

DO NOT DESTROY

REPAIR LIST and INSTRUCTIONS

FOR CARE AND OPERATION OF

IOWA *Over Size*
Guaranteed Power Engines
The Chore Boy—Associated Line

Gasoline $1\frac{3}{4}$ to 25 H. P.

Kerosene $2\frac{1}{4}$ to 25 H. P.

No. 730

*This Instruction and Repair Book should be carefully
preserved for future reference*

**ALWAYS GIVE SERIAL NUMBER
of your "IOWA" Engine when order-
ing repairs. This number is on end
of crank shaft or on the name plate**

**Associated Manufacturers Co.,
Waterloo, Iowa**

IOWA

CURVED DISC CREAM SEPARATOR



IOWA *Curved Disc*
CREAM SEPARATOR

**Outskimmed
All Competing Separators**

In the International Skimming Tests made by the Jury of Dairy Experts at the World's Fair Exposition in 1915, the "IOWA" outskimmed all other Cream Separators. The "IOWA," equipped with the patented Curved Disc Bowl, was the only Separator to receive OFFICIAL PRAISE for close skimming

"World's Best By Actual Test"

**Associated Manufacturers Co.
Waterloo, Iowa, U. S. A.**

**MORE
BUTTER FAT
GUARANTEED**

The patented Curved Disc Bowl of the IOWA Cream Separator is possible to guarantee more butter fat from the same amount of milk. For proof, test this Cream Separator along side other make, you will find the test for milk fat tag is out of the pocket of the ASSOCIATED MANUFACTURERS CO.



Factory of Associated Manufacturers Company

Waterloo, Iowa, U. S. A.



ASSOCIATED BRANCHES

Columbus, Ohio	Chicago Illinois
Minneapolis, Minnesota	Syracuse, New York
Omaha, Nebraska	Charlotte, North Carolina
Kansas City, Missouri	Waco, Texas
Portland, Oregon	Fargo, North Dakota
Seattle, Washington	Quebec, Canada
Oklahoma City, Oklahoma	St. Marys, Ont., Canada
Boise, Idaho	London, E. C., England
San Francisco, Calif.	Wellington New Zealand
Los Angeles, Calif.	Melbourne Australia

DEALERS EVERYWHERE

INDEX

Operating Instructions Gasoline Engines	Page 2
Operating Instructions Kerosene Engines	Page 7
Magneto Timing Instructions	Page 10
Price List and Symbol Numbers for Ordering All Parts.	Page 11
Repair List Tripping Device Complete	Page 22
Repair List Throttle Governed Kerosene Parts	Page 22
Wiring "ASSOCIATED" Engines	Page 26
Repair List Governor Lever Complete	Page 27
Repair List Muffler Complete	Page 27
Repair List Connecting Rod Complete	Page 27
Repair List Governor Complete	Page 28
Repair List Cylinder Head Complete	Page 28
Repair List Piston Complete	Page 29
Repair List Gasoline Igniter Complete	Page 29
Repair List Kerosene Igniter Complete	Page 30
Repair List Gasoline Mixer Complete	Page 30
Repair List Friction Clutch Pulley	Page 33
Repair List No. 5 Pump Jack	Page 34
Repair List No. 6 Pump Jack	Page 35
Repair List Nos. 6 and 18 Grinder	Page 36

Gasoline Engines $1\frac{3}{4}$ to 12 H. P. Kerosene Engines 3 to 25 H. P

OPERATING INSTRUCTIONS GASOLINE ENGINES

BEFORE STARTING

Before starting engine see that nothing is broken or damaged, and that the governor balls, governor lever, igniter and tripping mechanism, also valve lever and valves, are in good order.

OILING AND CLEANING

Fill the lubricator and adjust it to drop 10 or 15 drops a minute. Oil all working parts, such as gearing, governor lever and collar, each side bar bracket, valve stems and valve lever.

Fill the grease cups with a good grade of grease and turn the caps down so there will be a pressure forcing the grease into the bearings.

Be sure the opening in the grease cup on the connecting rod bearing has not become stopped up. This cup is operated by a spring which forces grease into the bearings, but if the grease should become hardened, the cup may not work properly. Drop some oil on the crank shaft bearing before starting the engine to be sure that it is well lubricated. Also put a few drops of oil in the hole in the cam gear, and on the end of the piston which extends beyond the cylinder. Then turn the flywheels around slowly by hand to make sure that everything operates freely.

Remove all surplus oil and grease with waste or cloth. To get the best service, the engine should be kept clean.

TO START "JOHNNY BOY," "CHORE BOY," "HIRED HAND" OR "HIRED MAN" ENGINES

1. Open the gasoline needle valve one-fourth turn.
2. Close the battery switch.
3. Tap on the bottom of the check valve until gasoline flows out of the bottom of the mixer.
4. Put the starting crank on the end of the crank shaft next to the governor.
5. Give the crank a few rapid turns, and at the same time press in on the end of the admitting valve to relieve compression.
6. Let go of the admitting valve and turn the crank until the engine gives an explosion.

7. Regulate the gasoline needle valve so that the gasoline mixture is correct. The engine is now ready to run up to speed and deliver its full power. See that oil is dropping evenly from the lubricator, that the gasoline tank is filled with gasoline and the water pot is three-quarters full of water. On the air cooled engines be sure the belt is driving the fan up to full speed.

TO START 3 H. P., 4 H. P., 6 H. P., 8 H. P., 12 H. P. OR 18 H. P. ENGINES

1. See that the gasoline tank is full of gasoline.
2. Let a small quantity of gasoline run into the mixer bottom through the priming valve.
3. Open the needle valve one full turn.
4. Open the relief valve which is located on the opposite side of the cylinder.
5. Close the battery switch.
6. Revolve the flywheels rapidly until the first explosion.
7. After two or three explosions close the relief valve.
8. Set the needle valve to regulate the proper mixture.

The engine is now ready to run up to speed and deliver its full power.

STOPPING THE ENGINE

1. Turn off battery switch.
2. Shut off gasoline at needle valve.
3. Turn off oil at lubricator.
4. Shut off gasoline at supply tank.

In cold weather be sure to drain the water pot thoroughly by taking out plug under the cylinder.

OPERATING INSTRUCTIONS

Gasoline Engines-- Continued

ADJUSTMENTS

All parts of the "ASSOCIATED" Engine are properly adjusted and the engine is carefully tested on its own power just before shipment.

By following the foregoing simple suggestions the engine can be started and operated without difficulty.

In case readjustment becomes necessary later on, the following suggestions are given for the benefit of the user:

EXHAUST VALVE ADJUSTMENT

Turn flywheel slowly and see that the exhaust valve opens when the crank shaft is at an angle of 40 or 45 degrees above its outer dead center. By screwing IN the adjusting screw in the end of the valve lever the valve will open EARLIER and close LATER. By turning this adjusting screw OUT the valve will open LATER and close EARLIER. There should be a clearance of about 1-32 to 1-16 of an inch between the end of this adjusting screw and the end of the exhaust valve stem when the engine is compressing its charge—permitting the valve to fit squarely into its seat.

GOVERNOR ADJUSTMENT

If a slight change of speed is desired, regulate the adjusting screw which passes through the governor lever—turning it IN to increase the speed, and turning it OUT for slower speed. Turning UP the eye-bolts attached to the governor balls will give additional speed, and unscrewing these bolts will give less speed.

Attached to governor lever and side bar will be found two small sharp edged steel plates, through the proper working of which the governor balls regulate the power and speed of the engine. These plates or blades should have a clearance of 1-32 of an inch both endwise and sidewise, and the edges should always be kept sharp and true. When broken or worn these blades should be replaced. The governor must work freely without sticking. A drop of oil on the knife-edged blades will keep them in good condition.

LUBRICATOR ADJUSTMENT

Fill the lubricator and turn up the little brass lever on top and the oil will drop down through the sight feed glass. Unscrewing the knurled nut will cause the oil to drop faster, and turning the nut down will permit the oil to drop slower. Nothing but the best grade of GASOLINE ENGINE CYLINDER OIL should be used in the lubricator. Common machine or steam engine oil should never be used on the cylinder of a gasoline engine. THIS IS VERY IMPORTANT.

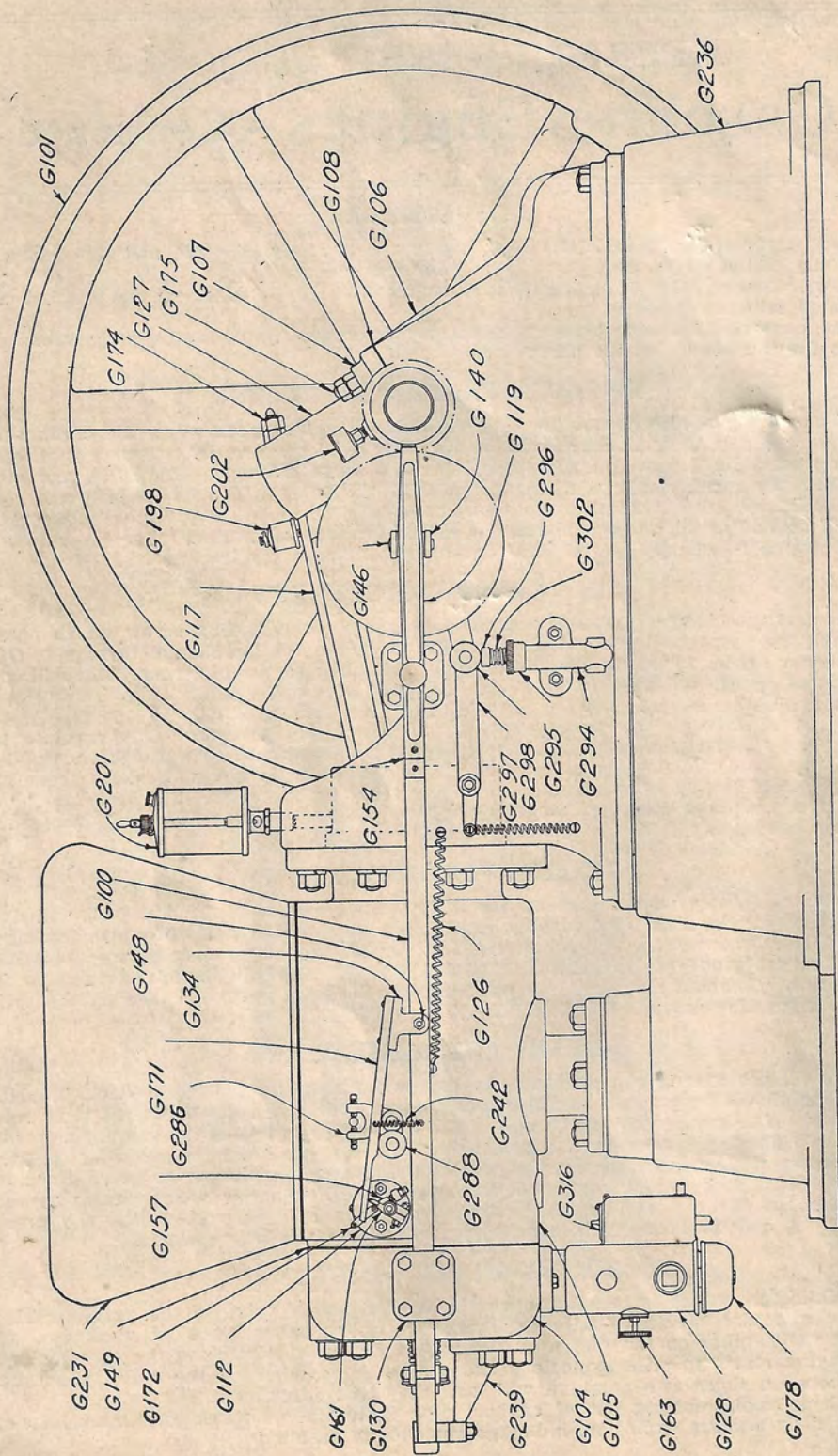
GREASE CUP ADJUSTMENT

To fill the grease cup unscrew the cap and fill before putting it back in place. This cup should be given a half turn several times during a day's run, as it is not a self feed. The grease cup on the end of the connecting rod is of the compression feed type. To fill this cup screw the plunger up into the cap before unscrewing the cap; fill the cup with grease and put the cap back allowing the plunger to press down the grease. This feed can be regulated by means of a little screw which passes through the stem of the cup and regulates the size of the hole through which the grease passes. A quarter turn of this screw opens or closes the hole entirely.

GASOLINE MIXER ADJUSTMENT

While the engine is running, open throttle or needle valve in the gasoline mixer until the engine starts to miss explosions or shows other signs of weakness, and notice the number on the dial near the wire indicator. Now close the throttle until the engine starts to miss explosions and notice the number on the dial. About half way between these two numbers will give the right adjustment.

Black smoke coming out of exhaust pipe indicates too much gasoline. Missing, followed by a sharp explosion, indicates not enough gasoline.



Outline Drawing of "ASSOCIATED," Engine—Side View—With Catalog Numbers for Parts

OPERATING INSTRUCTIONS

Gasoline Engines--Continued

CHECK VALVE

The check valve in the gasoline supply pipe between gasoline tank and mixer is intended to hold the gasoline back when the throttle valve is open and the engine is not drawing in a charge. Should some foreign substance get in the seat of this valve it will be necessary to remove and clean it.

IGNITER ADJUSTMENT

A large per cent of gasoline engine troubles being due to faulty ignition the following suggestions are given to help overcome them:

Remove Igniter from the engine and attach the wires from the batteries. Connect the switch and snap the igniter by hand and you should get a good hot spark at the contact points. If the batteries are weak or the igniter is short circuited there will be but a weak spark. To determine whether there is a short circuit in the igniter or in the batteries, disconnect one wire and brush it against the exposed part of the other wire, and notice the intensity of the spark. Remove all carbon or soot around the igniter points and the mica insulation, and brighten the contact points with sand paper.

Turn the flywheels over slowly until the igniter snaps which should take place when the crank shaft is at an angle of ten to twelve degrees below its inner dead center. A very simple adjustment is provided for changing the timing when necessary. To ADVANCE the spark turn IN on the adjusting screw on top of the igniter pick bracket, first loosening the lock nut. To RETARD the spark turn this adjusting screw OUT. Be sure the lock nut is SECURELY TIGHTENED after such adjustment.

The igniter points should separate about one-sixteenth (1-16) inch. If natural wear causes more clearance, proper adjustment can be made by loosening the hammer stop clamp screw and turning the movable electrode to proper position. If points are worn uneven they can be squared up by the use of a smooth, flat file.

When operating engine on batteries the igniter points should be held apart by a small coil spring attached to the igniter hammer stop and the left hand post on igniter body. Either "open" or "closed" position of igniter points can be used for operating engine on magneto, provided points make good square contact, and are proper distance apart.

Oil magneto bearings occasionally with a drop of oil.
Magneto MUST NOT BE TAKEN APART.

CAUTIONS

Do not forget to turn off the battery switch immediately on stopping the engine. IF THIS SWITCH IS LEFT ON, THE BATTERIES WILL RUN DOWN IN A FEW HOURS.

Never allow the water to get below the joints of the water pot on the cylinder. Keep the water pot half or three-quarters full of water. WATER COOLED ENGINES RUN BEST WHEN THE WATER IS BOILING.

The four principal causes of trouble on a gasoline engine arise from—Poor Ignition, Loss of Compression, Poor Lubrication and Loose Bearings. Of these four the last one must be guarded against most carefully. Just as soon as an engine bearing gets loose and begins to pound it should be looked after, removing enough of the shims to take up the wear. If this is not done the engine will pound itself to pieces.

It is a good idea to look any machinery over thoroughly each time before starting to make sure the bearings are properly adjusted. This is especially true for the connecting rod bearings in a gasoline engine.

KEEP THE ENGINE WELL OILED.

Test the batteries frequently and keep them in good condition.

Follow these instructions and keep the engine clean and it will give long satisfactory service with but very little adjustment.

OPERATING INSTRUCTIONS KEROSENE ENGINES

BEFORE STARTING ENGINE

1. Shut off all three needle valves.
2. Fill the small compartment of tank with gasoline.
3. Fill the compartment of tank with kerosene.
4. Fill the hopper with clean rain water if possible.
5. Fill the lubricator with gasoline engine cylinder oil.
6. Fill the grease cups with good grease.
7. Oil all bearings and working parts.
8. Turn the flywheels slowly by hand to see that all parts work freely.

SEE page 8 for
detailed drawing.

TO START ENGINE

1. See that gasoline compartment is filled.
2. Be sure to use gasoline for starting—opening the needle valve (8), one-fourth to one-half turn.
3. Close battery or magneto switch.
4. Give the flywheels a few rapid turns until the engine gives an explosion.
5. After engine has run about five minutes on gasoline, and is sufficiently hot, open up the kerosene needle valve gradually and allow some kerosene to be mixed with the gasoline and drawn into the engine cylinder. Gradually shut off the gasoline and open the kerosene needle valve until the engine runs on kerosene only.

ENGINE UNDER LOAD

After engine gets warmed up and is pulling load you will notice a knocking sound inside the cylinder. To overcome this open up the water needle valve 2, and allow just sufficient water to enter the mixer to stop this pounding sound.

This knocking is noticed only in the larger engines when working under load. The smaller engines do not require the water needle valve and connections.

SHUTTING DOWN ENGINE

Before stopping engine be sure and shut off water needle valve 2, first. Then open up the gasoline needle valve 8, and shut off the kerosene needle valve 10, and allow the engine to run a few minutes on gasoline. This will clean out the mixer and air passages in good shape for the next starting.

It will require a little practice to successfully switch the engine from gasoline to kerosene but a few startings under the above instructions will give satisfactory results.

The proper kerosene mixture will run the engine without smoke from the exhaust, except when the load is very light.

MIXING CHAMBER—9

The Mixing Chamber itself consists of a hollow tube with conical shaped sides, into which the fuel is drawn. This tube is surrounded by a jacketed space through which a part of the hot exhaust is forced.

