

Operating Instructions

Adjustment and Repair
Information • Parts List

PRICE 10c EACH

MODELS

"I"—"IL"—"ILR"—"IP"—"IR"—"IS"

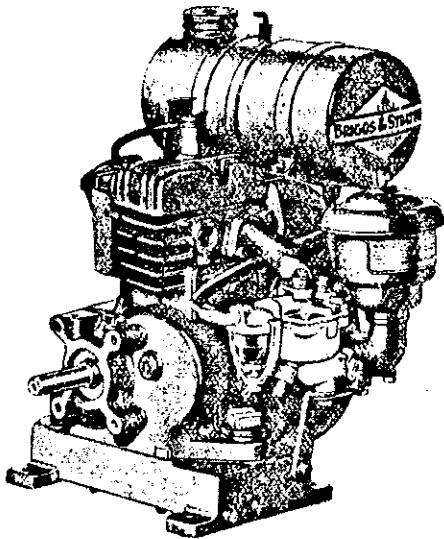
TYPE NUMBERS FROM 206150 TO 206528 AND 207000 TO 207303

IMPORTANT
ALWAYS USE
GOOD, CLEAN OIL
S. A. E. No. 20

For Temperatures Below 32° F.
Use S. A. E. No. 10W
ADD OIL FREQUENTLY
CHANGE OIL REGULARLY

IMPORTANT
ALWAYS USE
GOOD, CLEAN OIL
S. A. E. No. 20

For Temperatures Below 32° F.
Use S. A. E. No. 10W
ADD OIL FREQUENTLY
CHANGE OIL REGULARLY



INDEX

	Page
Starting the Motor.....	3
Servicing Reference Chart.....	4
Instructions for Adjustment and Repair.....	4
Repair Parts	10
Parts List, Models "I," "IL," "ILR," "IP," "IR," and "IS".....	11 to 18
Illustrated Parts	19 and 20
Warranty	21
Nation-Wide Service Organization.....	23
Authorized Central Service Distributors.....	23

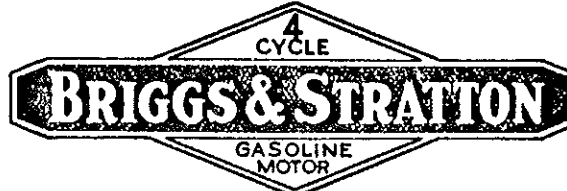
Read these instructions carefully before operating this Motor for the first time.

Guessing how to run it may cause you unnecessary inconvenience, aggravation or failure to receive the fine service that is built into it.

There is a right way to operate this Motor. This book tells you how.

Each Motor is carefully tested and adjusted at the factory before packing for shipment, and if correctly operated will perform beyond your expectations.

DO NOT START THIS MOTOR UNTIL YOU HAVE READ CAREFULLY THE "STARTING AND OPERATING INSTRUCTIONS" ON PAGE 3



IMPORTANT SAFETY INFORMATION AND INSTRUCTIONS FOR ENGINE SELECTION ENGINE INSTALLATION ENGINE OPERATION

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

18002333723

Briggs & Stratton Corporation
Milwaukee, Wisconsin 53201

www.briggsandstratton.com

Keep these instructions for future reference.




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



Fire



Explosion



Moving Parts



Toxic Fumes



Hot Surface



Shock



Kickback

(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.	

Starting and Operating Instructions

	Paragraph
Before Starting the Motor.....	1
How to Start.....	2
Failure of Motor to Start.....	3

	Paragraph
How to Stop.....	4
General Data.....	5

1. BEFORE STARTING THE MOTOR. Fill the crankcase with Mobiloil Arctic or any other high grade oil not heavier than **S. A. E. No. 20** for operating motor in temperatures of 32° F. or above. For temperatures below 32° use Mobiloil "Arctic Special" or other high grade oil not heavier than **S. A. E. No. 10W.**

The oil filler plug is painted blue and is located on top of motor base. With the motor level remove filler plug and pour oil in opening until it rises to the level of the filler plug opening. Crankcase holds one pint. Fill air cleaner with oil of the same viscosity as used in the crankcase to the indicated oil level. See paragraph 57. Fill the gas tank with a good clean third grade gasoline. Tank holds two quarts. Do not mix oil and gasoline. See paragraphs 11 to 19.

2. HOW TO START. Open gas shut-off valve on top of gasoline tank, turn valve to left. Completely close carburetor choke by turning lever in a clockwise direction.

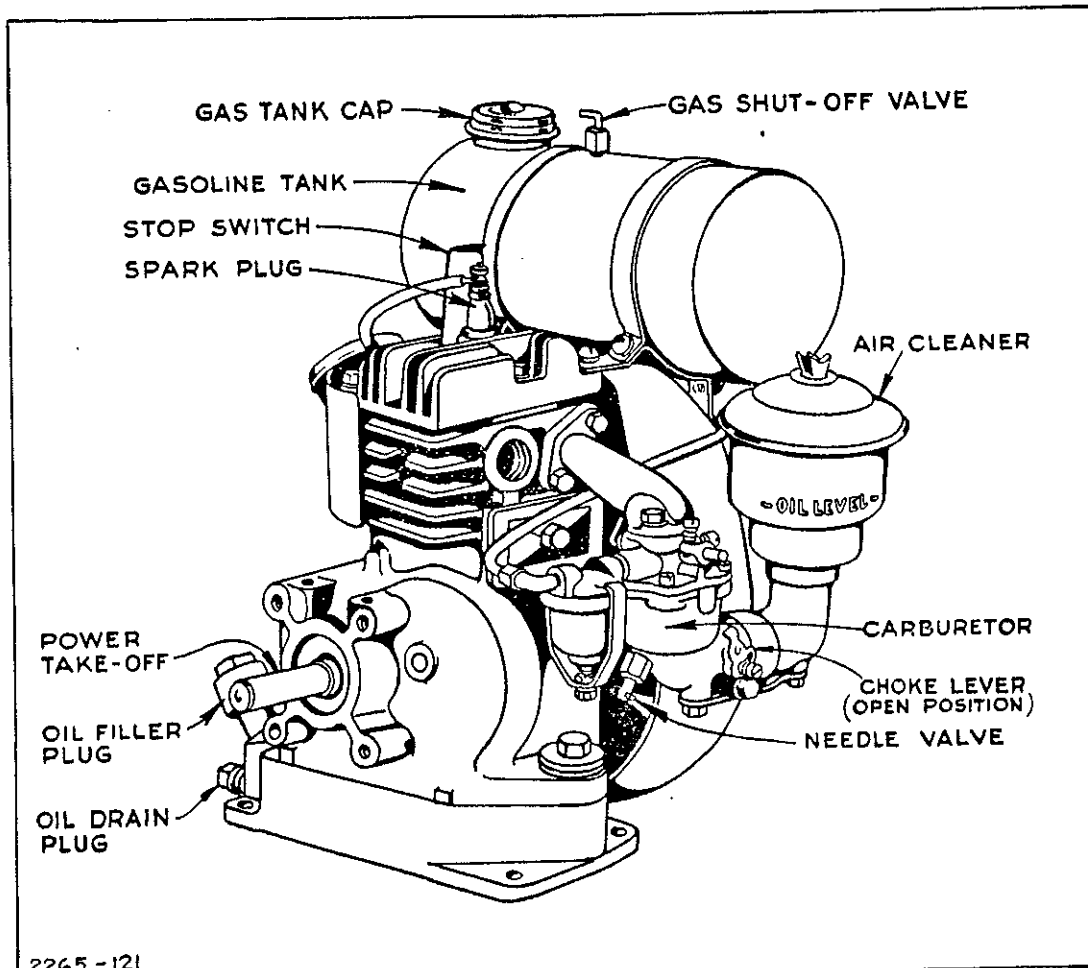
(A) ROPE STARTER. Wind the starting rope clockwise around the starter pulley, with knot in the pulley notch. Pull the rope

with a quick steady pull to spin the magneto flywheel and prime the motor. After motor has been primed, open choke about half-way to start. As motor warms up, gradually open choke valve until motor operates smoothly with the choke wide open. Operate the choke the same as you would on an automobile. (A warm motor does not require as much choking as a cold motor.) See paragraph 21.

(B) FOOT OR HAND LEVER STARTER. Step down on pedal or pull hand lever quickly with choke closed to prime the motor. Then operate choke as in paragraph 2A.

3. FAILURE OF MOTOR TO START. COLD WEATHER causes the oil in crankcase to become thick and the gasoline less volatile. Should you experience trouble in starting, we suggest that you give your motor a little extra priming. Also be sure that the spark plug points are clean and the gap set at .025". See plate No. 5. If motor fails to start after a reasonable number of trials do not make any adjustments until you have studied the instructions referred to in the Servicing Reference Chart, on page 4.

Plate No. 1



2265 - 121

Servicing Reference Chart

MOTOR FAILS TO START

	Paragraph
Out of Gasoline.....	1-18
Out of Oil.....	1-13-54-55
Dirt or Gum in Fuel System.....	16 to 19
Incorrect Use of Choke.....	20
Carburetor Out of Adjustment.....	22 to 26
Spark Plug Dirty.....	30-31
Ignition Cable Grounded.....	32
Magneto.....	33 to 41
Poor Compression.....	42 to 51
Air Cleaner Clogged.....	57

MOTOR STOPS

Out of Gasoline.....	1-18
Out of Oil.....	1-13-54-55
Dirt or Gum in Fuel System.....	16 to 19
Motor Overheated.....	13-54-55-56-57-58-59
Air Cleaner Clogged.....	57
Motor Overloaded.....	59

MOTOR OVERHEATS

	Paragraph
Out of Oil.....	1-13-54-55
Oil Needs Changing.....	14-15
Oil Too Heavy.....	14-15
Carburetor Out of Adjustment.....	22 to 26
Poor Spark.....	29 to 41
Carbon.....	56
Muffler Clogged.....	58
Overloaded.....	59

MOTOR LACKS POWER

Lack of Oil.....	1-13-54-55
Add or Change Oil.....	13 to 15
Carburetor Out of Adjustment.....	22 to 26
Motor Not Up to Speed.....	22 to 28
Poor Spark.....	29 to 41
Poor Compression.....	42 to 51
Carbon.....	56
Air Cleaner Clogged.....	57
Muffler Clogged.....	58
Overloaded.....	59

Instructions for Adjustment and Repair

	Paragraph
Operating Requirements.....	8
How a 4-Cycle Motor Operates.....	10
Keep the Motor Clean.....	11
Use the Right Kind of Oil.....	12
Add Oil Regularly.....	13
Change Oil Frequently.....	14
Use Clean Gasoline.....	16
Avoid Gummy Gasoline.....	17
To Clean the Fuel Lines.....	19
Correct Use of the Choke.....	20
To Prime the Motor.....	21
To Adjust the Carburetor.....	22
To Remove and Replace Carburetor.....	25
To Clean Carburetor.....	26
Governor—Correct Motor Speed.....	27
Governor Speed Adjustment.....	28
The Ignition System.....	29
To Check for Spark.....	30
Spark Plug Adjustment.....	31
Ignition Cable.....	32
To Remove and Replace Flywheel.....	33

	Paragraph
To Remove and Replace Magneto Assembly.....	35
Magneto Timing.....	36
To Adjust and Clean Contact Points.....	37
To Replace Condenser.....	38
To Replace and Adjust Armature.....	40
Cylinder Head.....	42
Compression.....	43
Valve Adjustment.....	44
Crankshaft.....	48
Piston.....	49
Piston Rings.....	51
Piston Pin.....	52
Connecting Rod.....	53
Oil Pump.....	54
Oil Leaks.....	55
Carbon.....	56
Air Cleaner.....	57
Muffler.....	58
Overload.....	59
Parts.....	60

4. **HOW TO STOP.** Press the stop switch mounted on the cylinder head against the end of the spark plug. Hold it until motor stops firing. This will ground the spark.

5. **GENERAL DATA.** You will find your motor substantially built. It is made of high grade materials by skilled workmen, in a factory fully equipped with the most modern machinery. Before it was shipped, it received many tests and careful inspections.

6. Your motor will give you better service if you do not tinker with it. This does not mean, however, that it does not require a certain amount of attention. Give it the right kind of fuel, oil and

care. Keep it clean both inside and out. You will be well repaid in trouble-free, satisfactory service.

7. If you should experience any difficulty, follow the instructions referred to in the Servicing Reference Chart above. If you cannot easily remedy it, consult your dealer or a nearby Briggs & Stratton Authorized Central Service Distributor. See page 23.

