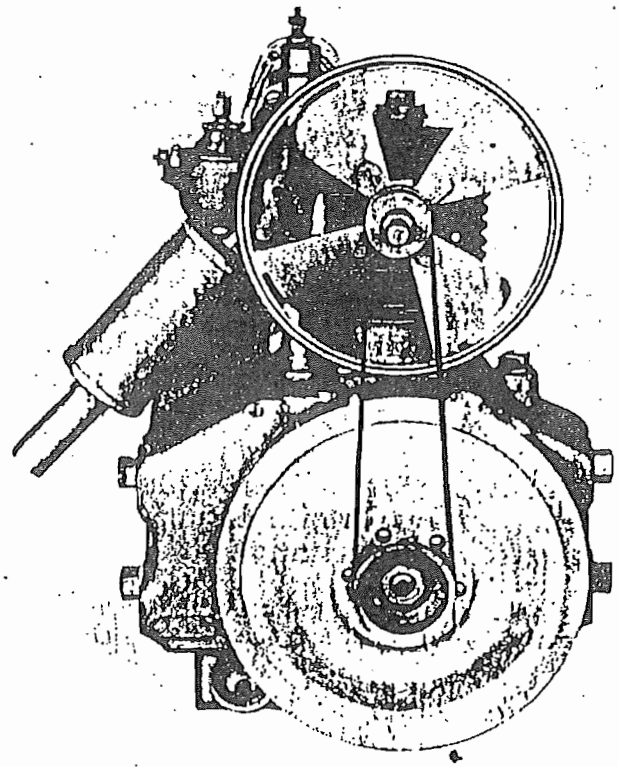
INSTRUCTIONS

How to take care of the
Type-P

Briggs-Stratton

Engine



BRIGGS & STRATTON CO.
Engine Division
MILWAUKEE, - - - U. S. A.

IMPORTANT SAFETY INFORMATION AND INSTRUCTIONS FOR

ENGINE SELECTION
ENGINE INSTALLATION
ENGINE OPERATION

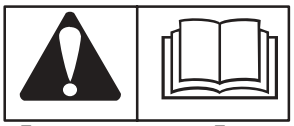
Keep these instructions for future reference.

In the USA and Canada,
our 24 hour hotline is:

18002333723

Briggs & Stratton Corporation
Milwaukee, Wisconsin 53201

www.briggsandstratton.com



Before installing and operating this engine read and observe all warnings, cautions and instructions on both sides of this sheet, on the engine, and in the operating & maintenance instructions.

NOTE: This sheet of instructions and safety information is not meant to cover all possible conditions and situations that may occur. Read entire Operating & Maintenance Instructions for this engine AND the instructions for the equipment this engine powers. Failure to follow instructions and safety information could result in serious injury or death.

The safety alert symbol (⚠) is used to identify safety information about hazards that can result in personal injury.

A signal word (DANGER, WARNING, or CAUTION) is used with the alert symbol to indicate the likelihood and the potential severity of injury. In addition, a hazard symbol may be used to represent the type of hazard.

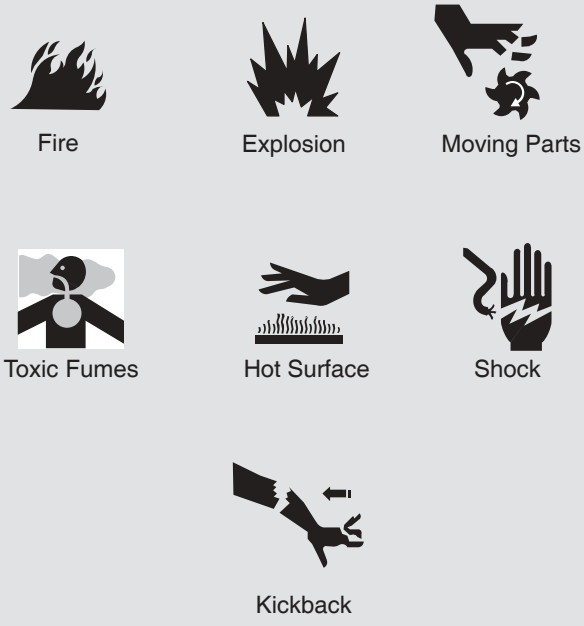
⚠ **DANGER** indicates a hazard which, if not avoided, **will result in death or serious injury.**

⚠ **WARNING** indicates a hazard which, if not avoided, **could result in death or serious injury.**

⚠ **CAUTION** indicates a hazard which, if not avoided, **might result in minor or moderate injury.**

CAUTION, when used **without** the alert symbol, indicates a situation that **could result in damage to the engine.**

HAZARD SYMBOLS AND MEANINGS



(OVER)

FORM MS-6445-01/03

ENGINE SELECTION

WARNING

Failure to select the correct engine could result in fire or explosion.

- Some engines are unique and designed for specific applications or types of equipment. If this engine will be used to build new equipment, contact Briggs & Stratton to ensure that the engine is appropriate for the intended use.

  Note: For all Go-karts use only a model 136200 series engine, which offers improved safety and performance.
- Replacement engines should be the same model as the original engine, or be the Briggs & Stratton designated replacement engine. Refer to the Operation & Maintenance Instructions for engine identification information.

  Note: For all Go-karts use only a model 136200 series engine, which offers improved safety and performance.
- Do not use Briggs & Stratton engines on 3-wheel All-Terrain Vehicles (ATVs), motor bikes, air craft products, or vehicles intended for use in competitive events. Briggs & Stratton does not approve of or authorize such uses.

ENGINE INSTALLATION

[1] Do not attempt to install this engine if you do not have the appropriate tools and knowledge of small engine installation procedures. Use only Briggs & Stratton parts. Contact your Authorized Service Dealer for assistance.

[2] Do not modify the engine in any way without Briggs & Stratton factory approval. Any such modification is at the owner's sole risk.

[3] If the exhaust system on the old engine was supplied by the equipment manufacturer, you must transfer the exhaust system and related components (original muffler and related pipes, brackets, clamps, and shields) to the new engine. All components must be in good condition.

[4] **WARNING**

Install muffler (and muffler deflector if used) so outlet points away from operator, fuel tank, and equipment, and so muffler heat will not damage or deform engine and components.

[5] **WARNING**

Ensure all fuel lines and fittings are properly assembled and do not leak. Replacement parts must be the same model as the original.

[6] **WARNING**

Ensure all wiring, including safety switches and engine shut-off components are completely installed and functioning properly.

[7] Set engine speed to equipment manufacturer's specification. Refer to equipment manufacturer's manual. Do not tamper with governor springs, or other parts that will increase engine speed above specification.

[8] **WARNING**

All engine parts, including fuel cap, spark plug, muffler, air cleaner, and covers and guards for drive components (gears, belts, shafts, couplings, etc.) must be in place before attempting to start engine.

[9] **WARNING**

If engine is installed on walk behind lawn mower, all mower components, including cutting blade, must be correctly installed before attempting to start engine.

[10] **WARNING**

When working on the engine or equipment, remove spark plug wire from spark plug. For electric start, remove negative wire from battery.

[11] **WARNING**

Do not check for spark with spark plug removed. Use Briggs & Stratton spark tester #19368.

ENGINE OPERATION

WARNING

When adding fuel:

Turn engine off and let engine cool at least 2 minutes before removing gas cap.

Fill fuel tank outdoors or in well-ventilated area. Fill tank to about 1 inch below lowest portion of neck to allow for fuel expansion.