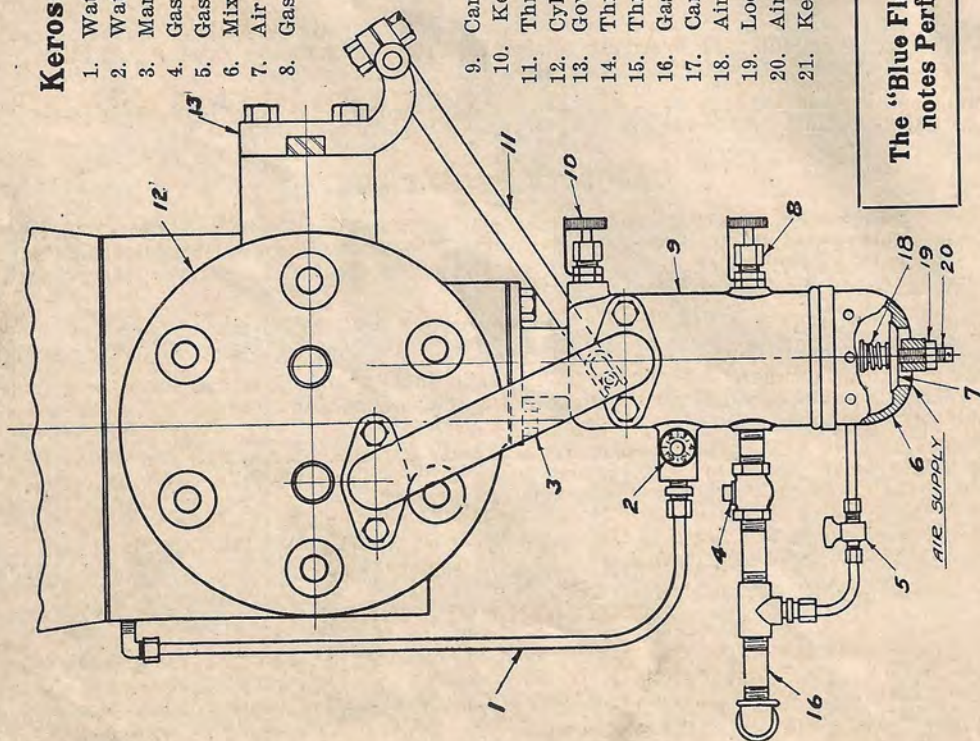
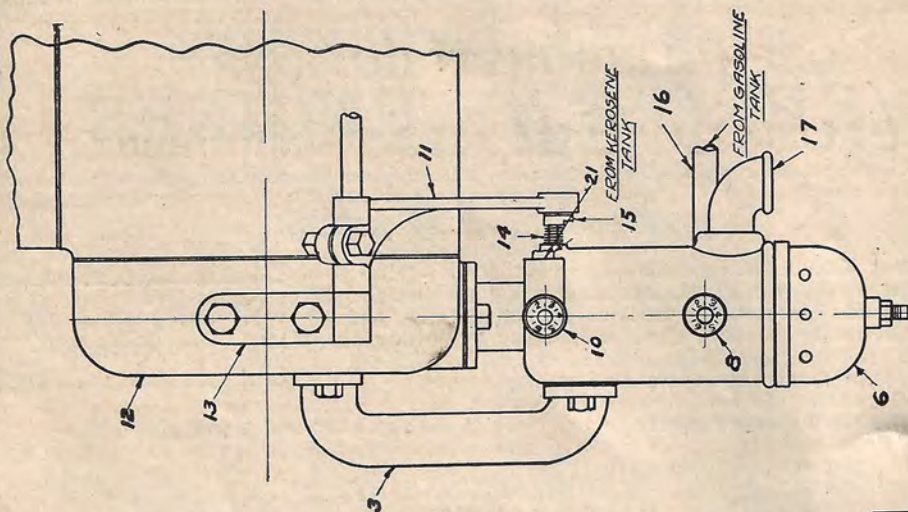
MIXING BOTTOM---6

The holes in the bottom of the Mixer control the supply of air, allowing just enough for the mixer to supply the engine when being started and running on light load.

Kerosene Mixer Parts

1. Water Pipe
2. Water Needle Valve
3. Manifold
4. Gasoline Check Valve
5. Gasoline Priming Valve
6. Mixer Bottom
7. Air Valve
8. Gasoline Needle Valve
9. Carburetor Body
10. Kerosene Needle Valve
11. Throttle Lever
12. Cylinder Head
13. Governor Rod Bearing
14. Throttle Valve Spring
15. Throttle Valve Crank
16. Gasoline Pipe.
17. Carburetor Heat Exhaust
18. Air Valve Spring
19. Lock Nut
20. Air Valve Stem
21. Kerosene Pipe

The "Blue Flame" Exhaust de-
notes Perfect combustion.



OPERATING INSTRUCTIONS

Kerosene Engines--Continued

AIR VALVE—7

The Air Valve 7, is controlled by a spring 18, whose tension is regulated by the screw 20, and lock nut 19. As the load is applied to the engine the suction becomes greater and lifts the valve 7, from its seat. This allows air to enter at the bottom of the mixer which is automatically proportioned to the amount of fuel being drawn into the mixing tube.

As this valve is properly adjusted before the engine leaves the factory it will need no re-adjustment unless tampered with. In case it does become necessary to change this adjustment, loosen the lock nut 19, and tighten up the screw 20, which will give a richer mixture. Loosening this same screw will give a leaner mixture. Be sure and tighten lock nut 19, after such adjustment.

EXHAUST MANIFOLD—3

The Exhaust Manifold 3, conducts a part of the hot exhaust gas into the chamber which surrounds the mixing tube and heats up the entire mixer body 9. This exhaust gas, after passing through the mixer body, is expelled into the air through the connection 17.

FUEL CONNECTIONS 16, 21

There are two compartments in the Fuel Supply Tank connected to the Mixer by separate lines of pipe. One pipe for kerosene, 21, running from large compartment of Tank to needle valve connection 10, at Mixer. The other 16, for gasoline (used only for starting engine) runs from small compartment of tank to needle valve connection 8, at Mixer.

WATER CONNECTION—1

The water supply for the mixer is drawn from the jacket water surrounding the cylinder, passing through pipe 1, and needle valve 2. To drain this pipe (in cold weather) open needle valve 2.

GASOLINE PRIMER—5

Gasoline for priming the engine is drawn through pipe 16, and cut-off valve 5. Opening this cut-off valve allows gasoline to flow into the bottom of Mixer, and is used only for starting engine

BUTTERFLY VALVE

The speed of the engine is controlled by means of a butterfly valve located in the neck of Mixer Chamber. This valve is a flat round disc similar to a damper in a stove pipe. Closing this butterfly valve slows down the engine, and opening it causes the engine to speed up.

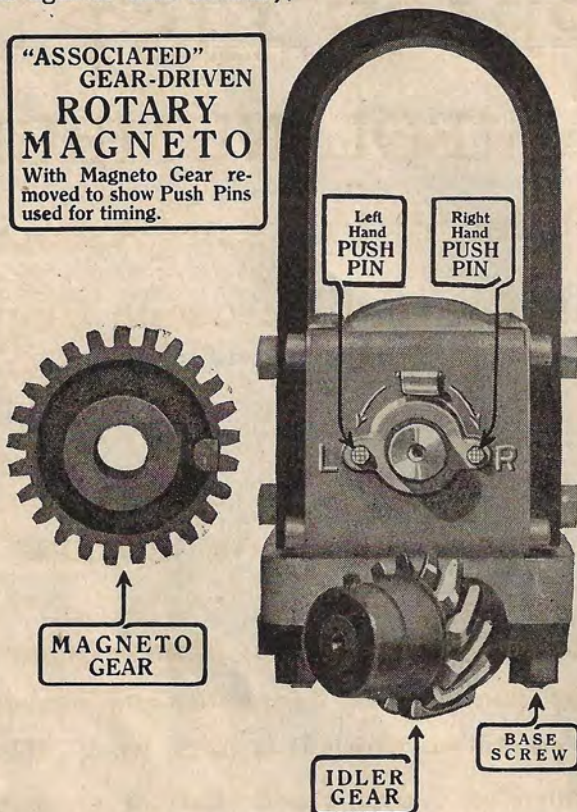
The stem of this butterfly valve extends from the side of the Mixer to which is attached a small spring 14, and throttle crank 15. To adjust throttle crank 15, take hold of the governor weights and pull them out as far as they will go. In this position the butterfly valve should be entirely closed. If it is not entirely closed it will then be necessary to loosen the clamp 15, and twist the stem around until the valve is closed. See that clamp is securely tightened before starting engine.

THROTTLE GOVERNOR

The throttle governor consists of two weights attached to hub of fly-wheel, and are acted upon by centrifugal force. A rod and set of levers transmit this motion to the butterfly valve. These governor weights work against a set of springs which are set at the right tension to give the engine the proper speed. To increase the speed tighten up these springs.

MAGNETO TIMING INSTRUCTIONS

When magneto is ordered separately it is furnished with proper bracket which should be securely fastened to engine frame. Before timing magneto be sure the igniter is properly timed with engine and in good working order. (See Page 6 for Igniter instructions).



MAGNETO TIMING—See that magneto is securely fastened to bracket. Standing on igniter side of engine, turn the fly-wheels over slowly in running direction of engine. Stop the fly-wheels instantly when the igniter snaps and do not allow them to move until magneto is timed and the gears put in mesh. Note carefully whether the top of the magneto shaft and gear are rotating toward the letter "L" stamped on the end of magneto, or toward the letter "R."

When the magneto timing gear is fastened with set screw only, loosen screw and remove gear from shaft. If top of magneto shaft rotates toward "L" (see illustration), turn the shaft in that direction and press in on the small push pin or plug near "L" until it enters the socket in the end of the armature. Hold this push pin in and replace magneto gear and tighten the set screw. If the top of the magneto shaft rotates toward "R," use that direction for timing. Be sure and tighten set screw in either case.

When magneto gear is secured with a taper pin (as it is on some of our engines) raise magneto from bracket by loosening the four base screws, lifting the gears out of mesh. Then proceed with timing as shown in above paragraph and when push pin enters socket, let magneto down and mesh gears, after which the base screws should be replaced and securely tightened.

PRICE LIST and SYMBOL NUMBERS

**for Ordering Parts of "Associated"
Gasoline and Kerosene Engines**

INSTRUCTIONS FOR ORDERING

When ordering repairs for any of these engines **BE SURE** and give the name of part, its number and symbol, also serial number of engine on which it is to be used. This number is found stamped on end of crank shaft or on name plate.

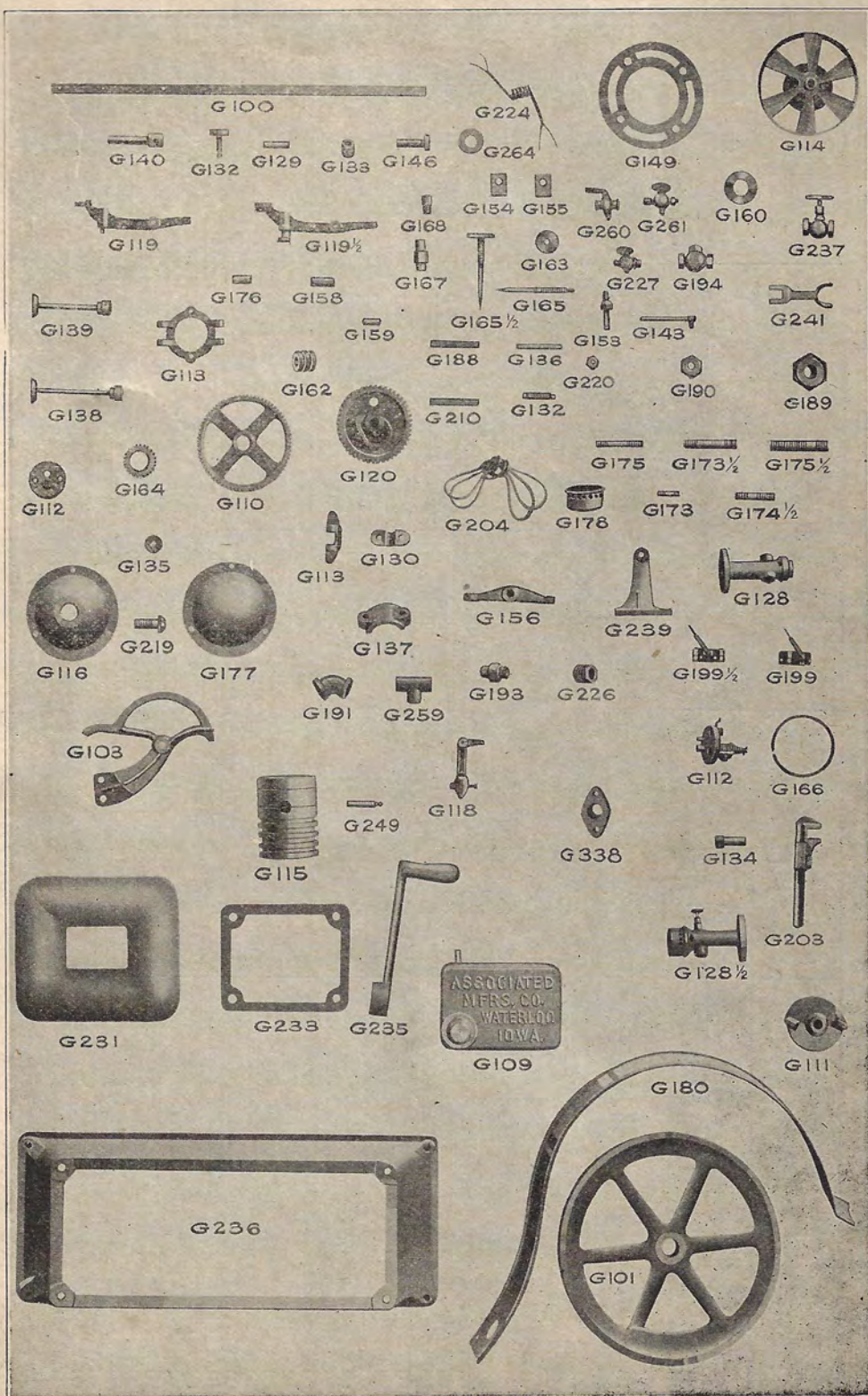
Example—To order a governor ball for a Chore Boy $1\frac{3}{4}$ H. P. Engine, the following must be given: "One G-118 DDK Governor ball for $1\frac{3}{4}$ H. P. Engine, serial number _____."

See Pages 13, 15, 25, 31 and 32 for plates showing **Engine
Repair Parts.**

Prices subject to change without notice.

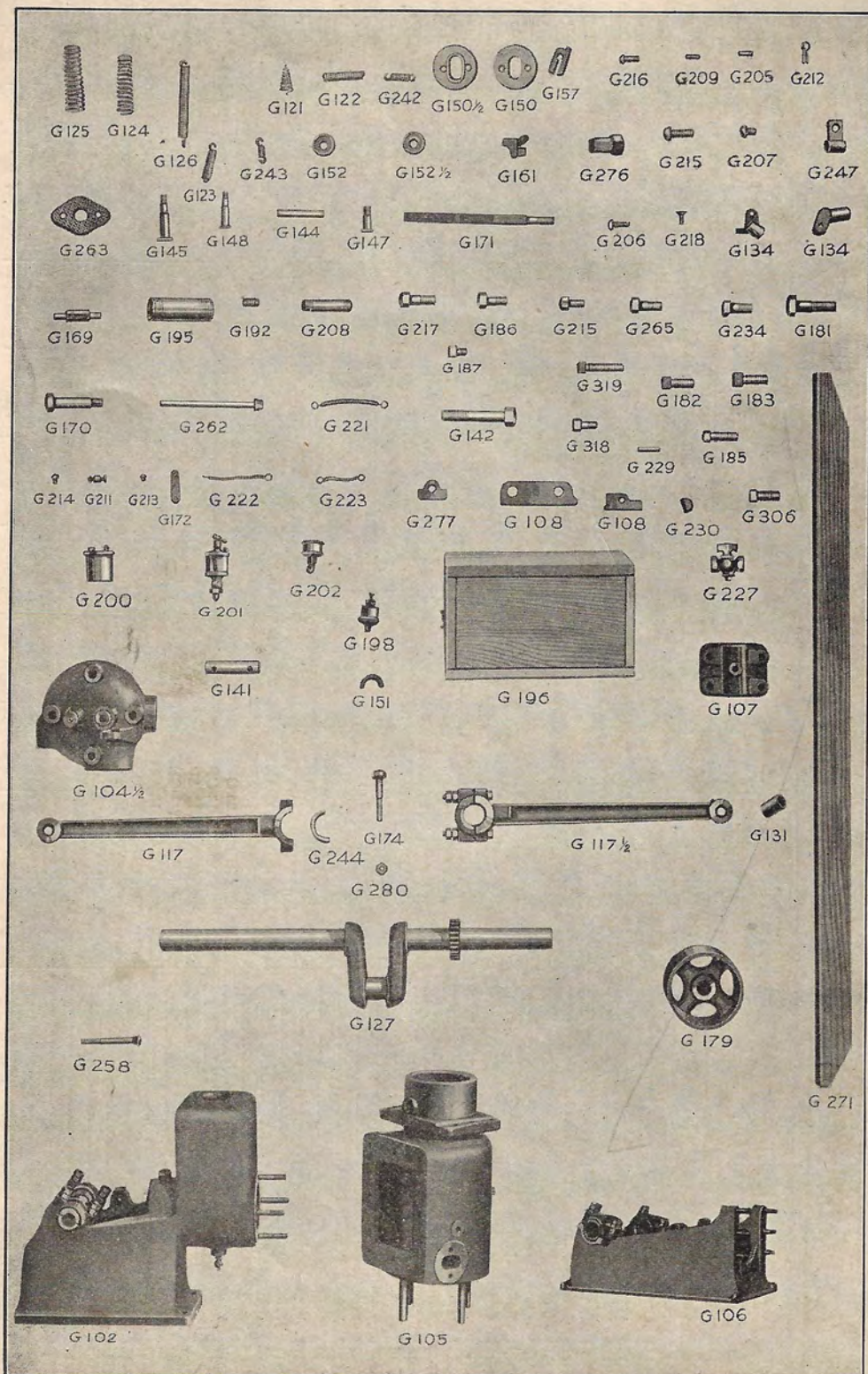
Send Serial Number of Your Engine Stamped on End of Crank Shaft or on Name Plate