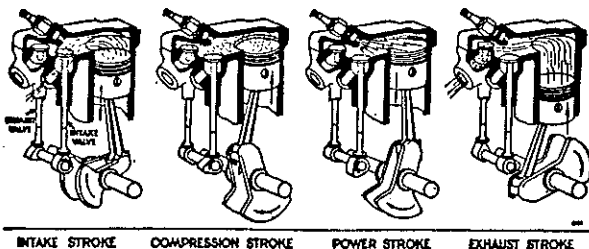
8. **OPERATING REQUIREMENTS.** A gasoline motor to operate properly must have all parts in correct adjustment to provide good ignition, carburetion, compression and cooling. And of equal importance, the oil and gasoline used must be clean and of recom-

mended grades. The following instructions fully explain the simple adjustments and offer operating recommendations that will assure you of complete satisfaction. We urge you to carefully observe them.

9. The reliability, economy and ease of starting which characterize this motor are due in part to the fact that it is of the 4-stroke cycle design commonly called "4-cycle," the same design used in all automotive motors. As the name indicates, there are four strokes to one complete power cycle.

10. **HOW A 4-CYCLE MOTOR OPERATES.** On the intake stroke the piston goes down, producing a vacuum in the cylinder, thereby drawing fuel up through the carburetor so that the space above the piston becomes filled with combustible gas. During this stroke the intake valve is open. Next the piston comes up on the compression stroke with both valves closed. At the top of the compression stroke a spark occurs at the spark plug, firing the highly compressed gas. This produces an explosion above the piston which forces it down on the power stroke. Both valves are closed. On the next upstroke of the piston, called the exhaust stroke, the exhaust valve is open, and the burned gases driven out. See plate No. 2.

The 4-Stroke Cycle — Plate No. 2



11. **KEEP THE MOTOR CLEAN.** It will pay you to keep your motor clean both inside and outside. See that no dirt or water enters motor when filling with oil or gasoline. As a precautionary measure always wipe off the gasoline cap and oil filler plug, as well as around them before refilling. Dirt in the motor or gasoline tank will cause trouble and even serious damage. Also be sure to remove any dirt or grass that may accumulate in the flywheel or between cylinder fins.

12. **USE THE RIGHT KIND OF OIL.** Correct lubrication is important. We recommend the use of MOBILLOIL "ARCTIC" or other high grade oil with similar characteristics having a low carbon residue and a body not heavier than S. A. E. No. 20 for operating motor in temperatures of 32° F. and above. For temperatures below 32° F. use Mobiloil "Arctic Special" or other high grade oil not heavier than S. A. E. No. 10W.

A heavier oil which might be satisfactory in a tractor or for lubricating farm machinery must NOT be used. Do not mix oil with the gasoline. This 4-cycle motor is provided with an independent efficient pump lubrication system which forces a stream of oil to all moving parts of the motor. There are no external parts which require separate oiling.

13. **ADD OIL REGULARLY.** A motor which is run without oil will be ruined within a few minutes. To avoid the possibility of such an occurrence and the resulting expense, always fill the oil reservoir at the blue plug to the top of the filler plug opening after each five hours of motor operation. Capacity of oil reservoir is 1 pint.

14. **CHANGE OIL FREQUENTLY.** After every twenty-five hours of motor operation, the oil should be completely drained from the

crankcase. Do not remove motor from its mounting base. Remove the yellow oil drain plug, located at either end of motor base, and let the oil flow into a pan or other receptacle you use. We do not recommend flushing out with kerosene. Replace the drain plug, refill with fresh oil and replace the blue filler plug.

15. In the normal running of any motor, small particles of metal from the cylinder walls, pistons and bearings will gradually work into the oil. Dust particles from the air also get into the oil. If the oil is not changed regularly these foreign particles cause increased friction and a grinding action which shortens the life of the motor. Sludge, a gummy mass, forms which clogs up the oil passages. Fresh oil also assists in cooling, for old oil gradually becomes thick and loses its cooling as well as its lubricating qualities.

16. **USE CLEAN GASOLINE.** A good grade of clean, fresh gasoline is recommended. Too high test gasoline may form vapor-lock in gas line when motor gets hot. This interrupts the flow of gasoline and causes motor to stop. Be sure that the small vent hole in the gasoline tank cap is not clogged up, for air must enter the tank to allow the gasoline to flow to the carburetor. Test by blowing through top of cap. See paragraph 18.

17. **AVOID GUMMY GASOLINE.** If you experience trouble with a gummy, sticky substance with a peculiar sharp obnoxious smell, change to another grade of gasoline. This gum comes from the gasoline and clogs carburetor, gas line, gasoline tank, etc. You can check your gasoline by evaporating a half pint in an open dish. If a quantity of gum remains, try another kind that is clean and fresh.

18. **YOU CAN AVOID MOST TROUBLE FROM GUM IF YOU WILL KEEP THE TANK FULL WHEN YOU ARE NOT USING THE MOTOR.** If you use it only occasionally, drain tank completely and refill when motor is used again. The reason for this is that evaporation of stale gasoline causes most gum deposits.

19. **TO CLEAN THE FUEL LINES.** Close the gas shut-off valve on top of gas tank, turn valve to right. Disconnect gas line at gas filter and also at the gas tank. Blow through the gas line to clear it. To clean the gas filter, loosen thumb screw below gas filter bowl. Remove and clean filter bowl and screen. Blow through the gas passage in the cover. Open shut-off valve to see if gasoline flows freely from the tank. **IMPORTANT:** If you find a gummy, varnish-like substance use alcohol or acetone to dissolve it. See paragraphs 17 and 18.

20. **CORRECT USE OF THE CHOKE.** The correct carburetor setting (see paragraph 23) gives the motor the best mixture to run on when it is hot. For starting, it is necessary to choke the carburetor to get a rich mixture, because cold gasoline does not vaporize readily. A warm or hot motor requires very little choking. Until you become familiar with your motor, however, you may make the mistake of not choking the carburetor enough or you may choke it too much. If motor fails to start after cranking three or four times with the choke closed, try cranking two or three times with the choke part-way down and then all the way down, or open. Use motor choke the same as you use an automobile choke.

21. **TO PRIME THE MOTOR.** The motor may fail to start for the reason that either the carburetor is incorrectly adjusted or dirty, or the fuel line is dirty or clogged, or you are out of gasoline. To determine the cause, prime the motor by removing the spark plug and pour a half teaspoonful of gasoline into the spark plug opening. Replace the spark plug and crank the motor. If it fires for three or four revolutions and stops, the difficulty is definitely in the fuel system. See paragraphs 19, 22 to 26. If motor will not

fire at all, check the ignition system, see paragraphs 29 to 41, also compression, paragraphs 42 to 51.

22. TO ADJUST THE CARBURETOR. The carburetor on this motor is of the gravity type. The gasoline supply is regulated by a needle valve. The throttle is automatically controlled by the governor, see paragraphs 27 and 28.

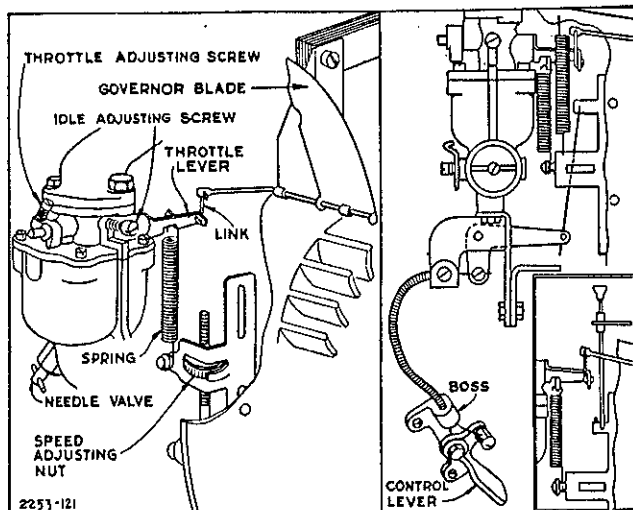
23. To adjust the carburetor, completely close needle valve by turning to right or clockwise as far as possible. Do not screw up too tight or use force when closing needle valve, or needle valve may be damaged. From closed position, open needle valve one-half to three-quarter turn. After the motor has been started and warmed up make final adjustment with the choke wide open by turning the needle valve to the point at which motor operates most smoothly with full load. This setting will also take care of starting with use of the choke. When starting cold motor, if it is necessary to keep choke partially closed several minutes before motor runs smoothly, carburetor setting is too lean and needle valve should be opened a notch or two—turn to left. For governor adjustments see paragraphs 27 and 28.

23A. The idle adjustment screw setting is about half to three quarters of a turn open. Do not force screw against seat or you will damage both. See plate No. 3.

24. The throttle lever adjustment screw is set at the factory to permit an idling speed of about 1600 R.P.M. We do not recommend adjusting the throttle to bring the speed lower. If you want to idle the motor at a higher speed than 1600 R.P.M. turn the throttle lever adjusting screw to the right or in a clockwise direction.

25. TO REMOVE AND REPLACE CARBURETOR. Close shut-off valve on top of gas tank, disconnect gasoline line from gas filter, loosen carburetor brace screw at base, remove brace screw from carburetor and air-cleaner elbow. Remove air-cleaner and elbow, unhook throttle and control return spring, loosen carburetor and unhook throttle link. To replace, reverse the operations as performed above.

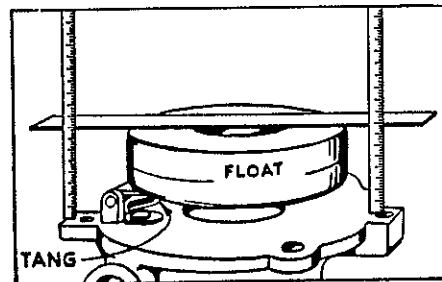
Carburetor and Governor Hook-Up — Plate No. 3



26. TO CLEAN CARBURETOR. Remove it from the motor as explained in the previous paragraph. Remove gas line connector elbow. To disassemble carburetor, FIRST remove needle valve, stuffing box nut, packing nut gland and nozzle. Then remove screws and lockwashers from the upper carburetor body. CAUTION: The upper and lower bodies are interlocked by the nozzle and failure to disassemble in above order will result in damaged parts. To check inlet valve and seat, pull out brass pin holding carburetor float. A worn or dirty inlet valve and seat or incorrect

float level will cause carburetor to leak. In reassembling, float should be in a horizontal position when it closes inlet valve and seat. To check float, invert upper carburetor body and place a scale or a flat straight piece of steel across carburetor float and see that distance from top of float to carburetor body flange is equal at both sides of float. See plate No. 3A. The float hinge tang can be bent to attain proper position of float. If any part are gummy, clean them in alcohol or acetone. Blow through all passages and openings. Do not use wire to clean out small holes. Replace worn or damaged parts.

Carburetor Float Position — Plate No. 3A



27. GOVERNOR—CORRECT MOTOR SPEED. The speed of your motor is automatically maintained under varying loads by pneumatic governor. It is operated by the air current blown by the flywheel. The governor was carefully adjusted at the factory to maintain normal speed under load. Do not re-adjust unless absolutely necessary. Recommended operating speed is from 2600 to 4000 R.P.M.—the speed is controlled by a hand throttling device. Adjust carburetor for best performance.

28. GOVERNOR SPEED ADJUSTMENT:

A. Fixed Speed Control. A speed adjuster is located beneath carburetor on magneto plate. To increase motor speed turn speed adjusting thumb nut down. The speed adjuster should be set so that motor will run 3500 R.P.M. without load for normal operating conditions. To decrease speed turn thumb nut up. See plate No. 3.

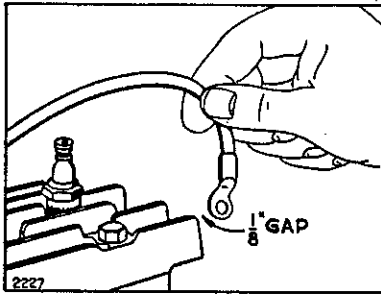
B. Manual Speed Control. To increase motor speed pull lever so that swivel moves away from control lever boss. To decrease speed push lever so that swivel moves toward control lever boss. See plate No. 3. To remove or replace governor parts, see paragraph 25.

Some models are equipped with a hand governor control. To increase motor speed pull up on knob, to decrease speed push knob down. See insert in plate No. 3.