Keep gasoline away from sparks, open flames, pilot lights, heat, and other ignition sources.

WARNING

When starting engine:

Remove all external equipment/engine loads.

Wait until spilled fuel is evaporated. Start engine outdoors.

Pull cord slowly until resistance is felt, then pull rapidly.

If engine floods, set choke to OPEN/RUN, place throttle in FAST and crank until engine starts.

WARNING

When operating equipment:

Do not tip engine or equipment at angle which causes gasoline to spill.

Run engine outdoors. Do not run in enclosed area, even if doors or windows are open.

Do not choke carburetor to stop engine.

READ AND FOLLOW INSTRUCTIONS CAREFULLY

Our Service and Sales are two different departments. Therefore, when communicating with us, keep Service subjects separate from Sales subjects.

When desiring additional information, or returning material, or placing order for parts, address letter for the attention of the Service Department. Never address a letter to an individual, as this may cause some delay.

To avoid errors and delays, always give engine number when ordering or returning parts for adjustment.

Engine number is placed on crank case directly to the left of the fly wheel

VERY IMPORTANT

The Crank must be drained at least every 50 running hours and flushed with kerosene. This will greatly prolong the life of the motor.

FOREWORD

The object of this booklet is to instruct the owner of a Briggs-Stratton Engine in its proper care.

It is a significant fact that a very large percentage of Briggs-Stratton Engines are used by people who, in the majority of cases, have had practically no experience with four-cycle air-cooled engines.

The extreme simplicity of the Briggs-Stratton Engine, together with the great ease and flexibility with which it operates, renders an extensive mechanical knowledge unnecessary.

On the following pages of this booklet we have summarized a list of troubles, their symptoms and remedies, and if watched carefully satisfaction is assured, which enables a Briggs-Stratton Engine owner to get the most service with the least possible annoyance or expense.

Read the contents of this booklet very carefully before starting the Briggs-Stratton Engine, and have it always with you for ready reference.

While it is not imperative, it is, however, very desirable that every Briggs-Stratton Engine owner should thoroughly understand this Engine. With such knowledge at your command you'll appreciate it all the more.

Engine Division
BRIGGS & STRATTON COMPANY
Milwaukee - - - U. S. A.

STARTING THE BRIGGS-STRATTON ENGINE

Before starting the Briggs-Stratton Engine read instructions carefully. After having attached the Briggs-Stratton Engine, pour oil into the crank case as directed, however, being careful not to overfill the oil compartment. Fill the gasoline tank with High Test Gasoline and see that the gasoline gets to the carburetor by depressing the flooder pin so it overflows.

In cold weather it may be necessary to choke the carburetor to facilitate easier starting. This can easily be done by placing the thumb over the intake hole in the carburetor. This hole is located directly below carburetor cap No. 13C11, shown on page ..... (present page No. 18). It may be necessary to hold the thumb in that position for a moment to allow the engine to get well under way.

If the carburetor is equipped with an "Air Cleaner" it will be necessary to remove the "Cleaner" in order to choke the carburetor. The above instructions should be followed. After the motor has started the "Cleaner" can be put back into place.

LUBRICATION

Correct lubrication is of paramount importance to the satisfactory performance and economical operation of a light weight internal combustion engine, such as the Briggs-Stratton Engine and the lubricant is used to separate the rubbing surfaces by maintaining between them a film, which keeps them out of actual metallic contact, thereby reducing friction and the power loss and wear which it occasions, to a minimum.

Our engineers have gone deeply into the subject, and the following recommendations are given as the result of their experience. The Briggs-Stratton Engine owner will be serving his own interests best in seeing to it that these recommendations are followed to the letter.

SYSTEM OF LUBRICATION

The system of lubrication is of the splash circulating type, wherein a constant level is maintained in a splash trough in which the connecting rod dips. The lower portion of the engine crankcase forms an oil reservoir or sump, from which the oil is elevated by a plunger pump driven by an eccentric on the camshaft and forced into an elevated splash

trough. A constant level is maintained in the splash trough by a properly arranged over-orifice. A dipper or splasher on the lower end of the connecting rod dips into the oil in this trough and splashes it up in the form of a fine spray, projecting it to the cylinder walls for the lubrication of the cylinder, piston and piston rings, and to open wells over the main shaft, crank pin, piston pin and cam shaft bearings, from which the lubricant is conducted into the bearings proper through drillings. The oil draining back from the crankcase chamber walls is returned to the sump for recirculation. The thorough distribution of the lubricant throughout the crank case chamber is relied upon to lubricate the timing gears, the cams and the cam follower.

RECOMMENDATION SUMMER AND WINTER

A correctly manufactured oil of proper body and character should be used both summer and winter, as it will thoroughly seal the piston rings, maintaining compression under heat, and will prevent the escape of the compressed fuel charge past the piston rings on the compression stroke, and the escape of the forces of combustion on the power stroke, thereby maintaining full power of the engine.

Such an oil will also furnish maximum lubrication to the cylinder, piston, piston rings, mainshaft, crankpin and pistonpin bearings and other rotating and reciprocating parts. It will, in addition, maintain the desired level in the dip trough.

Gargoyle Mobiloil A, which is of high quality and correct body, possesses the characteristics which are essential to efficient summer lubrication. At the same time it is sufficiently fluid to assure ease in starting the engine, the immediate circulation of the oil throughout the system when the engine is started under winter conditions. Its special characteristics as a lubricant enable it to meet lubrication conditions under all winter temperatures.

FILLING

An oil filler plug is located on top of the crankcase chamber to the rear of the engine, and an oil level sight window is located at the rear end of oil reservoir below the crankcase. Pour the oil SLOWLY into the oil reservoir through the filler opening until the oil in the reservoir stands at top level, as indicated on the sight glass. Replenish supply to correct level daily, NEVER PERMITTING LEVEL TO FALL OFF TO A POINT WHERE IT CANNOT BE SEEN ON THE SIGHT GLASS.

CAUTION: Drain the crankcase frequently, not less often than once in every 50 running hours. After draining refill to correct level with fresh Gargoyle Mobiloil A.

In recommending the Gargoyle Mobiloils we have been guided wholly and solely by the suitability of these high grade lubricants for our particular type of construction when used as recommended; at the same time we have not been unmindful of the fact that the world-wide distribution of these lubricants brings them within easy reach of every Briggs-Stratton Engine owner, regardless of location.

PROLONGING LIFE OF ENGINE

In order to prolong the life of a Briggs-Stratton Engine it is very essential that the interior parts be kept perfectly clean as well as the exterior. When an engine is used daily, dirt and grit is bound to get on the inside of the motor. When filling the oil compartment with oil or even removing the intake elbow, one should be very careful that no dirt falls into the openings.

A Briggs-Stratton Engine can be thoroughly cleansed internally by taking out the spark plug, pouring into the oil filler hole of the crank case at the rear of the cylinder about a quart of kerosene, after having drained all of the oil, and revolving the flywheel rapidly about twenty-five or thirty revolutions. This will have a tendency to wash all foreign substance from the main working parts to the base of the engine, and all of this, together with the gummy oil, which is of very little lubricating value, can then be permitted to escape by removing Drain Plug.

GASOLINE

None but the best grades of gasoline should be used, and it should be seen to that it is clean, and should always be strained, preferably through a chamois skin, to remove any dirt, water or other impurities.

