

HERCULES

Gasoline and Kerosene

ENGINES



Hercules Engines

All We Can Give for the
Money - Not all We Can
Get for the Goods

THE HERCULES GAS ENGINE CO.
EVANSVILLE INDIANA, U.S.A.



GUARANTEE

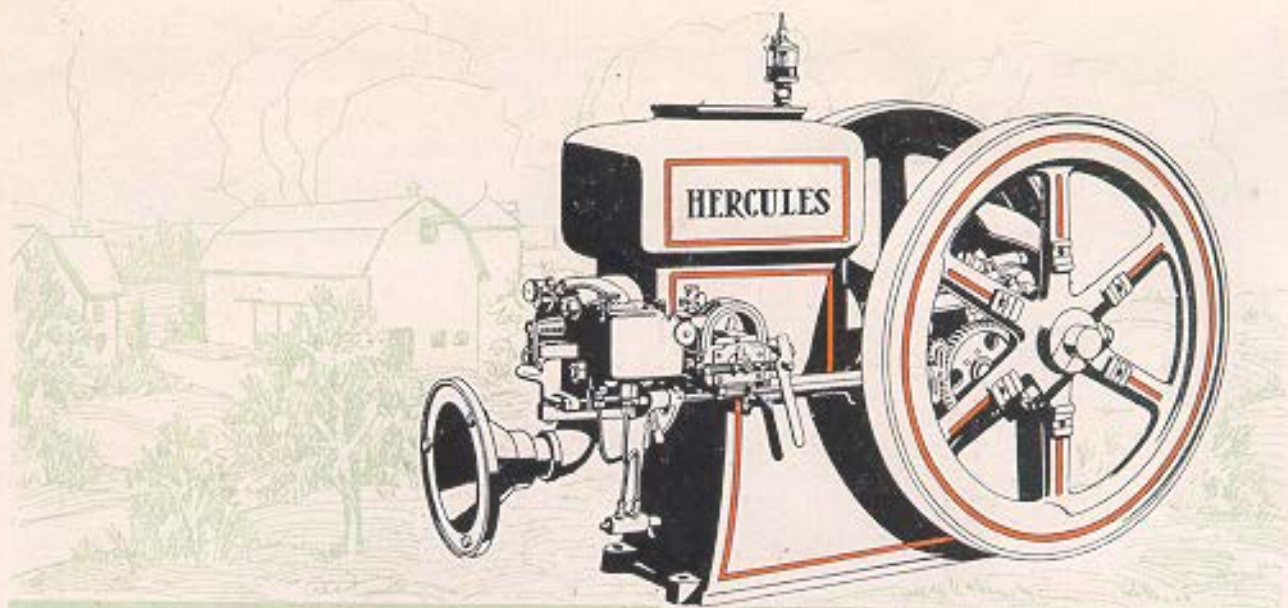
We hereby guarantee every Hercules Engine to be built of the best material with the highest grade machinery and workmanship.

Each engine is carefully tested under a continuous pulling load and is guaranteed to develop the full rated horsepower, leaving the factory in perfect running order.

The owner of a Hercules Engine is also protected by our liberal policy and our reputation of twenty-five years' standing in the manufacturing business.

Our responsibility does not cease when the sale is made.

The Hercules Gas Engine Co.



Power for the Farm



HERE is nothing more significant of the true value of any product of manufacture than the measure of success such product or its producers have achieved. And it is this standard of judgment that justifies the claim that Hercules Gas Engines represent the most remarkable development in farm power that agricultural America knows today.

Never has farmer-confidence been bestowed upon a name with more unqualified sincerity than has been earned by Hercules. Three hundred thousand farmers today give substantial proof of the overwhelming superiority built into Hercules Gas Engines.

The farmer of these times is a business man. He's becoming more scientific and more critical of his choice in equipment. He buys that which gives him the greatest service value for the price paid, he recognizes, just as well as any one else, that it's real, honest-to-goodness value that counts in the long run.

Built into every Hercules engine is the full force of a quarter of a century of experience, research and skill to make the right engine for farm power.

No other engine on the market, regardless of price, insures so much service quality—none has so many desirable mechanical features—in fact, none offers so much actual value and uninterrupted satisfaction as goes with every Hercules engine.

