

# Hercules Engine News

By Glenn Karch

## Hercules Ignition Systems



Determining the correct ignition system to use on a Hercules-built engine is a problem that routinely arises among Hercules engine collectors. Over the course of years ignition systems were routinely swapped out or modified, leaving current owners unsure how their engines were originally equipped.

Fortunately, sorting it out isn't that hard. For the small-block engines, four basic ignition systems were used from 1914 through 1929. The igniter was the first system used, followed by the Webster M, the Webster 1A and, lastly, the Wico EK.

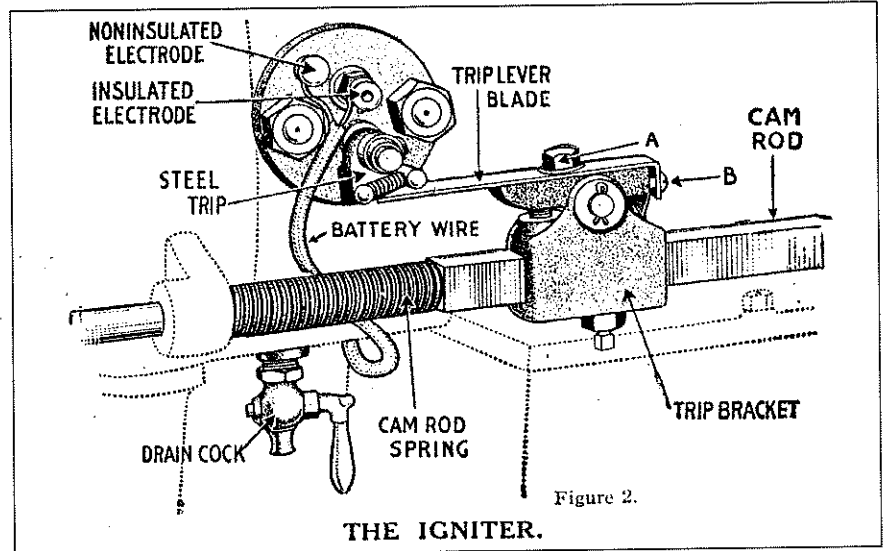


Figure 2.

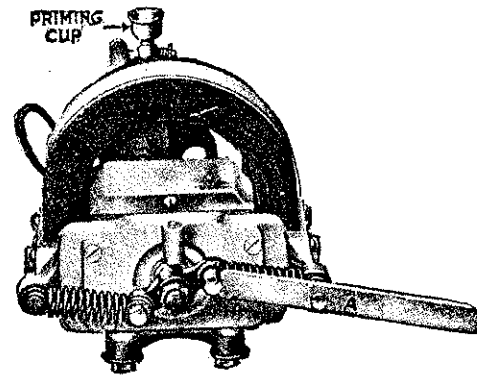
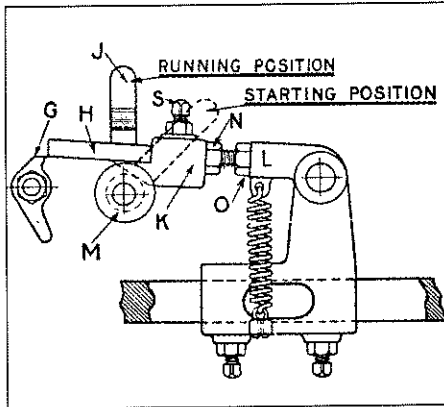
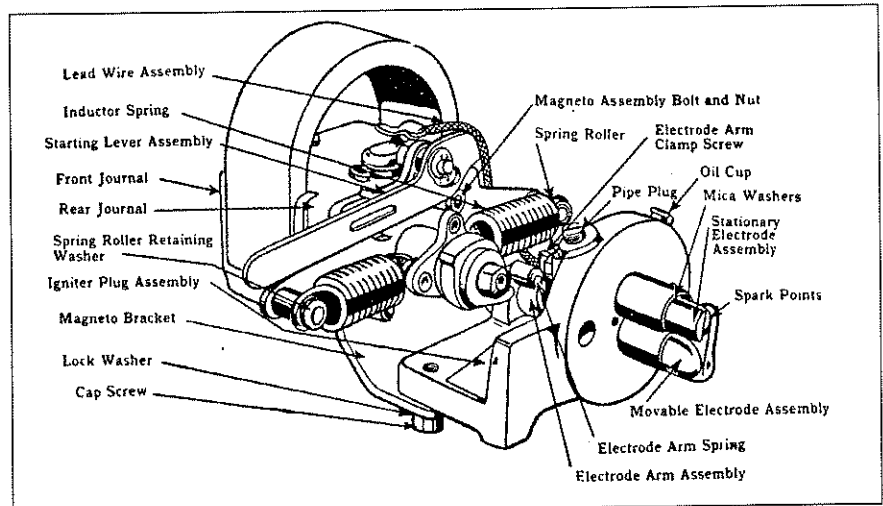