NAME OF PARTS	1 1/2 H. P.		1 3/4 H. P.		1 1/2 H. P.		2 1/4 H. P.		3 H. P.		4 H. P.		6 H. P.		8 H. P.		12 H. P.		18 H. P.	
	Water Cooled	Air Cooled	Water Cooled	Air Cooled	Water Cooled	Air Cooled	Water Cooled	Air Cooled	Water Cooled	Air Cooled	Water Cooled	Air Cooled	Water Cooled	Air Cooled	Water Cooled	Air Cooled	Water Cooled	Air Cooled	Water Cooled	Air Cooled
G100 Side Rod.....	CHM .90	AAW 1.00	AAW 1.00	AAW 1.00	AAW 1.00	AAW 1.00	AAW 1.00	AAW 1.00	AAW 1.00	AAW 1.00	AAW 1.00	AAW 1.00	AAW 1.00	AAW 1.00	AAW 1.00	AAW 1.00	AAW 1.00	AAW 1.00	AAW 1.00	AAW 1.00
G101 Fly Wheel.....	DFP 2.50	DFR 3.05	DFR 3.05	DFR 3.05	DFR 3.05	DFR 3.05	DFR 3.05	DFR 3.05	DFR 3.05	DFR 3.05	DFR 3.05	DFR 3.05	DFR 3.05	DFR 3.05	DFR 3.05	DFR 3.05	DFR 3.05	DFR 3.05	DFR 3.05	DFR 3.05
G102 Cylinder and Frame Combined.....	DBB 10.30																			
G102 1/2 Cylinder and Frame Combined.....																				
G103 1 1/4 H. P., A. C. CHR 8.25.....																				
G103 Back Gear Bracket and Shield.....	CKW .95	AAZ 1.05	AAZ 1.05	AAZ 1.05	AAZ 1.05	AAZ 1.05	AAZ 1.05	AAZ 1.05	AAZ 1.05	AAZ 1.05	AAZ 1.05	AAZ 1.05	AAZ 1.05	AAZ 1.05	AAZ 1.05	AAZ 1.05	AAZ 1.05	AAZ 1.05	AAZ 1.05	AAZ 1.05
G104 Cylinder Head (only).....	CHG 3.80	ABA 4.15	ABA 4.15	ABA 4.15	ABA 4.15	ABA 4.15	ABA 4.15	ABA 4.15	ABA 4.15	ABA 4.15	ABA 4.15	ABA 4.15	ABA 4.15	ABA 4.15	ABA 4.15	ABA 4.15	ABA 4.15	ABA 4.15	ABA 4.15	ABA 4.15
G104 1/4 Cylinder Head Complete.....	6.60	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15	7.15
G105 Cylinder.....	ABB 5.50	CTV 8.25																		
G105 1/2 Cylinder and Water Pot.....																				
G105 1/4 Cylinder and Water Pot.....																				
G106 1/2 Frame Complete.....																				
G107 Main Bearing Caps (each).....	CHS 1.40	ABK 1.60	ABK 1.60	ABK 1.60	ABK 1.60	ABK 1.60	ABK 1.60	ABK 1.60	ABK 1.60	ABK 1.60	ABK 1.60	ABK 1.60	ABK 1.60	ABK 1.60	ABK 1.60	ABK 1.60	ABK 1.60	ABK 1.60	ABK 1.60	ABK 1.60
G108 Main Bearing Cap Shims.....	CHU .15	ABM .15	ABM .15	ABM .15	ABM .15	ABM .15	ABM .15	ABM .15	ABM .15	ABM .15	ABM .15	ABM .15	ABM .15	ABM .15	ABM .15	ABM .15	ABM .15	ABM .15	ABM .15	ABM .15
G109 Gas Tank.....	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50	EMW 1.50
G110 Back Gear.....	CKV 1.10	ABP 1.10	ABP 1.10	ABP 1.10	ABP 1.10	ABP 1.10	ABP 1.10	ABP 1.10	ABP 1.10	ABP 1.10	ABP 1.10	ABP 1.10	ABP 1.10	ABP 1.10	ABP 1.10	ABP 1.10	ABP 1.10	ABP 1.10	ABP 1.10	ABP 1.10
G111 Back Gear Pulley.....	ABR .65	ABR .65	ABR .65	ABR .65	ABR .65	ABR .65	ABR .65	ABR .65	ABR .65	ABR .65	ABR .65	ABR .65	ABR .65	ABR .65	ABR .65	ABR .65	ABR .65	ABR .65	ABR .65	ABR .65
G112 Igniter Body (only).....	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25	ABS 1.25
G112 1/2 Gasoline Igniter Complete.....	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80
G113 One-Piece Governor Saddle (each).....	CHN .70	ABV .70	ABV .70	ABV .70	ABV .70	ABV .70	ABV .70	ABV .70	ABV .70	ABV .70	ABV .70	ABV .70	ABV .70	ABV .70	ABV .70	ABV .70	ABV .70	ABV .70	ABV .70	ABV .70
G113 Two-Piece Governor Saddle.....	DFN .70	EWV .70	EWV .70	EWV .70	EWV .70	EWV .70	EWV .70	EWV .70	EWV .70	EWV .70	EWV .70	EWV .70	EWV .70	EWV .70	EWV .70	EWV .70	EWV .70	EWV .70	EWV .70	EWV .70
G114 Fan.....	CHD 4.00	ABW 4.60	ABW 4.60	ABW 4.60	ABW 4.60	ABW 4.60	ABW 4.60	ABW 4.60	ABW 4.60	ABW 4.60	ABW 4.60	ABW 4.60	ABW 4.60	ABW 4.60	ABW 4.60	ABW 4.60	ABW 4.60	ABW 4.60	ABW 4.60	ABW 4.60
G115 Piston (only).....	DNK .70	DNL .70	DNL .70	DNL .70	DNL .70	DNL .70	DNL .70	DNL .70	DNL .70	DNL .70	DNL .70	DNL .70	DNL .70	DNL .70	DNL .70	DNL .70	DNL .70	DNL .70	DNL .70	DNL .70
G116 Muffler Bottom.....	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
G116 1/4 Muffler Complete.....	2.25	ABY 2.50	ABY 2.50	ABY 2.50	ABY 2.50	ABY 2.50	ABY 2.50	ABY 2.50	ABY 2.50	ABY 2.50	ABY 2.50	ABY 2.50	ABY 2.50	ABY 2.50	ABY 2.50	ABY 2.50	ABY 2.50	ABY 2.50	ABY 2.50	ABY 2.50
G117 Connecting Rod Comp.....	CGZ .50	ABY 5.70	ABY 5.70	ABY 5.70	ABY 5.70	ABY 5.70	ABY 5.70	ABY 5.70	ABY 5.70	ABY 5.70	ABY 5.70	ABY 5.70	ABY 5.70	ABY 5.70	ABY 5.70	ABY 5.70	ABY 5.70	ABY 5.70	ABY 5.70	ABY 5.70
G117 1/4 Connecting Rod Comp.....	DDA .40	DDK .40	DDK .40	DDK .40	DDK .40	DDK .40	DDK .40	DDK .40	DDK .40	DDK .40	DDK .40	DDK .40	DDK .40	DDK .40	DDK .40	DDK .40	DDK .40	DDK .40	DDK .40	DDK .40
G118 Governor Balls (each).....	CHH .85	ACA .85	ACA .85	ACA .85	ACA .85	ACA .85	ACA .85	ACA .85	ACA .85	ACA .85	ACA .85	ACA .85	ACA .85	ACA .85	ACA .85	ACA .85	ACA .85	ACA .85	ACA .85	ACA .85
G119 Governor Lever (only).....	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
G119 1/4 Governor Lever Comp.....	CHW 1.95	ACB 2.00	ACB 2.00	ACB 2.00	ACB 2.00	ACB 2.00	ACB 2.00	ACB 2.00	ACB 2.00	ACB 2.00	ACB 2.00	ACB 2.00	ACB 2.00	ACB 2.00	ACB 2.00	ACB 2.00	ACB 2.00	ACB 2.00	ACB 2.00	ACB 2.00
G120 Cam Gear.....	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
G121 Conical Igniter Spring.....	ACF .15	ACF .15	ACF .15	ACF .15	ACF .15	ACF .15	ACF .15	ACF .15	ACF .15	ACF .15	ACF .15	ACF .15	ACF .15	ACF .15	ACF .15	ACF .15	ACF .15	ACF .15	ACF .15	ACF .15
G122 Speed Detent Spring.....	DPZ .20	ACG .20	ACG .20	ACG .20	ACG .20	ACG .20	ACG .20	ACG .20	ACG .20	ACG .20	ACG .20	ACG .20	ACG .20	ACG .20	ACG .20	ACG .20	ACG .20	ACG .20	ACG .20	ACG .20
G123 Governor Ball Spring.....	3.10	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80
G123 1/4 Governor Complete.....																				



Send Serial Number of Your Engine Stamped on End of Crank Shaft or on Name Plate

NAME OF PARTS	1½ H. P.		1½ H. P.		2¼ H. P.		2¼ H. P.		3 H. P.		4 H. P.		6 H. P.		8 H. P.		12 H. P.		18 H. P.	
	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air
G124 Admitting Valve Spring-----	FRT .20	FRT .20	FRT .20	FRT .20	FRT .20	FRT .20	FRT .20	FRT .20	FRT .20	FRT .20	FRT .20	FRT .20	FRT .20	FRT .20	FRT .20	FRT .20	FRT .20	FRT .20	FRT .20	FRT .20
G125 Exhaust Valve Spring-----	FCS .25	FCS .25	FCS .25	FCS .25	FCS .25	FCS .25	FCS .25	FCS .25	FCS .25	FCS .25	FCS .25	FCS .25	FCS .25	FCS .25	FCS .25	FCS .25	FCS .25	FCS .25	FCS .25	FCS .25
G126 Pull Back Spring-----	ACL .20	ACL .20	ACL .20	ACL .20	ACL .20	ACL .20	ACL .20	ACL .20	ACL .20	ACL .20	ACL .20	ACL .20	ACL .20	ACL .20	ACL .20	ACL .20	ACL .20	ACL .20	ACL .20	ACL .20
G127 Crank Shaft with Pinion-----	CGY 5.50	ACM 9.10	ACM 9.10	ACM 9.10	ACM 9.10	ACM 9.10	ACM 9.10	ACM 9.10	ACM 9.10	ACM 9.10	ACM 9.10	ACM 9.10	ACM 9.10	ACM 9.10	ACM 9.10	ACM 9.10	ACM 9.10	ACM 9.10	ACM 9.10	ACM 9.10
G128 Air Pipe (only)-----	CHA .70	CHA .70	CHA .70	CHA .70	CHA .70	CHA .70	CHA .70	CHA .70	CHA .70	CHA .70	CHA .70	CHA .70	CHA .70	CHA .70	CHA .70	CHA .70	CHA .70	CHA .70	CHA .70	CHA .70
G128½ Mixer Complete-----	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
G129 Governor Lever Roller Pin-----	ACR .20	ACR .20	ACR .20	ACR .20	ACR .20	ACR .20	ACR .20	ACR .20	ACR .20	ACR .20	ACR .20	ACR .20	ACR .20	ACR .20	ACR .20	ACR .20	ACR .20	ACR .20	ACR .20	ACR .20
G130 Side Rod Bracket Cap-----	ACS .50	ACS .50	ACS .50	ACS .50	ACS .50	ACS .50	ACS .50	ACS .50	ACS .50	ACS .50	ACS .50	ACS .50	ACS .50	ACS .50	ACS .50	ACS .50	ACS .50	ACS .50	ACS .50	ACS .50
G131 Connecting Rod Bushing (piston end)-----	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25	ACT 1.25
G132 Gov. Speed Adjusting Screw-----	ACU .30	ACU .30	ACU .30	ACU .30	ACU .30	ACU .30	ACU .30	ACU .30	ACU .30	ACU .30	ACU .30	ACU .30	ACU .30	ACU .30	ACU .30	ACU .30	ACU .30	ACU .30	ACU .30	ACU .30
G133 Gov. Lever Roller-----	ACV .30	ACV .30	ACV .30	ACV .30	ACV .30	ACV .30	ACV .30	ACV .30	ACV .30	ACV .30	ACV .30	ACV .30	ACV .30	ACV .30	ACV .30	ACV .30	ACV .30	ACV .30	ACV .30	ACV .30
G134 Igniter Trip Rod End-----	CKA .30	ACW .30	ACW .30	ACW .30	ACW .30	ACW .30	ACW .30	ACW .30	ACW .30	ACW .30	ACW .30	ACW .30	ACW .30	ACW .30	ACW .30	ACW .30	ACW .30	ACW .30	ACW .30	ACW .30
G135 Cam Roller-----	DTF .35	DTF .35	DTF .35	DTF .35	DTF .35	DTF .35	DTF .35	DTF .35	DTF .35	DTF .35	DTF .35	DTF .35	DTF .35	DTF .35	DTF .35	DTF .35	DTF .35	DTF .35	DTF .35	DTF .35
G136 Gov. Spring Eye-bolt-----	ACY .15	ACY .15	ACY .15	ACY .15	ACY .15	ACY .15	ACY .15	ACY .15	ACY .15	ACY .15	ACY .15	ACY .15	ACY .15	ACY .15	ACY .15	ACY .15	ACY .15	ACY .15	ACY .15	ACY .15
G137 Connecting Rod Cap-----	CHB .45	CGP .50	CGP .50	CGP .50	CGP .50	CGP .50	CGP .50	CGP .50	CGP .50	CGP .50	CGP .50	CGP .50	CGP .50	CGP .50	CGP .50	CGP .50	CGP .50	CGP .50	CGP .50	CGP .50
G137½ Conn. Rod Cap (bronze)-----	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
G138 Exhaust Valve-----	ADA .60	ADA .60	ADA .60	ADA .60	ADA .60	ADA .60	ADA .60	ADA .60	ADA .60	ADA .60	ADA .60	ADA .60	ADA .60	ADA .60	ADA .60	ADA .60	ADA .60	ADA .60	ADA .60	ADA .60
G139 Admitting Valve-----	ADB .60	ADB .60	ADB .60	ADB .60	ADB .60	ADB .60	ADB .60	ADB .60	ADB .60	ADB .60	ADB .60	ADB .60	ADB .60	ADB .60	ADB .60	ADB .60	ADB .60	ADB .60	ADB .60	ADB .60
G140 Cam Gear Pin-----	CKB .70	ADC .70	ADC .70	ADC .70	ADC .70	ADC .70	ADC .70	ADC .70	ADC .70	ADC .70	ADC .70	ADC .70	ADC .70	ADC .70	ADC .70	ADC .70	ADC .70	ADC .70	ADC .70	ADC .70
G141 Piston Pin-----	FTK .45	FTK .45	FTK .45	FTK .45	FTK .45	FTK .45	FTK .45	FTK .45	FTK .45	FTK .45	FTK .45	FTK .45	FTK .45	FTK .45	FTK .45	FTK .45	FTK .45	FTK .45	FTK .45	FTK .45
G142 Fan Stud-----	ADE .45	ADE .45	ADE .45	ADE .45	ADE .45	ADE .45	ADE .45	ADE .45	ADE .45	ADE .45	ADE .45	ADE .45	ADE .45	ADE .45	ADE .45	ADE .45	ADE .45	ADE .45	ADE .45	ADE .45
G143 Mov. Electrode with point (Gasoline Eng.)-----	ADF .90	ADF .90	ADF .90	ADF .90	ADF .90	ADF .90	ADF .90	ADF .90	ADF .90	ADF .90	ADF .90	ADF .90	ADF .90	ADF .90	ADF .90	ADF .90	ADF .90	ADF .90	ADF .90	ADF .90
G144 Governor Ball Pin-----	ADG .25	ADG .25	ADG .25	ADG .25	ADG .25	ADG .25	ADG .25	ADG .25	ADG .25	ADG .25	ADG .25	ADG .25	ADG .25	ADG .25	ADG .25	ADG .25	ADG .25	ADG .25	ADG .25	ADG .25
G145 Valve Lever Pin-----	ADH .30	ADH .30	ADH .30	ADH .30	ADH .30	ADH .30	ADH .30	ADH .30	ADH .30	ADH .30	ADH .30	ADH .30	ADH .30	ADH .30	ADH .30	ADH .30	ADH .30	ADH .30	ADH .30	ADH .30
G146 Governor Lever Pin-----	CKC .30	ADK .35	ADK .35	ADK .35	ADK .35	ADK .35	ADK .35	ADK .35	ADK .35	ADK .35	ADK .35	ADK .35	ADK .35	ADK .35	ADK .35	ADK .35	ADK .35	ADK .35	ADK .35	ADK .35
G147 Cam Roller Pin-----	DTH .40	DTH .40	DTH .40	DTH .40	DTH .40	DTH .40	DTH .40	DTH .40	DTH .40	DTH .40	DTH .40	DTH .40	DTH .40	DTH .40	DTH .40	DTH .40	DTH .40	DTH .40	DTH .40	DTH .40
G148 Igniter Rod End Pin-----	CKD .25	ADM .35	ADM .35	ADM .35	ADM .35	ADM .35	ADM .35	ADM .35	ADM .35	ADM .35	ADM .35	ADM .35	ADM .35	ADM .35	ADM .35	ADM .35	ADM .35	ADM .35	ADM .35	ADM .35
G149 Cylinder Head Packing-----	CKL .40	ADN .50	ADN .50	ADN .50	ADN .50	ADN .50	ADN .50	ADN .50	ADN .50	ADN .50	ADN .50	ADN .50	ADN .50	ADN .50	ADN .50	ADN .50	ADN .50	ADN .50	ADN .50	ADN .50
G150 Igniter Packing (asbestos wire insert)-----	KNT .15	KNT .15	KNT .15	KNT .15	KNT .15	KNT .15	KNT .15	KNT .15	KNT .15	KNT .15	KNT .15	KNT .15	KNT .15	KNT .15	KNT .15	KNT .15	KNT .15	KNT .15	KNT .15	KNT .15
G150½ Igniter Packing (asbestos copper bound)-----	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25
G151 Conn. Rod Half Bushing-----	FDZ .35	FDZ .35	FDZ .35	FDZ .35	FDZ .35	FDZ .35	FDZ .35	FDZ .35	FDZ .35	FDZ .35	FDZ .35	FDZ .35	FDZ .35	FDZ .35	FDZ .35	FDZ .35	FDZ .35	FDZ .35	FDZ .35	FDZ .35
G152 Admitting Valve Collar-----	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25
G152½ Exhaust Valve Collar-----	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25	ENT .25