Since the early days of the industry, the Hercules has been manufactured upon well-defined principles of gas-engine construction developed through an intensive knowledge of gas power engineering. Today, the plant in which Hercules engines are built is recognized as the largest and best equipped gas engine plant in the world—the first and last word in human and mechanical skill.

Its destinies are guided by an organization of farm engine experts who can contribute more to the subject of the right power for the great American farmer than any other similar organization in the world.

THE HERCULES GAS ENGINE CO.
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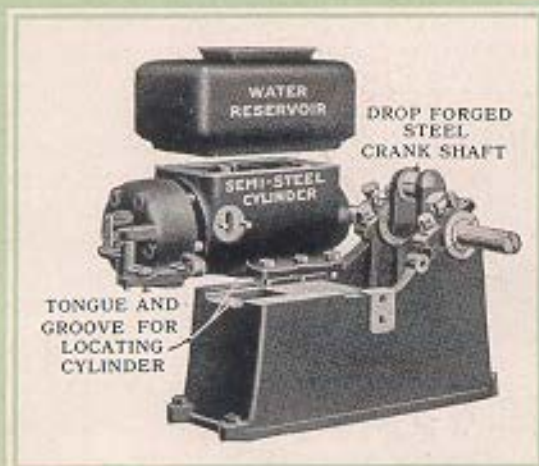
The Hercules governor is of the fly-ball type, with speed regulator, and we consider it much superior to the cheaply constructed flywheel governors. A steel pinion is used on the crank shaft to drive the governor, the governor pinion itself being made of steel and all other parts that are subject to wear are made of special tempered steel.

For ignition we use the make-and-break igniter. The igniter is made of the best materials, springs are special tempered steel. The igniter is operated by a hardened steel igniter trip blade that you see on the trip bracket fastened to the cam rod that runs along the side of the engine. This trip is adjustable so that the position of the spark can be changed at any time. It is made of drop forged steel, heat treated, to insure long service. All parts are accurately machined with ground joints to prevent loss of compression and are interchangeable. The Hercules igniter is not only the best but the simplest that it is possible to make.

The piston is cast in our own foundry from a special mixture of grey iron. It is turned, finished and ground to a perfectly smooth surface and machined to exact size within one-thousandth part of an inch. The piston rings, which are one of the most necessary parts of an engine, are each cast separately, which is admitted by all engine builders to be the only way to make a piston ring that will hold its shape and hold the compression. Hercules piston rings are made of the same materials and by the same methods as those used in the highest grade automobile engines.

Our connecting rod is of the "I" beam design, drop forged, of ample size to insure plenty of strength. A case-hardened steel pin is fitted in one end of the connecting rod to hold the piston, and we use a special oil cup on top of this end to insure the piston pin inside of the piston being properly oiled. The large end of the connecting rod is machined accurately and die-cast bearings are used where it connects to the crank shaft.

All crank shafts are oversize. The checks of the crank-throw are all extra size and of ample strength which enables us to absolutely guarantee the Hercules drop forged crank shafts against breakage and strain.



Tongue and Groove Joint

THE tongue and groove joint used on the Hercules in attaching the cylinder to the base insures perfect alignment in piston travel, preventing side thrust, undue friction and wear. It means longer life through reduced wear, more efficiency through reduced friction and greater fuel economy through perfect compression. The top of base being reinforced gives the Hercules the added strength and rigidity that is absolutely necessary in an engine subject to continuous heavy duty service.



when attached to a gasoline engine although there are quite a few on the market, many of which we have tested and found unsatisfactory.

To operate an engine successfully on kerosene, it is absolutely necessary that a small amount of water be taken into the engine with the kerosene vapors by the suction stroke. Too much water or too little water produces unsatisfactory results.

The Hercules kerosene engine is built complete in our factory. We have a special mixing valve, on which we have applied for patent, that produces desired results by admitting on the suction stroke the proper amount of kerosene vapor and water. This feature is what makes the Hercules kerosene engine successful.