CARBURETOR AND ITS ADJUSTMENT

Our carburetor is the culmination of a great deal of experimenting, and is free from complicated parts. It requires no special adjustment. In taking the carburetor apart the greatest care should be taken not to injure any part, and it should be carefully put together just as it was originally, to insure perfect working. Do not attempt to alter any part.

Every motor is tested before leaving our plant. In cold weather the carburetor may be flooded to assist in easy starting by holding down the flooding pin (A), Fig. 1. The Cap (B) of carburetor float chamber (C) contains a wire gauze strainer (D), which should be cleaned once every two or three months. At the same time it is a good plan to drain float chamber (C) by unscrewing plug (E).

NON-ADJUSTABLE CARBURETOR SPRAY NOZZLE

The non-adjustable spray nozzle aids greatly in the easy starting of an engine.

It consists of four parts. The nozzle itself, the plug, the spring and the washer. The washer is placed over the spray nozzle which is then inserted in the carburetor body and then followed up with the spring. The plug is then screwed in and drawn up tight. After drawing up the plug, should you find the carburetor to waste gasoline, it is advisable to look and see whether or not the float pin is grooved and does not shut off the gas after the chamber is filled. If this is not the cause, look at the washer on the nozzle, if this is defective it is necessary to replace it with a new one.

LEAKING CARBURETOR

When the gasoline seems to be dripping from the small air hole just above the plug of the spray nozzle, it is due to the improper setting of the nozzle itself. In order to remedy this, proceed to draw up the plug farther, as instructed under "Non-Adjustable Spray Nozzle." However, should you find gasoline escaping at the small hole of the carburetor cover, into which the flooder pin is fitted, the trouble is either due to a grooved float pin taper, too long a flooder pin, or a leaky float. When a flooder pin is too long, it will not allow the float to rise sufficiently high in order to permit the float pin to shut off the supply of gasoline when the float chamber is filled. This can be remedied by the shortening of the flooder pin. A grooved float pin taper cannot properly shut off the supply of gasoline, and if the taper cannot be made uniform, the float pin should be replaced. A leaky float will sink, and a new one to replace it will be necessary. Don't try to solder a float, as this will not remedy your trouble.

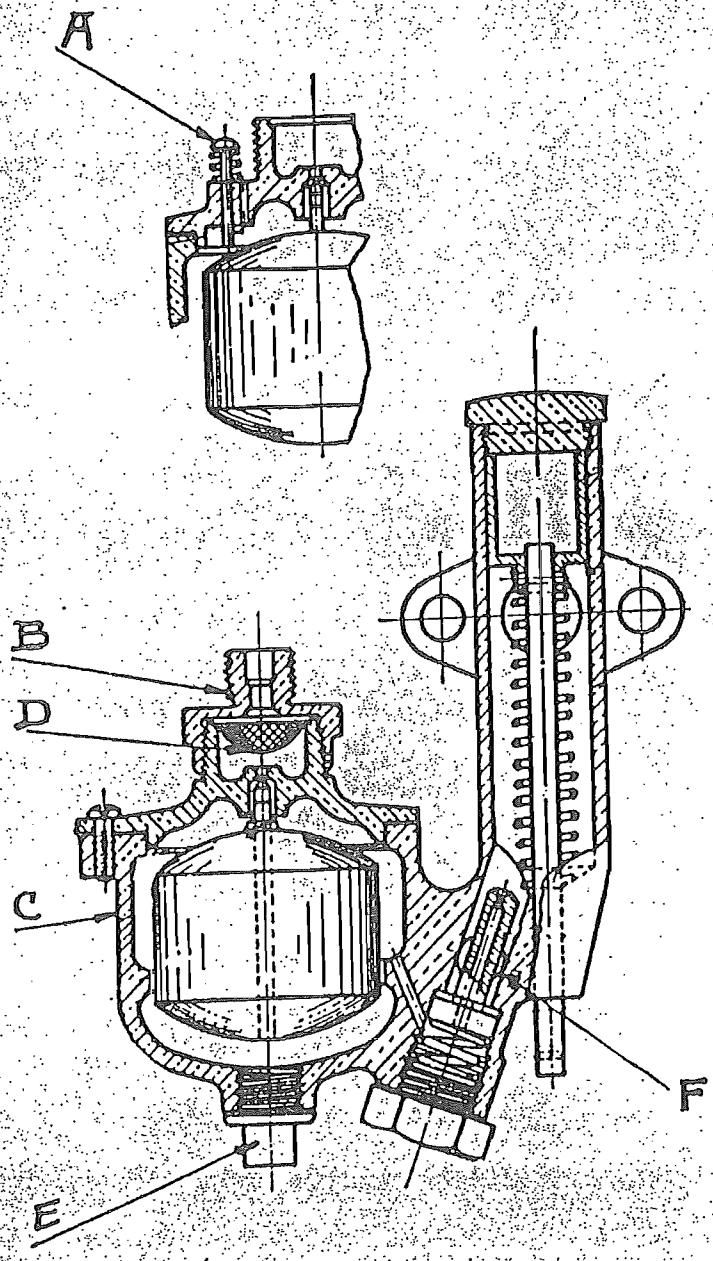


Fig. 1

MAGNETO

The Briggs-Stratton Engine is equipped with a Fly Wheel Magneto which requires no special attention. When an improper delivery of spark is first noticed, attention should first be given to the spark plug, and then to the setting of the contact points. The spark plug is quite an important factor in securing good ignition service. It is the connecting link between the magneto and engine. An inferior spark plug cannot be condemned too strongly, and we therefore recommend the use at all times of the one piece porcelain A. C. Champion "Titan" plug. The spark being thrown by the magneto may be ever so good, but when used with a spark plug of inferior construction and quality the ignition offered will be of no value. Keep the spark plug joints perfectly clean and set at .020 of an inch apart. A thin dime will serve as a gauge. Should carbon deposit too freely at the spark plug points it is due to using too much oil of poor quality.

The contact point adjustment, when properly made at low speed, will be correct for high speed. To clean contact points, open the points and insert a piece of tough paper, allowing the points to close. Then draw the paper from between the points, carefully noting that no lint from the paper is left on the points to collect dirt and grit. If the points are rough, scrape them with a sharp knife, but under no conditions use a file or emery cloth. When the points are separated the greatest, the gap should be about .006 of an inch thick. Use two thicknesses of newspaper as a gauge.

Another important matter to watch is the proper fastening of the magneto cable which reaches from the connection on the coil to the spark plug. This cable should be securely fastened at both the coil and the spark plug. Fasten the cable to the coil connection with a pair of pliers. Under no circumstances is the cable to be soldered to the coil. Any heat will damage the winding. To insure the cable not coming loose at the coil, secure with the clamp just to the left of the points. This will insure a good connection even though the cable is jerked. The insulation of the coil and cable must not be cracked or oil soaked.

CAUTION: Unless one is thoroughly familiar with magnetos, it is advisable to see a competent repair man in case of trouble.

SPARK PLUG

As cautioned under the subject of magneto, we cannot place too much stress on the fact that a first-class spark plug should be used at all times. The spark plug recommended by us is the one-piece porcelain A. C. Champion "Titan" plug. The spark plug must be kept clean from dirt and carbon deposit. The points should be clean and kept bright with emery cloth and the carbon deposit scraped off not only on the outside of the plug, but the inside of the plug chamber as well, and then washed with gasoline.

A good copper gasket should be used between the shoulder of the spark plug and the cylinder.