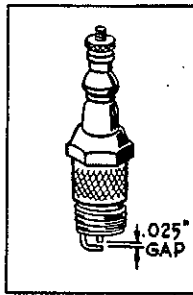
29. THE IGNITION SYSTEM. The spark is produced by a high tension magneto consisting of armature, condenser, contact point and rotating magnets cast in a flywheel. This is a simple self-contained system which is very reliable. It also does away with batteries. The ignition current is sent into the motor cylinder through the ignition cable and spark plug. The magneto itself, as well as the cable and spark plug must all be in proper condition and adjustment to insure a good hot spark.

30. TO CHECK FOR SPARK. To prove that a satisfactory spark is being delivered by the magneto, remove the ignition cable from the plug. Hold ignition cable terminal about 1/4" from any metal part of the cylinder head (keep hand on insulated part of the cable to avoid a shock). Turn motor with starter, and if the spark jumps this gap the entire ignition system, with the exception of the spark plug, is O. K. See plate No. 4. (To check spark plug

**Checking Spark
Plate No. 4**



**Spark Plug
Plate No. 5**



see paragraph 31.) If no spark, check cable, see paragraph 32, and refer to magneto adjustments paragraphs 33 to 41.

31. SPARK PLUG ADJUSTMENT. Spark plugs should be cleaned and points reset to .025" after each 100 hours of operation. See plate No. 5. Points burn away in service. The porcelain is to prevent the spark from jumping anywhere except at the gap, and if cracked or broken it will prevent the plug firing. Water on the outside of the spark plug may permit the high voltage current to leak over the surface of the porcelain. Dirt or carbon on it will do the same thing. The spark plug can be cleaned by washing off the carbon with gasoline or kitchen scouring powder. Points should be scraped or sand-papered. See plate No. 5. Always keep a new plug on hand. We recommend the use of Champion No. J8 or its exact equivalent. When reassembling spark plug to cylinder head put a little graphite grease on threads. Do not get grease on points.

32. IGNITION CABLE. Insulation must not be broken or soaked with oil or water or grounded in any way where it touches the

motor, or it will interfere with good ignition. To check cable all the way to magneto it is necessary to remove blower case. Ignition cable should be securely wound to the secondary terminal loop of the coil. See plate No. 9.

33. TO REMOVE AND REPLACE FLYWHEEL. The flywheel is securely mounted to the crankshaft by means of a taper fit, a key, a LEFT-hand nut and spring washer, or a threaded clutch housing and locking plate.

A. Rope Starter Motors. Remove the blower housing. Bolt or clamp motor to work bench. Place a wood block under flywheel fin on right side of flywheel or a small rod between fins to hold it rigid and prevent turning as you loosen nut. See Fig. 1, Plate No. 6. Use large wrench, 10 inch or bigger. To start nut to the RIGHT tap end of wrench handle lightly with hammer. Tap carefully or a broken fin may result which will throw flywheel out of balance. After nut is removed, loosen flywheel by placing the wood block against end of crankshaft and striking with a hammer. Pull off flywheel.

B. Hand Lever and Foot Starter Motors. On models with die cast clutch housing and starter pinion on side toward motor, remove starter assembly, loosen set screw and slip clutch housing from shaft, remove blower housing and proceed to remove flywheel as in "A." See Fig. 2, Plate No. 6.

On models with cast iron clutch housing and starter pinion away from motor, remove starter assembly and blower housing. Bend locking tang out of clutch housing recess with screw driver. To remove clutch housing from type No. 206195, tap to right with a punch and hammer; then proceed to remove flywheel as in "A." See Fig. 3, plate No. 6. On all other types of this model, place wooden block on left side of flywheel and tap clutch housing to left to loosen.

34. To reassemble, locate flywheel on crankshaft with key and install spring washer with the hollow or concave side next to the flywheel. Turn nut to LEFT until tight. Then use block under fin on left side of flywheel or rod between fins to hold flywheel rigid and draw nut or clutch housing very tight by tapping with hammer.

35. TO REMOVE AND REPLACE MAGNETO ASSEMBLY. After removing the flywheel as explained in paragraph 33, remove magneto point dust cover. If carburetor has not been removed, it is not necessary to do so. Remove governor air vane from armature. Unhook governor spring from speed adjusting slide plate. Detach

**Removing Flywheel
Plate No. 6**

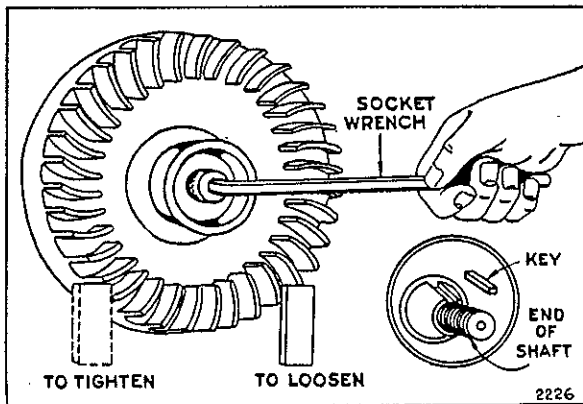


Fig. 1

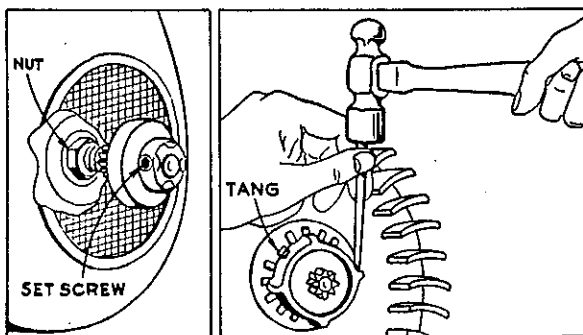
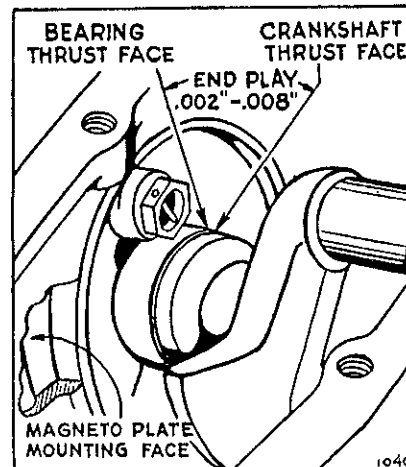


Fig. 2

Fig. 3

**Correct End Play
Plate No. 7**

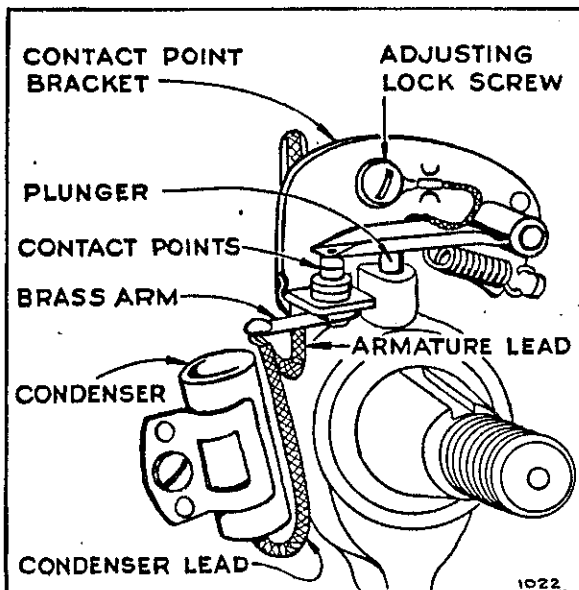


ignition cable from spark plug. Remove four magneto plate mounting screws. To replace, use same gasket between plate and crankcase, or if damaged, a new gasket, see part number 67307, 67597, 67607 for proper thickness to get correct end play of .002" to .008" between magneto bearing and crankshaft thrust faces, as shown in plate No. 7. Use lockwashers under mounting screws.

36. MAGNETO TIMING. The magneto assembly is always correctly timed with the motor when the flywheel is assembled to the tapered crankshaft with a key and securely held in place with left hand threaded nut. Do not attempt to change the timing by relocating any parts or filing crankshaft timing flat. Always use soft key part No. 61760. If steel key is used and flywheel becomes loose it will damage the keyway in the crankshaft.

37. TO ADJUST AND CLEAN CONTACT POINTS. Remove blower housing, flywheel and magneto point dust cover. Turn crankshaft by hand to see if contact points open and close properly. Points must be clean and line up squarely to make good electrical contact. Do not use a steel file on contact points—use a carborundum contact point file. Adjust gap to .020" by loosening the adjusting lock screw and moving contact point bracket up or down. When proper gap is obtained tighten lock screw securely. If either or both points become badly pitted or burned and need replacement, always order complete assembly Part No. 29667.

Contact Points and Condenser
Plate No. 8



38. TO REPLACE CONDENSER. A leaky or weak condenser may cause the motor to start hard, to sputter or misfire under load. If motor misfires after checking gasoline line, carburetor, spark plug, cable and contact points, install a new condenser. Both the condenser lead and armature lead must be soldered to brass arm, see plate No. 8. Be sure to push condenser lead down between condenser and hub of magneto plate so it cannot rub against flywheel.

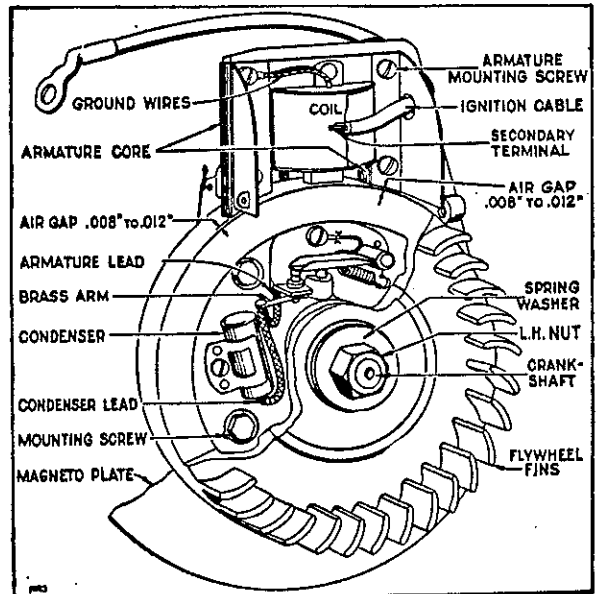
39. If after new condenser has been installed the ignition system still does not deliver a satisfactory spark, we recommend sending the complete magneto unit including the flywheel to the nearest Briggs & Stratton Central Service Distributor listed on page 23 for proper adjustment.

40. TO REPLACE AND ADJUST ARMATURE. Remove primary armature lead wire of coil from brass arm on contact bracket. Remove high tension ignition cable from secondary terminal loop

in coil. Unscrew four armature mounting screws. After installing new armature be sure that condenser lead wire and armature lead wire from coil are soldered to brass arm on contact bracket. See plates Nos. 8 and 9. Replace mounting screws, inserting loop of ground wires under screw and draw screws up tight.

41. Air gap of .008" to .012" must be maintained between armature core ends and flywheel. Gap must only be sufficient to prevent rubbing, but not over .012", or poor ignition will result. To adjust gap to proper clearance, loosen the four armature mounting screws, slide armature assembly up and place correct feeler gauge or three thicknesses of newspaper between rim of flywheel and armature core ends. Lower armature assembly until core ends rest on gauge or paper and tighten mounting screws securely. See plate No. 9.

Complete Magneto Assembly
Plate No. 9

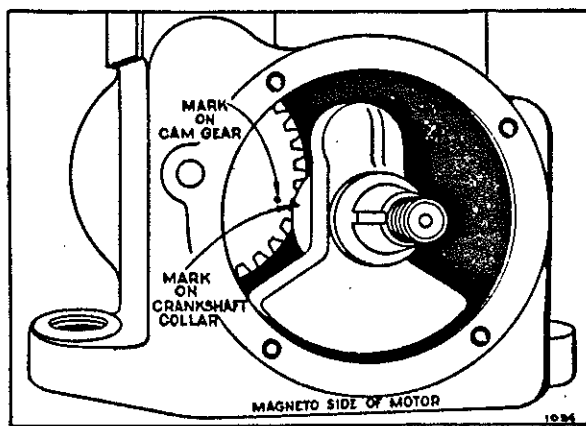


42. CYLINDER HEAD. The cylinder head is held on with six cap screws. When the cylinder head has been removed for the purpose of cleaning carbon or grinding valves, care should be used in replacing it. Use a new gasket if possible. Otherwise, clean the old one and coat both sides with cup grease. We do not recommend the use of shellac on cylinder head gaskets. Tighten each cap screw a little at a time so that the cylinder head is pulled down evenly. Screws need be only moderately tight.

