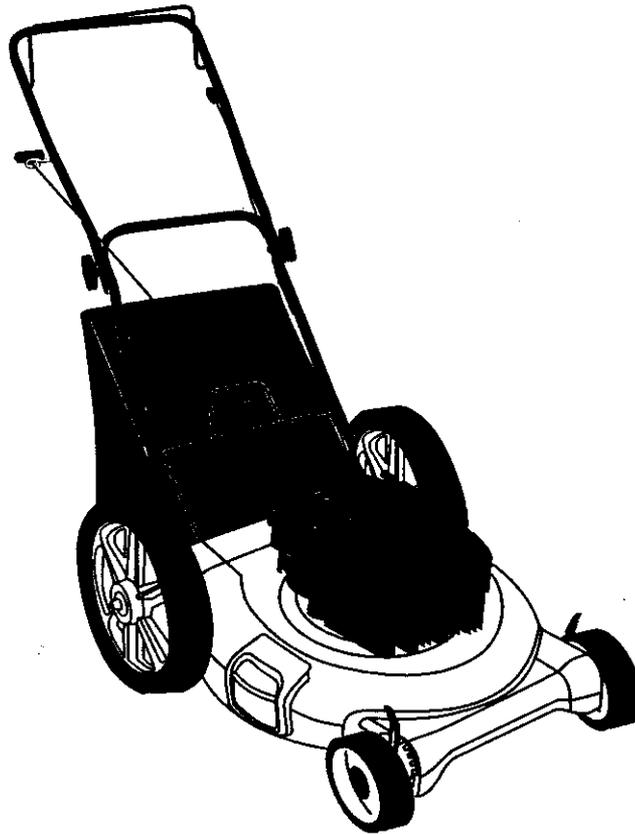


Owner's Manual

CRAFTSMAN®

**6.0 HORSEPOWER
21" MULTI-CUT
ROTARY LAWN MOWER**

Model No.
917.389391



- **Safety**
- **Assembly**
- **Operation**
- **Maintenance**
- **Español**
- **Repair Parts**

CAUTION:

Read and follow all
Safety Rules and Instructions
before operating this equipment

Sears, Roebuck and Co., Hoffman Estates, IL 60179
Visit our Craftsman website: www.sears.com/craftsman

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WARRANTY

LIMITED TWO YEAR WARRANTY ON CRAFTSMAN POWER MOWER

For two years from date of purchase, when this Craftsman Lawn Mower is maintained, lubricated, and tuned up according to the operating and maintenance instructions in the owner's manual, Sears will repair free of charge any defect in material or workmanship.

If this Craftsman Lawn Mower is used for commercial or rental purposes, this warranty applies for only 90 days from the date of purchase.

This Warranty does not cover:

- Expendable items which become worn during normal use, such as rotary mower blades, blade adapters, belts, air cleaners and spark plug.
- Repairs necessary because of operator abuse or negligence, including bent crankshafts and the failure to maintain the equipment according to the instructions contained in the owner's manual.

Warranty service is available by returning the Craftsman power mower to the nearest Sears Service Center/Department in the United States. This warranty applies only while this product is in use in the United States.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

SEARS, ROEBUCK AND CO., D/817 WA, HOFFMAN ESTATES, ILLINOIS 60179

SAFETY RULES

Safety standards require operator presence control to minimize the risk of injury. Your unit is equipped with such controls. Do not attempt to defeat the function of the operator presence controls under any circumstances.

TRAINING:

- Read this operator's manual carefully. Become familiar with the controls and know how to operate your mower properly. Learn how to quickly stop mower.
- Do not allow children to use your mower. Never allow adults to use mower without proper instructions.
- Keep the area of operation clear of all persons, especially small children and pets.
- Use mower only as the manufacturer intended and as described in this manual.

- Do not operate mower if it has been dropped or damaged in any manner. Always have damage repaired before using your mower.
- Do not use accessory attachments that are not recommended by the manufacturer. Use of such attachments may be hazardous.
- The blade turns when the engine is running.

PREPARATION:

- Always thoroughly check the area to be mowed and clear it of all stones, sticks, wires, bones, and other foreign objects. These objects will be thrown by the blade and can cause severe injury.
- Always wear safety glasses or eye shields when starting and while using your mower.
- Dress properly. Do not operate mower when barefoot or wearing open

sandals. Wear only solid shoes with good traction when mowing.

- Check fuel tank before starting engine. Do not fill gas tank indoors, when the engine is running or when the engine is hot. Allow the engine to cool for several minutes before filling the gas tank. Clean off any spilled gasoline before starting the engine.
- Always make wheel height adjustments before starting your mower. Never attempt to do this while the engine is running.
- Mow only in daylight or good artificial light.

OPERATION:

- Keep your eyes and mind on your mower and the area being cut. Do not let other interests distract you.
- Do not mow wet or slippery grass. Never run while operating your mower. Always be sure of your footing - keep a firm hold on the handles and walk.
- Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
- Always stop the engine whenever you leave or are not using your mower, or before crossing driveways, walks, roads, and any gravel-covered areas.
- Never direct discharge of material toward bystanders nor allow anyone near the mower while you are operating it.
- Before cleaning, inspecting, or repairing your mower, stop the engine and make absolutely sure the blade and all moving parts have stopped. Then disconnect the spark plug wire and keep it away from the spark plug to prevent accidental starting.
- Do not continue to run your mower if you hit a foreign object. Follow the procedure outlined above, then repair any damage before restarting and operating your mower.
- Do not change the governor settings or overspeed the engine. Engine damage or personal injury may result.
- Do not operate your mower if it vibrates abnormally. Excessive vibration is an indication of damage; stop the engine, safely check for the cause of vibration and repair as required.
- Do not run the engine indoors. Exhaust fumes are dangerous.

- Never cut grass by pulling the mower towards you. Mow across the face of slopes, never up and down or you might lose your footing. Do not mow excessively steep slopes. Use caution when operating the mower on uneven terrain or when changing directions - maintain good footing.
- Never operate your mower without proper guards, plates, grass catcher or other safety devices in place.

MAINTENANCE AND STORAGE:

- Check the blade and the engine mounting bolts often to be sure they are tightened properly.
- Check all bolts, nuts and screws at frequent intervals for proper tightness to be sure mower is in safe working condition.
- Keep all safety devices in place and working.
- To reduce fire hazard, keep the engine free of grass, leaves or excessive grease and oil.
- Check grass catcher often for deterioration and wear and replace worn bags. Use only replacement bags that are recommended by and comply with specifications of the manufacturer of your mower.
- Always keep a sharp blade on your mower.
- Allow engine to cool before storing in any enclosure.
- Never store mower with fuel in the tank inside a building where fumes may reach an open flame or an ignition source such as a hot water heater, space heater, clothes dryer, etc.

▲Look for this symbol to point out important safety precautions. It means **CAUTION!!! BECOME ALERT!!! YOUR SAFETY IS INVOLVED.**

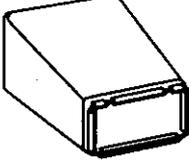
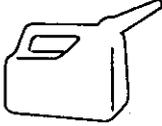
▲CAUTION: Always disconnect spark plug wire and place wire where it cannot contact spark plug in order to prevent accidental starting when setting up, transporting, adjusting or making repairs.

▲WARNING: The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

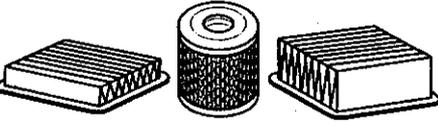
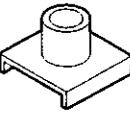
ACCESSORIES

These accessories were available when this lawn mower was produced. They are not shipped with your mower. They are also available at most Sears retail outlets and service centers. Most Sears stores can also order repair parts for you, when you provide the model number of your lawn mower. Some of these accessories may not apply to your lawn mower.

