

## Hercules Engine News

*Including Economy, Arco, Jaeger & Thermoil*

by Glenn Karch  
20601 Old State Road  
Haubstadt, Indiana 47639

On November 22, 1920 the corporate structure at Hercules changed. The various companies (The Hercules Buggy Company, The Hercules Body Company, the Hercules Gas Engine Company, The Indiana Color and Varnish Company, the Hercules Wheel Company, The Hercules Power Plant, The Hercules Surry and Wagon Company, and the Hercules Carriage Wood-Stock Company) were merged into the Hercules Corporation. It was also about that time that Hercules became involved in the refrigeration business too.

The E model gas engine era started coming to a close late in 1921. In an eight year span, some 220,000 E models had been built along with several thousand D models and Thermoils. This figures out to be around 30,000 engines per year. Before the move to Evansville from Sparta, Michigan in late 1913, less than 35,000 engines were produced during the four years there.

Interestingly, production of E models did not end abruptly when production of the F models began. A study of serial numbers of known engines would indi-

cate that both models were co-mingled for several thousand. The production of Jaeger engines also began toward the end of the E model era. They had the same dimensions and appearance (except of color) of the 1½ HP Economy engines, but they were rated at 2 HP and had no model letter on the tag.

There were several changes in engine design on the F model. The most noticeable would be the use of the Webster 1A and 2C magneto system. It is shown in the accompanying illustrations. This magneto system apparently was not too satisfactory. Many F model engines in the field have either refitted to the older Webster magneto system or updated to the Wico high tension system. Observation indicates that very few other engine manufacturers switched to this new Webster system.

On all Hercules brand engines the flair on the hopper lip was eliminated.

The small block engines had several other design changes. The main bearing mounts were changed to flat from the slanted design. Not only is the flair eliminated on the small Hercules hopper, the whole

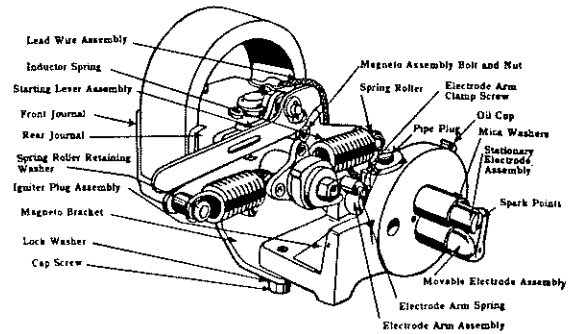
## Webster Magneto

(New Style)

### HOW TO ORDER SPARE PARTS

1. Give type of magneto and igniter plug.
2. Give part No. and part name.
3. Give H.P. name and type of engine.

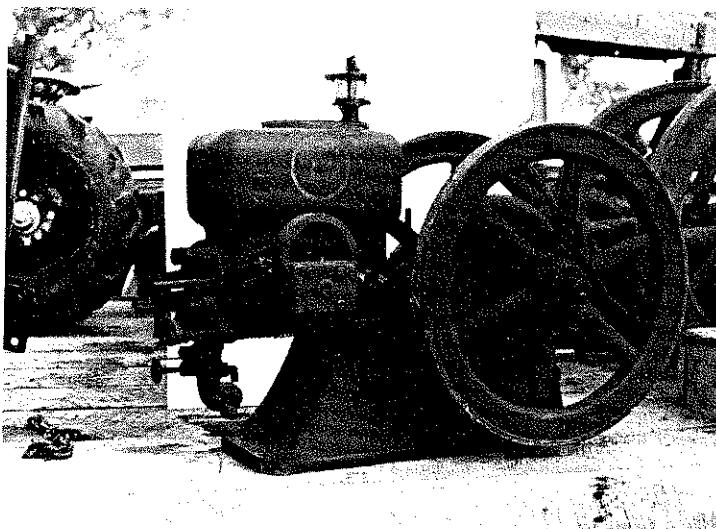
NOTE: New Style Webster Magneto cannot be used if engine is equipped for old style.



IF REPAIR WORK IS REQUIRED SEND IN BOTH MAGNETO AND IGNITER PLUG

NOTE: See Magneto Parts List for old style M1, K26 and L26 Magneto on pages 47, 48.

—49—



E Model Hercules 1½ HP with the Webster 1A magneto.

hopper is moved to the rear about ¼ of an inch. The small size Economy hopper is redesigned to a longer shape with a smaller opening. The oiler is relocated from behind the hopper to a pipe down through the hopper opening.

It should be pointed out again that these changes do not occur abruptly at some given serial number, but they seem to be phased in over several thousand engines. There are a few F model engines with some E model features and vice versa. These changes start occurring around 255,000 serial number.

The 2½ HP Economy is rerated to 3 HP with the bore increased from 4 inches to a 4¼ inches. On all 3 HP size engines the oiler is relocated to a hole just behind the large hopper opening. Other than the ignition system, the larger size engines remained virtually unchanged.

The F model era was short giving away to the FW (G) model beginning March 1, 1923. Over 25,000 F models were built, primarily in 1922. ○