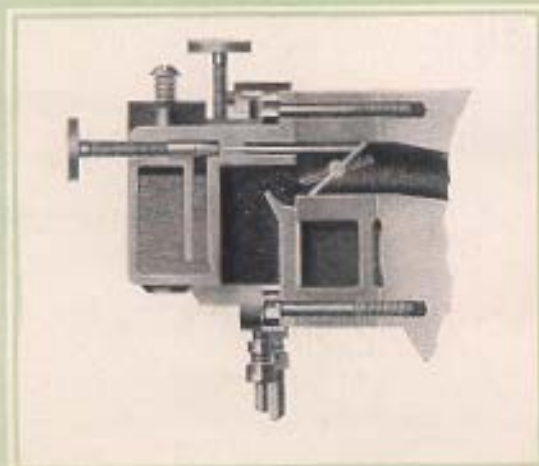
The Hercules kerosene engines have been tested under all conditions with full load and with no load, having run for several days at a time with no load. Thousands of them have been operating in the field in hands of customers and proved entirely satisfactory.

It is a guaranteed success.

The phenomenal record of Hercules sales is a record of superior value backed by a quarter century of honorable dealings. Nothing could be more significant of this than the fact that the largest sales come from localities where there are already many Hercules engines in use.

There are many reasons why one working Hercules engine almost invariably causes others to be purchased in the same locality, but the one outstanding feature is its masterful construction which insures long service; absence of trouble and a minimum cost of fuel and maintenance.

Hercules engines are easy starting and smooth running. All machine work is done by specially designed equipment and all parts are duplicated to the thousandth part of an inch. If ever it becomes necessary to replace any part, a Hercules owner knows it can be had promptly and that it will fit.



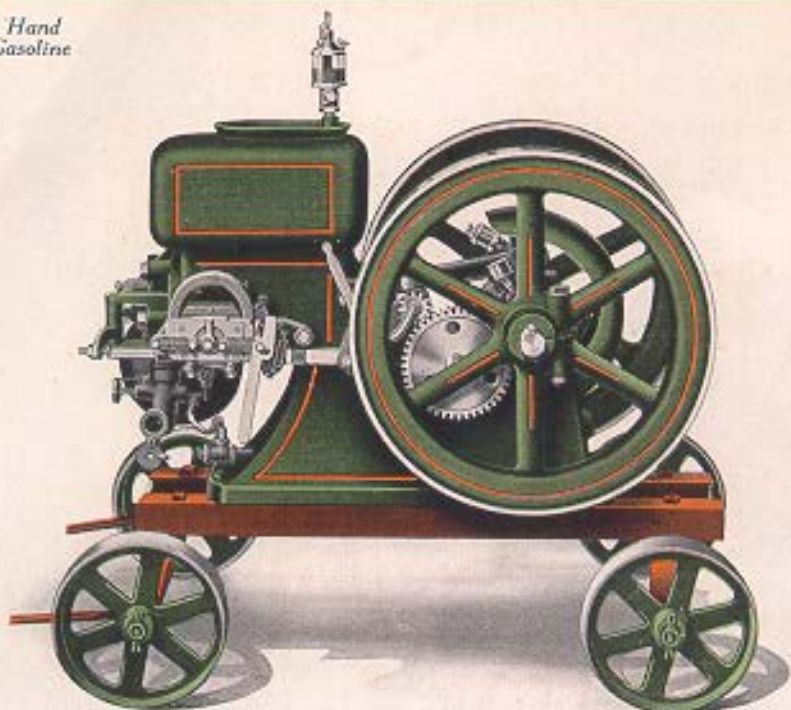
Kerosene Carburetor

THE Hercules kerosene carburetor was designed to make possible the use of kerosene as a satisfactory fuel and is the result of almost ten years' experimental work upon the part of one of the best engineers in the United States and one who is considered authority on internal combustion engines.

The importance of this feature is specially appreciated in foreign markets where the cost of kerosene is so much lower than that of gasoline.