43. COMPRESSION. Proper compression is obtained when valves seat properly, gaskets do not leak, and piston and rings are properly fitted. When tuning up a motor, it is always well to check compression. This is done by turning the motor over quickly by hand. If turned slowly sticky valves may not be detected. If a point of resistance is offered every other revolution, compression should be satisfactory. If motor turns over without compression resistance for a full cycle, it is possible that a worn piston or piston rings, leaky valves or leaky gaskets are present. See that spark plug has a gasket under it and is drawn up tight. Also check cylinder head gasket and tighten cylinder head bolts.

44. VALVE ADJUSTMENT. To check valve clearance remove valve cover plate. The correct clearance on the exhaust valve is .014" to .016", and on the intake valve .007" to .009" when motor is cold. Tappet clearance is adjusted by grinding required amount from end of valve stem. End of stem must be square with stem proper.

Valve Timing — Plate No. 10



45. To remove valves, remove cylinder head, and if not dismantled, drain oil from crankcase. Invert cylinder. Compress the spring with a screw driver and pull out valve retainer pin with long nose pliers. Tilt cylinder back far enough to allow valve to drop, permitting its stem to clear the spring. Pry the spring out with screw driver. To replace, reverse the operations as performed above.

46. To resseat valves, grind in the same manner as automobile valves. If valves stick they may be coated with gum or carbon. To remove gum use alcohol or acetone. Clean valve stems thoroughly with wire brush or emery cloth. Also scrape all carbon from valve ports.

47. The timing of the valves is taken care of by the meshing of the cam shaft gear with the gear on the crankshaft. These gears are properly meshed when the mark on the cam shaft gear is in line with the mark on the crankshaft collar. See plate No. 10.

48. **CRANKSHAFT.** To remove crankshaft, FIRST remove cam shaft holding the cam gear in crankcase. The cam shaft is assembled with a slip fit on magneto side of motor and a press fit on drive side. Drive cam shaft out of crankcase with a $\frac{1}{4}$ " rod or punch from the drive side. Be careful not to lose the cam shaft plug No. 68122. After cam shaft has been removed, tip motor toward carburetor side so that cam gear drops into crank case recess to allow ball bearing to pass cam gear. To reassemble, reverse the operation.

49. **PISTON.** The piston in this motor is made of a special aluminum alloy which is very light in weight. The standard clearance between the piston skirt and cylinder wall is .003" to .0045". This clearance is to compensate for the considerable expansion of aluminum when hot. The top and second lands of the piston are smaller than the skirt to allow for greater expansion at the piston head. When piston is removed be sure to thoroughly clean carbon from head of piston and ring grooves. If piston is out of round or scored it should be replaced.

50. When fitting a new piston in the motor, assemble it with the free side pin hole with an "X" on boss, toward the magneto side. If an oversize piston is necessary, we recommend that reboring of cylinder be done by an Authorized Central Service Distributor or the factory.

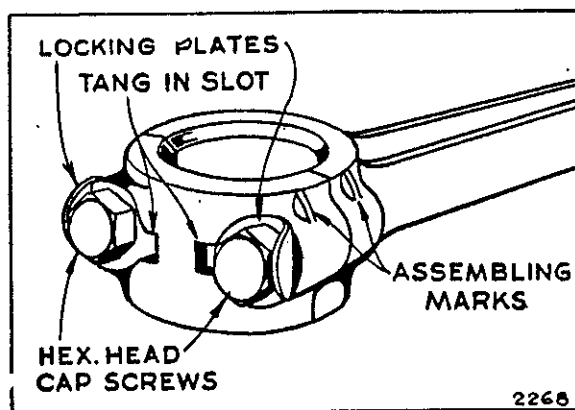
51. **PISTON RINGS.** The piston rings when fitted in the cylinder should have a gap of .007" to .017". The rings should be fitted in the cylinder below the piston ring travel. Before assembling new rings to piston be sure that piston ring grooves are thoroughly cleaned and rings move in grooves freely.

52. **PISTON PIN.** On earlier model motors the piston pin is a free fit in one side of the piston and a tight fit in the other. To

remove this pin without special equipment, it is advisable to heat the piston in boiling water which causes the aluminum alloy to expand. Cut a wooden pin a little smaller than the size of the piston pin and use this and a hammer to drive the pin out. Drive the pin out through the free fit hole. This hole is toward the magneto side and is indicated with an "X" on the pin hole boss. You should, of course, drive the pin out while the piston is still hot. To easily replace the pin the piston should be heated. On later model motors the piston pin is a slip fit in the piston. To remove it from the piston, first remove lock rings, then slip pin out of piston.

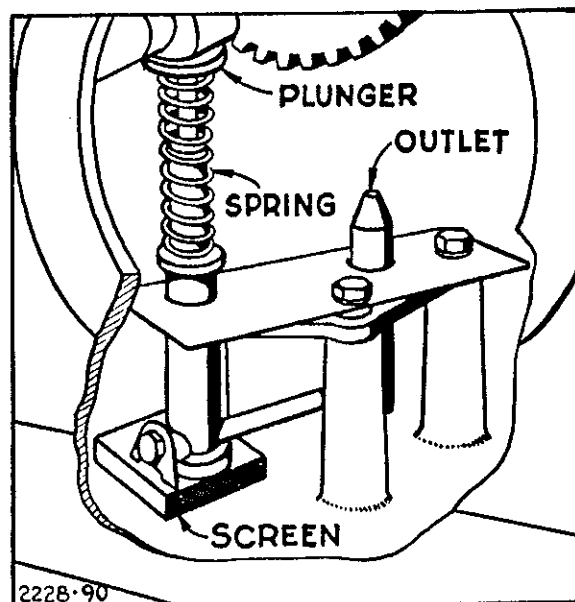
53. **CONNECTING ROD.** The connecting rod is also made of a special aluminum alloy which combines strength with light weight. When assembling connecting rod to crankshaft, assembly marks on cap and rod must be on the same side. These marks must also be toward magneto side of motor. Bend locking plates against hexagon head of cap screw. See plate No. 11.

Connecting Rod — Plate No. 11



54. **OIL PUMP.** The oil pump is assembled to the base. An inoperative pump will result in insufficient lubrication which may score the cylinder and piston assembly. To check oil pump, remove from base. Place pump in a pan of oil about $\frac{1}{2}$ " deep. Work plunger up and down. If oil is sprayed out, oil pump is in good working condition. If clogged, submerge complete unit

Oil Pump — Plate No. 12



in gasoline or kerosene for three or four hours to loosen accumulated sludge or gum. If still inoperative it should be replaced. In assembling, be sure that spring and plunger are in place.

55. OIL LEAKS. If oil leaks from either end of crankshaft main bearings, remove base from motor. Oil return valves are screwed into crankcase and magneto back plate below main bearings. Remove oil return valve and clean or flush with gasoline and blow out any dirt lodged under the small disc. Replace if necessary. See plate No. 7.

56. CARBON. Excessive carbon is caused by improper grade of oil — too much oil usually the result of piston rings not seating properly or sticking — carburetor set too rich — or long service. An unusual amount of carbon is noticeable by motor knocking or loss of power. Occasionally remove carbon from valves, valve ports, piston head, piston rings and ring grooves, cylinder head and top of cylinder bore.

57. AIR CLEANER. The air cleaner is to protect the motor from dust and dirt. No motor can stand up under the grinding action that takes place when dust and dirt particles are drawn into the motor through the carburetor. Air Cleaners should be cleaned occasionally as follows:

OIL BATH TYPE: Wash the outside of the filter element with

a rag or brush dipped in gasoline or kerosene. Do not submerge. Then clean bowl by submerging it in gasoline or kerosene. Fill cleaner with oil of the same viscosity as used in crankcase, up to the level marked on cleaner bowl. See instructions on air cleaner label.

FELT TYPE: Remove the felt regularly and brush out accumulated dust and dirt. Then wash felt thoroughly with gasoline. Make sure felt is dry before replacing.

58. MUFFLER. After long periods of service it is possible that the muffler will become clogged to the point where it will affect the motor's power. To check the muffler unscrew it from the motor and run water into the open end of the muffler. If full streams of water come out of the small holes at the end of the muffler, you will know that it is not clogged up. If the water runs through very slowly, however, the muffler is probably clogged and should be replaced.

59. OVERLOAD. Always be sure that the machine the motor is operating is well lubricated and running freely. If it is not, it may cause the motor to become overloaded resulting in it overheating, losing power, or even stopping entirely.

60. PARTS. All parts should be ordered from your dealer or nearest Briggs & Stratton Service Distributor, listed on page 23.

Repair Parts

	Paragraph
Always Give Type, Model and Serial Number	62
How to Make Out Parts Orders	64

	Page
How to Find Correct Part Number	11
Parts List	11-18
Parts Illustrations	19 and 20

61. To assure continued satisfactory performance, do not attempt to use substitute repair parts when overhauling or repairing the Briggs & Stratton Motor. Insist that all repair parts be original Briggs & Stratton parts.

62. ALWAYS GIVE TYPE, MODEL, AND SERIAL NUMBERS. Briggs & Stratton motors are identified by a type number, model letter, and a serial number. This information is stamped on a metal plate attached to the blower housing.

63. When writing to the factory or to a Central Service Distributor for service information, or when ordering new parts, be sure to specify the type number, the model, and the serial number of the motor to be serviced. This will assure prompt and efficient service without unnecessary correspondence.

64. HOW TO MAKE OUT PARTS ORDERS. Print your name and address plainly and correctly. Do not abbreviate name of

town or state. Specify on the order how shipment to you is to be made. This will assist in giving prompt and efficient service.

65. Give part number and name of parts wanted. (Do not use number cast on parts.) You will find the part numbers, names and prices on pages 11 to 18, and parts illustrations on pages 19 and 20.

66. After you have made out order, check back to see that you have followed all instructions and have accurately listed what you want.

67. All parts should be ordered from the nearest member of our Nation-wide Service Organization. (See Page 23.) In ordering parts by mail, selling prices will be furnished on request or parts will be shipped at prevailing prices.

TO FIND THE CORRECT NUMBER OF THE PART YOU NEED

1. Make a note of your motor TYPE NUMBER (Not the Serial Number) that appears on the metal nameplate attached to motor blower housing.
2. Refer to pages illustrating parts and locate the Master Part number by comparing your old part with the illustrations. Assemblies include all part numbers bracketed in illustrations. All parts shown in assembly brackets on which part numbers are given can be purchased separately.
3. After the Master Part Number has been identified, refer to the following Parts Lists where these Master Part Numbers are listed in numerical order.
The Master Part is used on all types of motors except those types listed under "Note."
4. If a "Note" appears below the Master Part Number this means that this part is made different from the Master Part for certain types and if your type is listed under "Note," order the part referred to.
5. If two or more parts are bracketed (—) under "Note," they are used to replace the Master Part on the type numbers shown.
6. If your Motor Type Number does not appear after any part number listed under "Note," order the Master Part Number.
7. When ordering parts—or writing for service information—always specify the MODEL LETTER—TYPE NUMBER—and SERIAL NUMBER of your motor.

