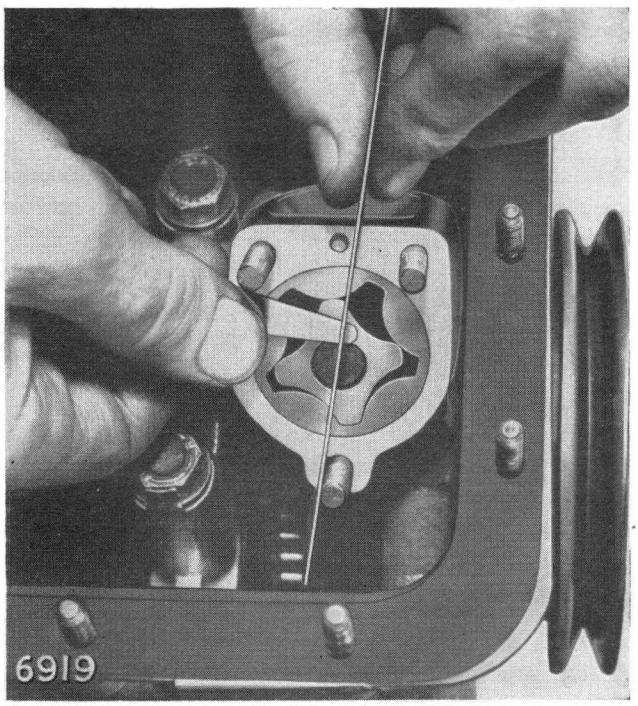

Fig. 24. *Checking oil pump rotor end clearance*

With the engine in a fully assembled condition, No. 1 firing stroke is found by removing No. 1 sparking plug and placing a thumb over the plug hole to feel when compression is occurring.

If the oil pump is replaced, with the distributor off the engine, its correct position for No. 1 T.D.C. is shown in Fig. 23. Position A is for engines fitted with alternators and position B for engines fitted with generators.

A thin gasket is used between the oil pump body face, at the driving gear end, and the face against which the pump bolts on the timing case.

Replace the sump and refill with the correct grade of oil.

To check working clearances (See Figs. 24 to 26)

If necessary the oil pump working clearances can be checked with the pump in position, after removing the pump base plate. The following clearances should be checked:

End clearance between the inner and outer rotors and pump base. The maximum and minimum clearances are ·003 in. (·076 mm) and ·001 in. (·025 mm) when measured with a feeler and straight edge as illustrated in Fig. 24.

Side clearance between the top of the lobes on the inner and outer rotor as shown in Fig. 25. The maximum and minimum clearances are ·006 in. (·152 mm) and ·001 in. (·025 mm). New parts should be fitted if the maximum clearance is exceeded.

Clearance between the outside of the outer rotor and pump body must not be greater than ·008 in. (·20 mm) and not less than ·005 in. (·127 mm). Should the clearance found be above the maximum figure, a replacement pump should be fitted. See Fig. 26.

INLET AND EXHAUST MANIFOLDS

The inlet and exhaust manifolds are usually removed together with the carburettor on the inlet manifold. If the carburettor has been removed first, it is possible to remove the inlet manifold before removing the exhaust manifold.

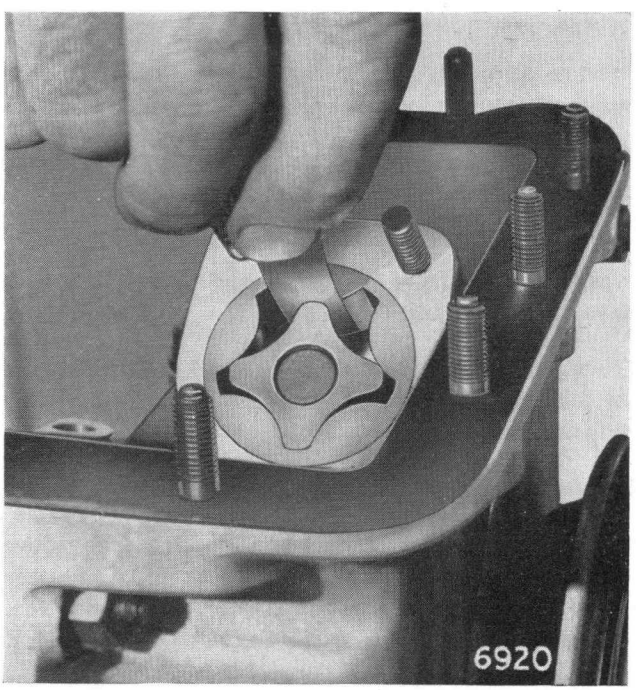

Fig. 25. *Checking oil pump rotor top clearance*