*1½ H. P. Hand
Portable Gasoline*

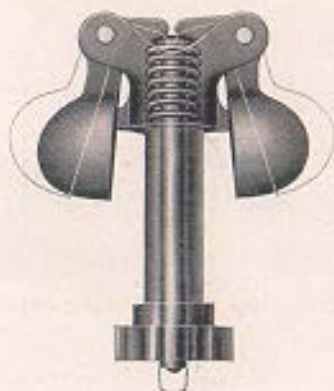


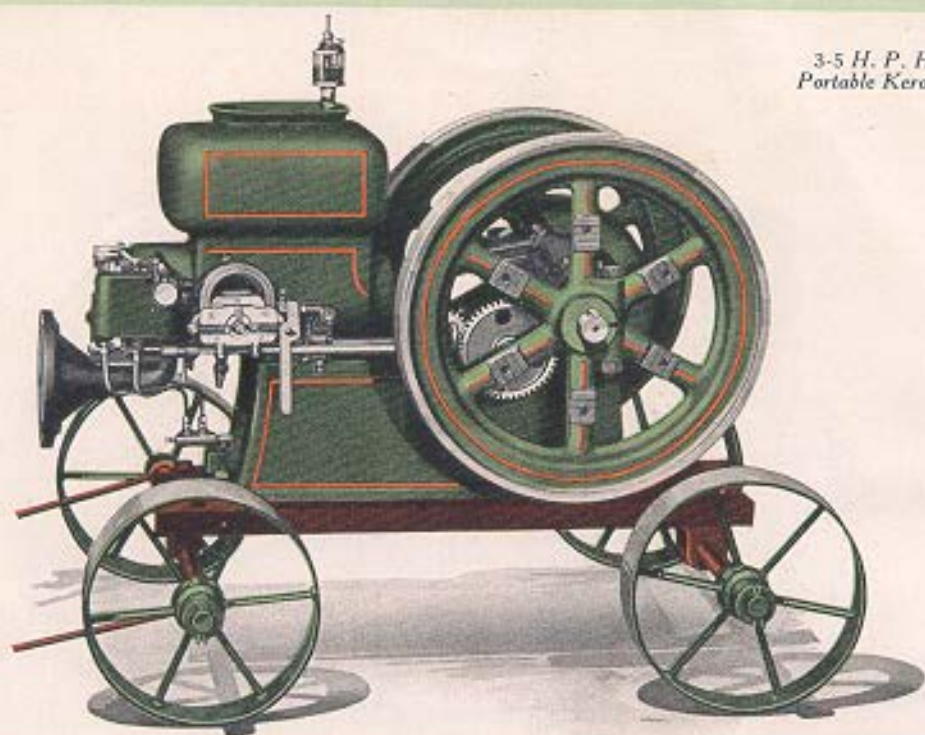
Ball Bearing Governor

THE Hercules governor is of the high speed fly-ball type, the same as is used on practically all steam engines, and the speed at which it operates insures the closest possible regulation and with less variation than any other type known.

Close regulation means steady, even speed of engine and machine which it operates and also effects a great saving in fuel consumption.

The Hercules governor is ball bearing and all parts subjected to wear are made of hardened steel, adjustable and interchangeable.

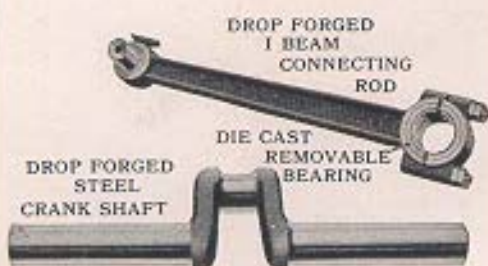




3-5 H. P. Hand
Portable Kerosene



Crank Shaft and Connecting Rod



EVERY Hercules engine is equipped with a drop forged crank shaft of high carbon steel, accurately turned and ground to 10 per cent over size. Connecting rod is of the "I" beam type, drop forged. Bearings on crank pin end are made of genuine babbitt, die cast, and are adjustable and interchangeable. Accurate machining insures absolutely perfect fit and bearings may be removed or replaced in a few moments by any person who knows the use of an ordinary monkey wrench. No need for an expert—an important thing to consider when you buy your engine.



Make and Break Ignition

THE ignition problem is a matter of much concern to the buyer of a gas engine. An engine, once started, is easily kept in operation, or if it does not work satisfactorily, can be adjusted with but little exertion on the part of the operator. On the other hand, an engine which refuses to start not only causes a loss of time and disarrangement of plans, but requires great physical effort in the attempts to start it.