LAWN MOWER PERFORMANCE

 <p>CLIPPING DEFLECTOR FOR REAR DISCHARGE LAWN MOWERS</p>	 <p>MULCHER KITS</p>	 <p>STABILIZER</p>
 <p>GRASS CATCHERS FOR REAR DISCHARGE LAWN MOWERS</p>	 <p>GRASS CATCHERS FOR SIDE DISCHARGE LAWN MOWERS</p>	 <p>GAS CANS</p>

LAWN MOWER MAINTENANCE

 <p>MUFFLERS</p>		 <p>AIR FILTERS</p>		 <p>SPARK PLUGS</p>
 <p>BELTS</p>	 <p>BLADES</p>	 <p>BLADE ADAPTERS</p>	 <p>WHEELS</p>	 <p>ENGINE OIL</p>

ASSEMBLY

Read these instructions and this manual in its entirety before you attempt to assemble or operate your new lawn mower.

IMPORTANT: This lawn mower is shipped WITHOUT OIL OR GASOLINE in the engine.

Your new lawn mower has been assembled at the factory with the exception of those parts left unassembled for shipping purposes. To ensure safe and proper operation of your lawn mower, all parts and hardware you assemble must be tightened securely. Use the correct tools as necessary to ensure proper tightness. All parts such as nuts, washers, bolts, etc., necessary to complete the assembly have been placed in the parts bag.

TO REMOVE LAWN MOWER FROM CARTON

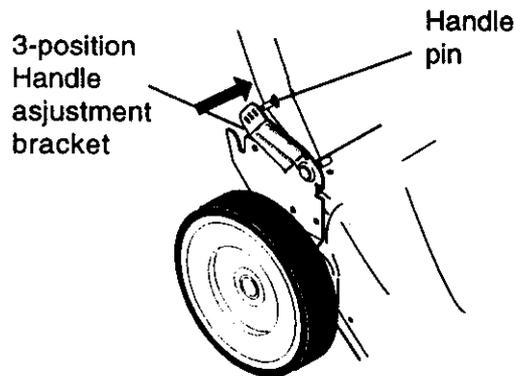
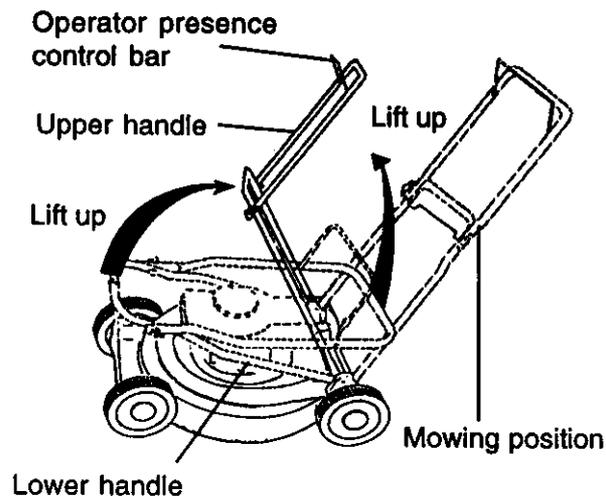
- Remove loose parts included with mower.
- Cut down two end corners of carton and lay end panel down flat.
- Remove all packing materials except padding between upper and lower handle and padding holding operator presence control bar to upper handle.
- Roll lawn mower out of carton and check carton thoroughly for additional loose parts.

HOW TO SET UP YOUR LAWN MOWER

TO UNFOLD HANDLE

IMPORTANT: Unfold handle carefully so as not to pinch or damage control cables.

- Raise lower handle section to operating position and squeeze the bottom ends of lower handle towards each other until the pin in handle can be inserted into one of the three height adjustment holes.
- Remove protective padding, raise upper handle section into place on lower handle and tighten both handle knobs.
- Remove any packing material from around control bar.
- Your handles may be adjusted for your mowing comfort. Refer to Service and Adjustments section of this manual.



TO INSTALL ATTACHMENTS

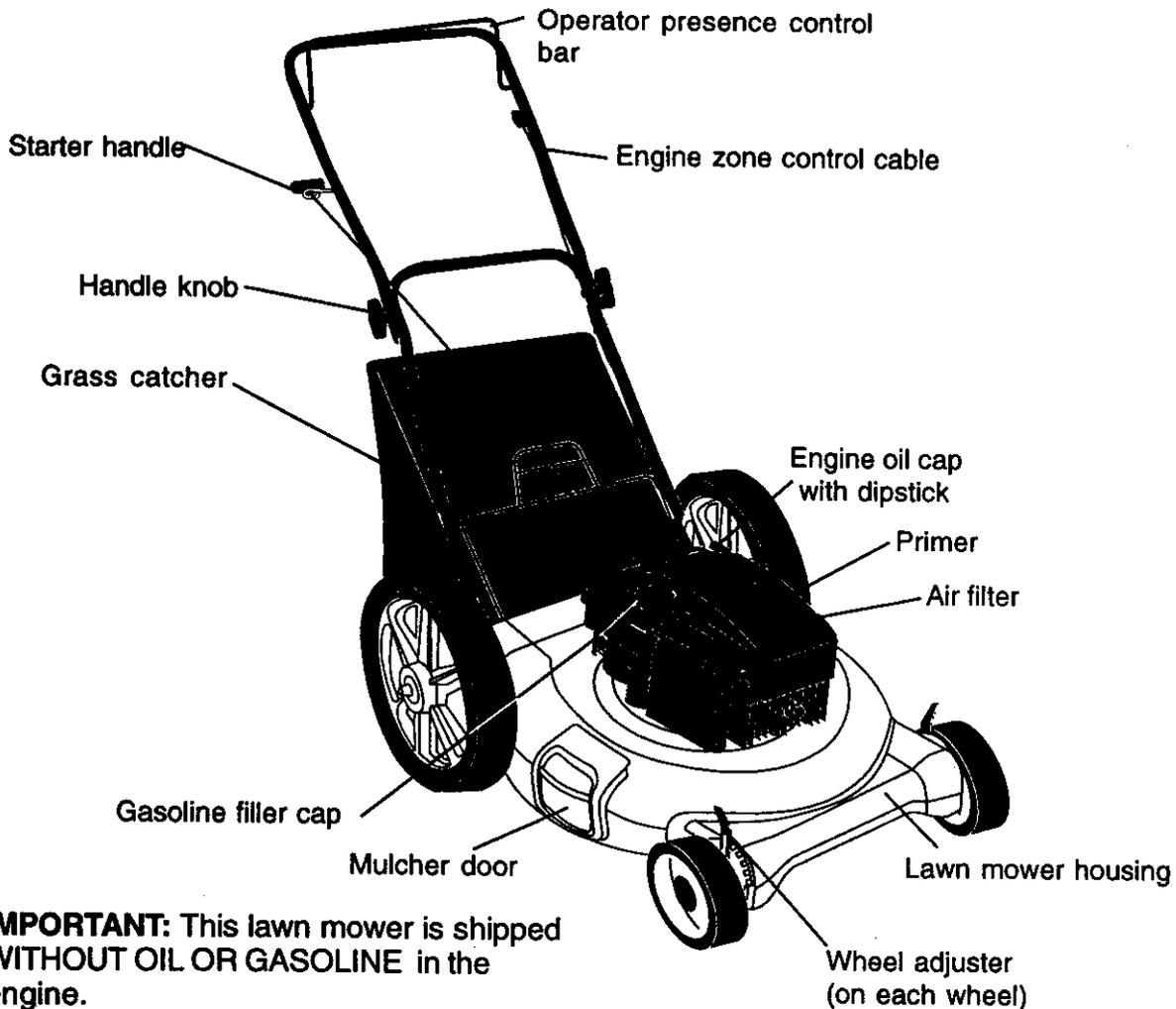
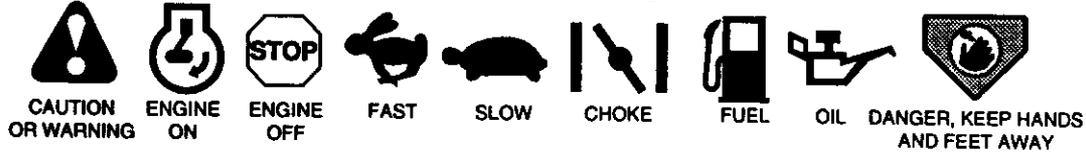
Your lawn mower was shipped ready to be used as a mulcher. To convert to bagging or discharging, see "To convert mower" in the OPERATION section of this manual.

