears are in the neutral position, thus impeding the free passage of the selector lever. This can be remedied by loosening the pinch screws on the change speed forks and moving the forks back into line.

The accompanying illustration shows the change speed forks as they should be in correct alignment.



SERVICE INFORMATION No. 14.
The M.G. Magna.
Date of Issue January 1932
AEROSHELL IN GEARBOX.

It should be noted that all Gearboxes on Magnas now leaving this Factory are being filled with AeroShell in preference to ordinary Gear Oil.

This is due to the fact that not only is it more suitable, but it further improves starting from cold, owing to the decreased resistance in the Gearbox.

The use of this oil should therefore be generally recommended, especially in such cases where Cars were delivered prior to the modifications now being made to the Gearbox and First Motion Shaft, to prevent the leakage of oil into the Clutch Housing.