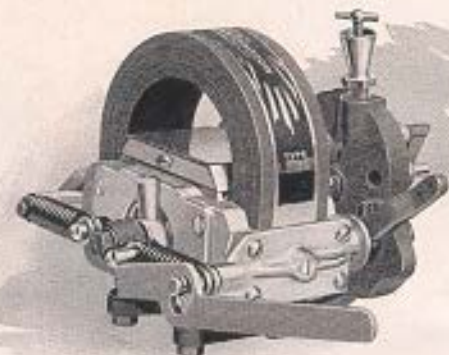
The ignition equipment has long been a source of trouble and uncertainty on gas engines and has been remedied only by the advent of the oscillating magneto, which not only displaces batteries, switches and wires, but starts the engine from a standstill and operates it in all kinds of weather.

The purchaser, in selecting from among the various types offered, must bear in mind the following requirements for easy starting:

First—A hot spark is absolutely essential. The engine is cold and when turned by hand the compression is very low. The mixture is usually too rich from being primed for starting and much gasoline condenses upon the cold cylinder walls. The mixture present in the cylinder is, therefore, difficult to ignite because it is of incorrect proportions, because it is cold, and because the compression is very low. In the presence of all these disturbing factors, it is of the utmost importance that the spark be of the greatest possible strength when the engine is being started.

Second—The spark must be perfectly reliable. No matter whether the engine is large or small, it is to the interest of the operator to reduce, as far as possible, the labor of starting. Every missed explosion means two more turns of the flywheels, or if the engine is large, it means drawing in a fresh charge and once more turning the engine against compression. While the engine is gaining speed no explosions may be missed without danger of fouling and choking, due to the richer mixture being fed at that time.

Third—Safety in starting must be assured. If the engine is small, so that it can be started by rotating the flywheels, then means must be provided whereby the spark may be retarded to the dead center position or later. There will be no danger from a kick-back with the possibility of a sprained or broken wrist. If the engine is large, the easiest and safest method of starting is to draw in a charge of gas, rock the flywheels back against compression and trip the magneto or igniter.



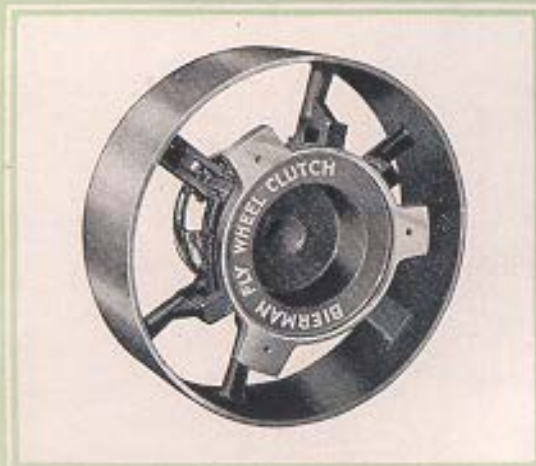
In all these requirements the Webster Tri-Polar Oscillator stands as the only true type oscillator that has really been perfected. It is simple, dependable and durable. Contains no moving wires, and the absence of brushes and rubbing contacts gives it a marked superiority over types of low tension ignition. It is weather proof, oil proof and as nearly fool proof as it can be made.

Bierman Friction Clutch Pulleys

IN keeping with the Hercules policy of giving all we can for the money, we have adopted the Bierman Friction Clutch Pulley as the one measuring up to the highest standard of Hercules efficiency.