Figure #1, above: Igniter system as introduced in 1914 and used on the Model D and later the Model E. Figure #2, left: Optional Webster Type M used beginning in 1915 and replacing earlier Elkhart optional magneto. Figure #3, below: Webster Type 1A magneto as introduced in 1921.

### Igniter System

The igniter, battery and coil system had a blade-type trip on the side rod of the igniter to create a spark (Figure #1). Beginning with the Model D in early 1914, the igniter with battery and coil was standard on Hercules engines. For extra cost, a crankshaft-driven Elkhart low-tension magneto could also be furnished to provide ignition current. These same systems were used on the Model E engines introduced in mid-1914.



### Webster Magneto

Beginning in 1915, Hercules replaced the optional Elkhart magneto with the Webster magneto system, and by late 1915 the igniter on the 7, 9 and 10 HP engines was dropped altogether in favor of the Webster magneto. The Webster system (Figure #2) used the Type M magneto, the 303M1 bracket and a different tripping mechanism on the side rod that replaced the regular igniter system. By 1917 the Webster system was standard on Model Es, and the use of this system continued until the end of the Model E era in mid-1921.

A new Webster magneto system was introduced in 1921. This was the Webster Type 1A magneto (Figure #3), which was equipped with an appropriate bracket and side-rod tripping mechanism. This system apparently failed to operate satisfactorily, and many engines originally equipped with the Type 1A have been changed to another ignition system. Use of the Type 1A -

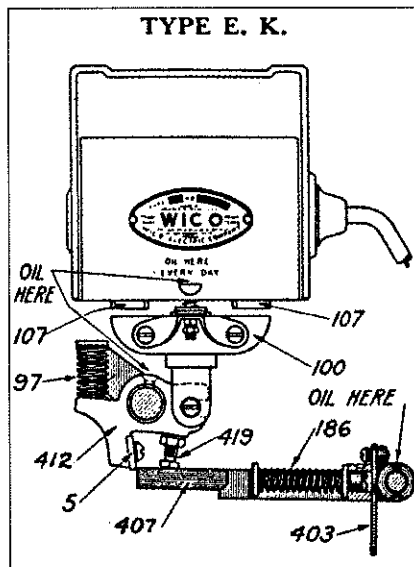


Figure #4: Wico EK high-tension magneto as introduced in 1923.

rily, and many engines originally equipped with the Type 1A have been changed to another ignition system. Use of the Type 1A -

and the F model that it was on - was short lived.

### Wico EK

The Wico EK high-tension magneto system was introduced in 1923 (Figure #4). It required a different mounting bracket for the magneto, trip mechanism and spark plug mounting. The Type 2 drive was used to trip the magneto. This system was used through the FW, G, H, S and X model engines.

Although not standard, a Wico PR magneto system using a special bracket and an earlier trip mechanism was available on the aftermarket before the Wico EK magneto system was introduced.

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