

GEARBOX AND
OVERDRIVE

E-16

No.

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SEPT. 1965

TO: ALL ROOTES GROUP DEALERS
MODEL: SUNBEAM DELUX & ALPINE
SUBJECT: ALL SYNCHROMESH GEARBOX: FIRST SPEED WHEEL END FLOAT

It is important when overhauling the all synchromesh gearbox to ensure prior to re-assembly, that the first speed wheel on the rear of the mainshaft has correct running clearance.

In order to check end float, the following procedure should be carried out:-

1. Fit the second speed wheel and baulk ring to the mainshaft, press on the 1st/2nd synchro hub, and fit first speed wheel baulk ring and distance bush.
2. Fit a suitable distance piece as shown (an Imp transaxle first speed bush, Part No. 7104180 is suitable). Fit the rear mainshaft nut and tighten to 10 lbs.ft. (1.38 kg. ms). (It is important this is not exceeded at this stage).
3. Using a feeler gauge, check the distance between the rear face of the first speed wheel and the shoulder of the first speed distance bush as shown in the illustration.
4. First speed wheel end float must be .004" - .009" (.1 mm - .23mm)
5. To obtain the correct end float, a first speed distance bush should be selected to provide the correct end float.
6. Should any difficulty be experienced in obtaining the correct gear end float, a new 1st/2nd synchro hub should be fitted.
7. After obtaining the correct clearance, dismantle and re-assemble, tightening the mainshaft nut to 80 lbs.ft. (11.06 Kg.ms).

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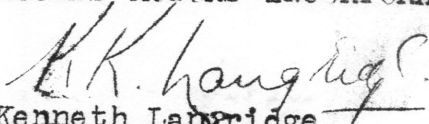
NOTE

To assist in tightening the rear nut to the correct torque loading during assembly of the gearbox, it is recommended that Churchill Special Tool RG. 482, is obtained, and there is immediate availability. Alternatively, a simple tool can be made out of 1/2" mild steel plate to the dimensions shown in the illustration. When using either tool, the torque spanner should be set at 80 lbs. ft. (11.06 Kg.ms).

ILLUSTRATION No. 8076

Please destroy original bulletin E-11 issued in May, 1965, and draw this revised issue to the attention of all concerned.

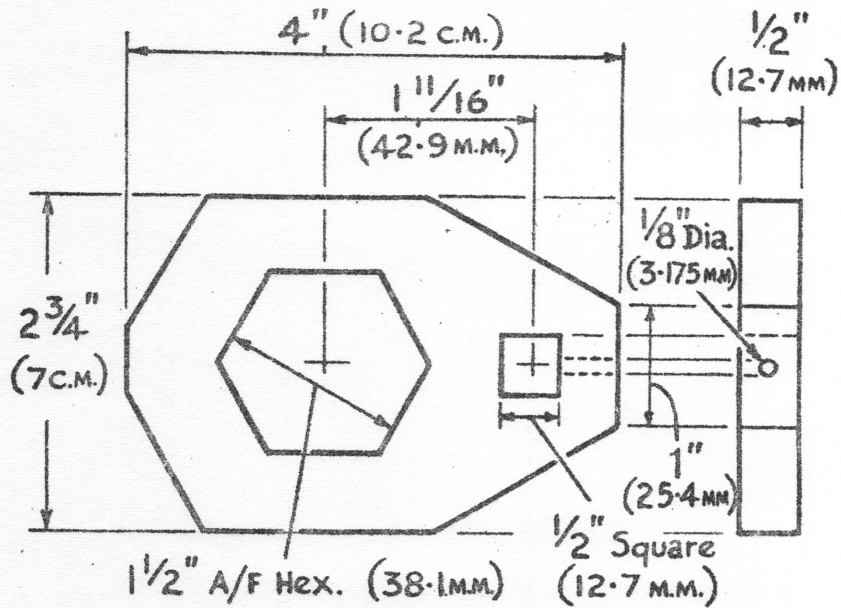
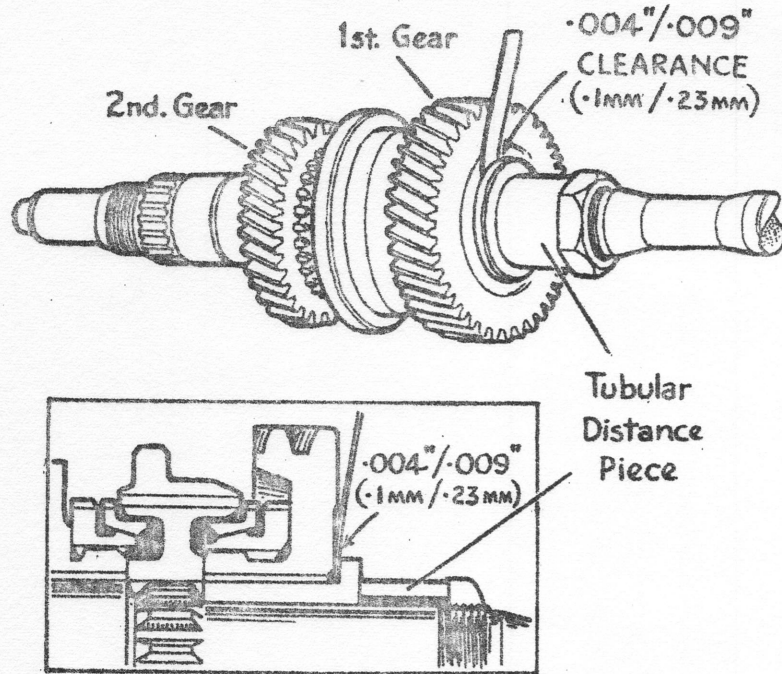
ROUTES MOTORS INCORPORATED


Kenneth Langridge
General Service Manager

KL/mr

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ALL SYNCHROMESH GEARBOX: FIRST SPEED WHEEL END FLOAT
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TORQUE WRENCH ADAPTOR
Rear Mainshaft Nut

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