These Pulleys are furnished in the following sizes

8 x 6		24 x 8
12 x 6	20 x 8	28 x 8
16 x 6		30 x 8

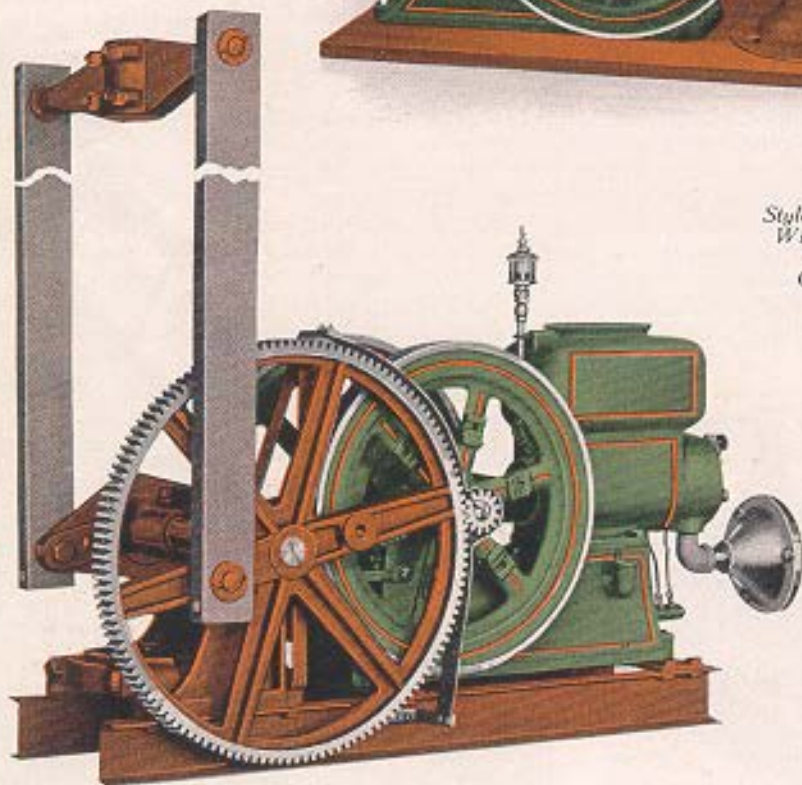


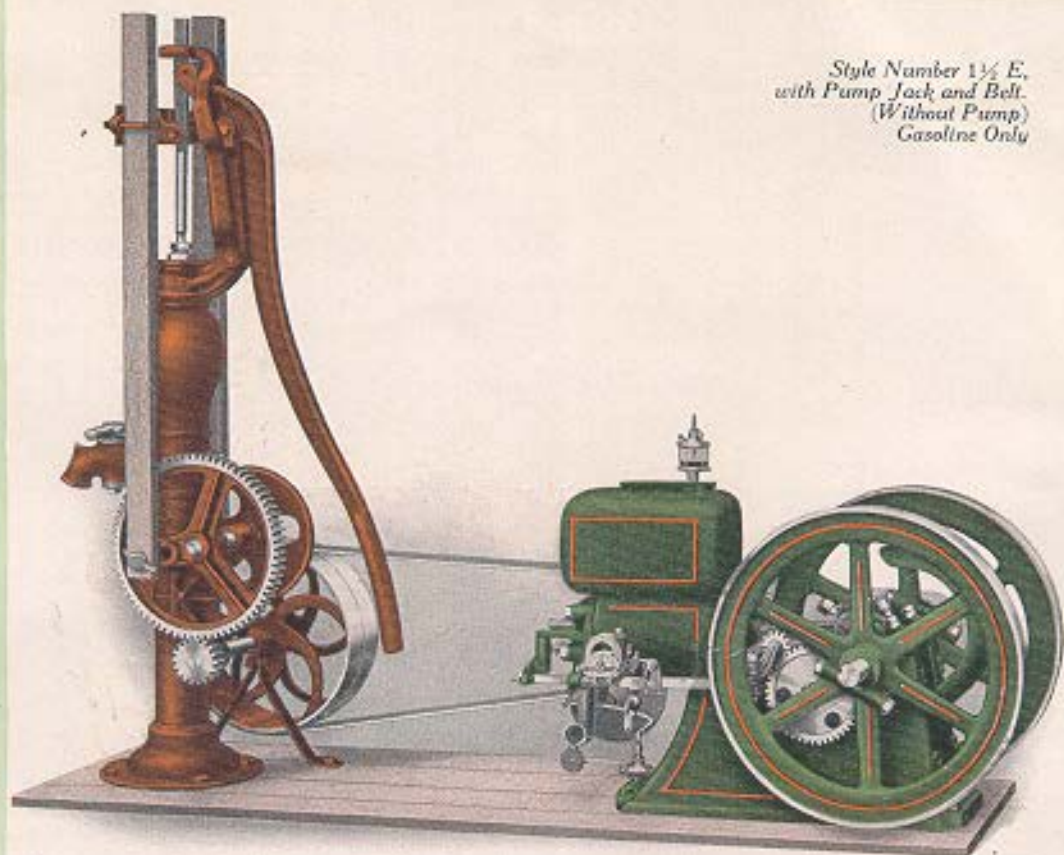


*Style Number 1 1/4 F,
With Geared Pump Jack
(Without Pump)
Gasoline Only.*

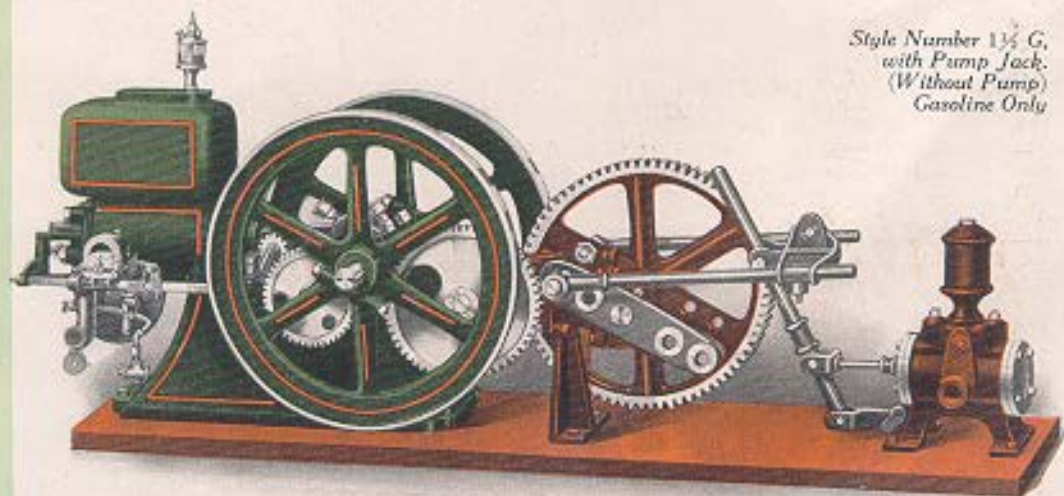


*Style Number 3 L or K 3 L
With Geared Pump Jack
(Without Pump)
Gasoline and Kerosene*





*Style Number 1 1/2 E,
with Pump Jack and Belt.
(Without Pump)
Gasoline Only*



*Style Number 1 1/2 G,
with Pump Jack.
(Without Pump)
Gasoline Only*



THE HERCULES HOPPER COOLED STATIONARY GASOLINE AND KEROSENE ENGINES

Code Word		Style Number		Horse Power	Speed R.P.M.	Plain Pulley		Fly Wheel		Floor Space Over All			Dia. of Crank Shaft	Shipping Weight Pounds
Gasoline	Kerosene	Gasoline	Kerosene			Diam.	Face	Diam.	Weight	Width	Length	Height		
Abaze	-----	136A	-----	1 1/2	550	4 in.	4 in.	18 in.	44 lbs.	27 in.	31 in.	19 in.	1 1/2 in.	300
