

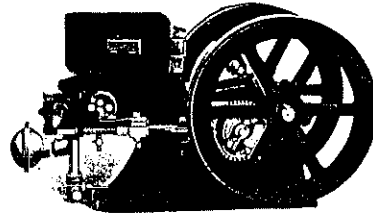
Sparta Economy Engine News

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The CX models were the last engines built for Sears, Roebuck & Company at the Holm Machine Manufacturing Company at Sparta, Michigan. Production began in mid 1912 with the 1 HP size and continued until the early fall of 1913. At that time the factory was closed down and all of the moveable assets were loaded on freight cars and shipped to the new Hercules Gas Engine Company factory at Evansville, Indiana.

The first engines of the new design in the new CX model were the 1 HP size. This first engine and the look alikes to come make interesting stories in themselves. The first 1 HP size is shown here. It was of attractive and simple design and with modifications it would continue until 1929 in the Hercules line of engines. The 1 HP model CX had a dry head, large water hopper opening and an igniter, battery and coil ignition system with a new design blade trip. It was first offered in the fall 1912 Sears general catalog at a price of \$26.95. The write-up described the new 3/4 inch bore by 5 inch stroke engine, but the engine illustrated is a 2 HP model CA. A special gas engine catalog of the time pictures the new 1 HP engine, but the rest of the engines in the catalog are still the model CA. It should be noted that the engine pictured has two bolt fly-

1-Horse Power Economy Stationary Gasoline Engine



No. 47A4508 1-Horse Power Stationary Gasoline Engine. Price **\$26⁹⁵**

THIS ENGINE GUARANTEED EQUAL TO ANY ENGINE SELLING FOR TWICE OUR PRICE.

TYPE—Four-cycle, water cooled.	PULLEY—4 inches in diameter; 4-inch face.
BORE—3/4 inches. STROKE—5 inches.	CRANK SHAFT—Drop forged, 1 1/4 inches in diameter.
SPEED—500 revolutions per minute.	FLOOR SPACE REQUIRED—18x24 inches.
FLY WHEEL—Diameter, 18 inches. Weight, 44 pounds.	SHIPPING WEIGHT—350 pounds.

Shipped from our factory at Sparta, Michigan.

wheels and has the tag on the side of the water hopper.

This new engine makes its appearance at the time when Sears and the Hercules Buggy Company of Evansville, Indiana, were in negotiation in regard to what eventually became the Hercules Gas Engine Company. Whether Sparta or Evansville people were responsible for this new design is unknown.

A unique feature of the new 1 HP engine is the cam gear governor mechanism. In the accompanying illustration you can see the cam gear governor parts. It consisted of a kidney shaped weight attached at a pivot on the cam gear with its travel limited by stops cast onto the cam gear. It had an attached threaded rod with a spring and nut for adjusting the speed setting. When it swung out far

enough, the governor weight struck a small roller on the end of the detent lever to cause it to engage the latch on the side rod. In practical terms it was a poor mechanism. Speed adjustment was poor and governing was erratic. It is no wonder that several of these early 1 HP engines have had the mechanism removed from the cam gear and the horizontal gear driven governor mechanism substituted in its place.

Currently, I only know of six such engines and half of these have been modified to the flyball governor. They all fall into the 26,000 to 29,000 serial number range. It is estimated that only 500 so described were built. The story that started out with the 1 HP cam gear governor Sparta Economy will continue next month with the four "look alikes." ○