Send Serial Number of Your Engine Stamped on End of Crank Shaft or on Name Plate

NAME OF PARTS	1 1/4 H. P.		1 1/2 H. P.		1 3/4 H. P.		2 H. P.		3 H. P.		4 H. P.		6 H. P.		8 H. P.		12 H. P.		18 H. P.	
	Water	Cooled	Air	Cooled	Water	Cooled	Air	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled
G153 Stationary Electrode with Point.....	FBE	.30	FBE	.30	FBE	.30	FBE	.30	FBE	.30	FBE	.30	FBE	.30	FBE	.30	FBE	.30	FBE	1.10
G154 Governor Catch Plate.....	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.60
G155 Governor Detent Plate.....	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.60
G156 Valve Lever.....	CHK	.55	AEB	.55	AEB	.55	AEB	.55	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.25	ADZ	.60
G157 Igniter Hammer Stop.....	KTX	.30	KTX	.30	KTX	.30	KTX	.30	KTX	.30	KTX	.30	KTX	.30	KTX	.30	KTX	.30	KTX	.30
G158 Igniter Point—Stationary.....	AEE	.25	AEE	.25	AEE	.25	AEE	.25	AEE	.25	AEE	.25	AEE	.25	AEE	.25	AEE	.25	AEE	.25
G159 Igniter Point—Movable.....	AED	.35	AED	.35	AED	.35	AED	.35	AED	.35	AED	.35	AED	.35	AED	.35	AED	.35	AED	.35
G160 Mica Washers, per set.....	AEF	.10	AEF	.10	AEF	.10	AEF	.10	AEF	.10	AEF	.10	AEF	.10	AEF	.10	AEF	.10	AEF	.10
G161 Igniter Hammer.....	DYE	.30	DYE	.30	DYE	.30	DYE	.30	DYE	.30	DYE	.30	DYE	.30	DYE	.30	DYE	.30	DYE	.30
G162 Governor Collar.....	CHP	.70	AEH	.80	AEH	.80	AEH	.80	AEH	.80	AEH	.80	AEH	.80	AEH	.80	AEH	.80	AEH	.80
G163 Throttle Dial.....	AEK	.25	AEK	.25	AEK	.25	AEK	.25	AEK	.25	AEK	.25	AEK	.25	AEK	.25	AEK	.25	AEK	.25
G164 Crank Shaft Pinion.....	CHZ	1.00	AEL	1.20	AEL	1.20	AEL	1.20	AEL	1.20	AEL	1.20	AEL	1.20	AEL	1.20	AEL	1.20	AEL	1.20
G165 Throttle Needle (only) Gasoline.....	AEM	.30	AEM	.30	AEM	.30	AEM	.30	AEM	.30	AEM	.30	AEM	.30	AEM	.30	AEM	.30	AEM	.30
G165 1/2 Throttle Needle Com. Gasoline.....	AEM	.70	AEM	.70	AEM	.70	AEM	.70	AEM	.70	AEM	.70	AEM	.70	AEM	.70	AEM	.70	AEM	.70
G166 Piston Ring.....	CHF	.40	AEN	.40	AEN	.40	AEN	.40	AEN	.40	AEN	.40	AEN	.40	AEN	.40	AEN	.40	AEN	.40
G167 Throttle Nut Gasoline.....	AEP	.30	AEP	.30	AEP	.30	AEP	.30	AEP	.30	AEP	.30	AEP	.30	AEP	.30	AEP	.30	AEP	.30
G168 Gasoline Nozzle.....	DPP	.25	DPP	.25	DPP	.25	DPP	.25	DPP	.25	DPP	.25	DPP	.25	DPP	.25	DPP	.25	DPP	.25
G169 Igniter Trip Rod Stud.....	---	---	AES	.20	AES	.20	AES	.20	AES	.20	AES	.20	AES	.20	AES	.20	AES	.20	AES	.20
G170 Back Gear Stud.....	AET	.55	AET	.55	AET	.55	AET	.55	AET	.55	AET	.55	AET	.55	AET	.55	AET	.55	AET	.55
G171 Igniter Trip Rod.....	CHX	.30	AEU	.30	AEU	.30	AEU	.30	AEU	.30	AEU	.30	AEU	.30	AEU	.30	AEU	.30	AEU	.30
G172 Igniter Connector.....	AEV	.10	AEV	.10	AEV	.10	AEV	.10	AEV	.10	AEV	.10	AEV	.10	AEV	.10	AEV	.10	AEV	.10
G173 Igniter Stud.....	AEY	.15	AEY	.15	AEY	.15	AEY	.15	AEY	.15	AEY	.15	AEY	.15	AEY	.15	AEY	.15	AEY	.15
G173 1/2 Cylinder Head Stud (short).....	CKG	.25	AFA	.15	AFA	.15	AFA	.15	AFA	.15	AFA	.15	AFA	.15	AFA	.15	AFA	.15	AFA	.15
G174 Connecting Rod Bolts and Nuts (2).....	CUE	.25	CUE	.25	CUE	.25	CUE	.25	CUE	.25	CUE	.25	CUE	.25	CUE	.25	CUE	.25	CUE	.25
G174 1/2 Connecting Rod Stud (OS).....	DKF	.15	CBK	.15	CBK	.15	CBK	.15	CBK	.15	CBK	.15	CBK	.15	CBK	.15	CBK	.15	CBK	.15
G175 Main Bearing Stud.....	CKH	.15	AFA	.15	AFA	.15	AFA	.15	AFA	.15	AFA	.15	AFA	.15	AFA	.15	AFA	.15	AFA	.15
G175 1/2 Frame Stud.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G176 Connecting Rod Pushing Pin.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G177 Muffler Top.....	DNH	.70	DNH	.70	DNH	.70	DNH	.70	DNH	.70	DNH	.70	DNH	.70	DNH	.70	DNH	.70	DNH	.70
G178 Air Pipe Cap.....	CHV	.35	CHV	.35	CHV	.35	CHV	.35	CHV	.35	CHV	.35	CHV	.35	CHV	.35	CHV	.35	CHV	.35
G179 Pulley.....	CRW	2.35	AGV	2.50	AGV	2.50	AGV	2.50	AGV	2.50	AGV	2.50	AGV	2.50	AGV	2.50	AGV	2.50	AGV	2.50
G180 Oil Shield.....	CZR	.45	AGY	.55	AGY	.55	AGY	.55	AGY	.55	AGY	.55	AGY	.55	AGY	.55	AGY	.55	AGY	.55
G181 Sub-base Bolt.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G182 Valve Lever Set Screw.....	FBV	.10	FBV	.10	FBV	.10	FBV	.10	FBV	.10	FBV	.10	FBV	.10	FBV	.10	FBV	.10	FBV	.10

Send Serial Number of Your Engine Stamped on End of Crank Shaft or on Name Plate

NAME OF PARTS	1½ H. P. Water Cooled	1½ H. P. Air Cooled	1½ H. P. Water Cooled	2½ H. P. Air Cooled	2½ H. P. Water Cooled	3 H. P. Water Cooled	4 H. P. Water Cooled	6 H. P. Water Cooled	8 H. P. Water Cooled	12 H. P. Water Cooled	18 H. P. Water Cooled
	FDC .10 FDC	.10 FDC	.10 FDC	.10 FDC	.10 FDC	.10 FDC	.10 FDC	.10 FDC	.15 FDC	.15 FDE	.15 FDF
G183 Piston Pin Set Screw	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G184 Air Pipe Set Screw	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G185 Cam Gear Pin Set Screw	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G186 Side Bar Bracket Cap Screw	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G187 Governor Saddle Cap Screw	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G188 Pulley Key	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G189 Nut for Main Bearing (each)	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G190 Nut for Valve Lever Set Screw	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G191 ¼ Inch Ell	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G192 Close Nipple ¼ inch	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G193 Union ¼ inch	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G194 Check Valve ¼ inch	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G195 Muffler Pipe	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G196 Battery Box	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G197 Tool Box	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G198 Grease Cup (automatic)	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G199 Battery Switch (single)	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G200 Spark Coils	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G201 Lubricator	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G202 Grease Cup (plain)	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G203 Steel Wrench	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G204 Fan Belting	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G205 Piston Ring Pin	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G206 Pull Back Spring Screw	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G207 Oil Shield Screw	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G208 ½x2 inch Nipple	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G209 Side Bar Pin	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G210 Key for Fly Wheel	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G211 Binding Post	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G212 Spring Cotter Pins, Connecting Rod (2)	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G213 Binding Post Screw (steel)	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G214 Binding Post Screw (brass)	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH
G215 Igniter Stop Hammer Screw	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH	FDH

Send Serial Number of Your Engine Stamped on End of Crank Shaft or on Name Plate

NAME OF PARTS	1 1/4 H. P.		1 1/2 H. P.		2 H. P.		3 H. P.		4 H. P.		6 H. P.		8 H. P.		12 H. P.		18 H. P.	
	Water	Cooled	Air	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled
G216 Igniter Ground Conn. Screw	FKR	.10 FKR	.10 FKR	.10 FKR	.10 FKR	.10 FKR	.10 FKR	.10 FKR	.10 FKR	.10 FKR	.10 FKR	.10 FKR	.10 FKR	.10 FKR	.10 FKR	.10 FKR	.10 FKR	.10
G217 Back Gear Bracket Cap Screw	FKT	.15 FKS	.15 FKS	.15 FKS	.15 FKS	.15 FKS	.15 FKS	.15 FKS	.15 FKS	.15 FKS	.15 FKS	.15 FKS	.15 FKS	.15 FKS	.15 FKS	.15 FKS	.15 FKS	.15
G218 Governor Catch Screw	FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.15
G219 Muffler Bolt and Nut	FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.15
G220 Nut for Governor Eye Bolt	FLA	.10 FLA	.10 FLA	.10 FLA	.10 FLA	.10 FLA	.10 FLA	.10 FLA	.10 FLA	.10 FLA	.10 FLA	.10 FLA	.10 FLA	.10 FLA	.10 FLA	.10 FLA	.10 FLA	.10
G221 Coil Connector	FLB	.10 FLB	.10 FLB	.10 FLB	.10 FLB	.10 FLB	.10 FLB	.10 FLB	.10 FLB	.10 FLB	.10 FLB	.10 FLB	.10 FLB	.10 FLB	.10 FLB	.10 FLB	.10 FLB	.10
G222 Switch Connection	FLC	.10 FLC	.10 FLC	.10 FLC	.10 FLC	.10 FLC	.10 FLC	.10 FLC	.10 FLC	.10 FLC	.10 FLC	.10 FLC	.10 FLC	.10 FLC	.10 FLC	.10 FLC	.10 FLC	.10
G223 Battery Connector	FLD	.10 FLD	.10 FLD	.10 FLD	.10 FLD	.10 FLD	.10 FLD	.10 FLD	.10 FLD	.10 FLD	.10 FLD	.10 FLD	.10 FLD	.10 FLD	.10 FLD	.10 FLD	.10 FLD	.10
G224 Battery Wire, per foot	AWV	.15 AWV	.15 AWV	.15 AWV	.15 AWV	.15 AWV	.15 AWV	.15 AWV	.15 AWV	.15 AWV	.15 AWV	.15 AWV	.15 AWV	.15 AWV	.15 AWV	.15 AWV	.15 AWV	.10
G225 Back Gear Pulley Spring	FLF	.20 FLF	.20 FLF	.20 FLF	.20 FLF	.20 FLF	.20 FLF	.20 FLF	.20 FLF	.20 FLF	.20 FLF	.20 FLF	.20 FLF	.20 FLF	.20 FLF	.20 FLF	.20 FLF	.20
G226 Reducing Bushing	FLH	.35 FLH	.35 FLH	.35 FLH	.35 FLH	.35 FLH	.35 FLH	.35 FLH	.35 FLH	.35 FLH	.35 FLH	.35 FLH	.35 FLH	.35 FLH	.35 FLH	.35 FLH	.35 FLH	.45
G227 Water Drain Cock	FEB	.10 FEB	.10 FEB	.10 FEB	.10 FEB	.10 FEB	.10 FEB	.10 FEB	.10 FEB	.10 FEB	.10 FEB	.10 FEB	.10 FEB	.10 FEB	.10 FEB	.10 FEB	.10 FEB	.20
G228 Nut for Cylinder Head	FLM	.10 FLM	.10 FLM	.10 FLM	.10 FLM	.10 FLM	.10 FLM	.10 FLM	.10 FLM	.10 FLM	.10 FLM	.10 FLM	.10 FLM	.10 FLM	.10 FLM	.10 FLM	.10 FLM	.15
G229 Taper Pin (Valve Collar)	ACP	.20 ACP	.20 ACP	.20 ACP	.20 ACP	.20 ACP	.20 ACP	.20 ACP	.20 ACP	.20 ACP	.20 ACP	.20 ACP	.20 ACP	.20 ACP	.20 ACP	.20 ACP	.20 ACP	.45
G230 Crank Shaft Key (Woodruff)																		
G231 Water Pot																		
G232 Nut for Frame End																		
G233 Packing for Water Pot																		
G234 Cap Screw for Water Pot																		
G235 Starting Crank																		
G236 Sub-Base																		
G237 Relief Valve																		
G238 Nut for Cam Gear Pin Set Screw																		
G239 Valve Lever Bracket																		
G240 Priming Check Valve																		
G241 Admitting Valve Lock Lever																		
G242 Igniter Trip Rod Spring																		
G243 Igniter Pull Back Spring																		
G244 Conn. Rod Die Cast, half bushing (crank end), pair																		
G245 Magneto Idler Gear (spiral)																		
G245 1/2 Magneto Idler Gear (spur)																		
G246 Magneto Bracket (spiral)																		
G247 Battery Wire Clamp																		

Send Serial Number of Your Engine Stamped on End of Crank Shaft or on Name Plate

NAME OF PARTS	1 1/2 H. P.		1 3/4 H. P.		2 H. P.		3 H. P.		4 H. P.		6 H. P.		8 H. P.		12 H. P.		18 H. P.	
	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air
	Cooled		Cooled		Cooled		Cooled		Cooled		Cooled		Cooled		Cooled		Cooled	
G248. Nut for Valve Lever Pin.....	FEB .10		FEB .10		FEB .10		FEB .10		FEB .10		FEB .10		FEB .10		FEB .10		FEB .10	
G249 Igniter Body Pin.....	DWV .10		DWV .10		DWV .10		DWV .10		DWV .10		DWV .10		DWV .10		DWV .10		DWV .10	
G250 Upper Lubricating Glass.....	FLW .30		FLW .30		FLW .30		FLW .30		FLW .30		FLW .30		FLW .30		FLW .30		FLW .30	
G251 Lower Lubricating Glass.....	FMA .20		FMA .20		FMA .20		FMA .20		FMA .20		FMA .20		FMA .20		FMA .20		FMA .20	
G252 Stem for Lubricator.....	FME .35		FME .35		FME .35		FME .35		FME .35		FME .35		FME .35		FME .35		FME .35	
G253 Lower Half of Lubricator.....	FMM .70		FMM .70		FMM .70		FMM .70		FMM .70		FMM .70		FMM .70		FMM .70		FMM .70	
G254 Magnet Bracket for Spur Idler.....	DGW .85		DGW .85		DGW .85		DGW .85		DGW .85		DGW .85		DGW .85		DGW .85		DGW .85	
G255 Magnet Gear.....	DVC .45		DVC .45		DVC .45		DVC .45		DVC .45		DVC .45		DVC .45		DVC .45		DVC .45	
G256 Lubricator Bottom.....	FPK .30		FPK .30		FPK .30		FPK .30		FPK .30		FPK .30		FPK .30		FPK .30		FPK .30	
G257 Cap Screws for Magneto.....	FDS .10		FDS .10		FDS .10		FDS .10		FDS .10		FDS .10		FDS .10		FDS .10		FDS .10	
G258 Skid Bolts.....	FCY .15		FCY .15		FCY .15		FCY .15		FCY .15		FCY .15		FCY .15		FCY .15		FCY .15	
G259 Priming Device Tee.....																		
G260 Shut-off Valve in Gas Pipe.....																		
G261 Valve in Priming Device.....																		
G262 Copper Tube for Priming Device.....																		
G263 Packing for Mixer.....	DBW .15		DBW .15		DBW .15		DBW .15		DBW .15		DBW .15		DBW .15		DBW .15		DBW .15	
G264 Packing for Union.....	FMU .20		FMU .20		FMU .20		FMU .20		FMU .20		FMU .20		FMU .20		FMU .20		FMU .20	
G265 Cap Screws for Mixer.....	FDS .10		FDS .10		FDS .10		FDS .10		FDS .10		FDS .10		FDS .10		FDS .10		FDS .10	
G266 Washer for Admitting Valve.....	DBA .15		DBA .15		DBA .15		DBA .15		DBA .15		DBA .15		DBA .15		DBA .15		DBA .15	
G267 Nut for Cam Roller Pin.....	FLV .10		FLV .10		FLV .10		FLV .10		FLV .10		FLV .10		FLV .10		FLV .10		FLV .10	
G268 Set Screw for Governor Ball.....	FMV .10		FMV .10		FMV .10		FMV .10		FMV .10		FMV .10		FMV .10		FMV .10		FMV .10	
G269 Nut for Igniter Rod End Pin.....	FLV .10		FLV .10		FLV .10		FLV .10		FLV .10		FLV .10		FLV .10		FLV .10		FLV .10	
G270 Nut for Trip Rod.....	FLV .10		FLV .10		FLV .10		FLV .10		FLV .10		FLV .10		FLV .10		FLV .10		FLV .10	
G271 Skids (each).....	FMZ .85		FMZ .85		FMZ .85		FMZ .85		FMZ .85		FMZ .85		FMZ .85		FMZ .85		FMZ .85	
G272 Nut for Piston Pin Set Screw.....	FLV .10		FLV .10		FLV .10		FLV .10		FLV .10		FLV .10		FLV .10		FLV .10		FLV .10	
G273 Cap Screws for Ped. Sup.....																		
G274 Nut for Sta. Electrode.....	FKZ .10		FKZ .10		FKZ .10		FKZ .10		FKZ .10		FKZ .10		FKZ .10		FKZ .10		FKZ .10	
G275 Nut for Governor Catch.....	FNK .10		FNK .10		FNK .10		FNK .10		FNK .10		FNK .10		FNK .10		FNK .10		FNK .10	
G276 Socket Wrench for Igniter Studs.....	FNM .30		FNM .30		FNM .30		FNM .30		FNM .30		FNM .30		FNM .30		FNM .30		FNM .30	
G277 Connecting Rod Shims (set).....	CHT .20		CHT .20		CHT .20		CHT .20		CHT .20		CHT .20		CHT .20		CHT .20		CHT .20	
G278 Water Pot Cover.....																		
G279 Gasoline Pump Valve.....																		
G280 Nut for Connecting Rod Bolt.....	FEB .10		FEB .10		FEB .10		FEB .10		FEB .10		FEB .10		FEB .10		FEB .10		FEB .10	
G281 13 inch Muffler Brace.....																		