Parts List

MODELS "T"—"TL"—"TLR"—"TP"—"TR"—"TS"

MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.	MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
21110	Venturi—Carburetor	1	22082	Lock—Connecting Rod Screw.....	1
21128	Body—Lower Carburetor	6	22084	Brace—Air Cleaner Elbow.....	1
	Note: No. 99720 Body—Lower Carburetor	6	22107	Bracket—Choke Rod	1
	Used on type Nos. 206164, 206167, 206182, 206184, 206185, 206189, 206191, 206194, 206195, 206201, 206203, 206207, 206345, 206356.		22125	Brace—Air Cleaner Elbow.....	1
	Includes: No. 90193 Screw—Machine, Fill. Hd.— $6-32 \times \frac{3}{8}$ "	1	22206	Shield—Cylinder	6
	No. 90362 Lockwasher—No. $6 \times \frac{1}{8} \times \frac{1}{2}$ "	1		Note: No. 22059 Shield—Cylinder.....	6
	No. 27011 Felt—Drain.....	1		Used on type Nos. 206164, 206167, 206182, 206184, 206185, 206187, 206189, 206191, 206194, 206195, 206201, 206202, 206203, 206207, 206356.	
	Used on type No. 206345.		22216	Cover—Breather	1
21174	Elbow—Air Cleaner	12		Used on all engines after Serial No. 32642.	
21178	Elbow—Air Cleaner	12	22217	Shield—Oil Spray	1
21283	Ring—Piston, Compression, Top—Standard	1		Note: No. 62703 Shield—Oil Spray.....	1
21310	Body—Breather	4		Used on engines before Serial No. 32642.	
	Used on all engines after Serial No. 32642.		22233	Plate—Spark Plug Shield Support.....	1
21376	Ring—Piston, Compression, Top—.010" O.S.	1	22238	Washer—Cylinder Mounting	1
21377	Ring—Piston, Compression, Top—.020" O.S.	1	22243	Washer—Cylinder Mounting	1
21378	Ring—Piston, Compression, Top—.030" O.S.	1	22247	Bushing—Cylinder	2
21737	Elbow—Air Cleaner	12	22279	Brace—Air Cleaner Elbow.....	1
21926	Elbow—Carburetor Intake	6	22281	Bracket—Bell Crank	3
	Note: No. 21108 Elbow—Carburetor Intake	6	*22353	Washer—Valve Cover	1
	Used on type Nos. 206194, 206195, 206359, 206360, 206504.		22368	Washer—Control Lever	1
22011	Cover—Valve	6	22372	Clamp—Control Wire Casing.....	1
22025	Plate—Oil Baffle	3		Note: No. 22054 Clamp—Control Wire Casing	1
	Note: Used on engines after Serial No. 6057.			Used on type Nos. 206473, 207302.	
22031	Lock—Clutch Housing	2	22725	Washer—Control Lever	1
22032	Washer—Needle Valve Packing.....	1	22834	Washer—Control Lever	1
22036	Valve—Throttle	1	22872	Shim—.010" Thick	1
22050	Valve—Choke	1	22963	Washer—Cylinder Head ($\frac{3}{8}$ " thick)....	1
22062	Washer—Choke Lever	1		Note: No. 62863 Washer—Cylinder Head ($\frac{3}{8}$ " thick).....	1
22075	Bracket—Control Spring	1		Used on earlier model engines.	
22078	Washer—Thrust—.065" Thick	1	23059	Lever—Fuel Shut-off	2
22080	Brace—Carburetor	1	23062	Bushing—Intermediate Gear	2
	Note: No. 22121 Brace—Carburetor....	1	23068	Nut—Speed Adjusting	1
	Used on type Nos. 206188, 206192, 206460, 206461.		23069	Screw—Speed Adjusting	1
			23075	Spacer—Foot Pedal Support.....	1
			23077	Pinion—Starter	4
				Note: No. 63794 Pinion—Starter.....	4
				Used on type Nos. 206167, 206182, 206184, 206185, 206189, 206191, 206194, 206195, 206201, 206203.	
			23104	Spacer—Foot Pedal Support.....	1
			23114	Pin—Float Hinge	1

*Included in Gasket Set—Part No. 291376

MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.	MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
23125	Pin—Throttle Stop	1		No. 26234 Crankshaft.....	3
23158	Sleeve—Bearing	1		Used on type Nos. 206153, 206155,	
23184	Retainer—Valve Spring	1		206158, 206160, 206164, 206168, 206170,	
23187	Pin—Valve Spring Retainer.....	1		206172, 206174, 206175, 206177, 206180,	
23211	Locknut—Bearing Sleeve	1		206181, 206183, 206187, 206188, 206190,	
23215	Spacer—Baffle Plate	1		206192, 206197, 206198, 206199, 206200,	
	Note: Used on engines after Serial No. 6057.			206202, 206205, 206207, 206363, 207100,	
23222	Nozzle—Carburetor	1		207101, 207102, 207103, 207104, 207105,	
23227	Nut—Needle Valve Packing.....	1		207106, 207107, 207108, 207109, 207110,	
23228	Valve—Idle Adjusting	1		207112, 207114, 207115, 207117, 207118,	
23230	Bushing—Throttle Shaft	1		207119, 207120, 207121, 207122.	
23250	Stud—Starter Mounting	3		No. 26250 Crankshaft.....	3
23261	Spacer—Carburetor Screw	1		Used on type No. 206195.	
23270	Screw—Choke Lever	1		No. 26261 Crankshaft.....	3
23272	Wrench— $\frac{1}{8}$ " Socket Set Screw.....	4		Used on type Nos. 206169, 207116.	
23292	Bolt—Air Cleaner	2		No. 26282 Crankshaft.....	3
	Note: No. 23334 Stud—Air Cleaner... 2			Used on type No. 206191.	
	No. 90355 Nut—Hex.—10-32.... 1			No. 26335 Crankshaft.....	3
	No. 92290 Lockwasher—No. 10x $\frac{1}{8}$ "x $\frac{1}{4}$ "	1		Used on type No. 206373.	
	Used on type Nos. 206345, 206350,			No. 26337 Crankshaft.....	3
	206351, 206357, 206362, 206370, 206460,			Used on type Nos. 206374, 207025.	
	206461, 206512, 207021.			No. 26342 Crankshaft.....	3
23329	Bushing—Starter Support	2		Used on type Nos. 206193, 206206,	
23443	Pin—Dowel	1		207111, 207113.	
23444	Stud—Valve Cover	1		No. 99312 Crankshaft.....	3
	Used on all engines after Serial No. 32642,			Used on type Nos. 206464, 206500,	
	Before Serial No. 32642 use:			206501, 206502, 206504, 206507, 206509,	
	No. 91707 Screw—Cap.—Hex. Hd. — $\frac{1}{4}$ -20x $\frac{1}{8}$ "	1		206510, 206512, 206513, 206514, 206515,	
	Note: No. 23466 Stud—Valve Cover.... 1			206516, 206517, 206518, 206519, 206520,	
	Used on type No. 206195 after			206521, 206522, 206523, 206524, 206525,	
	Serial No. 32642.			206526, 207200, 207201, 207202, 207203,	
	Before Serial No. 32642 use:			207204.	
	No. 91871 Screw—Cap, Hex. Hd. — $\frac{1}{4}$ -20x2"	1		No. 99348 Crankshaft.....	3
23571	Swivel—Control Lever	1		Used on type Nos. 206450, 206451,	
23580	Bushing—Control Lever	1		206456, 206457, 206459, 206460, 206461,	
23612	Valve—Exhaust	2		206462, 206463, 206465, 206467, 206468,	
23911	Bushing—Gear Cover	2		206469, 206470, 206471, 206472, 206473,	
26021	Spring—Intake Valve	1		207300, 207301, 207302.	
26026	Lock—Piston Pin	1		26228 Spring—Choke Lever Return.....	1
26032	Spring—Clutch Retainer	1		Note: No. 26270 Spring—Choke Lever	
26152	Spring—Pedal and Lever Return.....	1		Return	1
26157	Spring—Idle Valve and Throttle Adj...	1		Used on type No. 206345.	
26172	Spring—Pump Plunger	1		26229 Spring—Choke Lever	1
26178	Spring—Pedal Return	1		26235 Link—Governor	1
26204	Crankshaft	3		26263 Link—Throttle Control	1
	Note: No. 26115 Crankshaft.....	3		26265 Spring—Governor	1
	Used on type Nos. 206304, 206323,			26267 Spring—Control Wire Return.....	1
	206331, 206340, 206341, 206348, 206364,			Note: No. 67316 Spring—Control Wire	
	206371, 206375, 206376, 206385, 206386,			Return	1
	207005, 207009, 207012, 207013, 207015,			Used on type No. 206194.	
	207016, 207027.			26268 Spring—Starter Return	2
	No. 26126 Crankshaft.....	3		26330 Spring—Breather Retainer	1
	Used on type Nos. 206302, 206305,			Used on all engines after Serial No.	
	206306, 206330, 206359, 207004, 207006.			32642.	
	No. 26127 Crankshaft.....	3		26404 Washer—Stop Switch	1
	Used on type No. 206360.			26478 Spring—Exhaust Valve	1
	No. 26131 Crankshaft.....	3		26633 Wire—Control—78" long.....	3
	Used on type Nos. 206361, 206380,			For all other types, if longer wire is	
	206383, 207018, 207023, 207024.			needed, specify length in inches; if	
	No. 26149 Crankshaft.....	3		shorter wire is needed, order No. 26633	
	Used on type Nos. 206350, 207021.			and cut to required length.	
	No. 26159 Crankshaft.....	3		*27043 Gasket—Engine Base	1
	Used on type Nos. 206152, 207123.			Used on engines equipped with locating	
	No. 26162 Crankshaft.....	3		dowel pins for mounting cylinder to	
	Used on type No. 206362.			base.	
	No. 26166 Crankshaft.....	3		On engines equipped with base using	
	Used on type No. 206312.			eight screws for mounting to cylinder	
	No. 26225 Crankshaft.....	3		see Master Part No. 68337.	
	Used on type Nos. 206167, 206182,			27110 Gasket—Gear Cover—.010" Thick.....	1
	206184, 206185, 206189, 206194, 206201,			27111 Gasket—Gear Cover—.005" Thick.....	1
	206203.			27323 Gasket—Breather Body	1
				*27355 Gasket—Intake Elbow Mounting.....	1
				Note: No. 68917 Gasket—Intake Elbow	
				Mounting	1
				Used on type Nos. 206194, 206195,	
				206359, 206360, 206504.	

* Included in Gasket Set — Part No. 291376

Before ordering parts, read instructions top page 11

MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
29131	Shield—Spark Plug	6
29667	Point Assembly—Contact	2
29671	Armature—Magneto	2
	Note: No. 99648 Armature and Light Coil (Not Available) Used on type Nos. 206164, 206167, 206182, 206184, 206187, 206195, 206356.	
29693	Plug—Spark (with Gasket).....	3
29739	Piston Assembly—Standard	8
29778	Piston Assembly—.010" O.S.....	8
29779	Piston Assembly—.020" O.S.....	8
29780	Piston Assembly—.030" O.S.....	8
29806	Gasket—Spark Plug	1
29835	Flywheel—Magneto	6
	Note: When ordering this flywheel for type Nos. 206167, 206182, 206184, 206185, 206189, 206191, 206194, 206195, 206201, also order No. 21103 Key— Flywheel	1
29861	Condenser	2
29876	Rod—Choke	1
	Note: No. 99815 Rod—Choke..... Used on type No. 206345.	1
29878	Rope—Starter	6
38852	Washer—Armature	1
40437	Switch—Ignition Lock	6
46133	Spring—Spark Plug Shield.....	1
53029	Connector—Fuel Pipe	1
	Note: Used on type No. 206345 only.	
61703	Gear—Cam	1 8
61756	Ring—Piston, Compression, Center— Standard	1
61757	Ring—Piston, Oil—Standard	1
61760	Key—Flywheel	1
	Note: No. 21103 Key—Flywheel..... Used on type Nos. 206167, 206182, 206184, 206185, 206189, 206191, 206194, 206195, 206201.	1
61768	Ring—Piston, Compression, Center— .010" O.S.	1
61769	Ring—Piston, Compression, Center— .020" O.S.	1
61770	Ring—Piston, Compression, Center— .030" O.S.	1
61771	Ring—Piston, Oil—.010" O. S.....	1
61772	Ring—Piston, Oil—.020" O.S.....	1
61773	Ring—Piston, Oil—.030" O.S.....	1
61940	Plate—Generator End	1
	Note: No. 21458 Plate—Generator End. 1 Used on type Nos. 206371, 206385, 206386.	
61947	Housing—Starter Clutch	10
	Note: No. 21100 Housing—Starter Clutch 14 Used on type Nos. 206167, 206182, 206184, 206185, 206189, 206191, 206194, 206201, 206203.	
	No. 21148 Housing—Starter Clutch 14 Used on type No. 206195.	
	No. 291015 Housing — Starter Clutch	1
	Used on type No. 207020.	
61967	Stop—Throttle	1
62041	Shell—Air Cleaner	3
62042	Washer—Air Cleaner	1
62473	Shim—.005" Thick	1
62474	Shim—.010" Thick	1
62538	Washer—Clutch Retainer	2
62577	Washer—Flywheel	1
	Note: No. 62903 Washer—Flywheel... Used on engines with foot or hand lever starters.	1