GOOD COMPRESSION

We are very careful to see that every engine has perfect compression before leaving our plant. The engine is put through three individual tests and should there be anything seriously wrong with the engine it certainly is discovered before it passes the final test. Compression is the vital point about any engine, and all joints should be kept absolutely tight, such as the spark plug, cylinder plug and inlet cage nut, as well as cylinder screws.

VALVE TAPPET ADJUSTMENT

The valve tappet should be set so there is a slight play between the tappet and the end of the exhaust valve stem when the valve is closed. A space equal to the thickness of a thin business card will be sufficient. It is absolutely necessary that there be a slight play at that point in order to insure the seating of the valve when the motor is hot. The valve stem is apt to lengthen somewhat from the heat of expansion. Should it be necessary at any time to readjust the valve tappet screw, be sure to again tighten down the lock-nut holding this screw stationary so that it will not have a chance to work up while the motor is in action. Should you fail to lock the lock-nut after turning up or turning down the adjusting screw, there is a possibility of damaging the engine to a considerable extent.

TROUBLES AND REMEDIES

Engine Fails to Start.

This may be due to any of the following reasons:

1. Inlet valve sticks.
2. Gasoline supply shut off.
3. Water in gasoline.
4. Spark plug short circuited, or magneto cable loose.
5. Carburetor frozen (in zero weather).
6. Spray nozzle jet clogged.

Remedies.

1. The inlet valve may be released by pressing down pin on top of inlet valve elbow.
2. Go over gasoline system carefully. See that there is gasoline in tank, and that stop-cock is open.
3. Drain carburetor float chamber by removing plug on bottom of same.
4. Remove spark plug and see that it is free from carbon deposit and that points do not touch. Set at a distance of .020 inch.
5. Due to water in spray nozzle passage. Thaw it out with hot water applications and drain carburetor as stated above.
6. If spray nozzle jet is clear, gasoline will trickle out of holes (F), Fig. 1, when flooding pin (A) is depressed.

Engine Lacks Power.

This may be due to any of the following reasons:

1. Leaky valves.
2. Leaky spark plugs.
3. Clearance too great between valve stem and tappet.
4. Dirty spark plug resulting in a weak spark.
5. Exhaust pipe or muffler clogged.
6. Overheated engine due to lack of oil or poor grade of oil.

Remedies.

1. See a Repairman.
2. If a one-piece spark plug is used, see that the gasket at thread is perfect. If not, replace with a new one. If a two-piece plug is used, take plug apart, examine packing carefully, replace packing if necessary. **Two-piece plug not recommended.**
3. See that clearance is as explained under "Valve Tappet Adjustment."
4. Remove spark plug, examine and clean if necessary. If porcelain is loose or cracked, replace with a new one.

5. See that exhaust holes in muffler are not clogged. If clogged, clean same with any sharp-pointed tool.
6. See that there is oil in the crank case. If there is a liberal supply and oil does not feed, seek the service of a reliable repair man, as the trouble is most likely in the pump, although this seldom occurs.

Engine Overheats.

This may be due to any of the following reasons:

1. Oil reservoir empty or poor oil.
2. Carbon deposit in cylinder.

Remedies.

1. Proceed as in remedy 6 under "Engine Lacks Power."
2. Cylinder should be removed and carbon deposit scraped off. This should be done by a reliable repair man, as it is very essential that the piston and the interior walls of the cylinder are not scratched.

Engine Stops Suddenly.

This may be due to any of the following reasons:

1. Gasoline tank empty.
2. Water in gasoline, or feed clogged.
3. Magneto contact points obstructed.
4. Overheated, due to lack of oil or poor grade of oil.
5. Spark plug short circuited.
6. Magneto cable loose.

Remedies.

1. Examine gasoline tank, refill if necessary.
2. Drain carburetor by unscrewing plug on lower end of float chamber. See (E), Fig. 1. Also read instructions under heading "Motor Working in Jerks."
3. Remove fly wheel, examine carefully and remove obstruction, if any. The fly wheel nut has a right-hand thread and should, therefore, be screwed to the left to loosen. After unscrewing one or two turns, tap on the nut to loosen the wheel on the taper before removing the nut. The fly wheel will then drop off and can be easily drawn out without disturbing other parts. When replacing, be sure the key is properly in its seat in the shaft before drawing up tight, as it is possible to draw the wheel up with the key displaced so as even to break the hub.
4. Proceed as in remedy 6 under "Engine Lacks Power."
5. Proceed as in remedy 3 under "Engine Fails to Start."
6. Tighten cable securely at both ends.

Engine Knocks.

This may be due to any of the following reasons:

1. Carbon deposit in cylinder.
2. Loose connecting rod.
3. Worn crank shaft or cam shaft bearing.
4. Loose fly wheel.

Remedies.

1. Proceed as in remedy 2 under "Engine Overheats."
2. See a repair man.
3. If crank shaft or cam shaft bearings are worn very badly, replace with new ones. See repair man.
4. Examine fly wheel nut and see that it is tight. If this fails, remove fly wheel, examine key, and, if faulty, replace.

MOTOR WORKING IN JERKS

When an engine seems to be in good condition but is not operating smoothly, the trouble is either due to a clogged carburetor, or some leaky joint.

The carburetor is quite fully explained under the carburetor subjects, but when the gasoline is not feeding regularly, there is a possibility of the small passageway leading from the carburetor bowl to the spray nozzle being clogged. This can be cleaned out thoroughly by a fine wire, after having removed the carburetor cover, float and spray nozzle. At the same time of cleaning out the passageway in carburetor draw the wire through the spray nozzle opening. For information on leaky joints read remedies under Engine Lacks Power. Inspect the strainer set in the carburetor cap to which the gasoline feed pipe is fastened, and if sediment has accumulated, remove.

LUBRICATING OF CONTROL WIRES

Control wires sometimes become rusted and, therefore, will not work freely on the inside of the control wire casing, and often snap off when the control levers are being operated. As soon as the owner notices the control wire sticking, he should investigate and find out the exact cause. First of all, insert a heavy oil on the inside of the casing. This can be done very readily by bending the cable and working in the heavy oil wherever possible. At the same time be on the lookout for sharp bends or kinks in either the control wire or control wire casing. If the kink cannot be straightened, use a new wire.

HOW TO ORDER PARTS AND AVOID INCONVENIENCES

This Parts Price List is issued for the convenience of our customers when in need of repair parts. All parts are shown herein and individually numbered. Corresponding numbers with names of parts and assemblies, with full description are given on other pages. We use assembly numbers where sub-assemblies are required, thereby avoiding the necessity of the customer giving numbers of each individual piece.

INSTRUCTIONS GIVEN BELOW MUST BE CAREFULLY OBSERVED ON EACH ORDER. This, we assure you, will be to our mutual advantage, thus eliminating unnecessary correspondence.

How to Order

Write plainly and legibly when ordering parts. DO NOT WRITE ON ANY OTHER SUBJECT. Use the utmost care when selecting parts from parts book, by comparing parts with illustrations. Read description carefully.

Give part number and description of items wanted, and sub-assembly numbers and description when assemblies are required. Do not depend upon numbers cast on parts as being correct.

Give Serial Number

ALWAYS GIVE ENGINE NUMBER WHEN ORDERING PARTS. The serial number of the engine is stamped on the crank case, directly forward of the fly wheel.

Shipping Instructions

State, when ordering, whether shipment is desired to come forward by express, freight or parcel post.

Remittance

Remittance in full most accompany every order, unless customer has a deposit sufficient to cover value of parts ordered.