Send Serial Number of Your Engine Stamped on End of Crank Shaft or on Name Plate

NAME OF PARTS	1 1/4 H. P. Water Cooled	1 1/4 H. P. Air Cooled	1 3/4 H. P. Water Cooled	2 1/4 H. P. Air Cooled	2 1/4 H. P. Water Cooled	3 H. P. Water Cooled	4 H. P. Water Cooled	6 H. P. Water Cooled	8 H. P. Water Cooled	12 H. P. Water Cooled	18 H. P. Water Cooled
G282 17-inch Muffler Brace.....											FNP 2.10
G283 Lubricator Top.....	FPE .30	FPE .30	FPE .30	FPE .30	FPE .30	FPE .30	FPE .30	FPL .35	FPL .35	FPM .45	FPN .55
G284 Drain Cock for Feed Pipe.....											FLH .45
G285 Stud for Pedestal.....											FPS .30
G286 Trip Rod Roller Bracket.....											DRS 1.65
G287 Trip Rod Roller Bracket Stud.....											DTU .55
G288 Trip Rod Roller.....											DTV .45
G289 Trip Rod Roller Pin.....											EMZ .30
G290 Trip Rod Roller Bracket Pin.....											EMY .30
G291 Trip Rod Roller Bracket Set Screws.....											FMX .20
G292 Trip Rod End Pin Bushing.....											EMT .30
G293 Trip Rod Cap Screws.....											FNR .20
G294 Gasoline Pump Body.....							BVS 4.15	BVS 4.15	BVS 4.15	BVS 4.15	BVS 4.15
G295 Gasoline Pump Cap.....							BVF .70	BVF .70	BVF .70	BVF .70	BVF .70
G296 Gasoline Pump Plunger.....							BVA 1.40	BVA 1.40	BVA 1.40	BVA 1.40	BVA 1.40
G297 Gasoline Pump Lever.....							EZR 1.40	EZR 1.40	EZR 1.40	EZR 1.40	EZR 1.40
G298 Gasoline Pump Lever Roller.....										DTG .45	DTG .45
G299 Gasoline Pump Lever Spring.....											DCE .45
G300 Gasoline Pump Lever Stud.....											EEV .70
G301 Gasoline Pump Lever Handle.....							BVE .35	BVE .35	BVE .35	BVE .35	EEW .45
G302 Gasoline Pump Plunger Spring.....							ACK .30	ACK .30	ACK .30	ACK .30	ACK .30
G303 Gasoline Pump Bushing.....							BVB .70	BVB .70	BVB .70	BVB .70	BVB .70
G304 Gasoline Pump End Lever Roller Pin.....										DTL .45	DTL .45
G305 Throttle Needle Bushing.....											EEP 1.05
G306 Igniter Trip Rod Adj. Screw.....	FPT .15										
G307 Standard Water Gauge Complete.....											FNT 4.15
G308 Upper Conn. for Water Gauge.....											ELN 1.40
G309 Lower Conn. for Water Gauge.....											ELN 1.40
G310 Glass for Water Gauge.....											FNU .70
G311 Guard Rods for Gauge Glass.....											FNV .35
G312 Drain Cock for Water Gauge.....											FNW .45
G313 Nipple for Water Gauge.....											FNX .20
G314 Bolts for Muffler Braces.....											FNY .15

Send Serial Number of Your Engine Stamped on End of Crank Shaft or on Name Plate

NAME OF PARTS	1½ H. P.		1¾ H. P.		2¼ H. P.		2½ H. P.		3 H. P.		4 H. P.		6 H. P.		8 H. P.		12 H. P.		18 H. P.	
	Water	Cooled	Air	Cooled	Water	Cooled	Air	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled
G315 Gasoline Reservoir.....	---	---	---	---	---	---	---	---	---	---	---	---	BVP	2.10	BVP	2.10	BVP	2.10	---	---
G316 Reservoir Cap.....	---	---	---	---	---	---	---	---	---	---	---	---	BUZ	.55	BUZ	.55	BUZ	.55	DXV	.70
G317 Reservoir Cap Chain.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G318 Air Pipe Bottom Cap Screw.....	---	---	---	---	---	---	---	---	---	---	---	---	FNZ	.30	FNZ	.30	FNZ	.30	FNZ	.30
G319 Cylinder Head Stud (long).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G320 Throttle Head Stud (long).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G321 Throttle Needle Packing Nut.....	---	---	---	---	---	---	---	---	---	---	---	---	DCN	.35	DFY	.45	CGT	.55	DTT	.75
G322 Throttle Needle Lock Nut.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G323 Throttle Dial Index Spring.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G324 Magneto Brush, Carbon, with Spring.....	CWM	.20	CWM	.20	CWM	.20	CWM	.20	CWM	.20	CWM	.20	CWM	.20	CWM	.20	CWM	.20	GMK	.30
G325 Magneto Frame.....	BXX	5.50	BXX	5.50	BXX	5.50	BXX	5.50	BXX	5.50	BXX	5.50	BXX	5.50	BXX	5.50	BXX	5.50	BXX	5.50
G326 Magneto Magnet (each).....	BYE	2.75	BYE	2.75	BYE	2.75	BYE	2.75	BYE	2.75	BYE	2.75	BYE	2.75	BYE	2.75	BYE	2.75	BYE	2.75
G327 Magneto Strap.....	BZF	.20	BZF	.20	BZF	.20	BZF	.20	BZF	.20	BZF	.20	BZF	.20	BZF	.20	BZF	.20	BZF	.20
G328 Magneto Armature.....	BYD	2.75	BYD	2.75	BYD	2.75	BYD	2.75	BYD	2.75	BYD	2.75	BYD	2.75	BYD	2.75	BYD	2.75	BYD	2.75
G329 Magneto Idle Pin Collar.....	BUP	.15	BUP	.15	BUP	.15	BUP	.15	BUP	.15	BUP	.15	BUP	.15	BUP	.15	BUP	.15	BUP	.15
G330 Magneto Pole Piece Screw.....	DKD	.15	DKD	.15	DKD	.15	DKD	.15	DKD	.15	DKD	.15	DKD	.15	DKD	.15	DKD	.15	DKD	.15
G331 Magneto Gear Set Screw.....	CZN	.15	CZN	.15	CZN	.15	CZN	.15	CZN	.15	CZN	.15	CZN	.15	CZN	.15	CZN	.15	CZN	.15
G332 Magneto Brush Insulation.....	BYP	.20	BYP	.20	BYP	.20	BYP	.20	BYP	.20	BYP	.20	BYP	.20	BYP	.20	BYP	.20	BYP	.20
G333 Magneto Binding Post.....	ECB	.55	ECB	.55	ECB	.55	ECB	.55	ECB	.55	ECB	.55	ECB	.55	ECB	.55	ECB	.55	ECB	.55
G334 Magneto Pole Piece.....	BZE	.45	BZE	.45	BZE	.45	BZE	.45	BZE	.45	BZE	.45	BZE	.45	BZE	.45	BZE	.45	BZE	.45
G335 Magneto Connecting Wire.....	CZM	.30	CZM	.30	CZM	.30	CZM	.30	CZM	.30	CZM	.30	CZM	.30	CZM	.30	CZM	.30	CZM	.30
G336 Magneto Brush and Spring Conn.....	BYH	.30	BYH	.30	BYH	.30	BYH	.30	BYH	.30	BYH	.30	BYH	.30	BYH	.30	BYH	.30	BYH	.30
G337 Magneto Binding Post Insulation.....	CYP	.15	CYP	.15	CYP	.15	CYP	.15	CYP	.15	CYP	.15	CYP	.15	CYP	.15	CYP	.15	CYP	.15
G338 Trip Rod Cam.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G339 Air Pipe Flange.....	FRK	.70	FRK	.70	FRK	.70	FRK	.70	FRK	.70	FRK	.70	FRK	.70	FRK	.70	FRK	.70	FRK	.70
G339 Magneto Magnet Binding Screw Nut.....	DKE	.15	DKE	.15	DKE	.15	DKE	.15	DKE	.15	DKE	.15	DKE	.15	DKE	.15	DKE	.15	DKE	.15
Gasoline Feed Pipe (¼ inch, per ft.).....	.25		.25		.25		.25		.25		.25		.25		.25		.25		.25	
Drain Cook (¼ inch).....	.35		.35		.35		.35		.35		.35		.35		.35		.35		.35	
Bushing for Drain Cook.....	.15		.15		.15		.15		.15		.15		.15		.15		.15		.15	

Send Serial Number of Your Engine Stamped on End of Crank Shaft or on Name Plate

IMPROVED TRIPPING DEVICE

(See Parts Plate on Page 25).

NAME OF PARTS	1 1/2 H. P.		1 3/4 H. P.		2 H. P.		2 1/2 H. P.		3 H. P.		4 H. P.		6 H. P.		8 H. P.		12 H. P.		18 H. P.	
	Water	Cooled	Air	Cooled	Water	Cooled	Air	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled
G340 1/2 Tripping Device Complete.....	NZA	2.40	NZB	2.40	NZB	2.40	NZB	2.40	NZB	2.40	NZB	2.40	NZC	2.40	NZC	2.40	NZC	2.40		
G340 Pick Bracket.....	FTS	1.00	GDD	1.00	GDD	1.00	GDD	1.00	GDD	1.00	GDD	1.00	GDK	1.25	GDK	1.25	GDX	1.25		
G341 Pick Adj. Screw.....	GTD	.10	GTD	.10	GTD	.10	GTD	.10	GTD	.10	GTD	.10	GTD	.10	GTD	.10	GTD	.10		
G342 Pick Screw Nut (1/4).....	GXY	.10	GXY	.10	GXY	.10	GXY	.10	GXY	.10	GXY	.10	GXY	.10	GXY	.10	GXY	.10		
G343 Pick Adjusting Screw Nut (3/8).....	GXX	.10	GXX	.10	GXX	.10	GXX	.10	GXX	.10	GXX	.10	GXX	.10	GXX	.10	GXX	.10		
G344 Pick Screw.....	FTV	.15	FTV	.15	FTV	.15	FTV	.15	FTV	.15	FTV	.15	FTV	.15	FTV	.15	FTV	.15		
G345 Igniter Pick.....	FTU	.45	FTU	.45	FTU	.45	FTU	.45	FTU	.45	FTU	.45	FTU	.45	FTU	.45	FTU	.45		
G346 Pick Spring.....	FTT	.20	FTT	.20	FTT	.20	FTT	.20	FTT	.20	FTT	.20	FTT	.20	FTT	.20	FTT	.20		
G349 Pick Bracket Cap Screw.....	GUE	.15	GUE	.15	GUE	.15	GUE	.15	GUE	.15	GUE	.15	GUE	.15	GUE	.15	GUE	.15		
G350 Pick Bracket Cap Screw Washer.....	GUG	.10	GUG	.10	GUG	.10	GUG	.10	GUG	.10	GUG	.10	GUG	.10	GUG	.10	GUG	.10		
G351 Pick Bracket Cap Screw Nut.....	GUF	.10	GUF	.10	GUF	.10	GUF	.10	GUF	.10	GUF	.10	GUF	.10	GUF	.10	GUF	.10		
G352 Pick Spring Pin.....	BEZ	.10	BEZ	.10	BEZ	.10	BEZ	.10	BEZ	.10	BEZ	.10	BEZ	.10	BEZ	.10	BEZ	.10		

THROTTLE GOVERNED KEROSENE PARTS

(See Parts Plate on Page 25).

G353 Throttle Nut (Gas).....	GDH	.35	GDH	.35	GDH	.35	GDH	.35	GDH	.35	GDH	.35	GDH	.35	GDH	.35	GDH	.35	GDH	.35
G354 Feed Gauge.....	EPB	.30	EPB	.30	EPB	.30	EPB	.30	EPB	.30	EPB	.30	EPB	.30	EPB	.30	EPB	.30	EPB	.30
G355 Throttle Needle Packing (Kero).....	GWZ	.15	GWZ	.15	GWZ	.15	GWZ	.15	GWZ	.15	GWZ	.15	GWZ	.15	GWZ	.15	GWZ	.15	GWZ	.15
G356 Throttle Needle Packing Nut (Gas).....																				
G357 Throttle Needle (Gas).....																				
G358 Throttle Nut (Kero).....	AEM	.45	AEM	.45	AEM	.45	AEM	.45	AEM	.45	AEM	.45	AEM	.45	AEM	.45	AEM	.45	AEM	.45
G358 Throttle Nut (Water).....	ENZ	.45	ENZ	.45	ENZ	.45	ENZ	.45	ENZ	.45	ENZ	.45	ENZ	.45	ENZ	.45	ENZ	.45	ENZ	.45
G359 Throttle Needle Packing Nut (Kero).....	EWG	.30	EWG	.30	EWG	.30	EWG	.30	EWG	.30	EWG	.30	EWG	.30	EWG	.30	EWG	.30	EWG	.30
G359 Throttle Needle Packing Nut (Water).....	EWG	.30	EWG	.30	EWG	.30	EWG	.30	EWG	.30	EWG	.30	EWG	.30	EWG	.30	EWG	.30	EWG	.30
G360 Throttle Needle (Kero).....	EPA	.55	EPA	.55	EPA	.55	EPA	.55	EPA	.55	EPA	.55	EPA	.55	EPA	.55	EPA	.55	EPA	.55
G360 Throttle Needle (Water).....	EPA	.55	EPA	.55	EPA	.55	EPA	.55	EPA	.55	EPA	.55	EPA	.55	EPA	.55	EPA	.55	EPA	.55
G361 Throttle Disc.....	FUS	.20	FNN	.20	FNN	.20	FNN	.20	FNN	.20	FNN	.20	FNN	.20	FNN	.20	FNN	.20	FNN	.20
G362 Throttle Disc Stem.....	FUR	.30	FXR	.35	FXR	.35	FXR	.35	FXR	.35	FXR	.35	FBA	.45	FBA	.45	FBA	.45	FBA	.45
G363 Valve Crank.....	GKV	.70	GKV	.70	GKV	.70	GKV	.70	GKV	.70	GKV	.70	GKV	.70	GKV	.70	GKV	.70	GKV	.70
G364 Valve Crank Rivet.....	GDG	.15	GDG	.15	GDG	.15	GDG	.15	GDG	.15	GDG	.15	GDG	.15	GDG	.15	GDG	.15	GDG	.15
G365 Throttling Lever Clamp Screw.....	GTE	.15	GTE	.15	GTE	.15	GTE	.15	GTE	.15	GTE	.15	GTE	.15	GTE	.15	GTE	.15	GTE	.15
G366 Governor Lever Roller.....	ACV	.30	ACV	.30	ACV	.30	ACV	.30	ACV	.30	ACV	.30	ACV	.30	ACV	.30	ACV	.30	ACV	.30
G367 Feed Gauge Lock Nut.....	EWD	.15	EWD	.15	EWD	.15	EWD	.15	EWD	.15	EWD	.15	EWD	.15	EWD	.15	EWD	.15	EWD	.15

Send Serial Number of Your Engine Stamped on End of Crank Shaft or on Name Plate

THROTTLE GOVERNED KEROSENE PARTS—Continued

NAME OF PARTS	1½ H. P.		1½ H. P.		1½ H. P.		2½ H. P.		3 H. P.		4 H. P.		6 H. P.		8 H. P.		12 H. P.		18 H. P.	
	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air
G368 Throttle Needle Dial (Kero)	---	---	---	---	---	---	FUN	---	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30
G368 Throttle Needle Dial (Gas)	---	---	---	---	---	---	AЕК	---	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30
G368 Throttle Needle Dial (Water)	---	---	---	---	---	---	---	---	AЕК	---	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30 AЕК	.30
G369 Governor Lever Roller Pin	---	---	---	---	---	---	---	---	---	---	.20 ACR	.20 ACR	.20 ACR	.20 ACR	.20 ACR	.20 ACR	.20 ACR	.20 ACR	.20 ACR	.55
G370 Throttle Valve Spring	---	---	---	---	---	---	---	---	.20 ACR	.20 ACR	.30 GFG	.30 GFG	.30 GFG	.30 GFG	.30 GFG	.30 GFG	.30 GFG	.30 GFG	.30 GFG	.30
G371 Valve Crank Clamp Screw	---	---	---	---	---	---	---	---	.10 GWY	.10 GWY	.10 GWY	.10 GWY	.10 GWY	.10 GWY	.10 GWY	.10 GWY	.10 GWY	.10 GWY	.10 GWY	.10
G372 Carburetor Body Stud	---	---	---	---	---	---	---	---	.10 GSZ	.10 GSZ	.10 GSZ	.10 GSZ	.10 GSZ	.10 GSZ	.10 GSZ	.10 GSZ	.10 GSZ	.10 GSZ	.10 GSZ	.15
G373 Carburetor Body Stud Nut	---	---	---	---	---	---	---	---	.10 GXA	.10 GXA	.10 GXA	.10 GXA	.10 GXA	.10 GXA	.10 GXA	.10 GXA	.10 GXA	.10 GXA	.10 GXA	.15
G374 Manifold Studs	---	---	---	---	---	---	---	---	.10 GME	.10 GME	.10 GME	.10 GME	.10 GME	.10 GME	.10 GME	.10 GME	.10 GME	.10 GME	.10 GME	.10
G374½ Manifold Stud Nut	---	---	---	---	---	---	---	---	.10 KWU	.10 KWU	.10 KWU	.10 KWU	.10 KWU	.10 KWU	.10 KWU	.10 KWU	.10 KWU	.10 KWU	.10 KWU	.10
G375 Kerosene Nozzle	---	---	---	---	---	---	---	---	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.45
G375 Gasoline Nozzle	---	---	---	---	---	---	---	---	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25
G375 Water Nozzle	---	---	---	---	---	---	---	---	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25 DPP	.25
G376 Governor Rod Bracket (cylinder end)	---	---	---	---	---	---	---	---	.85 FYC	.90 FYC	.90 FYC	.90 FYC	.90 FYC	.90 FYC	.90 FYC	.90 FYC	.90 FYC	.90 FYC	.90 FYC	.170
G377 Governor Rod	---	---	---	---	---	---	---	---	.30 FXN	.35 FYD	.35 FYD	.35 FYD	.35 FYD	.35 FYD	.35 FYD	.35 FYD	.35 FYD	.35 FYD	.35 FYD	.85
G378 Governor Rod Bracket (crank end)	---	---	---	---	---	---	---	---	.85 FYA	1.00 FYA	1.00 FYA	1.00 FYA	1.00 FYA	1.00 FYA	1.00 FYA	1.00 FYA	1.00 FYA	1.00 FYA	1.00 FYA	.85
G379 Gov. Rod Bracket Cap Screw (cyl. end)	---	---	---	---	---	---	---	---	.15 GVD	.15 GVD	.15 GVD	.15 GVD	.15 GVD	.15 GVD	.15 GVD	.15 GVD	.15 GVD	.15 GVD	.15 GVD	.15
G379 Gov. Rod Brac. Cup Screw (crank end)	---	---	---	---	---	---	---	---	.15 GVE	.15 GVE	.15 GVE	.15 GVE	.15 GVE	.15 GVE	.15 GVE	.15 GVE	.15 GVE	.15 GVE	.15 GVE	.15
G380 Manifold Port Cover	---	---	---	---	---	---	---	---	.30 GSU	.30 GSU	.30 GSU	.30 GSU	.30 GSU	.30 GSU	.30 GSU	.30 GSU	.30 GSU	.30 GSU	.30 GSU	.15
G381 Governor Yoke	---	---	---	---	---	---	---	---	1.10 FXK	1.15 FYB	1.15 FYB	1.15 FYB	1.15 FYB	1.15 FYB	1.15 FYB	1.15 FYB	1.15 FYB	1.15 FYB	1.15 FYB	.70
G382 Governor Yoke Set Screw	---	---	---	---	---	---	---	---	.15 GXF	.15 GXF	.15 GXF	.15 GXF	.15 GXF	.15 GXF	.15 GXF	.15 GXF	.15 GXF	.15 GXF	.15 GXF	.20
G383 Admitting Valve Spring	---	---	---	---	---	---	---	---	.30 FRS	.30 FRS	.30 FRS	.30 FRS	.30 FRS	.30 FRS	.30 FRS	.30 FRS	.30 FRS	.30 FRS	.30 FRS	.20
G384 Throttling Lever	---	---	---	---	---	---	---	---	1.00 FXE	1.10 FXZ	1.10 FXZ	1.10 FXZ	1.10 FXZ	1.10 FXZ	1.10 FXZ	1.10 FXZ	1.10 FXZ	1.10 FXZ	1.10 FXZ	.70
G385 Exhaust Valve Spring	---	---	---	---	---	---	---	---	.30 FCS	.35 FCT	.50 FCT	.50 FCT	.50 FCT	.50 FCT	.50 FCT	.50 FCT	.50 FCT	.50 FCT	.50 FCT	.85
G386 Carburetor Body	---	---	---	---	---	---	---	---	2.10 FXD	2.75 FXT	2.75 FXT	2.75 FXT	2.75 FXT	2.75 FXT	2.75 FXT	2.75 FXT	2.75 FXT	2.75 FXT	2.75 FXT	.20
G387 Carburetor Body Bottom	---	---	---	---	---	---	---	---	.70 FUF	.70 FUF	.70 FUF	.70 FUF	.70 FUF	.70 FUF	.70 FUF	.70 FUF	.70 FUF	.70 FUF	.70 FUF	.20
G388 Manifold Exhaust	---	---	---	---	---	---	---	---	.70 FVA	.70 FVG	.70 FVG	.70 FVG	.70 FVG	.70 FVG	.70 FVG	.70 FVG	.70 FVG	.70 FVG	.70 FVG	.85
G389 Manifold Packing (Asbestos)	---	---	---	---	---	---	---	---	.10 FZG	.10 FZG	.10 FZG	.10 FZG	.10 FZG	.10 FZG	.10 FZG	.10 FZG	.10 FZG	.10 FZG	.10 FZG	.15
G390 Cam Gear Pin (Kerosene)	---	---	---	---	---	---	---	---	.70 GDM	.70 GDM	.70 GDM	.70 GDM	.70 GDM	.70 GDM	.70 GDM	.70 GDM	.70 GDM	.70 GDM	.70 GDM	.15
G391 Air Valve Stem	---	---	---	---	---	---	---	---	.30 GDW	.45 GDW	.45 GDW	.45 GDW	.45 GDW	.45 GDW	.45 GDW	.45 GDW	.45 GDW	.45 GDW	.45 GDW	.10
G392 Air Valve Spring	---	---	---	---	---	---	---	---	.15 GYR	.15 GYR	.15 GYR	.15 GYR	.15 GYR	.15 GYR	.15 GYR	.15 GYR	.15 GYR	.15 GYR	.15 GYR	.70
G393 Air Valve	---	---	---	---	---	---	---	---	.70 FUG	.70 FUG	.70 FUG	.70 FUG	.70 FUG	.70 FUG	.70 FUG	.70 FUG	.70 FUG	.70 FUG	.70 FUG	.20
G394 Air Valve Stem Dial	---	---	---	---	---	---	---	---	.70 FTY	.70 FTY	.70 FTY	.70 FTY	.70 FTY	.70 FTY	.70 FTY	.70 FTY	.70 FTY	.70 FTY	.70 FTY	.70
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	.30

