

ADDITIONAL INFORMATION**Oil pump driven and driving gears**

The oil pump driven gear on the oil pump spindle, and the oil pump driving gear on the front end of the crankshaft must always be renewed together if either of these gears show signs of wear.

These gears are supplied in pairs. Separate gears are not supplied.

New gears should be carefully checked before fitting and any burrs removed with a fine oil stone. Before replacing the timing cover both gears **MUST** be lubricated with engine oil to prevent momentary dry operation before oil reaches the gears.

If, when the oil pump gear is correctly positioned on the existing pump spindle, the locating pin holes do not properly line up, a new pump with an undrilled spindle should be fitted.

The two fixing pin holes, in the driven gear, are drilled through on one side only on service replacement gears. These gears have to be finish drilled after correct positioning on the pump spindle, as described in the following paragraphs.

Service replacement oil pumps

The service replacement oil pump is supplied without the driven gear. Pumps with the driven gear already fitted must not be used for service purposes because this means running a new driven gear with the existing used or partly worn driving gear on the engine crankshaft. When a new oil pump is fitted the driven gear on the discarded pump should be removed and fitted to the replacement pump spindle; provided that it is fit for further use. If worn a new pair of gears should be fitted.

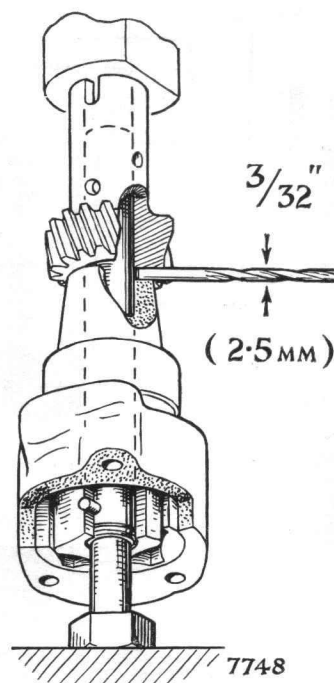


Fig. 58. Method of positioning oil pump gear

As shown in Fig. 58 the gear should be pressed onto the pump spindle until there is a gap of .087 in.—.103 in. (2.2 mm.—2.60 mm.) to the pump body. This gap can be measured by using the shank of a $\frac{3}{32}$ in. or 2.5 mm. drill as a gauge.

While pressing on the gear the pump end cover must be removed and the **END OF THE PUMP SHAFT MUST BE SUPPORTED** as shown in Fig. 58. If this is not done the pin holding the inner rotor to the shaft may be partly sheared.

When the driven gear is correctly positioned on the pump spindle, the two holes needed for the gear fixing pins should be drilled with an $\frac{1}{8}$ in. drill using the existing holes as a guide for the drill.

After driving in the two fixing pins the ends of the pins should be riveted over.