Remit in full by post office or express money order, or United States stamps. Stamps will be accepted for parts orders less than One Dollar ($1.00) only. Always include with remittance sufficient amount to cover parcel post on mailable parts orders. Prices quoted in this parts book do not include the 5% Federal Tax, which must be added to shipments of this nature, when shipments are made to any place in the United States. Excess postage will be refunded. Mailable parts are forwarded at owner's risk. If material is to be forwarded by insured par-

cel post, mention so in your order and accompany order with an additional fee of ten cents (10c) to cover insurance. Remittance with order eliminates delay in shipment, and avoids annoyances of C. O. D. and return collection charges. A minimum charge of 25c is placed on all orders.

Prices

Prices quoted herein are subject to change without notice. ALL PARTS ARE SOLD F. O. B. FACTORY.

Instructions on Returning Parts

Tag each part with engine number from which it was taken. Place name and address plainly on tag. At the same time advise us by letter, explaining fully what parts are being forwarded and the object for returning. Transportation charges must be prepaid on all shipments to the factory, otherwise they will not be accepted.

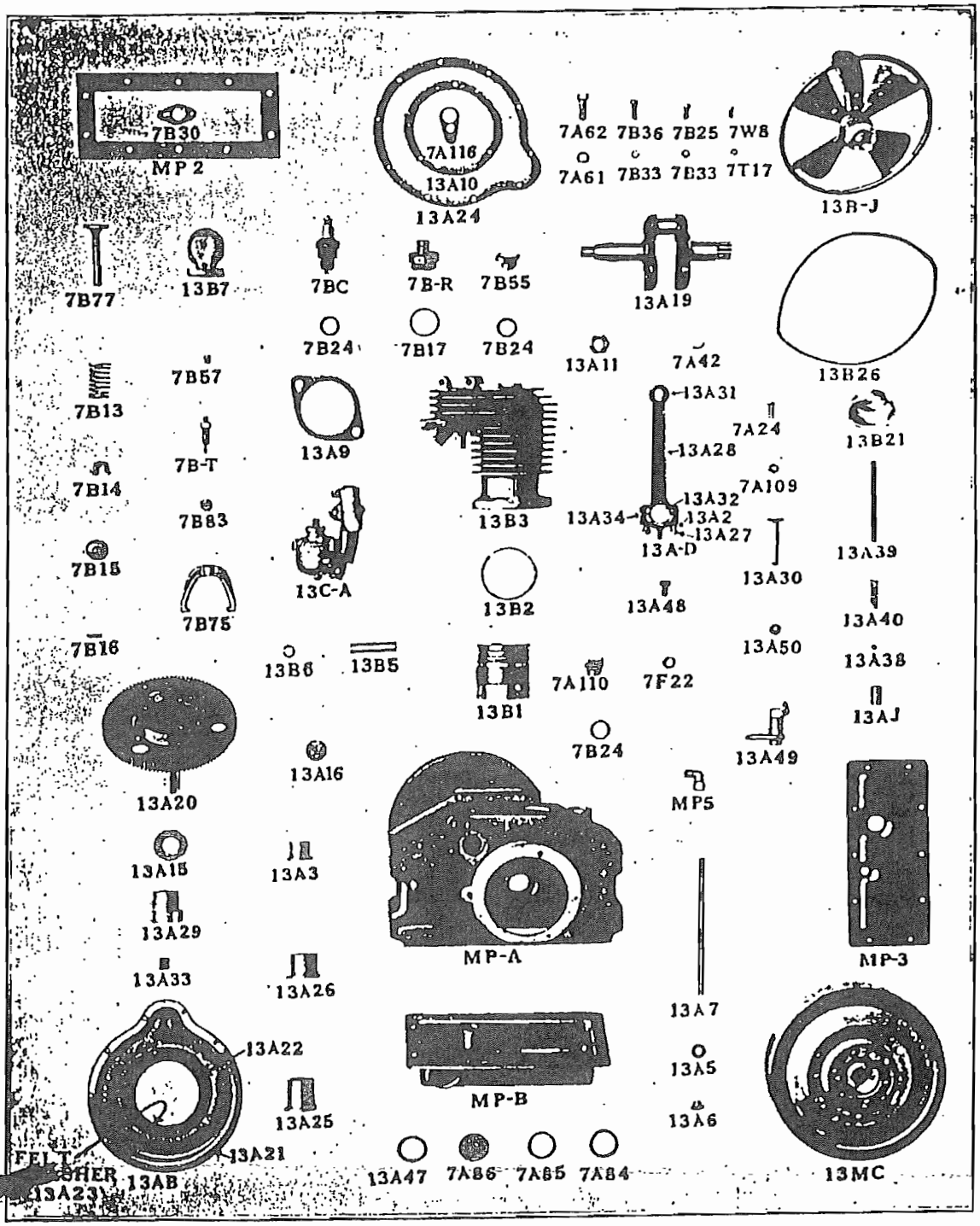
CRANK CASE DIVISION

Part No.	Description	Price, Each
MP-A	Crank Case Assembly	$19.25
MP-B	Oil Pan Assem., consisting of oil pan, pump body, bull's eye housing	2.90
MP-2	Oil Pan Gasket	.12
MP-3	Dip Trough	.25
MP-5	Breather Tub Elbow	.24
MP-16	Ignition Cable Sleeve (Long)	.14
MP-17	Ignition Cable Sleeve (Short)	.12
MP-18	Engine Mounting Screw	.10
13A-A	Muffler Assem.	2.00
13-AB	Gear Case Cover Assem., consisting of 13A-21, 22 and 23	1.80
13-AD	Connecting Rod Assem., consisting of 13A-2, 27, 28, 31, 32, 34	3.50
13A-J	Pump Plunger Assem.	.30
13-AL	Cam Follower and Guide Assem., consisting of 13A, 30, 49, 50	2.93
MS-M	Priming Cup Assem.	1.00
13A-2	Lockwasher for Connecting Rod Screw	.01
13A-3	Cam Shaft Bushing	.90
13A-5	Drain Plug Gasket	.05
13A-6	Drain Plug	.15
MP-20	Breather Tube	.05
13A-9	Cylinder Gasket	.10
13A-10	Magneto Gasket	.12
13A-11	Fly Wheel Nut	.21
13A-15	Thrust Washer	.50
13A-16	Bearing Cover	.05
13A-19	Crank Shaft	8.15

13A-20	Camshaft and Gear	9.00
13A-21	Gear Cover (see 13A-B for assem.).	
13A-22	Packing Retainer (always furnished assem.).	
13A-23	Packing Ring	.25
13A-24	Gear Cover Gasket	.18
13A-25	Bushing	1.10
13A-26	Bushing	1.00
13A-27	Connecting Rod Screw	.05
13A-29	Cam	2.60
13A-30	Cam Follower	1.25
13A-31	Connecting Rod Bushing (Upper)	.36
13A-32	Connecting Rod Bushing (Lower)	1.00
13A-33	Cam Screw	.15
13A-34	Connecting Rod Shim	.07
13A-38	Pump Ball	.02
13A-39	Pump Rod	.08
13A-40	Pump Spring	.07
13A-47	Bull's Eye Washer (Cork)	.05
13A-48	Cam Follower Guide Screw	.07
13A-49	Cam Follower Guide	1.45
13A-50	Cork Bushing	.05
13A-53	Lockwasher	.01
7A-24	Valve Adjusting Screw	.07
7A-42	Woodruff Key	.07
7A-61	Lockwasher for 7A-62, 13W-5	.01
7A-62	Cap Screw for fastening Cylinder to Crank Case	.10
7A-84	Bull's Eye Retainer Nut	.23
7A-85	Bull's Eye Washer	.05
7A-86	Bull's Eye	.05
7A-109	Adjusting Screw Locknut	.07
7A-110	Filler Plug	.23
7A-116	Guide Gasket	.04
13W-5	Cap Screw for Cam Gear	.10