OPERATION

KNOW YOUR LAWN MOWER

READ THIS OWNER'S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR LAWN MOWER. Compare the illustrations with your lawn mower to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.

These symbols may appear on your lawn mower or in literature supplied with the product. Learn and understand their meaning.



IMPORTANT: This lawn mower is shipped WITHOUT OIL OR GASOLINE in the engine.

MEETS CPSC SAFETY REQUIREMENTS

Sears rotary walk-behind power lawn mowers conform to the safety standards of the American National Standards Institute and the U.S. Consumer Product Safety Commission. The blade turns when the engine is running.

Operator Presence Control Bar- must be held down to the handle to start the engine. Release to stop the engine.

Primer - pumps additional fuel from the carburetor to the cylinder for use when starting a cold engine.
Starter Handle - used for starting the engine.



The operation of any lawn mower can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your lawn mower or performing any adjustments or repairs. We recommend a wide vision safety mask over spectacles or standard safety glasses.

HOW TO USE YOUR LAWN MOWER ENGINE SPEED CONTROL

The engine speed was set at the factory for optimum performance. Speed is not adjustable.

ENGINE ZONE CONTROL

CAUTION: Federal regulations require an engine control to be installed on this lawn mower in order to minimize the risk of blade contact injury. Do not under any circumstances attempt to defeat the function of the operator control. The blade turns when the engine is running.

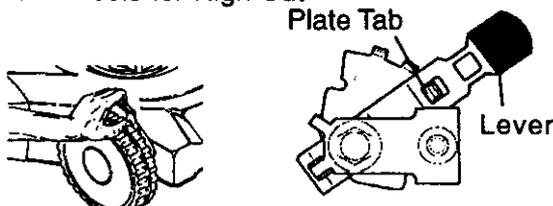
- Your lawn mower is equipped with an operator presence control bar which requires the operator to be positioned behind the lawn mower handle to start and operate the lawn mower.

TO ADJUST CUTTING HEIGHT

- Raise wheels for low cut and lower wheels for high cut.
- Adjust cutting height to suit your requirements. Medium position is best for most lawns.
- To change cutting height, squeeze adjuster lever toward wheel. Move wheel up or down to suit your requirements. Be sure all wheels are in the same setting.

NOTE: Adjuster is properly positioned when plate tab inserts into hole in lever. Also, 9-position adjusters (if so equipped) allow lever to be positioned between the plate tabs.

Lower Wheels for High Cut



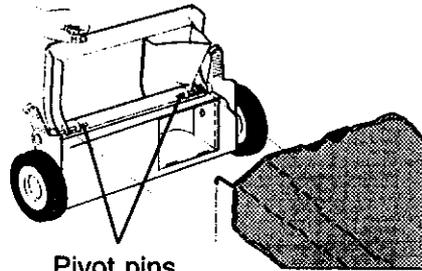
Raise Wheels for Low Cut

TO CONVERT MOWER

Your lawn mower was shipped ready to be used as a mulcher. To convert to bagging or discharging:

REAR BAGGING

- Lift rear door of the lawn mower and place the grass catcher frame hooks onto the door pivot pins.
- To convert to mulching or discharging operation, remove grass catcher and close rear door.



Pivot pins

SIDE DISCHARGING

- Rear door must be closed.
- Open mulcher door and install discharge deflector under guard as shown.
- Mower is now ready for discharging operation.
- To convert to mulching or bagging operation, discharge deflector must be removed and mulcher door must be closed.

SIMPLE STEPS TO REMEMBER WHEN CONVERTING YOUR LAWN MOWER

FOR MULCHING -

- Rear door closed.
- Mulcher door closed.

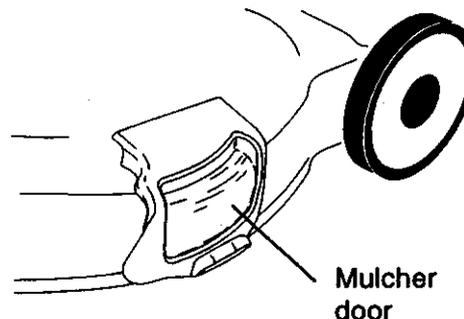
FOR REAR BAGGING -

- Grass catcher installed.
- Mulcher door closed.

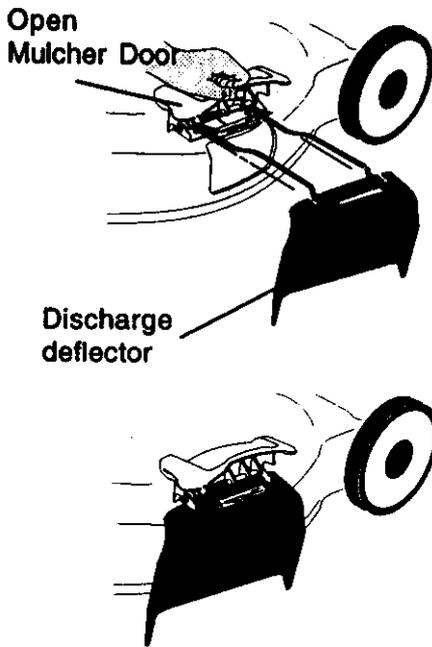
FOR SIDE DISCHARGING -

- Rear door closed.
- Side discharge deflector installed.

CAUTION: Do not run your lawn mower without rear door closed or approved grass catcher in place. Never attempt to operate the lawn mower with the rear door removed or propped open.



Mulcher door



BEFORE STARTING ENGINE

Oil

Your lawn mower is shipped without oil in the engine.

- Be sure mower is level and area around oil fill is clean.
- Remove engine oil cap and fill to the full line on the dipstick.

NOTE: Allow oil to settle down into engine for accurate dipstick reading.

- Engine holds 20 ozs. of oil. For type and grade of oil to use, see "ENGINE" in Maintenance section of this manual.
- Pour oil slowly. Do not over fill.
- Check oil level before each use. Add oil if needed. Fill to full line on dipstick.
- To read proper level, tighten engine oil cap each time.
- Reinstall engine oil cap and tighten.
- Change the oil after every 25 hours of operation or each season. You may need to change the oil more often under dusty, dirty conditions.

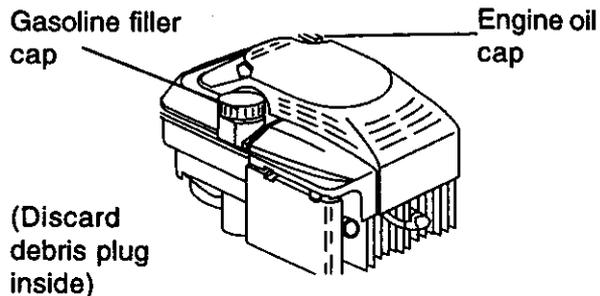
ADD GASOLINE

NOTE: Before filling fuel tank, remove and discard the debris plug that is inside the tank.

- Fill fuel tank. Use fresh, clean, regular unleaded gasoline with a minimum of 87 octane. Do not mix oil with gasoline. Purchase fuel in quantities that can be used within 30 days to assure fuel freshness.

⚠WARNING: Experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Drain the fuel tank, start the engine and let it run until fuel lines and carburetor are empty. Use fresh fuel next season. See Storage Instructions for additional information. Never use engine or carburetor cleaner products in fuel tank or permanent damage may occur.

⚠CAUTION: Fill to bottom of gas tank filler neck. Do not overfill. Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame.



TO START ENGINE

- To start a cold engine, push primer three (3) times before trying to start. Use a firm push. This step is not usually necessary when starting an engine which has already run for a few minutes.
- Hold operator presence control bar down to the handle and pull starter handle quickly. Do not allow starter rope to snap back.
- To stop engine, release operator presence control bar.

NOTE: In cooler weather it may be necessary to repeat priming steps. In warmer weather over priming may cause flooding and engine will not start. If you do flood engine, wait a few minutes before attempting to start and do not repeat priming steps.