THROTTLE GOVERNED KEROSENE PARTS send serial number of your engine.

NAME OF PARTS	1 1/4 H. P.	1 1/2 H. P.	1 3/4 H. P.	2 1/4 H. P.	3 H. P.	4 H. P.	6 H. P.	8 H. P.	12 H. P.	18 H. P.
	Water Cooled	Air Cooled	Water Cooled	Water Cooled	Water Cooled	Water Cooled	Water Cooled	Water Cooled	Water Cooled	Water Cooled
G395 Valve Lever Spring.....	---	---	---	GDL .15	GDL .15	GDN .15	GDE .15	GDE .15	GKT .20	HFV .25
G396 Set Screws (2) for Collars.....	---	---	---	KRH .15	KRK .20	KRK .20	KRK .20	KRK .20	KRK .20	KRL .20
G397 Igniter Body.....	---	---	---	GLE 1.50	GLE 1.50	GLE 1.50	GLE 1.50	GLE 1.50	GLE 1.50	DRR 2.50
G397 3/4 Kerosene Igniter Complete.....	---	---	---	6.00	6.00	6.00	6.00	6.00	6.00	10.20
G398 Movable Electrode and Point, Kerosene.....	---	---	---	FYK 1.00	FYK 1.00	FYK 1.00	FYK 1.00	FYK 1.00	FYK 1.00	DSB 1.90
G399 Sta. Electrode and Point with Mica Insulation.....	---	---	---	FYM .50	FYM .50	FYM .50	FYM .50	FYM .50	FYM .50	EFE 1.25
G400 Igniter Connector.....	---	---	---	GEX .15	GEX .15	GEX .15	GEX .15	GEX .15	GEX .15	AEU .20
G401 Hammer Stop Spring Pin.....	---	---	---	DGK .15	DGK .15	DGK .15	DGK .15	DGK .15	DGK .15	DGK .15
G402 Electrode Nut.....	---	---	---	KSD .10	KSD .10	KSD .10	KSD .10	KSD .10	KSD .10	KSD .10
G403 Igniter Packing (copper).....	---	---	---	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25	ADP .25
G404 Igniter Pull Back Spring.....	---	---	---	HEY .10	HEY .10	HEY .10	HEY .10	HEY .10	HEY .10	HEY .10
G405 Movable Point.....	---	---	---	FYX .25	FYX .25	FYX .25	FYX .25	FYX .25	FYX .25	FYX .25
G406 Steel Washer (sta. electrode).....	---	---	---	KSE .10	KSE .10	KSE .10	KSE .10	KSE .10	KSE .10	KSE .10
G407 Packing Ring (sta. electrode).....	---	---	---	KSF .15	KSF .15	KSF .15	KSF .15	KSF .15	KSF .15	KSF .15
G408 Priming Cup.....	---	---	---	KSG .50	KSG .50	KSG .50	KSG .50	KSG .50	KSG .50	KSG .50
G409 Brass L Connection (1).....	---	---	---	KUV .30	KUV .30	KUV .30	KUV .30	KUV .30	KUV .30	KUV .30
G410 1/4 inch Copper Water Tube, per foot.....	---	---	---	KUW .30	KUW .30	KUW .30	KUW .30	KUW .30	KUW .30	KUW .30
G411 Compartment Fuel Tank.....	---	---	---	FUZ 2.00	MGS 2.50	MGV 3.75	MGV 3.75	MGV 3.75	MHY 3.75	---
G411 1/2 Kerosene Mixer Complete.....	---	---	---	NZE 12.00	NZF 12.00	NZF 12.00	NZF 12.00	NZF 12.00	NZH 15.00	---

NOTE: Kerosene Tank on 18 h. p. Kerosene Stationary Engine is Special Kerosene Tank, but is not a compartment tank. Symbol is MHZ and price is \$9.00. Portable 18 h. p. Kerosene Engine also takes Special Kerosene Tank, Symbol FRB, same price. Small Gasoline Tank, Symbol KFD, price \$2.00, is used to hold gasoline for priming 18 h. p. Engine.

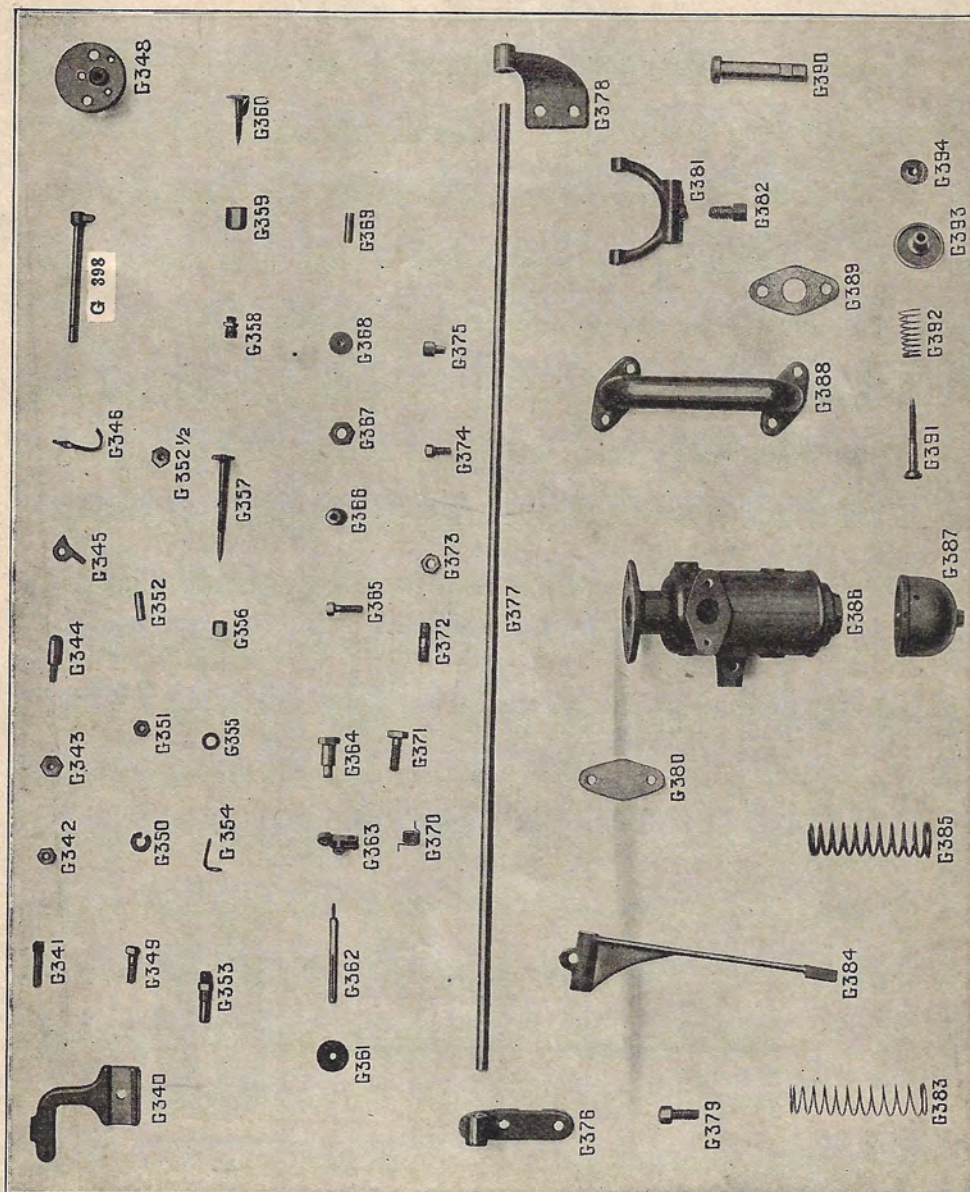
NATURAL GAS ATTACHMENT COMPLETE

Chore Boy, 1 3/4 H. P.....	\$20.00
Hired Man, 2 1/4 H. P.....	20.00
Three Mule Team, 3 H. P.....	23.50
Four Mule Team, 4 H. P.....	25.00
Six Mule Team, 6 H. P.....	33.00
Eight Mule Team, 8 H. P.....	43.00
Twelve Mule Team, 12 H. P.....	60.00

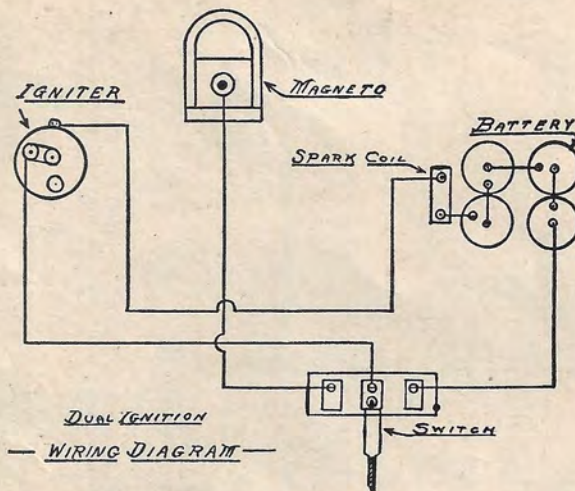
GASOLINE PUMP COMPLETE WITH TANK FOR OUTDOOR PIPE NOT EXCEEDING 10 FEET, COMPLETE FITTINGS

Four Mule Team, 4 H. P.....	\$19.25
Six Mule Team, 6 H. P.....	29.00
Eight Mule Team, 8 H. P.....	38.75
Twelve Mule Team, 12 H. P.....	48.00

THROTTLE GOVERNED KEROSENE PARTS—For prices see pages 22, 23 and 24



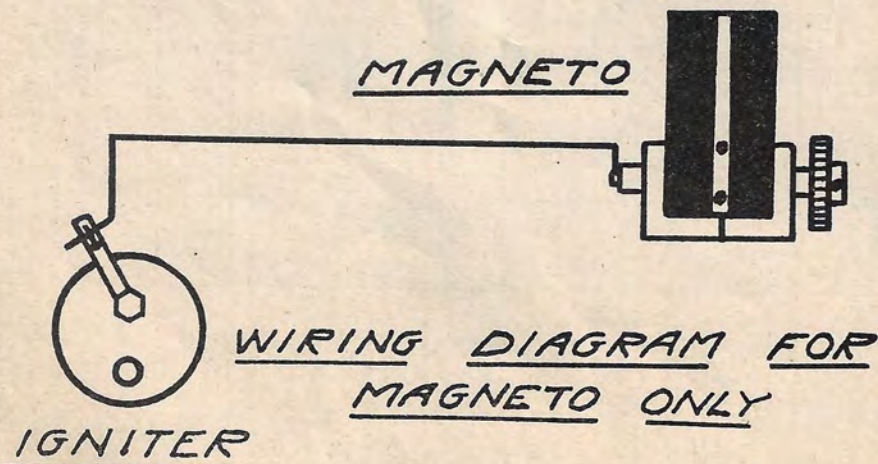
Wiring Diagram of "ASSOCIATED" Engines



When the "ASSOCIATED" Engine leaves the factory the magneto is properly adjusted, timed and set to furnish a good hot spark. Unless the magneto has been removed, timing changed or taken apart there will be no need whatever for re-adjustment.

In case of difficulty in the ignition, first, carefully examine the igniter. A change in the wiring, loose connections, or fouling of igniter points with grease and carbon, may cause trouble often attributed to the magneto.

The "ASSOCIATED" Engine, with its very simple ignition system, will give long satisfactory service.



Send Serial Number of Your Engine Stamped on End of Crank Shaft or on Name Plate

GOVERNOR LEVER COMPLETE

NAME OF PARTS	1 1/2 H. P. Water Cooled	1 1/2 H. P. Air Cooled	1 1/2 H. P. Water Cooled	2 1/4 H. P. Air Cooled	2 1/4 H. P. Water Cooled	3 H. P. Water Cooled	4 H. P. Water Cooled	6 H. P. Water Cooled	8 H. P. Water Cooled	12 H. P. Water Cooled	18 H. P. Water Cooled
	CHH	.85 ACA	.85 ACA	.85 ACA	.85 ACA	.85 DDT	1.00 BND	1.05 ALX	1.10 CCL	1.40 EMA	1.70 DRG
G119 Governor Lever.....	ADZ	.25 ADZ	.25 ADZ	.25 ADZ	.25 ADZ	.25 ADZ	.25 ADZ	.25 DBL	.40 DBL	.40 DBL	.40 DTP
G155 Governor Detent Plate.....	ACU	.30 ACU	.30 ACU	.30 ACU	.30 ACU	.30 ACU	.30 ACU	.30 ACU	.30 ACU	.30 ACU	.30 CME
G132 Governor Speed Screw.....	FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKU	.10 FKW
G218 Governor Catch Screw.....	FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FKZ	.10 FEF
G220 Governor Catch Nut.....	ACR	.20 ACR	.20 ACR	.20 ACR	.20 ACR	.20 ACR	.20 ACR	.20 ACR	.20 ACR	.20 DUC	.55 DUC
G129 Governor Lever Roller Pin.....	ACV	.30 ACV	.30 ACV	.30 ACV	.30 ACV	.30 ACV	.30 ACV	.30 ACV	.30 ACV	.30 DUB	.70 DUB
G133 Governor Lever Roller.....											