CYLINDER DIVISION

Part No.	Description	Price, Each
7B-R	Inlet Valve Assem., with 7B-17	$ 2.00
7B-T	Elbow Clamp Set Screw	.60
13B-1	Piston	2.50
13B-2	Piston Ring	.50
13B-3	Cylinder	10.60
13B-5	Piston Pin	.65
13B-6	Piston Pin Locks	.02
13B-20	Intake Elbow	1.23
13B-30	Lockwasher for 13A-11	.03
7B-13	Exhaust Valve Spring	.10
7B-14	Exhaust Spring Support	.09
7B-15	Exhaust Spring Collar	.18
7B-16	Exhaust Valve Pin	.03
7B-17	Inlet Valve Gasket	.03


7B30
MP 2
7A116
13A10
13A24
7A62 7B36 7B25 7W8
7A61 7B33 7B33 7T17
13B-J
7B77
13B7
7BC
7B-R
7B55
13A19
7B24
7B17
7B24
13A11
7A42
13B26
7B57
7B13
13A9
13A31
7A24
13B21
7B-T
13A28
7B14
7A109
13A32
7B83
13B3
13A34
13A2
13A27
13A-D
13A39
7B15
13A30
13C-A
13B2
13A48
7B75
13A40
7B16
13A50
13B6
13B5
13A38
7A110
7F22
13B1
13AJ
7B24
13A49
13A20
13A16
MP5
13A15
13A3
13A29
MP-A
MP-3
13A33
13A26
13A7
13A22
13A5
MP-B
13A25
13A6
13A21
13A47
7A86
7A85
7A84
13MC
13AB
13A23

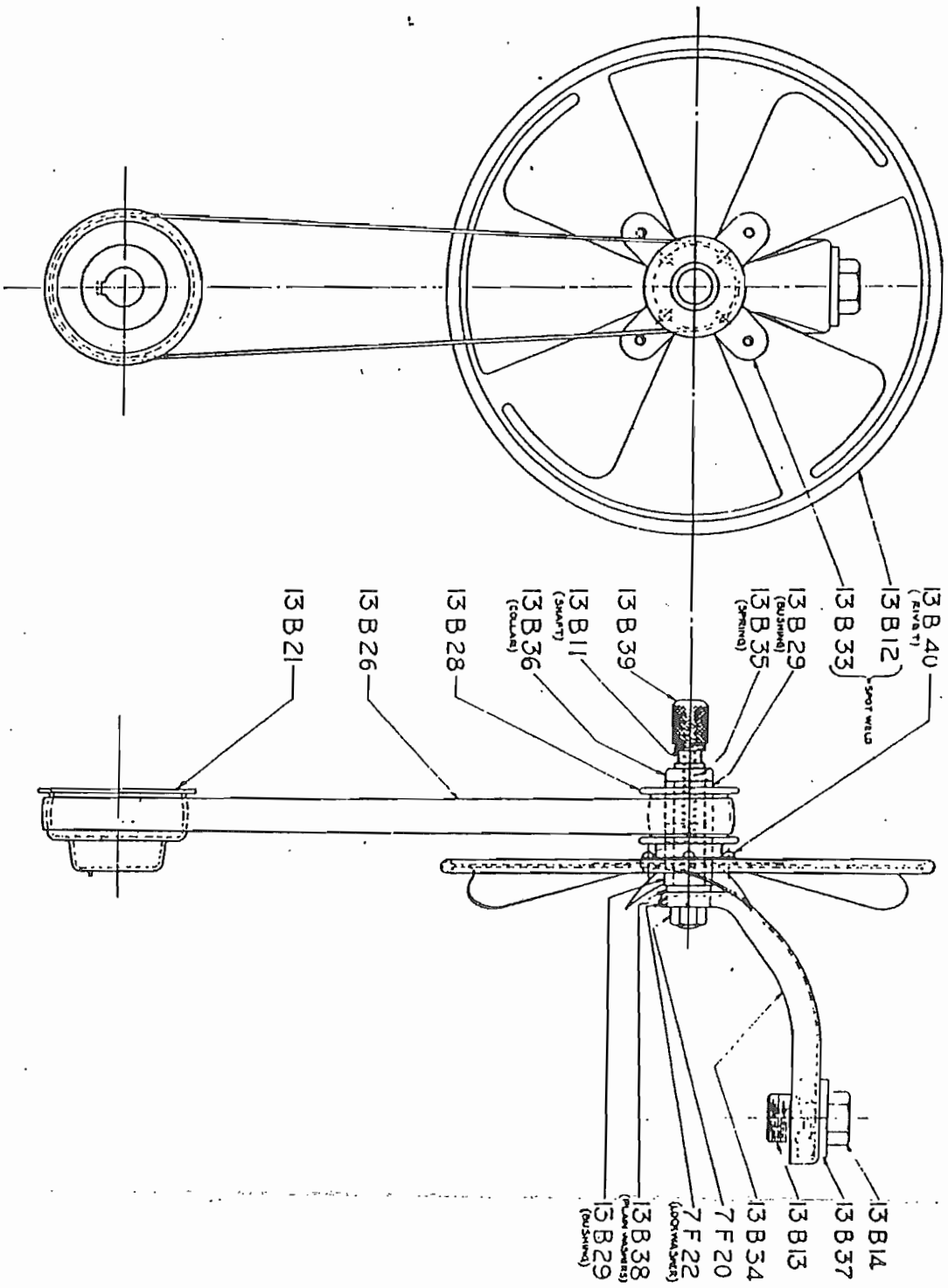
7B-24	Gasket for 7A-110, 7B-C, 7B-55	.03
7B-25	Cap Screw for fastening Carburetor to Cylinder	.04
7B-30	Carburetor Gasket	.05
7B-33	Lockwasher for 7B-25, 7B-36	.01
7B-36	Cap Screw for Crank Case Cover	.05
7B-55	Cylinder Plug	.26
7B-57	Priming Cup used on 13B-H	.15
7B-75	Elbow Clamp	.82
7B-77	Exhaust Valve	.66
7B-83	Intake Elbow Spacer	.05
7F-20	Nut for 13B-H	.05
7F-22	Lockwasher for 13A-48, 13B-H	.01
7T-17	Lockwasher for 13A-B, MP-B, 13M-B, 22, 47	.01
7W-8	Screw for 13A-B, MP-B, 13M-B, 22, 47	.03