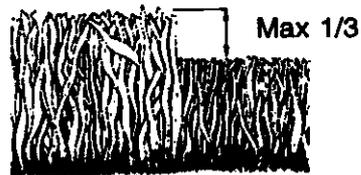
MOWING TIPS

- Under certain conditions, such as very tall grass, it may be necessary to raise the height of cut to reduce pushing effort and to keep from overloading the engine and leaving clumps of grass clippings. It may also be necessary to reduce ground speed and/or run the lawn mower over the area a second time.
- For extremely heavy cutting, reduce the width of cut by overlapping previously cut path and mow slowly.
- For better grass bagging and most cutting conditions, the engine speed should be set in the fast position.
- Pores in cloth grass catchers can become filled with dirt and dust with use and catchers will collect less grass. To prevent this, regularly hose catcher off with water and let dry before using.
- Keep top of engine around starter clear and clean of grass clippings and chaff. This will help engine air flow and extend engine life.

MULCHING MOWING TIPS

IMPORTANT: For best performance, keep mower housing free of built-up grass and trash. Clean **UNDERSIDE OF MOWER HOUSING** after each use. See "Cleaning" in **MAINTENANCE** section of this manual.

- The special mulching blade will recut the grass clippings many times and reduce them in size so that as they fall onto the lawn they will disperse into the grass and not be noticed. Also, the mulched grass will biodegrade quickly to provide nutrients for the lawn. Always mulch with your highest engine (blade) speed as this will provide the best recutting action of the blades.
- Avoid cutting your lawn when it is wet. Wet grass tends to form clumps and interferes with the mulching action. The best time to mow your lawn is the early afternoon. At this time the grass has dried and the newly cut area will not be exposed to the direct sun.
- For best results, adjust the lawn mower cutting height so that the lawn mower cuts off only the top one-third of the grass blades. If the lawn is overgrown it will be necessary to raise the height of cut to reduce pushing effort and to keep from overloading the engine and leaving clumps of mulched grass. For extremely heavy mulching, reduce your width of cut, mow slowly and raise the rear of the lawn mower one wheel adjuster setting higher than the front.
- Certain types of grass and grass conditions may require that an area be mulched a second time to completely hide the clippings. When doing a second cut, mow across or perpendicular to the first cut path.
- Change your cutting pattern from week to week. Mow north to south one week then change to east to west the next week. This will help prevent matting and graining of the lawn.



PRODUCT SPECIFICATIONS

MODEL NUMBER	917.389391
SERIALNUMBER	
DATE OF PURCHASE	
GASOLINE CAPACITY/ TYPE:	1.6 QUARTS UNLEADED REGULAR
OIL TYPE (API-SF/SG/SH):	SAE 30 (ABOVE 32°F) SAE 5W-30 (BELOW 32°F)
OIL CAPACITY:	20 OZS.
SPARK PLUG (GAP: .030")	CHAMPION RJ19LM OR J19LM
VALVE CLEARANCE:	INTAKE: .004 - .008 EXHAUST: .004 - .008
SOLID STATE IGNITION AIR GAP:	.0125 IN.
BLADE BOLT TORQUE:	35-40 FT. LBS.
<ul style="list-style-type: none"> • The model and serial numbers will be found on a decal attached to the rear of the lawn mower housing. Record both serial number and date of purchase in space provided above. 	

LAWNMOWER

Always observe safety rules when performing any maintenance.

TIRES

- Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.
- Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.

BLADE CARE

For best results, mower blade must be kept sharp. Replace bent or damaged blades.

TO REMOVE BLADE

- Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with spark plug.
- Turn lawn mower on its side. Make sure air filter and carburetor are up.
- Use a wood block between blade and mower housing to prevent blade from turning when removing blade bolt.
- Protect your hands with gloves and/or wrap blade with heavy cloth.
- Remove blade bolt by turning counter-clockwise.
- Remove blade and attaching hardware (bolt, lock washer and hardened washer).

NOTE: Remove the blade adapter and check the key inside hub of blade adapter. The key must be in good condition to work properly. Replace adapter if damaged.

TO REPLACE BLADE

- Position the blade adapter on the engine crankshaft. Be sure key in adapter and crankshaft keyway are aligned.
- Position blade on the blade adapter aligning the two (2) holes in the blade with the raised lugs on the adapter.
- Be sure the trailing edge of blade (opposite sharp edge) is up toward the engine.
- Install the blade bolt with the lock washer and hardened washer into blade adapter and crankshaft.
- Use block of wood between blade and lawn mower housing and tighten the blade bolt, turning clockwise.
- The recommended tightening torque is 35-40 ft. lbs.

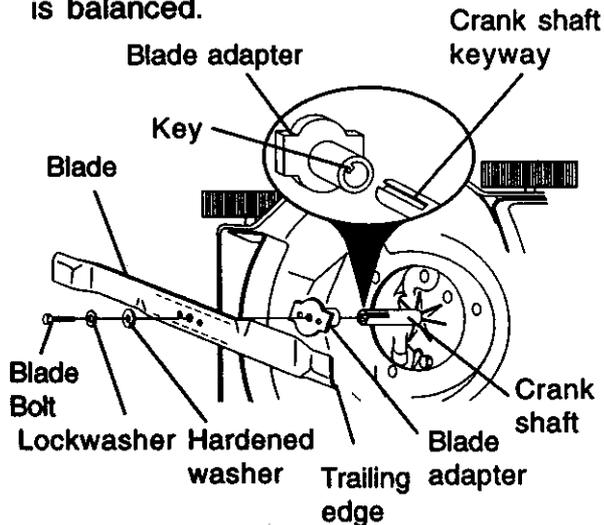
IMPORTANT: Blade bolt is grade 8 heat treated.

TO SHARPEN BLADE

NOTE: We do not recommend sharpening blade - but if you do, be sure the blade is balanced.

Care should be taken to keep the blade balanced. An unbalanced blade will cause eventual damage to lawn mower or engine.

- The blade can be sharpened with a file or on a grinding wheel. Do not attempt to sharpen while on the mower.
- To check blade balance, drive a nail into a beam or wall. Leave about one inch of the straight nail exposed. Place center hole of blade over the head of the nail. If blade is balanced, it should remain in a horizontal position. If either end of the blade moves downward, sharpen the heavy end until the blade is balanced.



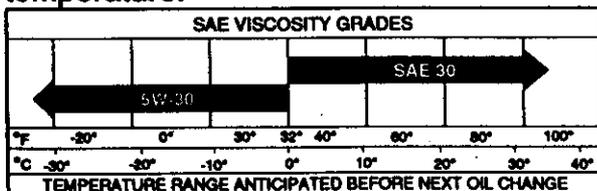
GRASS CATCHER

- The grass catcher may be hosed with water, but must be dry when used.
- Check your grass catcher often for damage or deterioration. Through normal use it will wear. If catcher needs replacing, replace only with a manufacturer approved replacement catcher. Give the lawn mower model number when ordering.

ENGINE

LUBRICATION

Use only high quality detergent oil rated with API service classification SF, SH or SG. Select the oil's SAE viscosity grade according to your expected operating temperature.



NOTE: Although multi—viscosity oils (5W30, 10W30 etc.) improve starting in cold weather, these multi—viscosity oils will result in increased oil consumption when used above 32°F. Check your engine oil level more frequently to avoid possible engine damage from running low on oil.

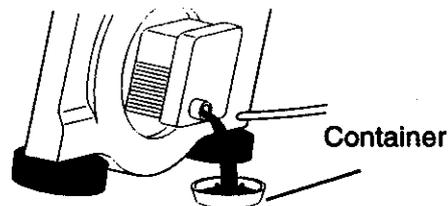
Change the oil after every 25 hours of operation or at least once a year if the lawn mower is not used for 25 hours in one year.

Check the crankcase oil level before starting the engine and after each five (5) hours of continuous use. Tighten oil plug securely each time you check the oil level.

TO CHANGE ENGINE OIL

NOTE: Before tipping lawn mower to drain oil, drain fuel tank by running engine until fuel tank is empty.

- Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with spark plug.
- Remove engine oil cap; lay aside on a clean surface.
- Tip lawn mower on its side and drain oil into a suitable container. Rock lawn mower back and forth to remove any oil trapped inside of engine.
- Wipe off any spilled oil on lawn mower and on side of engine.
- Fill engine with oil. Fill only to the "FULL" line on the dipstick. DO NOT OVER FILL.
- Replace engine oil cap.
- Reconnect spark plug wire to spark plug.



AIR FILTER

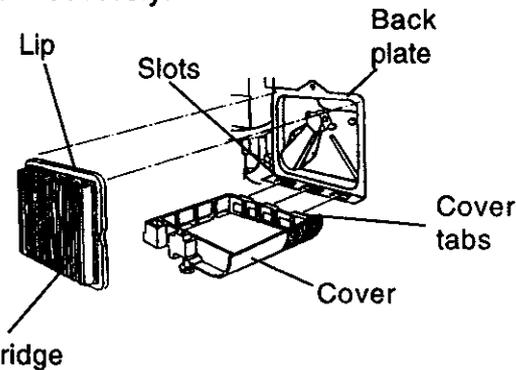
Your engine will not run properly and may be damaged by using a dirty air filter. Replace the air filter every year, more often if you mow in very dusty, dirty conditions. Do not wash air filter.

TO CLEAN AIR FILTER

- Loosen screw and tilt cover to remove.
- Carefully remove cartridge.
- Clean by gently tapping on a flat surface. If very dirty, replace cartridge.

CAUTION: Petroleum solvents, such as kerosene, are not to be used to clean cartridge. They may cause deterioration of the cartridge. Do not oil cartridge. Do not use pressurized air to clean or dry cartridge.

- Install cartridge, then replace cover making sure the tabs are aligned with the slots in the back plate. Fasten screw securely.



MUFFLER

Inspect and replace corroded muffler as it could create a fire hazard and/or damage.

SPARK PLUG

Change your spark plug each year to make your engine start easier and run better. Set spark plug gap at .030 inch.

CLEANING

IMPORTANT: For best performance, keep mower housing free of built-up grass and trash. Clean underside of mower housing after each use.

CAUTION: Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with the spark plug.

- Turn lawn mower on its side. Make sure air filter and carburetor are up. Clean the underside of your lawn mower by scraping to remove build-up of grass and trash.
- Clean engine often to keep trash from accumulating. A clogged engine runs hotter and shortens engine life.
- Keep finished surfaces and wheels free of all gasoline, oil, etc.
- We DO NOT recommend using a garden hose to clean lawn mower unless the electrical system, muffler, air filter and carburetor are covered to keep water out. Water in engine can result in shortened engine life.

SERVICE AND ADJUSTMENTS

CAUTION: Before performing any service or adjustments:

- Release control bar and stop engine.
- Make sure the blade and all moving parts have completely stopped.
- Disconnect spark plug wire from spark plug and place where it cannot come in contact with plug.

LAWN MOWER

TO ADJUST CUTTING HEIGHT

See "TO ADJUST CUTTING HEIGHT" in the Operation section of this manual.

REAR DEFLECTOR

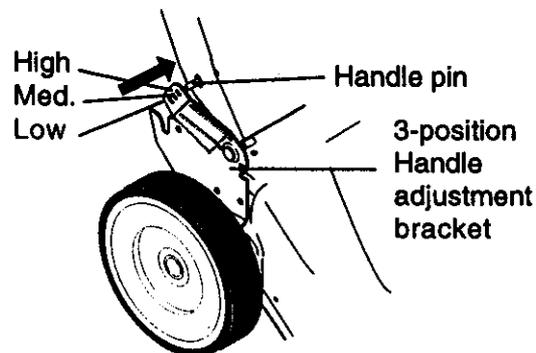
The rear deflector, attached between the rear wheels of your lawn mower, is provided to minimize the possibility that objects will be thrown out the rear of the lawn mower into the operator's mowing position.

If the rear deflector becomes damaged, it should be replaced.

TO ADJUST HANDLE

The handle on your lawn mower has three (3) height positions - adjust to height that suits you.

- Squeeze the bottom ends of lower handle towards each other until the pin in handle can be inserted into one of the three height adjustment holes.

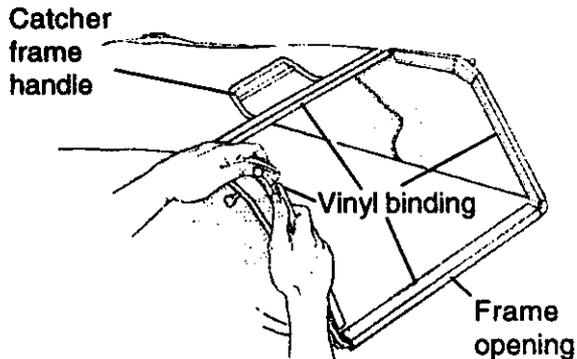


TO ASSEMBLE GRASS CATCHER

- Put grass catcher frame into grass bag with rigid part of bag on the bottom. Make sure the frame handle is outside of the bag top.
- Slip vinyl bindings over frame.

NOTE: If vinyl bindings are too stiff, hold them in warm water for a few minutes. If bag gets wet, let it dry before using.

CAUTION: Do not run your lawn mower without clipping deflector or approved grass catcher in place. Never attempt to operate the lawn mower with the rear door removed or propped open.



ENGINE

CARBURETOR

Your carburetor has a non-adjustable fixed main jet for mixture control. If your engine does not operate properly due to suspected carburetor problems, take your lawn mower to an authorized service center for repair or adjustment.

IMPORTANT: Never tamper with the engine governor, which is factory set for proper engine speed. Overspeeding the engine above the factory high speed setting can be dangerous. If you think the engine-governed high speed needs adjusting, contact your nearest authorized service center, which has proper equipment and experience to make any necessary adjustments.

ENGINE SPEED

Your engine speed has been factory set. Do not attempt to increase engine speed or it may result in personal injury. If you believe that the engine is running too fast or too slow, take your lawn mower to an authorized service center for repair and adjustment.

STORAGE

Immediately prepare your lawn mower for storage at the end of the season or if the unit will not be used for 30 days or more.

LAWN MOWER

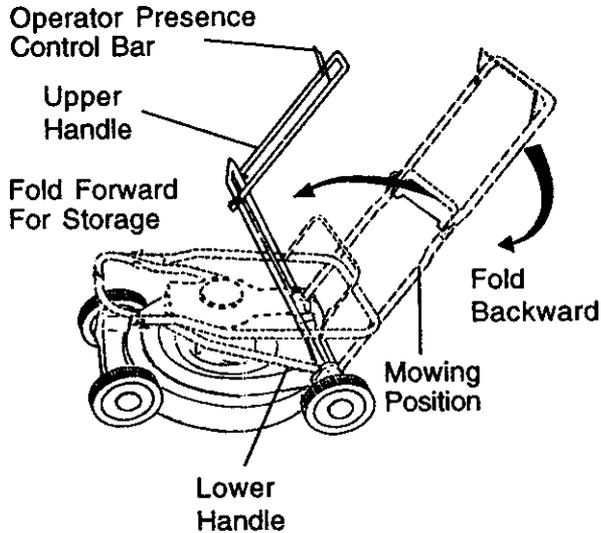
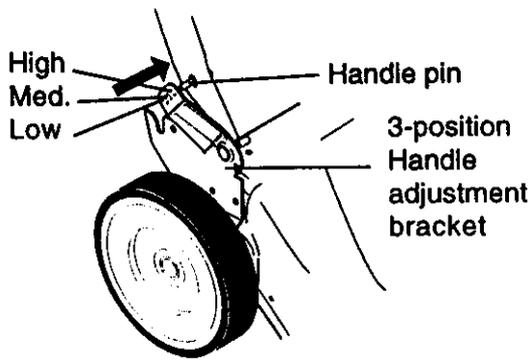
When lawn mower is to be stored for a period of time, clean it thoroughly, remove all dirt, grease, leaves, etc. Store in a clean, dry area.

