

CITROEN CARS LIMITED,
TRADING ESTATE,
SLOUGH, BUCKS,
ENGLAND.

TECHNICAL NOTE NO. 590.

OCTOBER 1953.

GEAR BOX - SIX CYLINDER

LOCKING OF GEARS.

When the driver rests his foot on the clutch pedal when the car is being driven in second gear in traffic blocks or when manoeuvring, it may happen that it jumps out of gear because the gear is no longer locked.

To reduce this inconvenience we have made arrangements to lock the selector fork in such cases.

This arrangement consists of a ball which enters a supplementary groove in the selector rod (see fig. 1). It has been fitted to our cars since March 1953.

You can make this modification on cars in service when doing work necessitating the removal of the engine and gearbox assembly, without changing the gearbox.

Obtain from our Spare Parts Department :-

1 Selector rod	No. 508486
1 Locking spring	No. 508487
1 Locking ball	No. 2709-S

Proceed as follows :-

Having removed the gearbox take off the cover plate and the selector rods.

Protect the gear wheels with a rag. The operation should be carried out with great care to avoid swarf cuttings.

Using a 7mm. drill increase the depth of the existing hole in the box (see fig. 2). **Observe the dimension of depth given on the sketch.** Clean out the hole carefully and make sure that there is no swarf in the bearing of the intermediate gear train by raising the sheet metal cover.

Fit the selector rods. In the hole drilled as above put the spring 508487 and the ball 2709-S. Fit the second and third speed rod, then fit the second rod and the locking rod.

Adjust the position of the synchromesh on the second and third speeds. Fit the gearbox cover.

IMPROVEMENT IN EASE OF GEAR CHANGING.

Easy gearchanging depends on the strict position of the selector rods when locked in neutral position.

This locking is obtained by the use of a locking pin (see fig. 4), the length of which must be judiciously selected in order to secure the correct position of the selector rods.

To this end, three locking pins of varying lengths are available. It is necessary to select the one of correct length when reassembling the gearbox.

Proceed as follows :-

Put the selector rods in position in the gearbox casing (without locking balls and without selector forks).

Push one of the selector rods so that the groove for the locking pin just projects beyond the end of the gearbox.

P.T.O.

Push the other selector rod so that the cylindrical part of the rod past the locking groove, projects from the gearbox.

Offer up a locking pin between the two selector rods, one of its ends in the groove on the one rod and the other end bearing on the cylindrical part of the other rod (see fig. 4).

Choose from the three sizes of locking pins sold, the one which in these conditions fits freely but without play.

Reverse the selector rods and repeat the operation.

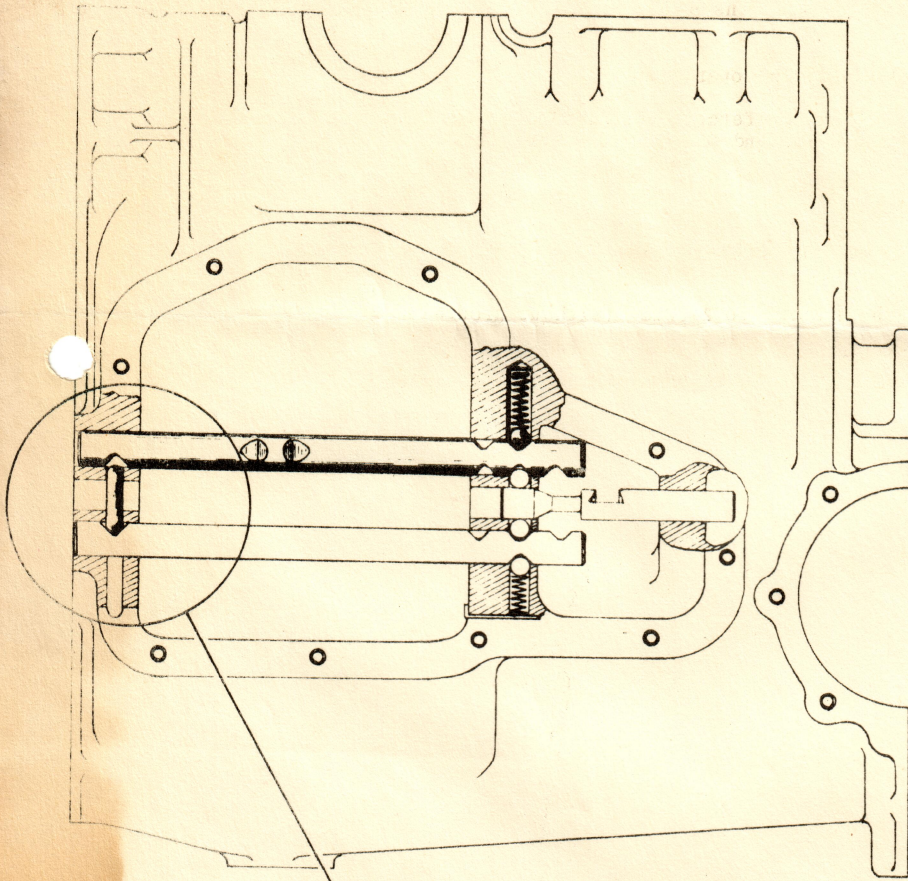
After assembling the gearbox, check, preferably with a dial gauge, that the longitudinal play of the selector rods is between 0.08mm. and 0.6mm. (.003" and .023").