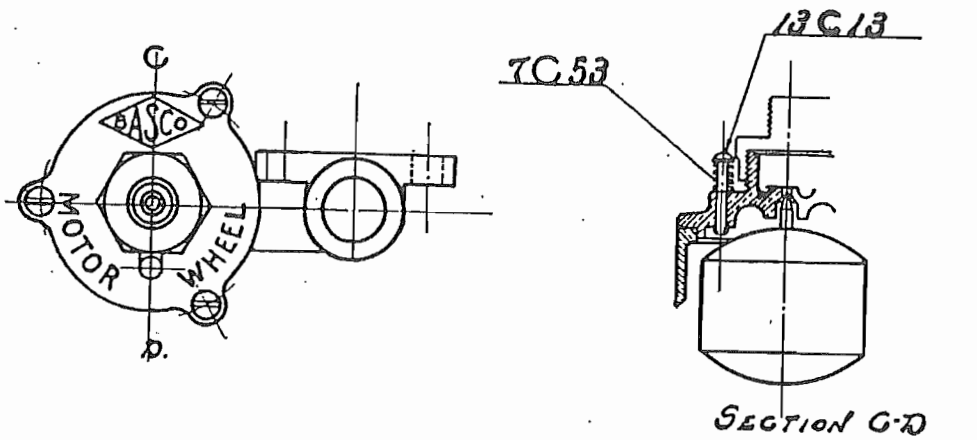
FAN DIVISION

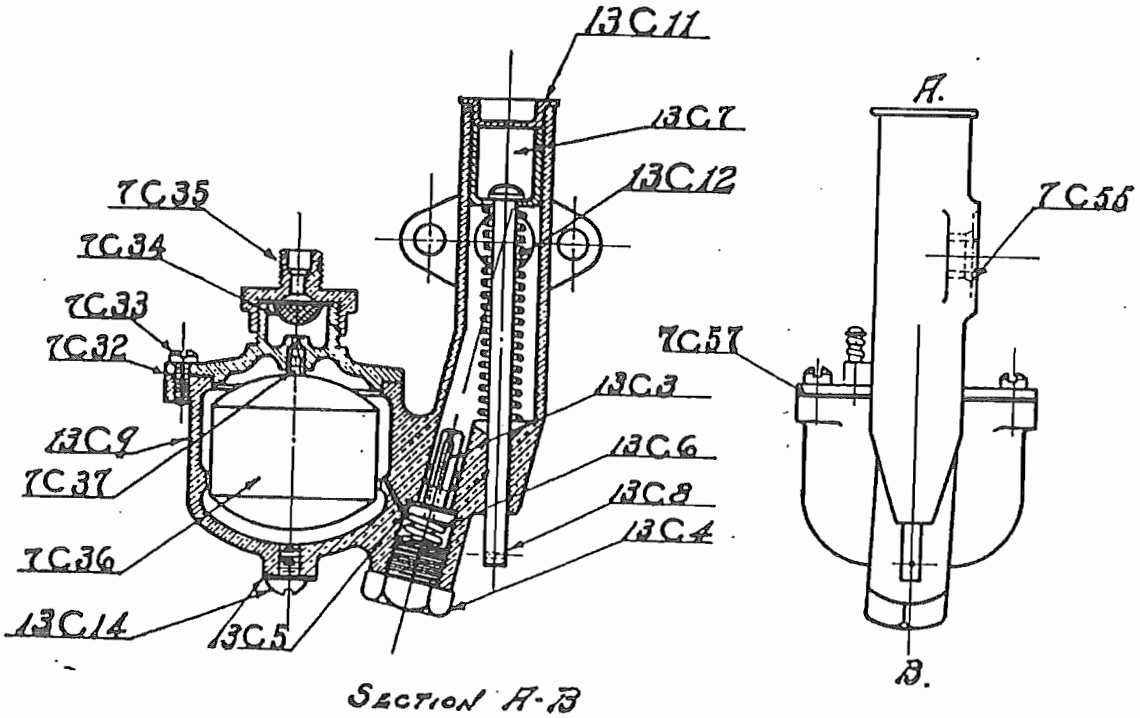
Part No.	Description	Price, Each
13B-H	Fan Assem., Complete	$ 5.00
13B-C	Fan Sub. Assem.	2.25
13B-O	Fan Shaft Assem.	1.00
13B-11	Shaft	.50
13B-12	Fan with 7B-33	1.00
13B-13	Cylinder Plug	.35
13B-14	Bolt	.12
13B-21	Fan Drive Pulley	.75
13B-26	Belt	.75
13B-28	Pulley	.65
13B-33	Re-enforcements. (See 13B-12.)	
13B-29	Bushing	.25
13B-34	Bracket	.50
13B-35	Spring	.05
13B-36	Collar	.10
13B-37	Washer	.05
13B-38	Plain Washer	.05
13B-39	Grease Cup	.10
13B-40	Rivets	.01

CARBURETOR DIVISION

Part No.	Description	Price, Each
MPH	Carburetor Complete with Shield	$13.15
7C-F	Carburetor Cover Assem., consisting of 7C-32, 52, 53, 54	1.75
7C-R	Carburetor Piston Sub. Assem.	1.20
13C-3	Nozzle	.45
13C-4	Nozzle Plug	.20
13C-5	Nozzle Gasket	.02
13C-6	Nozzle Spring	.03


13 B 40 (RIVET)
13 B 12
13 B 33
SPOT WELD
13 B 29 (BUSHING)
13 B 35 (SPRING)
13 B 39
13 B 11 (SHAFT)
13 B 36 (COLLAR)
13 B 28
13 B 26
13 B 21
13 B 14
13 B 37
13 B 13
13 B 54
7 F 20
7 F 22 (LOCKWASHER)
13 B 38 (PLAIN WASHERS)
15 B 29 (BUSHING)