- Clean entire lawn mower (See "CLEANING" in the Maintenance section of this manual).
- Lubricate as shown in the Maintenance section of this manual.
- Be sure that all nuts, bolts, screws, and pins are securely fastened. Inspect moving parts for damage, breakage and wear. Replace if necessary.
- Touch up all rusted or chipped paint surfaces; sand lightly before painting.

HANDLE

- You can fold your lawn mower handle for storage.
- Loosen the two (2) handle knobs on sides of the upper handle and allow handle to fold down to the rear.
- Squeeze the bottom ends of lower handle toward each other until pins in handle clear the brackets and pivot entire handle assembly forward and allow it to rest on mower.
- When setting up your handle from the storage position, the lower handle will require manually locking into the mowing position.

IMPORTANT: When folding the handle for storage or transportation, be sure to fold the handle as shown or you may damage the control cables.



ENGINE FUEL SYSTEM

IMPORTANT: It is important to prevent gum deposits from forming in essential fuel system parts such as carburetor, fuel filter, fuel hose, or tank during storage. Also, experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage.

- Drain the fuel tank.
- Start the engine and let it run until the fuel lines and carburetor are empty.

- Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.
- Use fresh fuel next season.

NOTE: Fuel stabilizer is an acceptable alternative in minimizing the formation of fuel gum deposits during storage. Add stabilizer to gasoline in fuel tank or storage container. Always follow the mix ratio found on stabilizer container. Run engine at least 10 minutes after adding stabilizer to allow the stabilizer to reach the carburetor. Do not drain the gas tank and carburetor if using fuel stabilizer.

ENGINE OIL

Drain oil (with engine warm) and replace with clean engine oil. (See "ENGINE" in the Maintenance section of this manual).

CYLINDER

- Remove spark plug.
- Pour one ounce (29 ml) of oil through spark plug hole into cylinder.
- Pull starter handle slowly a few times to distribute oil.
- Replace with new spark plug.

OTHER

- Do not store gasoline from one season to another.
- Replace your gasoline can if your can starts to rust. Rust and/or dirt in your gasoline will cause problems.
- If possible, store your unit indoors and cover it to give protection from dust and dirt.
- Cover your unit with a suitable protective cover that does not retain moisture. Do not use plastic. Plastic cannot breathe which allows condensation to form and will cause your unit to rust.

IMPORTANT: Never cover mower while engine and exhaust areas are still warm.

CAUTION: Never store the lawn mower with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION
Does not start	<ol style="list-style-type: none"> 1. Dirty air filter. 2. Out of fuel. 3. Stale fuel. 4. Water in fuel. 5. Spark plug wire is disconnected. 6. Bad spark plug. 7. Loose blade or broken blade adapter. 8. Control bar in released position. 9. Control bar defective. 	<ol style="list-style-type: none"> 1. Clean/replace air filter. 2. Fill fuel tank. 3. Drain tank and refill with fresh clean fuel. 4. Drain fuel tank and carburetor and refill tank with fresh gasoline. 5. Connect wire to plug. 6. Replace spark plug. 7. Tighten blade bolt or replace blade adapter. 8. Depress control bar to handle. 9. Replace control bar.
Loss of power	<ol style="list-style-type: none"> 1. Rear of lawn mower housing or cutting blade dragging in heavy grass. 2. Cutting too much grass. 3. Dirty air filter. 4. Buildup of grass, leaves, and trash under mower. 5. Too much oil in engine. 6. Walking speed too fast. 	<ol style="list-style-type: none"> 1. Set to "Higher Cut" position. 2. Set to "Higher Cut" position. 3. Clean/replace air filter. 4. Clean underside of mower housing. 5. Check oil level. 6. Cut at slower walking speed.
Poor cut – uneven	<ol style="list-style-type: none"> 1. Worn, bent or loose blade. 2. Wheel heights uneven. 3. Buildup of grass, leaves and trash under mower. 	<ol style="list-style-type: none"> 1. Replace blade. Tighten blade bolt. 2. Set all wheels at same height 3. Clean underside of mower housing.

TROUBLESHOOTING CHART

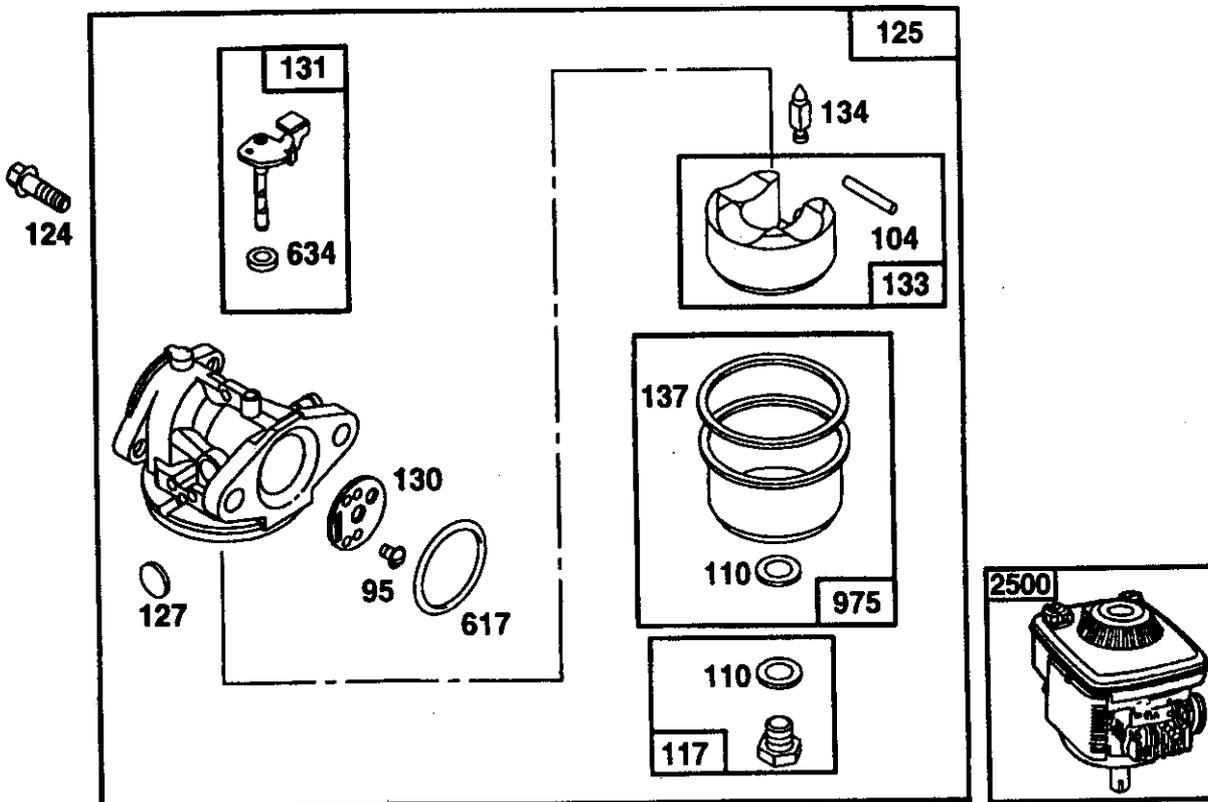
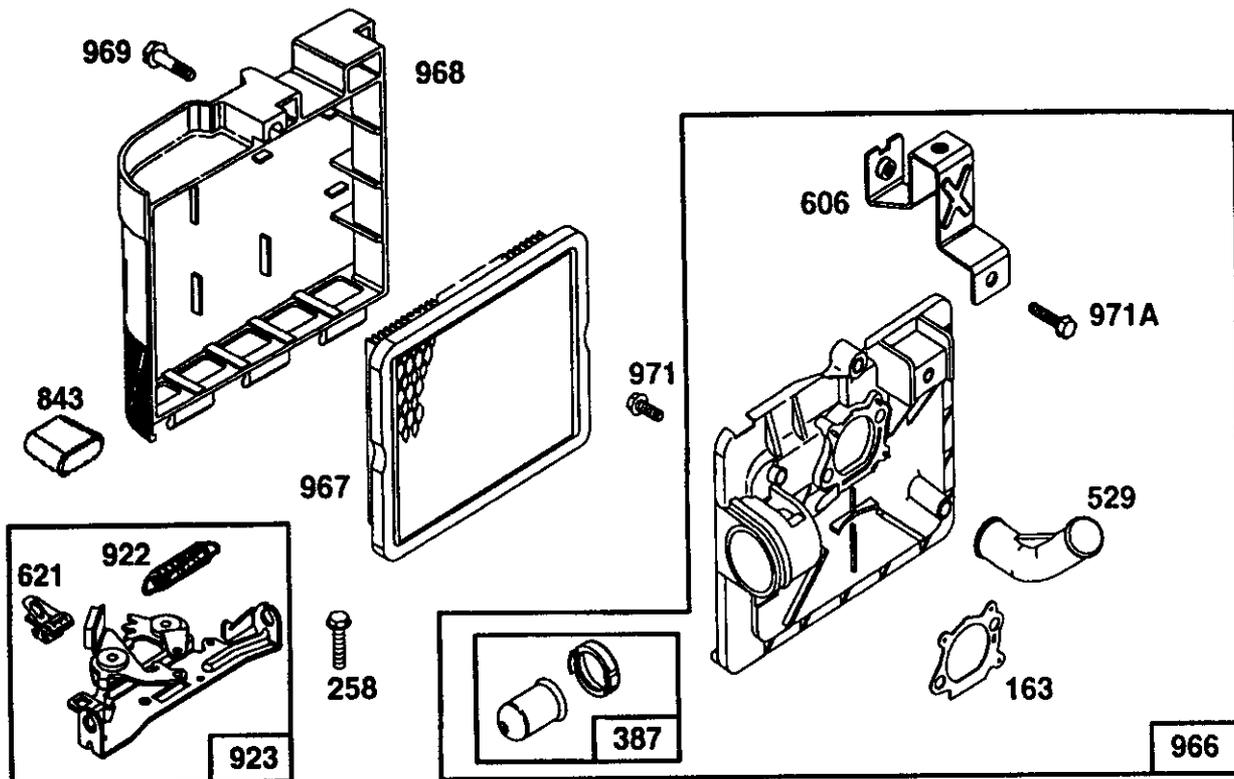
PROBLEM	CAUSE	CORRECTION
Excessive vibration	<ol style="list-style-type: none"> 1. Worn, bent or loose blade. 2. Bent engine crankshaft. 	<ol style="list-style-type: none"> 1. Replace blade. Tighten blade bolt. 2. Contact an authorized service center.
Starter rope hard to pull	<ol style="list-style-type: none"> 1. Engine flywheel brake is on when control bar is released. 2. Bent engine crankshaft. 3. Blade adapter broken. 4. Blade dragging in grass. 	<ol style="list-style-type: none"> 1. Depress control bar to upper handle before pulling starter rope. 2. Contact an authorized service center. 3. Replace blade adapter. 4. Move lawn mower to cut grass or to hard surface
Grass catcher not filling (if so equipped)	<ol style="list-style-type: none"> 1. Cutting height too low. 2. Lift on blade worn off. 3. Catcher not venting air. 	<ol style="list-style-type: none"> 1. Raise cutting height. 2. Replace blade. 3. Clean grass catcher.
Hard to push	<ol style="list-style-type: none"> 1. Grass is too high or wheel height is too low. 2. Rear of lawn mower housing or blade dragging in grass. 3. Grass catcher too full. 4. Handle height position not right for you. 	<ol style="list-style-type: none"> 1. Raise cutting height. 2. Raise rear of lawn mower housing one (1) setting higher. 3. Empty grass catcher. 4. Adjust handle height to suit.