MUFFLER COMPLETE

G177 Muffler Top.....	DNH	.70 DNH	.70 DNH	.70 DNH	.70 DNH	.70 BNH	.70 BNH	.70 BBW	.85 BEK	1.05 BLA	1.40 DXF
G195 Exhaust Pipe.....	CLT	.25 DNN	.30 DNN	.30 DNP	.30 DNP	.45 DAZ	.45 DAZ	.45 DNR	.55 DNS	.70 DNT	.85 FDP
G219 Muffler Bolts.....						HGR	.10 HGR	.10 HGR	.10 HGR	.10 HGR	.10 HGS
G281 Muffler Brace 13 inch.....											FNN
G282 Muffler Brace 17 inch.....											FNP
G314 Bolts for Brace.....											FNY
G116 Muffler Bottom.....	DNK	.70 DNL	.70 DNL	.70 DNL	.70 DNL	.70 BDK	.85 BDK	.85 BBV	1.05 BGP	1.05 BLB	1.40 DXG
											2.20

CONNECTING ROD COMPLETE

G117 Connecting Rod (1).....	CGZ	.25 ABY	.25 ABY	.25 ABY	.25 ABY	.25 ABY	.25 DEK	.35 DBD	4.00 DBK	6.25 DBZ	7.50 CUN
G137 Connecting Rod Cap (1).....	CHB	.45 CGP	.50 CGP	.50 CGP	.50 CGP	.50 DEL	.50 DEL	.50 DBH	.55 DBH	.55 DBH	.55 DBH
G131 Connecting Rod Bushing (piston end) (1).....	ACT	1.25 ACT	1.25 ACT	1.25 ACT	1.25 ACT	1.25 ACT	1.25 ACT	1.40 BMG	1.75 ANH	2.00 ANH	2.00 BKB
G244 Connecting Rod Die Castings (pair).....	CHC	.50 CGM	.70 CGM	.70 CGM	.70 CGM	.70 CGM	.70 CGM	1.40 DBC	2.10 CCB	2.50 CGC	3.45 DPG
G174 Connecting Rod Bolts and Nuts (2).....	CUE	.25 CUE	.25 CUE	.25 CUE	.25 CUE	.25 CUE	.25 CUE	.30 DBM	.35 DBM	.35 CUM	.45 CUM
G212 Connecting Rod Cotter Pins (2).....	FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL
G277 Connecting Rod Shim (set).....	CHT	.20 CGN	.20 CGN	.20 CGN	.20 CGN	.20 CGN	.20 DEB	.25 DNB	.25 BHM	.25 CGG	.35 CGL
											.45 DXY

Send Serial Number of Your Engine Stamped on End of Crank Shaft or on Name Plate

GOVERNOR COMPLETE

NAME OF PARTS	1 1/4 H. P.		1 3/4 H. P.		2 1/2 H. P.		3 H. P.		4 H. P.		6 H. P.		8 H. P.		12 H. P.		18 H. P.	
	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air	Water	Air
G118 Governor Balls (each).....	DDA	.40 DDK	.40 DDK	.40 DDK	.40 DDK	.40 DDK	.60 DDP	.60 DDP	.60 DCY	.60 DCY	.70 DCV	.70 DCV	.75 DDV	.75 DDV	1.00 DDV	1.00 DDV	1.25 DRN	1.25 DRN
G113 Governor Saddles two-piece.....	DFN	.70 EWW	.70 EWW	.70 EWW	.70 EWW	.70 EWW	.70 DDM	.85 DAX	.85 DAX	.85 DAX	.85 DAE	.85 DAE	1.05 ENN	1.10 CDT	1.20 DCC	.35 CLV	.45 CLV	.55 CLV
G123 Governor Spring	DPZ	.20 ACG	.20 ACG	.20 ACG	.20 ACG	.20 ACG	.20 DRX	.20 DRX	.20 ACG	.20 ACG	.20 DCF	.25 DUM	.30 DCC	.30 DCC	.35 DCC	.35 DCC	.35 CLV	.45 CLV
G136 Governor Eye Bolts and Nuts	ACY	.15 ACY	.15 ACY	.15 ACY	.15 ACY	.15 ACY	.15 ACY	.15 ACY	.15 ACY	.15 ACY	.15 ACY	.15 ACY	.15 ACY	.15 ACY	.15 ACY	.15 ACY	.15 EML	.45 EML
G144 Governor Ball Pins	ADG	.25 ADG	.25 ADG	.25 ADG	.25 ADG	.25 ADG	.25 ADG	.25 ADG	.25 ADG	.25 ADG	.25 ADG	.25 ADG	.25 ADG	.25 ADG	.25 ADG	.25 ADG	.25 BKT	.45 DUD
G268 Governor Ball Set Screws and Nuts.....	FMV	.10 FMV	.10 FMV	.10 FMV	.10 FMV	.10 FMV	.10 FMV	.10 FMV	.10 FMV	.10 FMV	.10 FMX	.10 FMX	.15 FMX	.15 FMX	.15 FMX	.15 FMX	.15 FMY	.15 FMY
G212 Spring Cotter Pins (2).....	FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL	.10 FKL

CYLINDER HEAD COMPLETE

G104 Cylinder Head (1).....	CHG	3.80 ABA	4.15 ABA	4.15 ABA	4.15 ABA	4.15 EXX	4.15 CMW	4.85 BMX	6.20 CGT	8.25 DAF	11.00 BKF	13.75 BKF	13.75 BKF	13.75 BKF	13.75 BKF	13.75 BKF	13.75 BKF	13.75 BKF
G138 Exhaust Valve.....	ADA	.60 ADA	.60 ADA	.60 ADA	.60 ADA	.60 ADA	.60 DET	.70 BMK	.85 ANL	1.05 BDV	1.15 BKK	1.70 BKK	1.70 BKK	1.70 BKK	1.70 BKK	1.70 BKK	1.70 BKK	1.70 BKK
G152 1/2 Exhaust Valve Collar (1).....	ENT	.25 ENT	.25 ENT	.25 ENT	.25 ENT	.25 ENT	.25 ENT	.25 ENT	.30 ENR	.30 ENR	.30 ENP	.35 DXP	.35 DXP	.35 DXP	.35 DXP	.35 DXP	.35 DXP	.35 DXP
G125 Exhaust Valve Spring (1).....	FCS	.25 FCS	.25 FCS	.25 FCS	.25 FCS	.25 FCS	.25 FCR	.30 FCU	.40 FCT	.40 FCT	.45 FCW	.60 FCX	.60 FCX	.60 FCX	.60 FCX	.60 FCX	.60 FCX	.60 FCX
G139 Admitting Valve (1).....	ADB	.60 ADB	.60 ADB	.60 ADB	.60 ADB	.60 ADB	.60 DES	.70 BMB	.85 AME	1.05 BEE	1.15 BHS	1.70 DWR	1.70 DWR	1.70 DWR	1.70 DWR	1.70 DWR	1.70 DWR	1.70 DWR
G152 Admitting Valve Collar (1).....	ENT	.25 ENT	.25 ENT	.25 ENT	.25 ENT	.25 ENT	.25 ENT	.25 ENT	.30 ENR	.30 ENR	.30 ENP	.35 DXP	.35 DXP	.35 DXP	.35 DXP	.35 DXP	.35 DXP	.35 DXP
G124 Admitting Valve Spring (1).....	FRT	.20 FRT	.20 FRT	.20 FRT	.20 FRT	.20 FRT	.20 FRS	.25 FRR	.25 FRP	.30 FRN	.40 FRM	.50 FRL	.50 FRL	.50 FRL	.50 FRL	.50 FRL	.50 FRL	.50 FRL
G266 Admitting Valve Washer (1).....	DBA	.15 DBA	.15 DBA	.15 DBA	.15 DBA	.15 DBA	.15 DBA	.15 BMP	.20 BER	.20 BER	.20 BER	.20 CMN	.20 CMN	.20 CMN	.20 CMN	.20 CMN	.20 CMN	.20 CMN
G398 Set Screws for Collars (2).....	KRH	.15 KRH	.15 KRH	.15 KRH	.15 KRH	.15 KRH	.15 KRK	.20 KRK	.20 KRK	.20 KRK	.20 KRL	.20 KRL	.20 KRL	.20 KRL	.20 KRL	.20 KRL	.20 KRL	.20 KRL
G239 Valve Lever Bracket (1).....	CHK	.55 AEB	.55 AEB	.55 AEB	.55 AEB	.55 AEB	.55 DDY	.70 BNW	.85 ALY	1.05 BGF	1.10 BLF	1.40 BFX	1.40 BFX	1.40 BFX	1.40 BFX	1.40 BFX	1.40 BFX	1.40 BFX
G156 Valve Lever (1).....	ADH	.30 ADH	.30 ADH	.30 ADH	.30 ADH	.30 ADH	.30 ADH	.30 AMW	.35 AMW	.35 AMW	.35 BLR	1.05 DTZ	1.05 DTZ	1.05 DTZ	1.05 DTZ	1.05 DTZ	1.05 DTZ	1.05 DTZ
G145 Valve Lever Pin (1).....	FBV	.10 FBV	.10 FBV	.10 FBV	.10 FBV	.10 FBV	.10 FBV	.10 FBV	.10 FBV	.10 FBV	.10 FBV	.15 FBX	.15 FBX	.15 FBX	.15 FBX	.15 FBX	.15 FBX	.15 FBX
G132 Valve Lever Set Screw.....	FBV	.10 FBV	.10 FBV	.10 FBV	.10 FBV	.10 FBV	.10 FBV	.10 FBV	.10 FBV	.10 FBV	.10 FBV	.15 FBX	.15 FBX	.15 FBX	.15 FBX	.15 FBX	.15 FBX	.15 FBX

Send Serial Number of Your Engine Stamped on End of Crank Shaft or on Name Plate

PISTON COMPLETE

NAME OF PARTS	1½ H. P.		1¾ H. P.		2¼ H. P.		3 H. P.		4 H. P.		6 H. P.		8 H. P.		12 H. P.		18 H. P.	
	Water	Cooled	Air	Cooled	Air	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled
G115 Piston (1)-----	CHD	4.00	ABW	4.60	AKY	5.20	AKY	5.20	CMV	6.20	BNR	8.25	AMG	10.35	BEF	16.50	BLH	24.75
G166 Piston Ring (1)-----	CHF	.40	AEN	.40	AKZ	.40	AKZ	.40	CMY	.50	BNN	.55	DHE	.65	BGL	.75	BLF	.80
G141 Piston Pin (1)-----	FTH	.45	FTH	.45	FTK	.50	FTK	.50	FTL	.70	FTM	.85	FTN	1.05	FTP	1.10	FTR	1.40
G183 Set Screws and Nuts (1)-----	FDC	.10	FDC	.10	FDC	.10	FDC	.10	FDC	.10	FDC	.15	FDD	.15	FDE	.15	FDF	.20
G205 Piston Ring Pins (1)-----	AKL	.10	AKL	.10	AKL	.10	AKL	.10	AKL	.10	AKL	.10	AMR	.15	AMR	.15	AMR	.15

GASOLINE IGNITER COMPLETE

G112 Body (1)-----	ABS	1.25	ABS	1.25	ABS	1.25	ABS	1.25	ABS	1.25	ABS	1.25	ABS	1.25	ABS	1.25	ABS	1.25
G121 Conical Igniter Spring-----	ACC	.10	ACC	.10	ACC	.10	ACC	.10	ACC	.10	ACC	.10	ACC	.10	ACC	.10	ACC	.10
G143 Movable Electrode and Point-----	ADF	.90	ADF	.90	ADF	.90	ADF	.90	ADF	.90	ADF	.90	ADF	.90	ADF	.90	ADF	.90
G153 Stationary Electrode and Point-----	FBE	.30	FBE	.30	FBE	.30	FBE	.30	FBE	.30	FBE	.30	FBE	.30	FBE	.30	FBE	.30
G157 Igniter Hammer Stop-----	KTX	.30	KTX	.30	KTX	.30	KTX	.30	KTX	.30	KTX	.30	KTX	.30	KTX	.30	KTX	.30
G160 Mica Washers (set)-----	AEF	.10	AEF	.10	AEF	.10	AEF	.10	AEF	.10	AEF	.10	AEF	.10	AEF	.10	AEF	.10
G161 Igniter Hammer-----	DYE	.30	DYE	.30	DYE	.30	DYE	.30	DYE	.30	DYE	.30	DYE	.30	DYE	.30	DYE	.30
G172 Igniter Connector-----	AEV	.10	AEV	.10	AEV	.10	AEV	.10	AEV	.10	AEV	.10	AEV	.10	AEV	.10	AEV	.10
G401 Hammer Stop Spring Pin-----	DGK	.15	DGK	.15	DGK	.15	DGK	.15	DGK	.15	DGK	.15	DGK	.15	DGK	.15	DGK	.15
G211 Binding Post-----	BPE	.15	BPE	.15	BPE	.15	BPE	.15	BPE	.15	BPE	.15	BPE	.15	BPE	.15	BPE	.15
G214 Binding Post Screw-----	FKN	.10	FKN	.10	FKN	.10	FKN	.10	FKN	.10	FKN	.10	FKN	.10	FKN	.10	FKN	.10
G215 Ground Screw-----	FKR	.10	FKR	.10	FKR	.10	FKR	.10	FKR	.10	FKR	.10	FKR	.10	FKR	.10	FKR	.10
G216 Hammer Stop Screw-----	FKP	.10	FKP	.10	FKP	.10	FKP	.10	FKP	.10	FKP	.10	FKP	.10	FKP	.10	FKP	.10
G220 Electrode Nut-----	FKZ	.10	FKZ	.10	FKZ	.10	FKZ	.10	FKZ	.10	FKZ	.10	FKZ	.10	FKZ	.10	FKZ	.10
G229 Taper Pin-----	FLM	.10	FLM	.10	FLM	.10	FLM	.10	FLM	.10	FLM	.10	FLM	.10	FLM	.10	FLM	.10
G249 Body Hammer Stop Pin-----	DWV	.10	DWV	.10	DWV	.10	DWV	.10	DWV	.10	DWV	.10	DWV	.10	DWV	.10	DWV	.10
G150 Igniter Packing (asbestos wire inserted)-----	KNT	.15	KNT	.15	KNT	.15	KNT	.15	KNT	.15	KNT	.15	KNT	.15	KNT	.15	KNT	.15
G150½ Igniter Packing (asbestos copper bound)-----	ADP	.25	ADP	.25	ADP	.25	ADP	.25	ADP	.25	ADP	.25	ADP	.25	ADP	.25	ADP	.25
G243 Igniter Pull Back Spring-----	HEY	.10	HEY	.10	HEY	.10	HEY	.10	HEY	.10	HEY	.10	HEY	.10	HEY	.10	HEY	.10
G213 Steel Screw-----	FKM	.10	FKM	.10	FKM	.10	FKM	.10	FKM	.10	FKM	.10	FKM	.10	FKM	.10	FKM	.10

KEROSENE IGNITER COMPLETE Send Serial Number of Your Engine

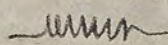
NAME OF PARTS	1 1/4 H. P.		1 1/2 H. P.		2 1/4 H. P.		3 H. P.		4 H. P.		6 H. P.		8 H. P.		12 H. P.		18 H. P.	
	Water	Cooled	Air	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled
G397 Kerosene Igniter Body.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G121 Conical Igniter Spring.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G398 Movable Electrode and Point.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G399 Stationary Electrode and Point with Mica Tube	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Insulation.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G157 Igniter Hammer Stop.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G161 Igniter Hammer.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G400 Igniter Connector.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G401 Hammer Stop Spring Pin.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G216 Ground Screw.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G3215 Hammer Stop Screw.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G402 Electrode Nut.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G3229 Taper Pin.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G3249 Igniter Hammer Stop Body Pins.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G403 Igniter Packing (copper).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G404 Igniter Pull Back Spring.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G213 Steel Screw.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G405 Movable Point.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G406 Steel Washer (Stationary Electrode).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G407 Packing Ring (Stationary Electrode).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G408 Priming Cup.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

GASOLINE MIXER COMPLETE

NAME OF PARTS	1 1/4 H. P.		1 1/2 H. P.		2 1/4 H. P.		3 H. P.		4 H. P.		6 H. P.		8 H. P.		12 H. P.		18 H. P.	
	Water	Cooled	Air	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled	Water	Cooled
G128 Air Pipe, only (1).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G178 Air Pipe Cap (1).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G168 Gasoline Nozzle (1).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G165 Gasoline Needle (1).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G163 Throttle Dial (1).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G316 Reservoir Cap (1).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G317 Reservoir Cap Chain (1).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G318 Bottom Cap Screw (1).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G305 Throttle Needle Bushing (1).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G320 Needle Packing Nut (1).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G321 Needle Lock Nut (1).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G322 Dial Index Spring (1).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G263 Asbestos Packing (1).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G265 Cap Screws.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G167 Throttle Nut (1).....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

MAGNETO PARTS

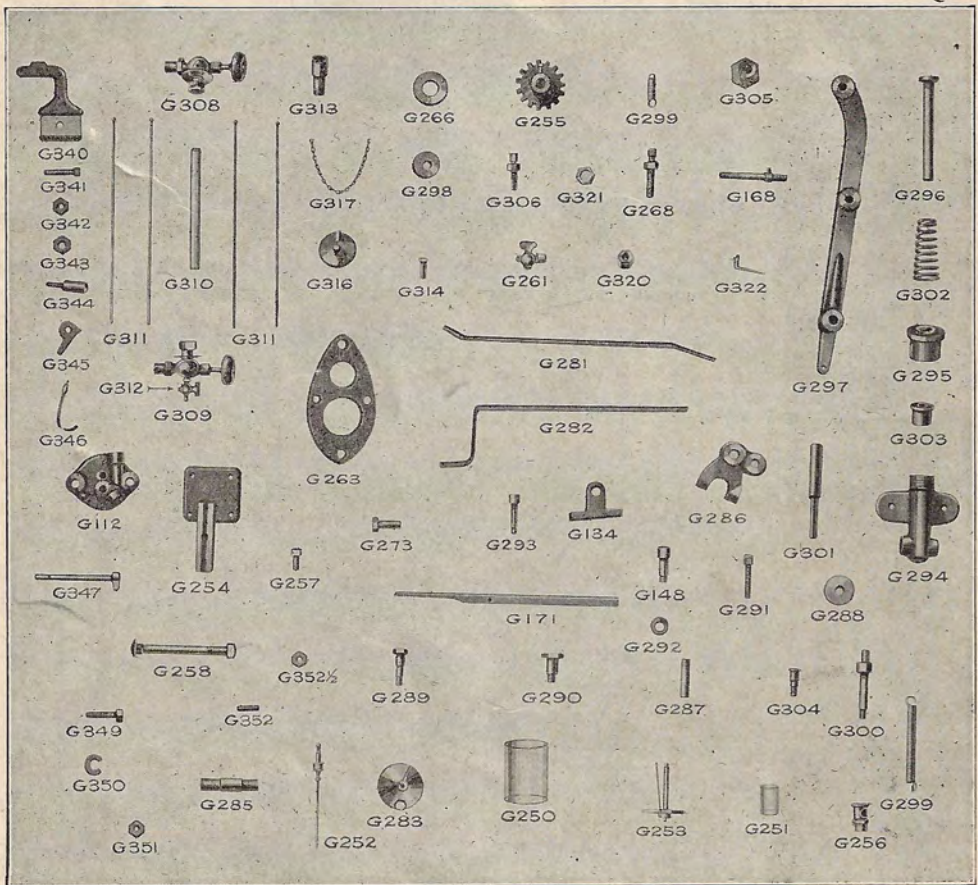
Send Serial Number of your Engine when ordering Magneto Parts.

 G 255 DVC  G 245 DVB  G 246 DVD 1½ H.P.	 G 255 BYV  G 245 DVB  G 246 DVE 1¾ H.P.	 G 255 BYV  G 245 DVB  G 246 DVE 3 H.P.	 G 255 BUE  G 245 DUZ  G 246 DVA 4 H.P.	 G 255 BUF  G 245 DUZ  G 246 DVF 6 ^{AND} 8 H.P.	 G 255 BUG  G 254 DVG 12 H.P.	 G 255 EKM  G 254 BTW 18 H.P.
 G 323	 G 324	 G 325	 No 10	 G 326	 G 327	
 G 328	 G 329	 G 330	 G 331	 G 332	 G 333	 G 334
 G 337	 G 255 BYV  G 245½ BYU  G 254 BPH 1½ H.P.	 G 255 BYV  G 245½ DGX  G 254 DGW 1¾-2¼-3 H.P.	 G 255 BUE  G 245½ BUH  G 254 BTV 4 H.P.	 G 255 BUF  G 254 BPK 6 ^{AND} 8 H.P.		

Refer to pages 18 and 19 before ordering Magneto Parts.