* Included in Gasket Set—Part No. 291376

MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
62641	Plate—Speed Adjuster Retainer.....	2
	Note: No. 62575 Spring—Speed Adjuster Friction	1
	Used on type Nos. 206350, 206362, 206515.	
62693	Pulley—Rope Starter	6
62835	Cover—Dust	8
62842	Spacer—Dust Cover	1
62851	Strap—Fuel Tank	3
	Note: No. 62965 Strap—Fuel Tank..... Used on type Nos. 206198, 206315, 206363, 206367, 206377, 206381, 206382, 206471, 207008, 207017, 207022, 207112, 207121.	
	No. 69298 Strap—Fuel Tank..... 3 Used on type Nos. 206187, 206202, 206207.	
62876	Screen—Fuel Filter	1
	Note: No. 62477 Screen—Fuel Filter.... Used on type No. 206345.	1
62966	Switch—Stop	2
	Note: { No. 22111 Switch—Stop..... No. 90366 Lockwasher— $\frac{1}{8}$ " x $\frac{1}{8}$ " x $\frac{1}{8}$ "	1
	{ No. 91648 Screw—Cap, Hex. Hd. — $\frac{1}{8}$ "-24x $\frac{1}{2}$ "	1
	Used on type No. 206345.	
62980	Washer—Bearing Sleeve	1
63426	Locknut—Control Wire Casing.....	1
63770	Ball—Clutch	1
63782	Valve—Intake	2
63785	Valve—Intake	3
63788	Shaft—Cam	1
63788	Tappet—Valve	1
63821	Wrench— $\frac{1}{8}$ " Socket Set Screw.....	2
63965	Plunger—Oil Pump	1
65431	Use 290568.	
65534	Gasket—Oil Filler Cap.....	1
65616	Casing—Control Wire—72" long.....	10
	Note: If a longer casing is needed specify length in inches. If a shorter casing is needed order No. 65616 and cut to required length.	
65704	Plunger—Contact Point	1
65794	Insulator—Armature	1
65968	Disc—Breather Valve	1
	Used on all engines after Serial No. 32642.	
66111	Elbow—Fuel Pipe	1
	Note: No. 63377 Elbow—Fuel Pipe.... Used on type Nos. 206187, 206202, 206207.	1
*66114	Washer—Cylinder Mounting	1
66154	Washer—Stop Switch	1
66164	Washer—Stop Switch	1
66432	Washer—Speed Adjuster Retainer and Fuel Tank Strap.....	1
	Note: No. 67072 Washer—Fuel Tank Strap	1
	Used to mount tank straps on type Nos. 206198, 206315, 206377, 206381, 206382, 206471, 207008, 207017, 207022, 207112, 207121.	
*67307	Gasket—Magneto Plate—.015" Thick...	1
*67527	Gasket—Valve Cover.....	1
*67597	Gasket—Magneto Plate—.005" Thick...	1
*67607	Gasket—Magneto Plate—.009" Thick...	1
68122	Plug—Camshaft	1
*68337	Gasket—Engine Base	1
	Note: Used on all engines equipped with base using eight screws for mount- ing to cylinder.	
	On engines equipped with locating dowel pins for mounting cylinder to base see Master Part No. 27043 Gasket.	

Before ordering parts, read instructions top page 11

MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
*68477	Gasket—Fuel Filter Bowl.....	1
	Note: No. 67267 Gasket—Fuel Filter Bowl	1
	Used on type No. 206345.	
68487	Bowl—Fuel Filter	2
	Note: No. 67257 Bowl—Fuel Filter.....	2
	Used on type No. 206345.	
68507	Washer—Fuel Shut-Off Valve Packing..	1
68537	Gasket—Gear Cover—.015" Thick.....	1
68857	Gasket—Carburetor Body	1
68877	Gasket—Fuel Inlet Valve Seat.....	1
68887	Packing—Needle Valve	1
68897	Gasket—Carburetor Venturi	1
*68957	Gasket—Air Cleaner Mounting.....	1
	Note: No. 68287 Gasket—Air Cleaner Mounting	1
	Used on engines before Serial No. 8492.	
*68987	Gasket—Carburetor Mounting	1
89221	Cap—Fuel Tank	2
	Note: No. 29880 Cap—Fuel Tank.....	2
	Used on type Nos. 206197, 206382, 207008, 207017, 207022, 207112.	
	No. 68961 Cap—Fuel Tank.....	2
	Used on type Nos. 206187, 206198, 206201, 206202, 206207, 206315, 206363, 206367, 206377, 206381, 206382, 206471, 207008, 207017, 207022, 207112, 207121.	
	No. 89769 Cap—Fuel Tank.....	2
	Used on type Nos. 206371, 206385.	
89345	Cap—Oil Filler	2
	Note: No. 89136 Cap—Oil Filler.....	2
	Used on type Nos. 206371, 206385, 206386.	
	No. 90886 Plug—Oil Filler.....	1
	Used on type Nos. 206164, 206187.	
89446	Stud and Wing Nut.....	1
89447	Filter—Air Cleaner	2
89002	Pulley Assembly—Automatic Drive....	2
89190	Pipe—Fuel—13" long	3
	Note: No. 29278 Pipe—Fuel—20" long..	4
	Used on type No. 206345.	
	No. 29476 Pipe—Fuel—13 $\frac{3}{8}$ " long	3
	Used on type Nos. 206187, 206202, 206207.	
	No. 89419 Pipe—Fuel—13 $\frac{1}{4}$ " long	3
	Used on type No. 206201.	
	No. 89226 Pipe—Fuel—11 $\frac{1}{2}$ " long	3
	Used on type Nos. 206197, 206198, 206205, 206323, 206326, 206383, 207009, 207024, 207105, 207108.	
	No. 89520 Pipe—Fuel.....	3
	Used on type Nos. 206198, 206315, 206363, 206367, 206377, 206381, 206382, 206471, 207008, 207017, 207022, 207112, 207121.	
	No. 89663 Pipe—Fuel—11 $\frac{1}{2}$ " long	3
	Used on type Nos. 206523, 206526, 207202.	
	No. 99972 Pipe—Fuel—18" long.	4
	Used on type No. 206356.	
89307	Valve—Oil Return	1
89408	Base—Engine (Cast Iron).....	6
	Note: No. 89362 Base—Engine (Cast Iron)	6
	Used on type Nos. 207003, 207004, 207005, 207006, 207007, 207008, 207009, 207010, 207011, 207012, 207013, 207014, 207015, 207016, 207017, 207018, 207019, 207021, 207023, 207024, 207025, 207026,	

MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
	207027, 207028, 207203.	
	No. 89408 Base—Engine (Cast Iron)	8
	Used on type Nos. 207020, 207102, 207103, 207104, 207105, 207106, 207107, 207108, 207109, 207110, 207111, 207112, 207114, 207115, 207116, 207117, 207118, 207119, 207120, 207122, 207302.	
	No. 89436 Base—Engine (Cast Iron)	8
	Used on type Nos. 206206, 207100, 207101, 207113, 207121, 207123, 207300, 207301.	
	For bases which do not use the locating dowel pins for mounting cylinder to base see Master Part No. 89799 and "Notes" listed under it.	
89495	Body Assembly—Upper Carburetor....	4
	Used on engines after Serial No. 69735. Before Serial No. 69735 order:	
	No. 89735 Body Assembly—Upper Carburetor	4
	Note: No. 89719 Body Assembly—Upper Carburetor	4
	Used on type Nos. 206164, 206167, 206182, 206184, 206185, 206189, 206191, 206194, 206195, 206201, 206202, 206203, 206207, 206356.	
89546	Control—Hand Throttle	6
	Note: No. 89542 Control—Hand Throttle	6
	Used on type No. 206515.	
	Earlier models used No. 23342	
	Control—Hand Throttle	6
	No. 290171 Control Assembly—Governor	6
	Used on type No. 206386.	
89612	Cover Assembly—Gear Case.....	3 8
	Note: No. 89659 Cover Assembly—Gear Case	3 8
	Used on type Nos. 206513, 206525.	
89615	Valve—Fuel Shut-Off.....	3
	Used on type Nos. 206198, 206201, 206315, 206363, 206367, 206377, 206471, 207008, 207017, 207022, 207112, 207121.	
	Note: No. 89836 Valve—Fuel Shut-Off..	1
	Used on type Nos. 206187, 206202, 206207.	
89624	Cylinder	13
	Note: On engines equipped with base using eight screws for mounting to cylinder and not otherwise listed in this "Note" use No. 99727.	
	No. 89630 Cylinder.....	13
	Used on type Nos. 206525, 206526, 207200, 207201, 207202, 207203, 207204, 207300, 207301, 207302.	
	No. 89311 Cylinder.....	13
	Used on type No. 206504.	
	No. 89471 Cylinder.....	13
	Used on type No. 206195.	
	Includes: { No. 91648 Screw—Cap, Hex. Hd. — $\frac{1}{8}$ -24x $\frac{1}{2}$ " (3)	1
	{ No. 91865 Lockwasher (3)	1
	No. 89727 Cylinder.....	13
	Used on engines equipped with eight screws for mounting to cylinder and not otherwise listed in this "Note."	
	For engines equipped with locating dowel pins for mounting cylinder to base and not otherwise listed in this "Note" use Part No. 89624.	
	No. 89741 Cylinder.....	13
	Used on type Nos. 206450, 206451,	
	(See next page)	

