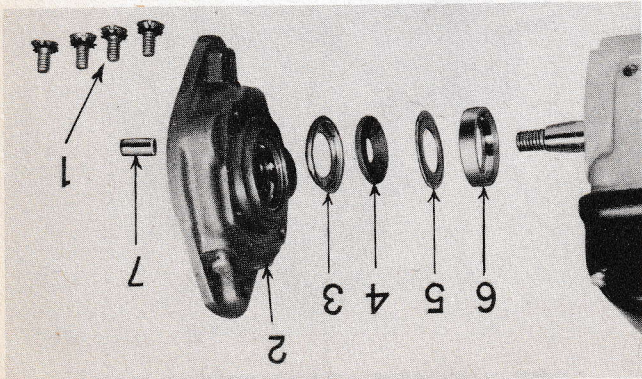


Mounting Flange and Oil Seal



ILLUST. 98--H-4 MAGNETO WITH IMPULSE COUPLING REMOVED. SHOWING MOUNTING FLANGE AND ROTOR BEARING PARTS. 1--COUNTER SUNK SCREWS WITH LOCK WASHERS. 2--MOUNTING FLANGE. 3--FORWARD OIL SEAL RETAINER. 4--LEATHER OIL SEAL. 5--INNER OIL SEAL RETAINER. 6--OUTER BEARING RACE. 7--LEATHER OIL SEAL.

The mounting flange (2) attaches the magneto to the engine and is held to the magneto frame with four countersunk screws and shakeproof lock washers (1) (Illustr. 98). The mounting flange contains one of the rotor bearing races (6) and a leather oil seal (4). The purpose of the oil seal is to keep engine lubricating oil out of the magneto.

To remove the mounting flange, first remove the impulse couplings as explained on Page 53. Then, take out the four countersunk cap screws (1). When replacing, attach so impulse coupling oil cup is on top.

Removing Oil Seal

The rotor shaft leather seal (4) (Illustr. 98, and the two retaining members, (3) and (5) are held in place by press fit of the rotor ball bearing outer race (6). The rotor bearing races (6) can be removed with Puller SF-1020 as outlined and illustrated on Page 23. Races may be replaced with Tool SF-1020, shown on the same page.

Illustration 98 shows the sequence of assembly of bearing race and oil seal. The internal taper side of the leather oil seal (4) faces the bearing race (6) and the bulged side of the oil seal retainer (5) faces the oil seal (4). Careful centering and proper arrangement of the oil seal produces maximum compression and efficiency.

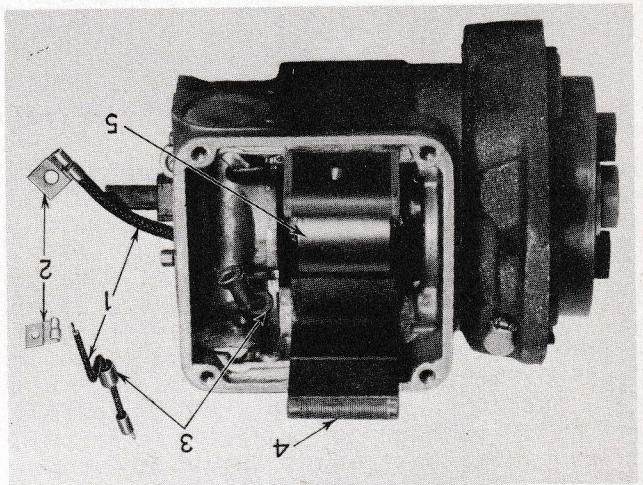
If a new bearing race has been installed, the recommended procedure is to remove complete rotor and bearings and reassemble all parts as covered under the heading of ROTOR MAGNETS and ROTOR BEARINGS (including checking magneto rotor shaft end play).

As shown, it must be removed and enough cut off the threaded end to meet this requirement. When the coil core is in place the screws will then tighten up in the countersunk hole of the pole piece before the screws bottom in the coil core.

CAUTION: Do not file or otherwise deface ends of coil core or face of pole pieces as this will impair the magnetic circuit and efficiency of the magneto. The coil core should be a light press fit between the pole pieces.

Coil Marking

The coils are marked as to the month and year of their manufacture. For instance, a mark, 8-39, means that the coil was built in August 1939.



ILLUST. 97--LOCATION AND ASSEMBLY OF PRIMARY WIRE. 1--PRIMARY WIRE. 2--SPRING ANCHOR TERMINAL. 3--RUBBER GROMMET. 4--COIL INTER-POLE BRIDGING AIR-GAP. 5--ROTOR MAGNET

The primary wire (1) connecting the breaker arm assembly to the condenser terminal, should be a tight fit in rubber grommet (3), and the rubber grommet (3) should be a tight fit in the magneto frame (Illustr. 97). The primary wire and the rubber grommet should make an air-tight job in the magneto frame.

To remove the primary wire (1) the spring anchor terminal (2) must first be unsoldered. Then pull the terminal wire out from the top of the magneto. In reassembling the primary wire, reverse the above procedure.

The spring anchor terminal (2) should be assembled to the breaker arm assembly. When assembling the breaker arm to the magneto, do not flatten the terminal and be careful that it does not touch any part of the magneto frame.