Able	Afar	3 A	K 3A	3	475	8 in.	4 in.	22 in.	93 lbs.	26 in.	40 in.	22 in.	1 1/2 in.	575
Acid	Alien	5 A	K 5A	5	425	12 in.	6 in.	28 in.	166 lbs.	28 in.	47 in.	27 in.	2 in.	912
Acme	Alert	7 A	K 7A	7	375	16 in.	6 in.	34 in.	228 lbs.	32 in.	57 in.	32 in.	2 1/2 in.	1780
Acorn	Amias	9 A	K 9A	9	325	20 in.	8 in.	38 in.	400 lbs.	36 in.	65 in.	36 in.	2 1/2 in.	1980
Adult	Aze	12 A	K12A	12	300	24 in.	8 in.	44 in.	530 lbs.	39 in.	74 in.	41 in.	2 1/2 in.	2650

THE HERCULES HAND PORTABLE OUTFITS WITH ALL STEEL HAND TRUCK

Code Word		Style Number		Engine Reg. Equip.	Truck Angle Beams	Axle	Width of Tires	Size of Wheels		Shipping Weight Pounds
Gasoline	Kerosene	Gasoline	Kerosene					Front	Rear	
Babe	-----	1 1/2 H	-----	1 1/2 H.P.	26-1 1/2 x 1 1/2	1 in. Pipe	2 in.	8 1/2 in.	8 1/2 in.	350
Ball	Barn	3 H	K 3H	3 H.P.	36-1 1/2 x 2	1 1/2 in. Steel	2 1/2 in.	14 in.	14 in.	755
Bang	Bean	5 H	K 5H	5 H.P.	36-1 1/2 x 2	1 1/2 in. Steel	2 1/2 in.	14 in.	14 in.	1112