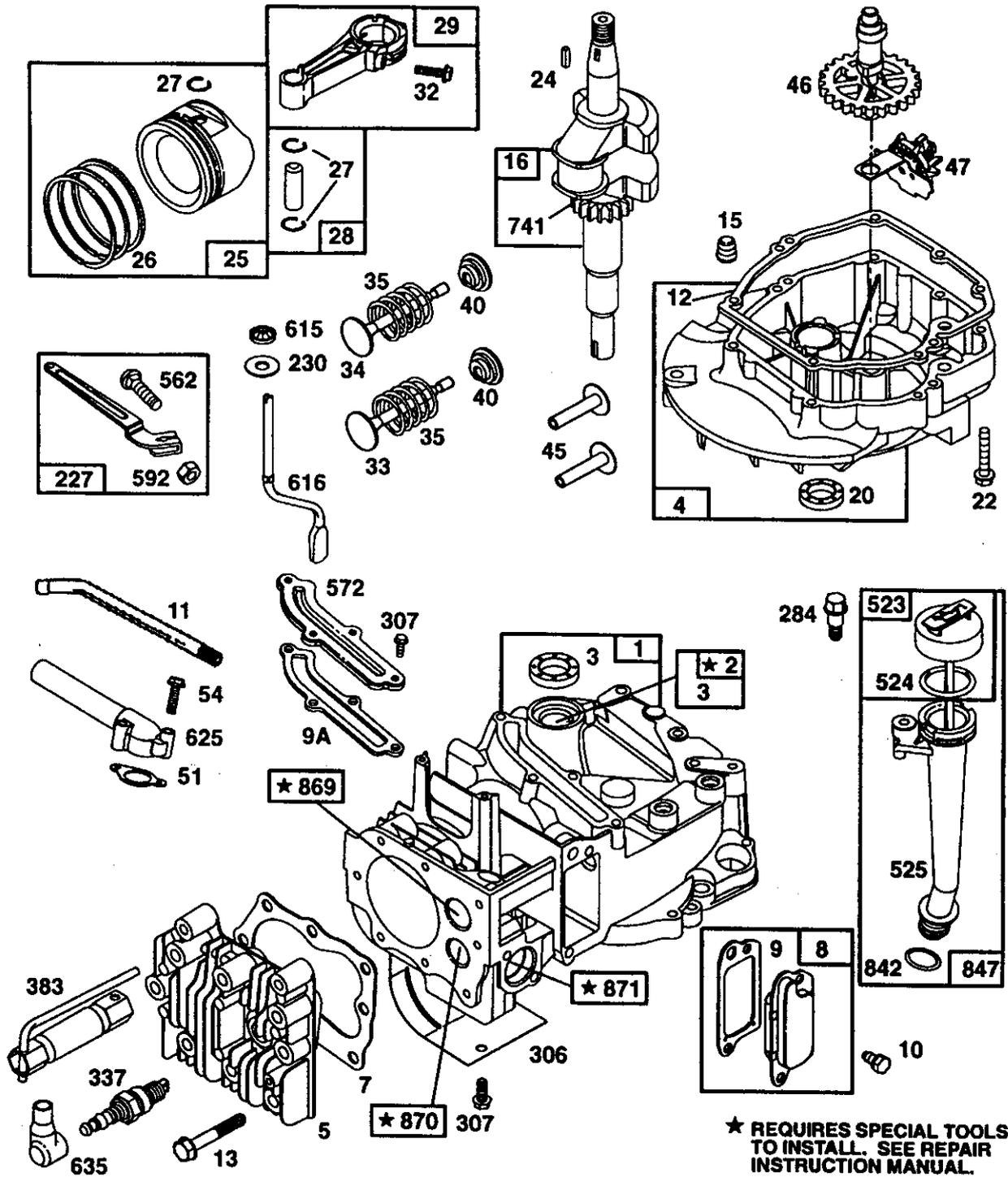
CRAFTSMAN ROTARY LAWN MOWER -- MODEL NO. 917.389391