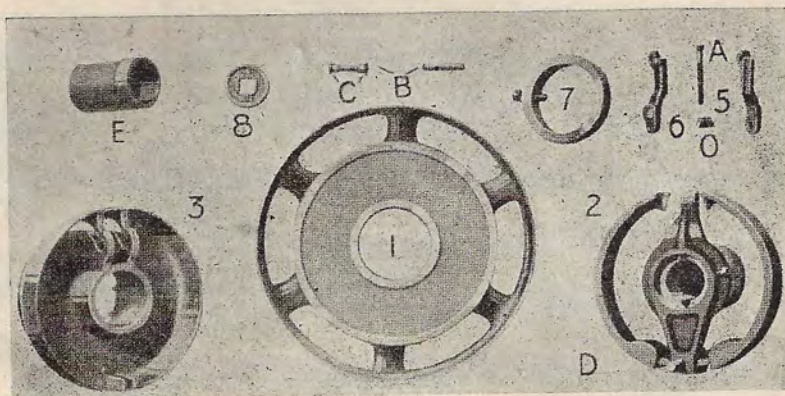
G246 Magneto Brackets for 1½, 4, 12 and 18 H. P. Engines do not interchange. G246 Magneto Brackets for 1¾, 2¼ and 3 H. P. do interchange; also Magneto Brackets for 6 and 8 H. P. interchange.

18 H. P. REPAIR PARTS



Lasure Friction Clutch Pulleys

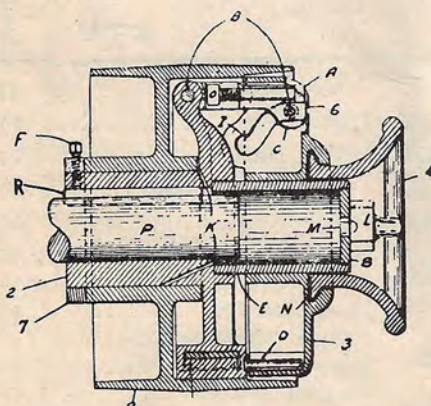
List of Parts and Descriptive Diagram



Part No.	Name	Clutch Number		
		1	2	3
2	Clutch Member	\$ 6.00	\$ 6.50	\$ 7.75
3-4	Cam Housing and Hand Wheel	3.50	4.00	5.00
5-6	Toggle Levers (pair)	.50	.60	.60
7	Set Collar	.75	.80	.85
8	Oil Retainer	.10	.15	.20
E	Extension Sleeve	1.10	1.25	1.50
F	Set Screws for Collar (pair)	.25	.25	.25
O	Adjustment Nut	.15	.15	.15
A	Adjustment Screw	.20	.20	.25
B	Pins	.30	.30	.30
C	Rollers (pair)	.20	.25	.30
D	Guide Pins	.15	.15	.20
		\$13.20	\$14.60	\$17.35

* To ascertain the list price of any size pulley, deduct from list price of complete clutch the total cost of parts, as given above, for relative size clutch. Example: List price of complete No. 2 Clutch, 18x8 pulley, is \$28.75; total cost of parts No 2 clutch, \$14.60, list price of pulley, \$14.15.

* No. 1 Clutch is used for 4 H. P. and smaller; No. 2 for 6 and 8 H. P.; No. 3 for 12 H. P.



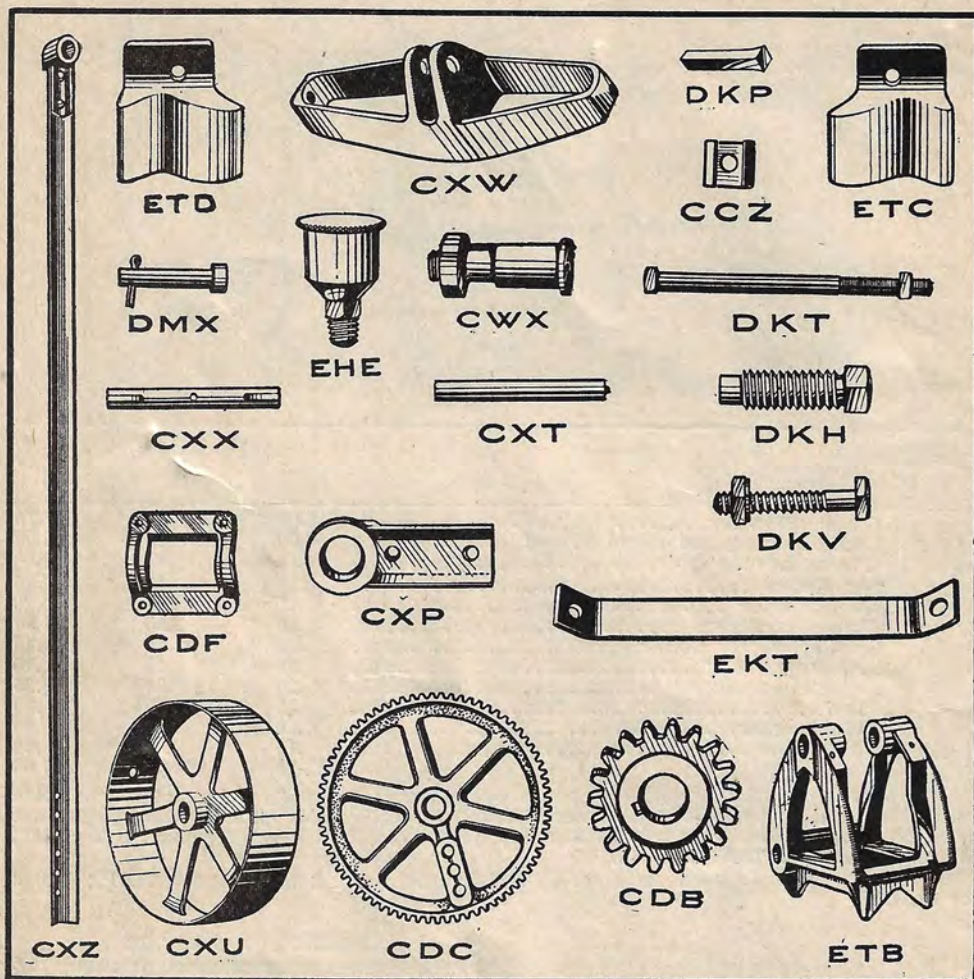
M Oil Entrance.
N Chilled Swivel Bearing.
P Engine Shaft.
R Drive Key.

Descriptive Diagram

1. Loose Pulley with extended friction ring.
2. Clutch Member.
3. Cam Housing.
4. Swivel Hand Wheel.
5. Right Half Toggle Lever.
6. Left Half Toggle Lever.
7. Set Collar.
8. Oil Retainer.
9. Rim (smallest pulley.)
0. Adjustment Spreading Nut.
- A Adjustment Screw.
- B Fulcrum and Roller Pins.
- C Anti-Friction Rollers.
- D Guide Pin.
- E Extension Sleeve.
- F Screws for Set Collar.
- H Flexible Steel Connection.
- I Curved Slot in Cam.
- K Oil Communication.
- L Lug For Shifter Connection.

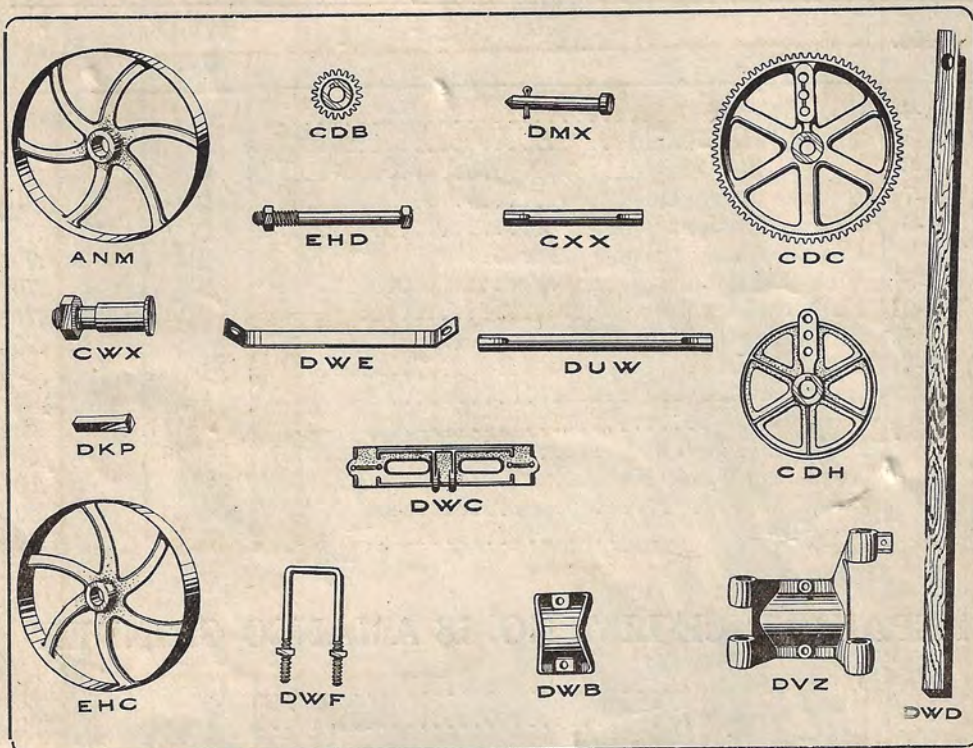
NO. 5 PUMP JACK REPAIR LIST

Including Jack Boy Jack



CXP	Pitman Bearing	\$.45	CXX	Pinion Shaft	50
CDF	Clamp	35	CWX	Pitman Pin	30
EKT	Brace	30	CXZ	Pitman Rod	 1.00
DKT	Clamp Bolt	10	CCZ	Pitman Rod Washer	10
CXW	Cross Head	55	DKP	Pinion Key	15
DKV	Cross Head Bolt	10	CXU	Pulley	 1.75
ETB	Frame	 2.20	DKH	Pulley Set Screw	10
CDC	Gear	 1.75	DMX	Pump Rod Pin	10
CXT	Gear Shaft	45		Pitman Complete	80
ETD	Gear Guard (left)	25	EBA	Horizontal Bracket	 1.40
ETC	Gear Guard (right)	25		Vertical Bracket	 1.40
EHE	Grease Cup	30	DUR	Jack Boy Bracket	 1.80
CDB	Pinion	45	HNX	Gear Guard	35
EKS	Cut Pinion	 3.00	FSM	Frame (Jack Boy)	 4.25
HHX	Shaft	60	ALH	Clamp	40
EHA	Cut Gear	 3.00			

NO. 6 PUMP JACK REPAIR PARTS



DWE	Brace	.....	\$ .25
DWB	Clamp	.....	.25
EHD	Clamp bolt	.....	.10
DWC	Cross Head	.....	.50
DWF	Cross Head Bolt	.....	.10
DVZ	Frame	.....	1.90
CDC	Gear	.....	1.75
DKP	Gear Key	.....	.15
CCX	Gear Shaft	.....	.40
CDB	Pinion	.....	.45
DUW	Pinion Shaft	.....	.35
CWX	Pitman Pin	.....	.30
DWD	Pitman Rod	.....	.40
DKP	Pinion Key	.....	.15
EHC	Loose Pulley	.....	1.50
ANM	Tight Pulley	.....	1.50
DKP	Tigh Pulley Key	.....	.15
DMX	Pump Rod Pin	.....	.25
CDH	Disc	.....	.90
DKD	Disc Key	.....	.15

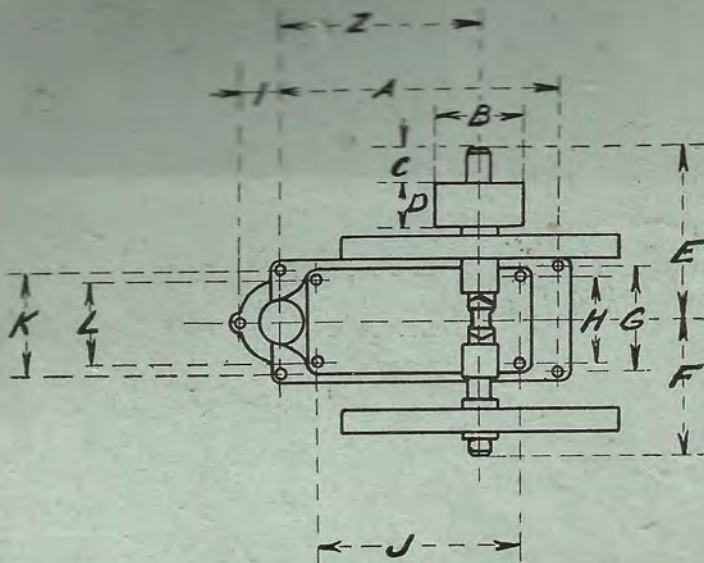
REPAIR PRICE LIST NO. 6 AMANCO GRINDER

No.	Name	Weight lbs.	Price
A-4	Main Frame	20	\$3.50
A-5	Front Burr Shield	6	1.50
A-6	Upper Burr Shield	3	.80
NA-7	Runner Burr Head	5	1.50
NA-8	Coarse Stationary Burr	2 $\frac{1}{2}$	.70
NA-9	Coarse Runner Burr	2 $\frac{1}{2}$	.70
NA-81	Fine Stationary Burr	2 $\frac{1}{2}$	.70
NA-91	Fine Runner Burr	2 $\frac{1}{2}$	.70
A-10	End Thrust Plate	$\frac{1}{4}$	.20
A-11	Feed Spout	1	.50
A-12	Base	16	2.60
A-14	Feed Slide	$\frac{3}{4}$	.40
	Adjusting Screw	1	.60
	Adjusting Lock Nut	$\frac{1}{4}$	.10
	Shaft	4	1.50
	Hopper	6	1.50

REPAIR PRICE LIST NO. 18 AMANCO GRINDER

N-31	Main Frame	45	\$9.50
N-33	Front Bearing	7	2.00
N-35	Rear Bearing	3	1.00
	Ball Bearing	$\frac{1}{4}$	.50
N-36	End Thrust Bearing	1	.80
N-37	Adjusting Lever	2	.80
	Adjusting U Bolt	$\frac{1}{4}$	.20
38	Adjusting Hand Wheel	1	.30
N-40	Burr Shield	10	2.00
41	Runner Burr Head	7	2.00
N-43	Stationary Burr Head	10	3.00
N-44	Large Concave	4	1.50
N-45	Small Concave	1	.40
46	Cob Breaker	1	.20
N-46	Worm Cob Breaker	9	1.80
N-47	Front Feed Cob Breaker	2	.50
48	Rear Feed Cob Breaker	3	.60
49	Leg Clamp	1	.20
N-50	Coarse Stationary Burr	3 $\frac{1}{2}$	1.00
N-50	Coarse Runner Burr	3 $\frac{1}{2}$	1.00
N-52	Fine Stationary Burr	3 $\frac{1}{2}$	1.00
N-52	Fine Runner Burr	3 $\frac{1}{2}$	1.00
N-57	Right Feed Slide	2 $\frac{1}{2}$	.30
N-57	Left Feed Slide	2 $\frac{1}{2}$	.30
	Hopper	16	3.00
	Hopper Clamps, each	$\frac{1}{4}$	.10
	Shaft	14	4.00
	Fly Wheel	35	3.50

Instructions for finding Foundation Dimensions for IOWA "Over Size" Engines, 1½ to 18 H. P.



DIMENSIONS.

HP	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1½	0	4	½	4	11¼	11¼	0	7½	0	12½	0	7½	17½	8	0	8¼	36	0	16	24	1½	18	30	10	8½	0
1¾	0	6	½	4	12	12	0	8½	0	17½	0	8½	24½	8½	0	9½	48	0	18	30	1¾	21	33	12	8½	0
2¼	0	6	½	4	12	12	0	8½	0	17½	0	8½	24½	10	0	9½	48	0	18	30	1¾	21	33	12	8½	0
3	22¼	10	½	6	15¼	14½	11	9½	0	17¼	11	9½	29½	12	12½	6½	60	6	20	36	2¼	22	34	16	½	14½
4	32½	12	2	6	18	15	11¼	9½	0	25¼	11¼	9½	37½	13½	14½	8	72	6½	24	44	2¼	24	36	18	½	22½
6	40½	16	1½	6	21	17	16¼	13½	6½	27	16¼	11¼	45	20	20½	8½	84	12	28	58½	2¼	28	40	24	½	27½
8	39¼	20	1	6	21	19	16½	14½	8¼	28½	16½	14½	46½	21	22	10	86	12	32	60½	2¼	28	40	26	½	27½
12	45¼	24	2	8	25	22	19½	16¼	11½	33½	19½	16¼	55½	24	25½	12	96	13½	36	69	2¼	32	44	30	½	30½
18	54¼	28	0	10	28½	26	23½	19	16½	45½	23½	19	68	26	27	14	115	13	48	86	3½	36	60	36	½	35½

The engines in the H. P. Column of the table above represent size of IOWA "Over Size" engines in Horse Power. All figures in columns of the letters of the alphabet represent distance in inches.

If you want specifications for a foundation for an "IOWA" 6 H. P. run down the H. P. Column at the extreme left of the table until you come to the figure "6." Directly at the right of this figure in column "A" you will find the figures "40 1-8." Referring to the diagram at the top of this page you will see that the letter "A" represents the distance length-wise between the centers of the Foundation Bolts. Therefore this distance is 40 1-8 inches.

In column "B" directly at the right of "6 H. P." you will find the number "16" and by again referring to diagram you will see this represents the diameter of the belt pulley in inches. In column "C" opposite "6 H. P." is the number "1 5-8." The diagram shows this is the distance the crankshaft extends beyond the belt pulley. In column "D" opposite "6 H. P." we find the face of the pulley is 6 inches. Column "E" tells us the distance between center of web of crankshaft and pulley end of same is 21 inches on 6 H. P. In column "F" opposite "6 H. P." we find number 17 and the diagram shows this is the distance from middle of web of crankshaft to governor end of same, etc.

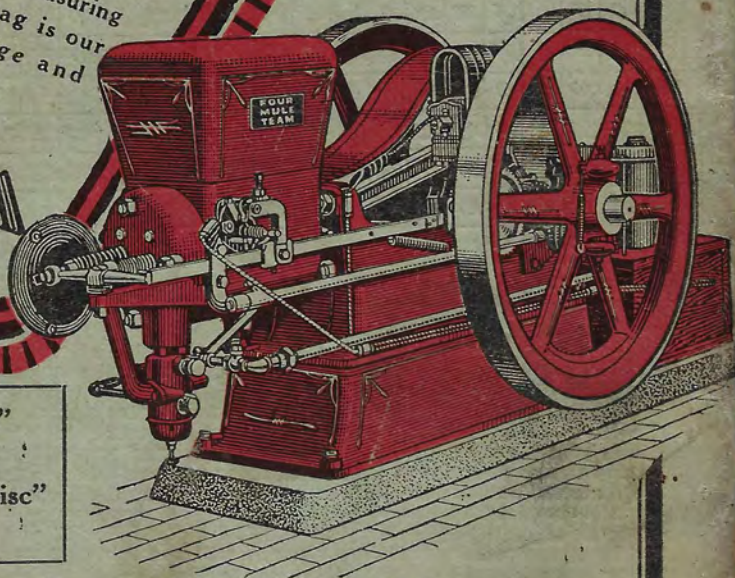
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