Included in Gasket Set — Part No. 291376

Before ordering parts, read instructions top page 11

MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.	MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
206456, 206457, 206459, 206460, 206461, 206462, 206463, 206464, 206465, 206467, 206468, 206469, 206470, 206471, 206472, 206473, 206500, 206501, 206502, 206507, 206509, 206510, 206512, 206513, 206514, 206515, 206516, 206517, 206518, 206519, 206520, 206521, 206522, 206523, 206524.			90916	Screw—Machine, Rd. Hd.— $\frac{1}{4}$ -20x $\frac{1}{2}$ "... Note: No. 90891 Screw—Cap, Hex. Hd.— $\frac{1}{4}$ -20x $\frac{1}{2}$ " Used to mount blower housing on type No. 206195.	1
No. 99750 Cylinder..... 13 Used on type Nos. 206194, 206359, 206360.			No. 91691 Screw—Machine, Fill. Hd.— $\frac{1}{4}$ -20x $\frac{5}{8}$ " 1 Used to mount air cleaner and fuel tank braces to cylinder head on type Nos. 206345, 206350, 206351, 206460, 206512.		
No. 99769 Cylinder..... 13 Used on type No. 206350.			90950 Screw—Cap, Hex. Hd.— $\frac{5}{16}$ -24x $\frac{3}{4}$ " 1		
No. 290959 Cylinder..... 13 Used on type No. 207021.			91070 Lockwasher—Shakeproof No. 1208..... 1		
89660 Seal—Oil 1 Used on engines after Serial No. 55000. Note: No. 23495 Ring—Oil Retainer.... 1 Used on engines before Serial No. 55000.			91084 Plug—Pipe— $\frac{3}{8}$ " 1 Note: Used on engines with $\frac{3}{8}$ " pipe tapped oil drain hole in base.		
89677 Bushing—Magneto 2 Includes: No. 89660 Seal—Oil Used on engines after Serial No. 55000. Note: No. 89340 Bushing—Magneto.... 2 Includes: No. 23495 Ring—Oil Retaining. Used on engines before Serial No. 55000.			91237 Lockwasher— $\frac{1}{4}$ x $\frac{3}{8}$ x $\frac{3}{4}$ " 1		
89742 Shield—Spark Plug 6			91256 Screw—Machine, Fill. Hd.— $\frac{1}{4}$ -20x1".... 1		
89838 Wrench—Spark Plug 6			91324 Washer— $\frac{1}{4}$ " Standard 1		
89966 Muffler 1 Note: No. 89295 Muffler..... 3 Used on type Nos. 206202, 206207, 206377, 207017, 207109.			91359 Screw (Replaced by No. 99770) 1		
No. 89567 Muffler..... 1 Used on type No. 206187.			91401 Screw—Machine, Fill. Hd.—8-32x $\frac{1}{4}$ "... 1		
No. 89945 Muffler..... 3 Used on type Nos. 206371, 206385, 206386.			91406 Screw—Machine, Rd. Hd.—10-32x $\frac{3}{8}$ "... 1		
No. 99866 Muffler..... 1 Used on type Nos. 206168, 206351, 207109.			91413 Pin—Cotter— $\frac{1}{8}$ x1" 1		
90029 Screw—Machine, Rd. Hd.—4-36x $\frac{1}{4}$ "... 1			91419 Screw—Cap, Hex. Hd.— $\frac{1}{4}$ -20x $\frac{5}{8}$ "... 1		
90066 Screw—Machine, Rd. Hd.—8-32x $\frac{1}{4}$ "... 1			91422 Screw—Cap, Hex. Hd.— $\frac{1}{4}$ -20x $\frac{3}{8}$ "... 1		
90067 Screw—Machine, Rd. Hd.—8-32x $\frac{1}{8}$ "... 1			91430 Screw—Machine, Fill. Hd.—10-32x $\frac{1}{8}$ "... 1 [No. 90136 Screw—Machine, Rd. Hd.—10-32x $\frac{3}{4}$ " 1 Note: No. 90355 Nut—Hex.—10-32.... 1 No. 92290 Lockwasher—No. 10x $\frac{1}{8}$ x $\frac{3}{4}$ " 1 Used to mount fuel pipe clamp on type No. 206345.		
90079 Screw—Machine, Rd. Hd.—10-32x $\frac{3}{8}$ "... 1			No. 90597 Screw—Machine, Rd. Hd.—10-32x $\frac{1}{2}$ " 1		
90081 Screw—Machine, Rd. Hd.—10-32x $\frac{1}{2}$ "... 1			No. 92290 Lockwasher—No. 10x $\frac{1}{8}$ x $\frac{3}{4}$ " 1 Used to mount casing clamp on type No. 206195.		
90083 Screw—Machine, Rd. Hd.—10-32x $\frac{3}{8}$ "... 1 Note: No. 91406 Screw—Machine, Rd. Hd.—10-32x $\frac{3}{8}$ " 1 Used on type Nos. 206315, 207008, 207121.			91449 Screw—Cylinder Head (long)..... 1		
90200 Screw—Machine, Fill. Hd.—8-32x $\frac{1}{2}$ "... 1			91456 Screw—Cap, Hex. Hd.— $\frac{1}{4}$ -20x1"..... 1		
90202 Screw—Machine, Fill. Hd.—10-32x $\frac{1}{2}$ "... 1			91488 Plug—Pipe— $\frac{1}{8}$ " 1 Note: No. 92015 Plug—Drain (Breather side) 1 No. 92018 Plug—Drain (Carburetor side) 1 Used on type Nos. 206167, 206182, 206184, 206185, 206189, 206191, 206194, 206195, 206201, 206203, 206207, 206356.		
90313 Nut—Hex.—8-32 1			91539 Key— $\frac{3}{16}$ " Square 1 Note: No. 23277 Key—Square..... 1 Used on type Nos. 206167, 206182, 206195, 206201, 206202, 206207. No. 63755 Key—Square 1 Used on type Nos. 206160, 206345, 206358, 206369, 207014, 207028, 207106.		
90337 Nut—Hex.—8-32 Brass 1			91635 Connector—Fuel Pipe 1 Note: Used on type No. 206345 only.		
90355 Nut—Hex.—10-32 1			91691 Screw—Machine, Fill. Hd.— $\frac{1}{4}$ -20x $\frac{5}{8}$ "... 1		
90364 Lockwasher—No. 8x $\frac{3}{4}$ x $\frac{1}{2}$ " 1			91708 Nut—Flywheel 1 Note: No. 91900 Nut—Flywheel..... 1 Used on engines with foot or hand lever starters.		
90366 Lockwasher— $\frac{1}{8}$ x $\frac{1}{2}$ x $\frac{1}{8}$ " 1			91711 Screw—Cylinder Head (1" Long)..... 1 Note: No. 63337 Spacer ($\frac{3}{8}$ " Long)... 2 No. 68873 Spacer ($\frac{1}{8}$ " Long)... 1 No. 91203 Screw—Cylinder Head Used to mount cylinder head on blower housing side of type Nos. 206473, 207302.		
90367 Lockwasher—No. 8x $\frac{3}{4}$ x $\frac{3}{4}$ " 1			91712 Screw—Cylinder Head (1 $\frac{1}{4}$ " long).... 1		
90369 Lockwasher—No. 4x $\frac{3}{4}$ x $\frac{3}{4}$ " 1			91753 Screw—Machine, Fill. Hd.—8-32x1".... 1		
90528 Screw—Cap, Hex. Hd.— $\frac{1}{4}$ -28x $\frac{3}{4}$ "... 1 Note: No. 92134 Screw—Cap, Hex. Hd.— $\frac{1}{4}$ -28x $\frac{3}{4}$ " 1 Used on type Nos. 206371, 206385, 206386.			91758 Screw—Set, Socket Hd.— $\frac{5}{16}$ -24x $\frac{1}{2}$ "... 1		
90576 Nut—Hex.—8-32 1			91787 Screw—Cap, Hex. Hd.— $\frac{1}{4}$ -28x2"..... 1		
90832 Lockwasher— $\frac{1}{4}$ x $\frac{3}{8}$ x $\frac{3}{4}$ " 1					
90847 Nut—Hex.— $\frac{1}{4}$ -28 1 Used on all engines after Serial No. 32642.					
90849 Pin—Cotter— $\frac{3}{32}$ x $\frac{3}{4}$ " 1					
90877 Screw—Stop Switch 1					

Before ordering parts, read instructions top page 11

MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.	MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
91795	Screw—Cap, Hex. Hd.— $\frac{1}{8}$ -24x $\frac{1}{4}$ "	1	206201, 206202, 206207, 206315, 206363,		
91808	Lockwasher— $\frac{1}{8}$ x $\frac{3}{8}$ x $\frac{1}{2}$ "	1	206367, 206377, 206381, 206382, 206471,		
91810	Elbow—Exhaust	3	207008, 207017, 207022, 207112, 207121.		
	Note: No. 91812 Elbow—Exhaust	3		To mount Fuel Tank No. 29034 on above type numbers use:	
	Used on type Nos. 206167, 206184, 206185, 206188, 206190, 206192, 206195, 206351, 206370, 207110.			No. 90321 Nut—Square, 10-32	1
	No. 91961 Nipple—Exhaust	3		No. 91406 Screw—Machine, Rd. Hd.—10-32x $\frac{7}{8}$ "	1
	No. 92478 Elbow—Exhaust	4		No. 99510 Tank Assembly—Combination Fuel	3 8
	Used on type Nos. 206385, 206386.			Used on type Nos. 206197, 206205, 206323, 206383, 207009, 207024, 207105, 207108.	
91811	Locknut—Muffler Elbow	2		No. 99615 Valve—Shut-off	1
91821	Bolt and Nut— $\frac{1}{8}$ x1"	1		No. 99477 Tank Assembly—Combination Fuel	3
91833	Stud—Dust Cover	1		No. 99509 Pipe—Fuel	3
91901	Screw—Cap, Hex. Hd.— $\frac{1}{8}$ -20x $\frac{1}{2}$ "	1		No. 99511 Tee	1
91920	Screw—Machine, Fill. Hd.—8-32x $\frac{3}{8}$ "	1			
91991	Screw—Set (Drive Pulley)	1			
92000	Screw—Cap, Hex. Hd.— $\frac{1}{4}$ -28x $\frac{1}{4}$ "	1			
	Note: No. 91183 Screw—Cap, Hex. Hd.— $\frac{1}{4}$ -28x $\frac{5}{8}$ "	1			
	Used on engines before Serial No. 6057.		99243	Handle—Carrying	1
92017	Screw—Machine, Fill. Hd.—8-32x $\frac{1}{8}$ "	1		Note: No. 99697 Handle—Carrying	1
92029	Lockwasher—Shakeproof No. 1108	1		Used on type Nos. 206371, 206385, 206386.	
92051	Nut—Castle— $\frac{1}{8}$ -20	1	99272	Clutch Assembly—Starter	1
92054	Nut—Starter Pedal	1		Note: No. 99615 Clutch Assembly—Starter	1
92066	Screw—Carburetor Mounting	1		Used on type Nos. 206167, 206182, 206184, 206185, 206189, 206191, 206194, 206201, 206203.	
92067	Nut—Wing	1		No. 99805 Clutch Assembly—Starter	1
92085	Screw—Set, Socket Head— $\frac{1}{8}$ -24x $\frac{1}{4}$ "	1		Used on type No. 206195.	
92089	Screw—Machine, Fill. Hd.— $\frac{1}{4}$ -20x $\frac{3}{4}$ "	1			
	Note: No. 23296 Stud	1	99288	Cable—Ignition	2
	No. 92288 Pin—Cotter— $\frac{1}{8}$ x $\frac{1}{2}$ " long	1		Note: No. 99391 Cable—Ignition	2
	No. 91916 Nut—Castle— $\frac{1}{4}$ -28	1		Used on type Nos. 206340, 206371, 206372, 206375, 206376, 206385, 206386, 207012, 207016, 207027.	
	Used to mount carburetor elbow on type Nos. 206164, 206167, 206182, 206184, 206185, 206187, 206189, 206191, 206201, 206202, 206203, 206207, 206356.		99306	Pedal and Sector—Foot Starter	1
	No. 99770 Kit—Carburetor Mounting	2	99307	Starter Assembly—Foot	3
	Used on type Nos. 206194, 206195, 206359, 206360, 206504.		99309	Housing—Blower	2
92125	Screw—Cap, Hex. Hd.— $\frac{1}{4}$ -20x $\frac{1}{2}$ "	1		Note: No. 99208 Housing—Blower	2
92129	Nut—Hex.— $\frac{1}{4}$ -28	1		Used on type Nos. 206164, 206167, 206184, 206185, 206187, 206191, 206195, 206201, 206202, 206207, 206345.	
92227	Lockwasher—Shakeproof No. 1120	1		No. 99426 Housing—Blower	2
92235	Screw—Cylinder Mounting	1		Used on type Nos. 206198, 206315, 206363, 206367, 206377, 206381, 206382, 206471, 207008, 207017, 207022, 207112, 207121.	
92236	Screw—Cylinder Mounting	1		No. 290027 Housing—Blower	2
92278	Nut—Hex.— $\frac{1}{4}$ -20	1		Used on type No. 206386.	
92285	Pin—Cotter—No. 18x $\frac{1}{4}$ " long	1			
92287	Screw—Machine, Rd. Hd.—10-32x $\frac{1}{4}$ "	1			
92290	Lockwasher—No. 10x $\frac{1}{8}$ x $\frac{3}{8}$ "	1			
92291	Nut—Shut-Off Valve Packing	1			
92306	Screw—Cap, Hex. Hd.— $\frac{1}{4}$ -28x $\frac{5}{8}$ "	1			
	Note: No. 90802 Screw—Cap, Hex. Hd.— $\frac{1}{4}$ -20x $\frac{1}{2}$ "	1			
	No. 92278 Nut—Hex.— $\frac{1}{4}$ -20	1			
	Used on type No. 206512.				
92324	Rivet—Tubular— $\frac{1}{8}$ x $\frac{3}{8}$ "	1			
92604	Screw—Connecting Rod	1			
	Note: No. 91849 Screw—Connecting Rod	1			
	Used on engines before Serial No. 11791 and on Serial Nos. 20000 to 22787 inclusive.		99313	Gear—Intermediate	2
92646	Pin—Cotter— $\frac{1}{8}$ x $\frac{1}{2}$ "	1		Note: No. 99123 Gear—Intermediate	2
92671	Screw—Self Tapping, Rd. Hd.—10-32x $\frac{1}{2}$ "	1		Used on type Nos. 206462, 206463, 206464, 206467, 206468, 206469, 206471, 206516, 206521, 206524.	
99158	Bearing—Ball	8	99314	Shaft Assembly—Drive	3
	Note: No. 22247 Bushing—Cylinder	2		Note: No. 99121 Shaft Assembly—Drive	3
	Used on Model "IR" Engines.			Used on type Nos. 206462, 206463, 206467, 206468, 206469, 206471, 206516, 206521, 206524.	
	No. 62552 Bushing—Cylinder	2		No. 99172 Shaft Assembly—Drive	3
	Used on type No. 206350.			Used on type No. 206464.	
99176	Seal—Oil	6		No. 99174 Shaft Assembly—Drive	3
	Note: No. 99440 Seal—Oil	6		Used on type Nos. 206473, 207302.	
	Used on type No. 206195.		99317	Seal—Oil	6
99180	Tank Assembly—Fuel	3			
	Note: No. 29034 Tank Assembly—Fuel	2			
	Used on type Nos. 206187, 206198,				