SPARE PARTS :

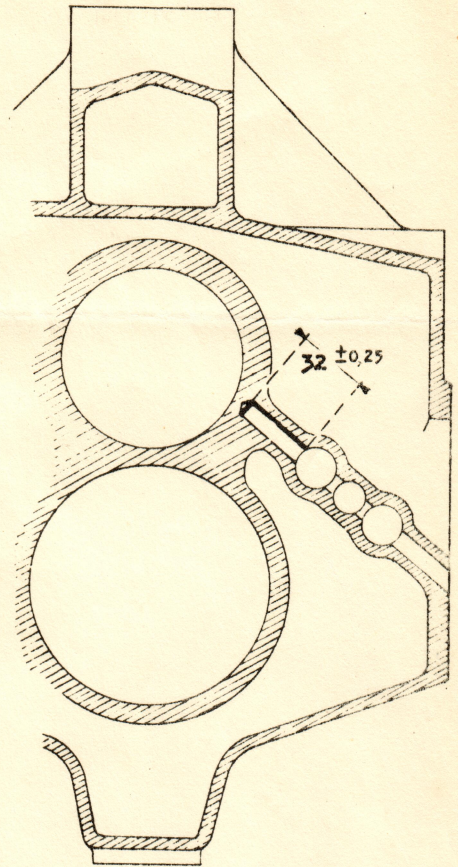
The locking pins are sold by our Spare Parts Department and are marked with grooves (see fig. 3).

508114	length 24.35mm. to 24.6mm. (without groove).
508516	length 24.6mm. to 24.8mm. (with one groove).
508517	length 24.8mm. to 25.05mm. (with two grooves).

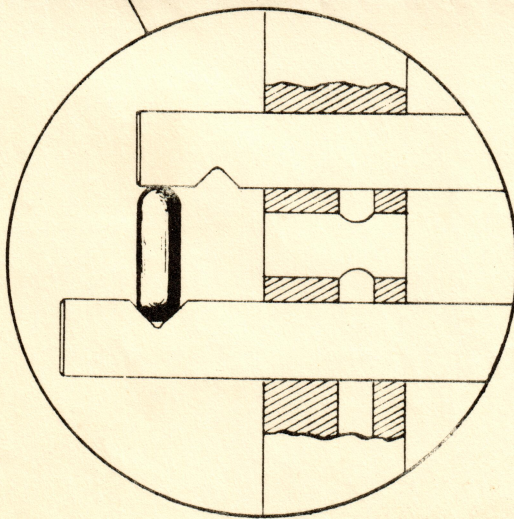
— Fig. 1. —



— Fig. 2. —

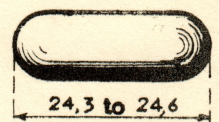


— Fig. 4. —

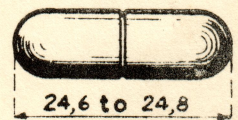


— Fig. 3. —

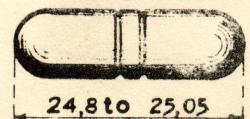
N° 508114.



N° 508516.



N° 508517.



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