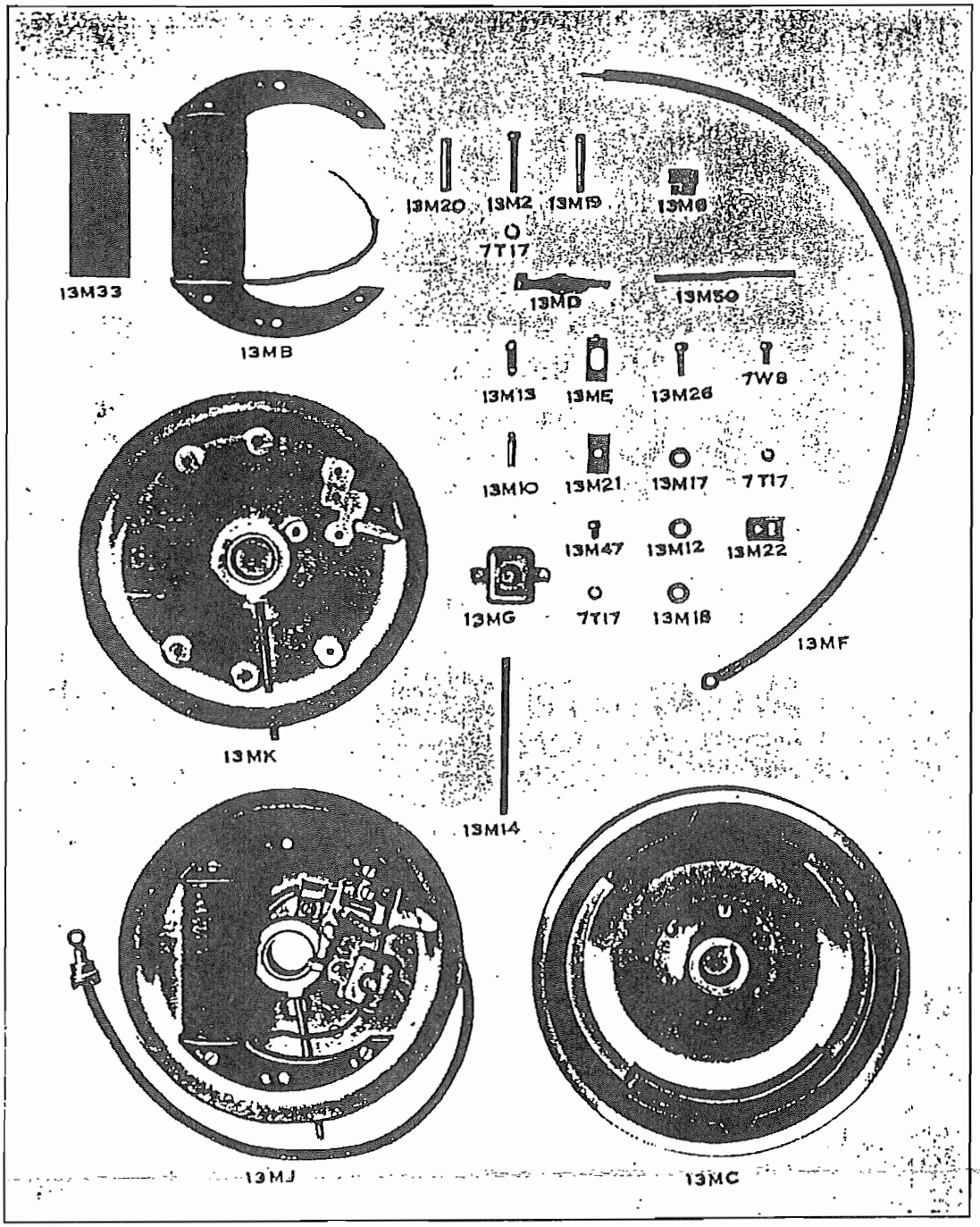


CARBURETOR ASSEMBLY - MP-H.

13C-9	Carburetor Body with 7C-55	7.80
13C-11	Carburetor Cap	.25
13C-12	Piston Spring	.10
13C-13	Flooder Pin	.06
13C-14	Drain Screw with Gasket	.10
7C-32	Carburetor Cover	1.55
7C-33	Carburetor Cover Screw	.02
7C-34	Strainer for 7C-32	.12
7C-35	Strainer Cap	.47
7C-36	Carburetor Float	1.00
7C-37	Float Pin	.20
7C-53	Flooder Pin Spring	.02
7C-55	Strainer for Carburetor Flange	.10
7C-57	Carburetor Cover Gasket	.04

MAGNETO DIVISION

Part No.	Description	Price, Each
MP-E	Ignition Cable Assem.	$ .50
13M-B	Armature Assem. (See 13M-K for Assem.)	9.80
13M-C	Fly Wheel Assem.	11.00
13M-D	Breaker Arm with Contact Point and Fibre Bushing	1.30
13M-E	Contact Bracket with Point	.52
13M-G	Condenser Assem., Complete	2.50
13M-J	Magneto Assem.	22.50
13M-K	Crank Case Cover Assem., including 13M-B and 13M-33	15.80
13M-2	Armature Core Screw	.05
13M-8	Ignition Cable Bushing	.15
13M-10	Spring Stud	.05
13M-12	Bracket Bushing	.06
13M-13	Breaker Arm Spring	.05
13M-14	Drain Tube	.10
13M-17	Bracket Washer	.05
13M-18	Spring Washer	.05
13M-19	Breaker Arm Stud	.08
13M-20	Armature Core Dowel	.08
13M-21	Bracket Shim	.05
13M-22	Ignition Cable Clamp	.07
13M-33	Coil Insulator	.10
13M-36	Filisteer Head Screw for 13M-E	.02
13M-47	Screw for Condenser	.03
13M-50	Armature Lead Insulator	.05


13M33
13MB
13M20
13M2
13M19
13M8
7T17
13MD
13M50
13M13
13ME
13M26
7W8
13M10
13M21
13M17
7T17
13M47
13M12
13M22
13MG
7T17
13M18
13MF
13MK
13M14
13MJ
13MC

GASOLINE TANK DIVISION

Part No.	Description	Price, Each
13-TA	Gasoline Pipe Assem.	$ .80
13T-C	Gasoline Tank	3.00
7T-C	Gasoline Shutoff Valve	.69
7T-K	Priming Gun Assem.	1.00
7T-45	Nut for 13T-C	.06
7T-46	Pad for 13T-C	.02
7T-52	Lockwasher for 7T-45	.01

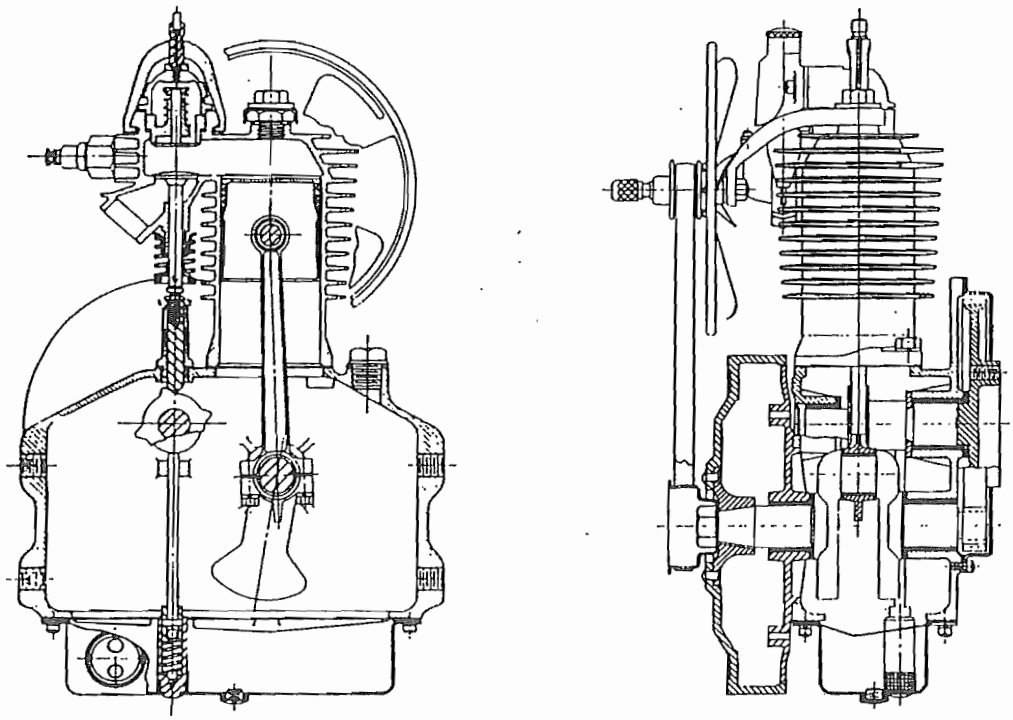
CONTROL DIVISION

Part No.	Description	Price, Each
13K-C	Carburetor Control Assem., consisting of 13K-E, 7K-0, 10, 45	$ 6.10
13K-E	Control Lever Sub. Assem.	4.30
7K-O	Carburetor Connecting Sub. Assem.	1.05
7K-10	Control Wire Casing	.55
7K-23	Cotter Pin, used on 7C-52	.01
7K-45	Control Wire	.15

M7K-78
M13K-12
M7K-23
M7K-41
M7K-33
M13K-10
M13K-6
M13K-5
M7K-77
M7K-68
M13K-3
M-19K9
M7B-35 SCREW
M7K-45
M7K-10
M7B-35 SCREW
M7K-84 CLAMP
M7T-17WASHER
M7K-86
M7K-33
M7K-47 COTTER

CONTENTS

WATCH YOUR OIL AND KEEP YOUR ENGINE CLEAN



Cross Section of Type "P" Engine

BRIGGS & STRATTON CO.

MILWAUKEE, -:- WISCONSIN