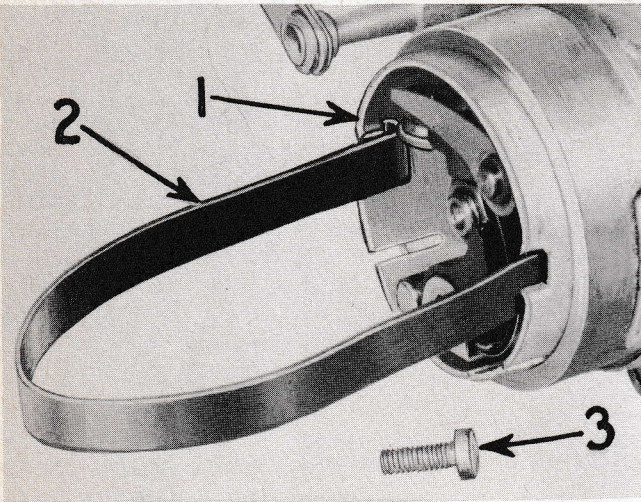


BLUE RIBBON SERVICE

Breaker Cup Removal

A simple tool for removing the circuit breaker cup may be made from a discarded flat impulse coupling spring.



ILLUST. 34--HOW TOOL IS USED TO REMOVE BREAKER CUP.
1--BREAKER CUP. 2--SPRING TOOL. 3--PRIMARY LEAD-OUT TERMINAL SCREW.

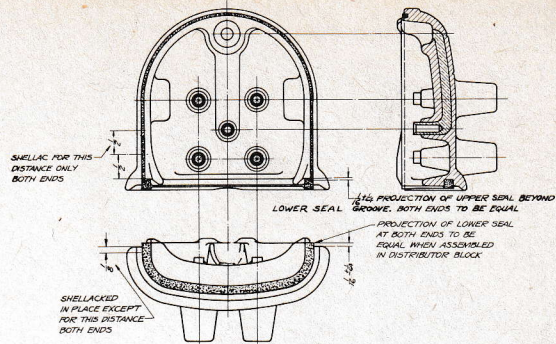
Bend the spring into a "U" shape and turn a short lip at a right angle on both legs of the "U". These two lips should be long enough to hook in back of the bent over lips on the breaker cup slots which are used to move the cup to advance or retard the spark.

To remove the breaker cup, first remove the primary lead-out terminal screw. A light blow on the head of this screw after it has been loosened about two turns will free the lead-out terminal and facilitate the breaker cup removal. The breaker cup must be positioned so that the slot in the rear of the cup registers with the pin which is a stop for the advance and retard action. A light pull on the puller, as shown in Illust. 34, will then remove the breaker cup.

Distributor Block and Gaskets

For satisfactory performance of a magneto, water should not be permitted to find its way to the inside. The F-4 and F-6 magnetos have for some time been fitted with distributor block gaskets of waterproof construction. This is being done in two ways, one by waterproofing the felt, and the other by applying a narrow lamination of artificial rubber in the gasket to prevent seepage from working through.

In wet localities see that these gaskets are used in case ignition troubles



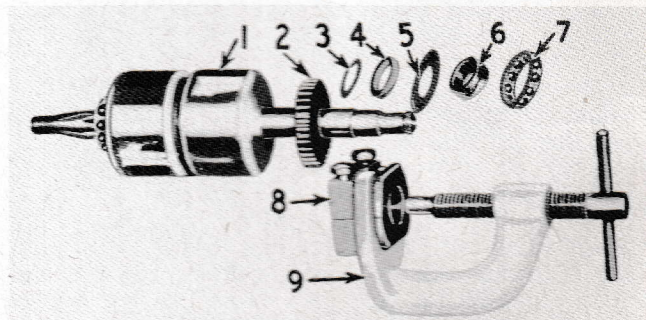
ILLUST. 35--PROPER METHOD OF ASSEMBLING DISTRIBUTOR BLOCK GASKETS.

are experienced. Assemble them as shown in Illust. 35.

Keep the outside of the distributor block clean of mud and water. Some soils produce a mud that is a very good conductor of electricity. With the exterior surfaces of the distributor block coated with such material, the electrical losses may readily reach values that jeopardize ignition, especially when starting is attempted.

Removing F-4 or F-6 Rotor from Magneto Frame

To remove the rotor from either of these magnetos, first remove the impulse coupling. Use puller SE-912 to avoid injury to the rear of the magneto frame. Then take off distributor block, magnet, magneto frame cover, distributor disc, bearing assembly, and breaker housing cover. Remove primary lead-out terminal screw and three breaker housing screws. Breaker housing can then be removed from magneto frame and rotor taken from frame.



ILLUST. 36--EXPLODED VIEW OF ROTOR PARTS WITH INNER RACE PULLER TOOL SE-839. 1--ROTOR. 2--ROTOR PINION. 3--ROTOR SHIMS. 4--ROTOR SHAFT BEARING SPACER. 5--OIL FLINGER. 6--INNER BEARING RACE. 7--BALL BEARINGS AND SEPARATOR ASSEMBLY. 8--BEARING RACE ADAPTER. 9--PULLER.

Inner bearing race can be readily removed from the rotor by using puller and adapter SE-839, shown in above illustration. It is necessary to remove inner bearing race when removing or inserting rotor shims for preloading rotor bearings as explained on following page.