Before ordering parts, read instructions top page 11

NUMBER MASTER PART	NAME	Lbs. Oz. SHIPPING WEIGHT	MASTER PART NUMBER	NAME	SHIP WEL Lbs.
99339	Starter Assembly—Hand Lever.....	3		No. 99740 Base—Engine (Cast Iron)	6
	Note: No. 99352 Starter Assembly—Hand Lever	3		Used on type Nos. 206345, 206464, 206500, 206501, 206502, 206507, 206510, 206512, 206513, 206514, 206515, 206516, 206517, 206518, 206519, 206520, 206521, 206522, 206523, 206524.	
	Used on type Nos. 206198, 206471, 207112.			No. 99743 Base—Engine (Cast Iron)	8
99443	Starter Assembly—Foot	3		Used on type Nos. 206450, 206451, 206456, 206457, 206459, 206460, 206461, 206462, 206463, 206465, 206467, 206468, 206469, 206470, 206471, 206472, 206473.	
99597	Breather	12		No. 99839 Base—Engine (Cast Iron)	6
	Used on engines before Serial No. 32642.			Used on type Nos. 206351, 206504, 206509.	
	Note: No. 99291 Breather.....	12		Includes: No. 91812 Elbow.....	
	Used on engines before Serial No. 6057.			No. 99913 Base—Engine (Cast Iron)	6
	No. 91240 Elbow— $\frac{1}{2}$ x45° Street.	1		Used on type No. 206356.	
	No. 99687 Breather.....	12		99763 Support Assembly—Foot Lever.....	2
	Used on type Nos. 206164, 206167, 206182, 206184, 206185, 206187, 206189, 206195, 206356.			99764 Support Assembly—Foot Pedal.....	2
99621	Valve—Needle Adjusting	3		99768 Support Assembly—Foot Pedal.....	2
99622	Float—Carburetor	2		99770 Kit—Carburetor Mounting	
99630	Cleaner Assembly—Air	1		99793 Tube—Control Wire Casing.....	
99632	Tooth Assembly—Spring	1		99833 Crank Assembly—Bell	
99634	Body—Upper Carburetor	4		Note: No. 89685 Crank Assembly—Bell	
99636	Valve and Seat—Fuel Inlet.....	1		Used on type No. 207204.	
99640	Rod Assembly—Connecting	8		99844 Cleaner Assembly—Air	1
99647	Block Assembly—Terminal	2		99858 Sector Assembly—Starter	14
99665	Yoke Assembly—Fuel Filter.....	2		99860 Starter Assembly—Foot	3
	Note: {No. 29602 Wire—Filter Clamp..	1		99865 Support Assembly—Foot Starter.....	2
	{No. 99006 Nut—Filter Thumb...}	1		99868 Shaft and Lever Assembly—Throttle...	1
	Used on type No. 206345.			Used on engines after Serial No. 69735.	
99679	Lever Assembly—Choke	1		No. 89736 Shaft and Lever Assembly—Throttle	1
99686	Sector Assembly—Starter	14		Used on engines after Serial No. 69735.	
99700	Shaft and Lever—Choke.....	2		Note: No. 99635 Shaft and Stop—Throttle	1
	Note: No. 23252 Shaft—Choke.....	1		Used on type Nos. 206164, 206167, 206182, 206184, 206185, 206189, 206191, 206194, 206195, 206201, 206202, 206203, 206207.	
	Used on type Nos. 206164, 206167, 206182, 206184, 206185, 206189, 206191, 206194, 206195, 206201, 206202, 206203, 206207, 206345, 206356.			Uses: No. 23284 Collar—Throttle Shaft	1
99714	Filter Assembly—Fuel	10		99874 Adjuster—Speed	2
	Note: No. 89224 Filter Assembly—Fuel.	10		99876 Carburetor Assembly	1
	Used on type Nos. 206187, 206202, 206207.			Used on engines after Serial No. 69735.	
	No. 99910 Filter Assembly—Fuel.	10		Before Serial No. 69735 order:	
	Used on type No. 206345.			Note: No. 89507 Carburetor Assembly..	1
	Includes: No. 23933 Valve—Shut-off	1		Used on type No. 206345.	
99732	Blade Assembly—Governor	6		No. 89734 Carburetor Assembly..	1
	Note: No. 22039 Plate—Baffle.....	1		No. 99717 Carburetor Assembly..	1
	Used on type Nos. 206164, 206167, 206182, 206184, 206187, 206195, 206201, 206202, 206356.			Used on type Nos. 206164, 206167, 206182, 206184, 206185, 206189, 206191, 206194, 206195, 206201, 206202, 206203, 206207, 206356.	
	No. 62598 Plate—Baffle.....	1		99879 Cover Assembly—Fuel Filter.....	6
	Used on type Nos. 206185, 206189, 206191, 206194, 206203, 206338.			Note: No. 61685 Cover—Fuel Filter....	6
99739	Base—Engine (Cast Iron).....	4		Used on type No. 206345.	
	Note: No. 21144 Base—Engine (Cast Iron)	8		Uses: No. 29536 Valve—Fuel Shut-Off	1
	Used on type Nos. 206164, 206187.			No. 89223 Cover Assembly—Fuel Filter	6
	No. 89874 Base—Engine (Cast Iron)	8		Used on type Nos. 206187, 206202, 206206.	
	Used on type Nos. 206371, 206385, 206386.			99886 Pedal—Foot Starter	1
	No. 99723 Base—Engine (Cast Iron)	8		99897 Starter Assembly—Foot	3
	Used on type Nos. 206167, 206182, 206184, 206185, 206189, 206191, 206194, 206195, 206201, 206202, 206203, 206207.			Note: No. 99546 Starter Assembly—Foot	
	No. 99736 Base—Engine (Cast Iron)	8		Replaced by No. 99897 and is similar to it except that it has a	
	Used on type Nos. 206152, 206153, 206155, 206158, 206160, 206167, 206168, 206169, 206170, 206172, 206174, 206175, 206177, 206180, 206181, 206183, 206188, 206190, 206192, 206193, 206197, 206198, 206199, 206200, 206205, 206363, 206365.			(See following page)	

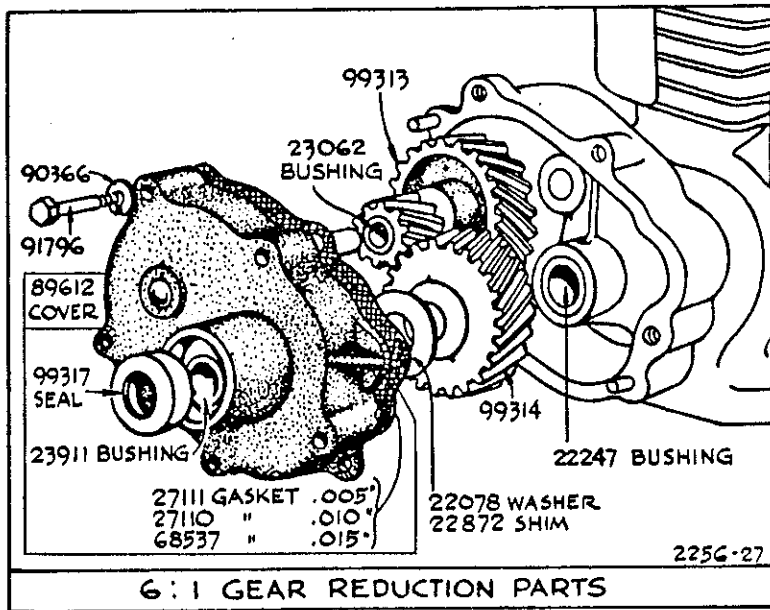
Before ordering parts, read instructions top page 11

MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
	foot pedal instead of a foot lever. Earlier models used the following to mount pedal to sector:	
	No. 82976 Washer.....	1
	No. 81028 Screw—Cap, Hex. Hd.— $\frac{3}{8}$ -24x $\frac{3}{4}$ "	1
	No. 82268 Lockwasher— $\frac{9}{16}$ x $\frac{1}{2}$ x $\frac{3}{8}$ "	1
89955	Pump Assembly—Oil	1
290290	Ring Set—Standard Piston.....	3
290291	Ring Set—.010" O.S. Piston.....	3
290292	Ring Set—.030" O.S. Piston.....	3
290413	Cap—Oil Filler	3
290414	Pulley—Drive, V-Belt (2" Dia.).....	1
290548	Breather Assembly	2
290568	Lever Assembly — Control (Stamped Steel)	4
	Note: No. 29035 Lever Assembly—Control	8
	Used on type No. 206512.	
	No. 89583 Lever Assembly—Control	8
	Used on type Nos. 206164, 206187, 206202, 206207, 206338.	
	Includes: { No. 92282 Screw — Machine, Rd. Hd.—10-24 x $\frac{1}{2}$ "	1
	{ No. 92289 Screw — Machine, Rd. Hd.—10-24 x $\frac{7}{8}$ " (2)	1
290584	Base—Control Lever (Stamped Steel)...	2
	Note: No. 21441 Base—Control Lever (Cast Iron)	4
	Used on type Nos. 206164, 206187, 206202, 206207, 206338.	
	No. 65631 Base—Control Lever (Cast Iron)	4
	Used on type No. 206512.	
290596	Ring Set—.020" O.S. Piston.....	3
290642	Lever—Control (Stamped Steel).....	2
290760	Magneto Assembly	6
	Note: No. 89013 Magneto Assembly... ..	6
	Used on type Nos. 206153, 206174, 206205, 206305, 206368, 206378, 206467, 206524, 207105, 207114, 207119, 207122.	
	Includes: No. 65335 Wire—Ground	1
	No. 89195 Magneto Assembly....	6
	Used on type Nos. 206340, 206371, 206372, 206375, 206376, 206385, 207012, 207016, 207027.	
	No. 99652 Magneto Assembly (Light Coils and Ground Wire)	(Not available)
	Used on type No. 206195.	
	Includes: No. 65985 Wire—Ground	1
	No. 99661 Magneto Assembly (Light Coils and Ground Wire)	(Not available)
	Used on type Nos. 206164, 206167,	

MASTER PART NUMBER	NAME	SHIPPING WEIGHT Lbs. Oz.
206182, 206184, 206187, 206201, 206202, 206207.		
	Includes: No. 65335 Wire—Ground	1
	No. 99662 Magneto Assembly (Light Coils)	(Not available)
	Used on type No. 206356.	
	No. 99837 Magneto Assembly... ..	6
	Used on type No. 206185.	
	Includes: No. 66025 Wire—Ground	1
	No. 290846 Magneto Assembly.. ..	6
	Used on type No. 206386.	
	Includes: No. 290020 Wire—Ground	1
	No. 290879 Magneto Assembly.. ..	6
	Used on type No. 206191.	
	Includes: No. 66155 Wire—Ground	1
	No. 290896 Magneto Assembly.. ..	6
	Used on type Nos. 206189, 206194, 206338.	
	Includes: No. 65985 Wire—Ground	1
290792	Plate—Magneto	2
	Note: No. 99646 Plate—Magneto.....	(Not available)
	Used on type Nos. 206164, 206167, 206182, 206184, 206187, 206201, 206356.	
	Includes: { No. 22037 Spacer.....	1
	{ No. 99647 Block—Terminal	2
	No. 99650 Plate—Magneto.....	(Not available)
	Used on type No. 206195.	
	Includes: { No. 22037 Spacer.....	1
	{ No. 99647 Block—Terminal	2
	No. 290869 Plate—Magneto.....	2
	Used on type Nos. 206153, 206174, 206185, 206191, 206203, 206205, 206305, 206368, 206378, 206467, 206469, 206524, 207105, 207114, 207119, 207122.	
290918	Lever Assembly—Control	3
290980	Pin Assembly—Piston (Standard).....	2
290981	Pin Assembly—Piston (.005" O.S.).....	2
*291301	Gasket—Cylinder Head ($\frac{1}{8}$ " thick)...	1
	*Note: No. 67537 Gasket—Cylinder Head ($\frac{3}{8}$ " thick).....	1
	Used with cast iron and earlier type aluminum cylinder heads.	
291376	Gasket Set	4
291379	Head Assembly—Cylinder	1 8
	Note: No. 21099 Head—Cylinder.....	2
	Used on type No. 206338.	
	No. 291381 Head Assembly—Cylinder	1 8
	Used on type Nos. 206340, 206371, 206372, 206375, 206376, 206385, 207012, 207016, 207027.	

* Included in Gasket Set — Part No. 291376

Before ordering parts, read instructions top page 11



ASSEMBLIES INCLUDE ALL PARTS SHOWN IN BRACKETS

ABOVE PARTS LISTED ON PAGE 11 THROUGH 18

Briggs & Stratton Gasoline Motors are precision built and require **original** Briggs & Stratton replacement parts in order to obtain satisfactory results. Service that is not reliable or continuous becomes expensive at any price.

Users will find that the prices paid for **original** repair parts are well worth the investment when the service delivered is compared with that afforded by substitute parts. **Original** Briggs & Stratton repair parts can be obtained through all Authorized Central Service Distributors listed on page 23.