THE HERCULES HOPPER COOLED TEAM PORTABLE OUTFITS WITH ALL-STEEL TRUCK

Code Word		Style Number		Engine Reg. Equip.	Channel Steel Frame	Axle	Width of Tires	Size of Wheels		Shipping Weight Pounds
Gasoline	Kerosene	Gasoline	Kerosene					Front	Rear	
Birth	Blank	5B	K 5B	5 H.P.	5in.x 8ft.5in.	1 1/2 in.	4 in.	24 in.	32 in.	1515
Besch	Bless	7B	K 7B	7 H.P.	5in.x 8ft.5in.	1 1/2 in.	4 in.	24 in.	32 in.	1883
Bind	Board	9B	K 9B	9 H.P.	6in.x 9ft.	1 1/2 in.	4 in.	24 in.	32 in.	2608
Blame	Boat	12B	K12B	12 H.P.	6in.x10ft.5in.	2 in.	5 in.	26 in.	36 in.	3520

THE HERCULES HOPPER COOLED TEAM PORTABLE SAWING OUTFITS WITH ALL-STEEL TRUCK

Code Word		Style Number		Engine Reg. Equip.	Channel Steel Frame	Axle	Width of Tires	Size of Wheels		Saw Frame	Saw with Guard	Shipping Weight Pounds
Gasoline	Kerosene	Gasoline	Kerosene					Front	Rear			
Dad	Delight	5C	K 5C	5 H.P.	5in.x 8ft.5in.	1 1/2 in.	4 in.	24 in.	32 in.	Sliding Table	26 in.	1580
Dare	Denote	5D	K 5D	5 H.P.	5in.x 8ft.5in.	1 1/2 in.	4 in.	24 in.	32 in.	Tilting Table	26 in.	1670
Debt	Depend	7C	K 7C	7 H.P.	5in.x 8ft.5in.	1 1/2 in.	4 in.	24 in.	32 in.	Sliding Table	30 in.	2175
Deal	Deplore	7D	K 7D	7 H.P.	5in.x 8ft.5in.	1 1/2 in.	4 in.	24 in.	32 in.	Tilting Table	30 in.	2365
Decay	Desk	9C	K 9C	9 H.P.	6in.x 9ft.	1 1/2 in.	4 in.	24 in.	32 in.	Sliding Table	30 in.	3170
Deed	Destroy	9D	K 9D	9 H.P.	6in.x 9ft.	1 1/2 in.	4 in.	24 in.	32 in.	Tilting Table	30 in.	3160
Defer	Disown	12C	K12C	12 H.P.	6in.x10ft.5in.	2 in.	5 in.	26 in.	36 in.	Sliding Table	30 in.	3750
Defect	Develop	12D	K12D	12 H.P.	6in.x10ft.5in.	2 in.	5 in.	26 in.	36 in.	Tilting Table	30 in.	3740

THE HERCULES BELT DRIVEN AND DIRECT CONNECTED PUMPING OUTFITS

Code Word		Style Number		Horse Power	How Driven	Strokes Per Min.	Length of Strokes	Floor Space Over All, Not- Including Pump			Style of Pump	Shipping Weight Pounds
Gasoline	Kerosene	Gasoline	Kerosene					Width	Length	Height		
Card	-----	1 1/2 E	-----	1 1/2	Belt	43	4 1/2, 7 or 9 1/2 in.	27 in.	70 in.	65 in.	Vertical	390
Case	-----	1 1/2 F	-----	1 1/2	Gear	43	5, 6, 8 or 10 in.	27 in.	45 in.	63 in.	Vertical	410
Center	-----	1 1/2 G	-----	1 1/2	Gear	46	5, 6, 8 or 10 in.	27 in.	59 in.	19 in.	Horizontal	410
Cress	Crank	3 E	K 3E	3	Belt	37	4 1/2, 7 or 9 1/2 in.	26 in.	72 in.	65 in.	Vertical	565
Crook	Crawl	3 L	K 3L	3	Gear	47	7 1/2, 10 or 12 in.	26 1/2 in.	48 in.	90 in.	Vertical (Deep Well)	1020

ALWAYS ORDER BY STYLE NUMBER

THE HERCULES GAS ENGINE CO.

EVANSVILLE, INDIANA, U. S. A.