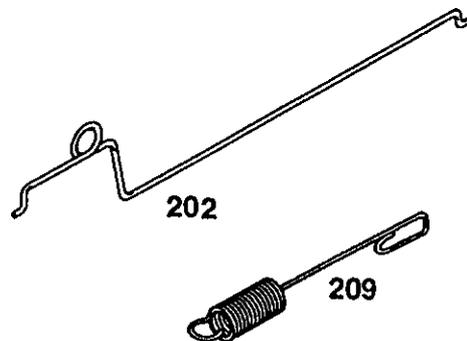
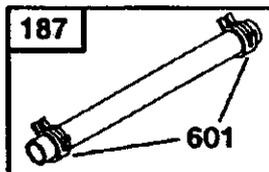
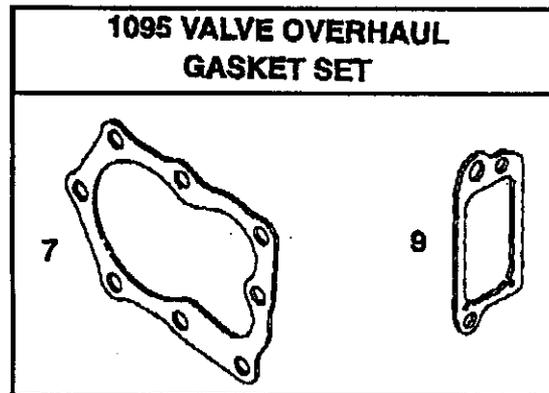
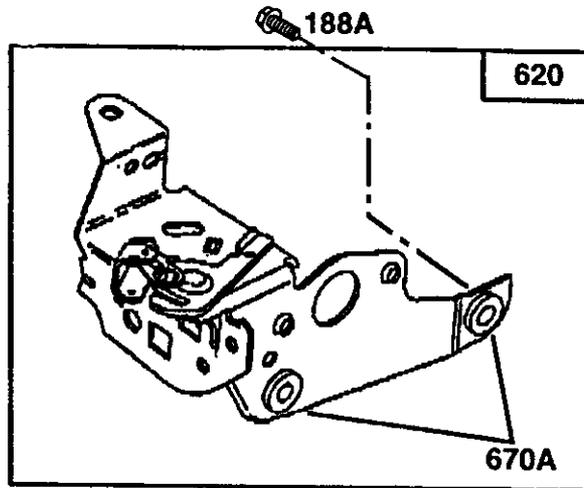
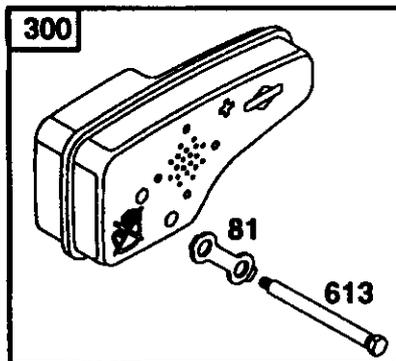
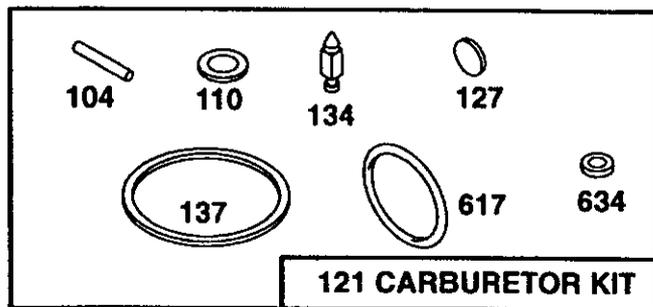
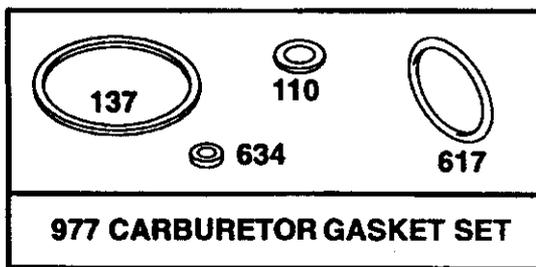
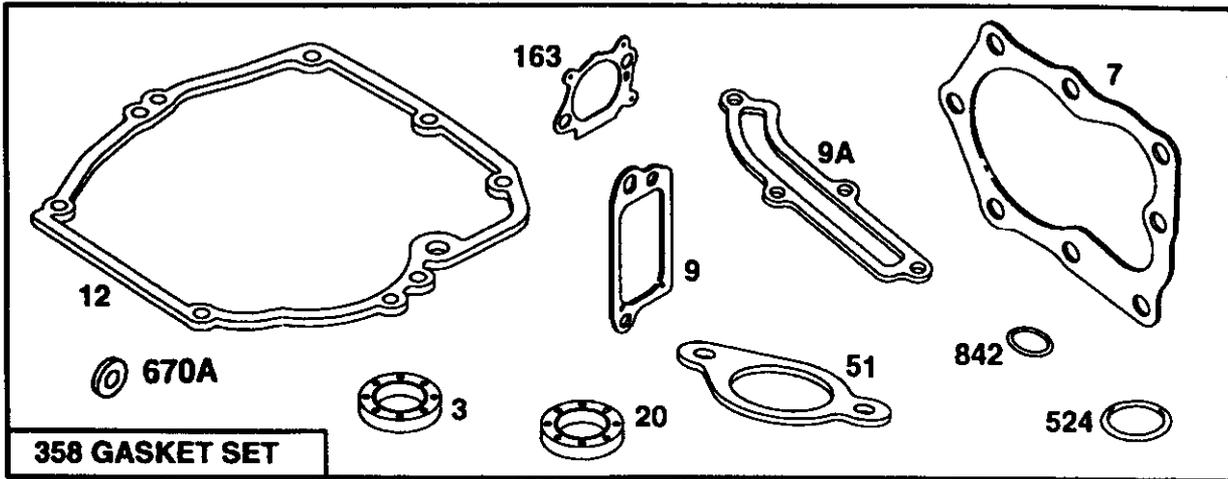
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	131696	Control Bar	34	167130X004	Axle Arm Assembly - LR
2	166860X479	Upper Handle	35	166785	Locknut 5/16-18
3	161105X479	Lower Handle	36	160828	Shoulder Bolt 5/16-18
4	132001	Rope Guide	37	151162	Wheel Assembly
5	63601	Locknut 1/4-20	38	164362	Shoulder Bolt
6	131959	Handle Bolt	39	83923	Flanged Locknut
7	66426	Wire Tie	40	77400	Hubcap
8	74780512	Hex Bolt 5/16-18 x 3/4	41	88652	Hinge Screw
9	154132	Hinge Bracket	42	165766	Spring (LH)
10	165754	Mulcher Door	43	165767	Spring (RH)
11	162778	Engine Zone Control Cable	44	165912	Door Bolt
12	750097	Hex Washer Head Screw #10-24 x 1/2	45	150406	Hex Head Thread Rolling Screw 3/8-16 x 1
13	86899X004	Up-Stop Bracket	46	85463	Danger Decal
14	136376	Handle Knob	47	63124	Nut
15	51793	Hairpin Cotter	48	167131X004	Axle Arm Assembly - RR
16	147286	Hinge Rod	49	151161	Wheel
17	165946X479	Support Bracket	50	57143	Wave Washer
18	17600406	Screw	51	73990500	Nut
19	167132X004	Axle Arm Assembly - LF	52	166878	Housing Assembly (Incl. Ref. #17, 18 & 46)
20	167133X004	Axle Arm Assembly - RF	53	851084	Hex Head Screw 3/8-24 x 1-3/8 Grd. 8
21	165858	Rear Skirt	54	850263	Helical Lockwasher
22	168360X004	Selector Spring	55	851074	Hardened Washer
23	166875	Rear Door Assembly Kit (Incl. Springs)	56	165833	21" Blade
24	751153	Locknut 5/16-18	57	851514	Blade Adapter
25	166236X479	Handle Bracket Assembly (Left)	58	161551	Adjustment Bolt
26	166243x479	Handle Bracket Assembly (Right)	67	166113	Grass Bag
27	851856	Screw 1/4-20 x 3/8	68	165755	Catcher Frame
28	152124	Hinge Spring	70	-----	Engine - (See Breakdown)
29	160835X007	Wheel Adjusting Bracket - Front	--	161058	Briggs & Stratton 12H802-2675-E1
30	19112222	Spacer	--	171303	Warning Decal (Not Shown)
31	165760	Clip on Discharge Guard			Owner's Manual
33	87877	Selector Knob			

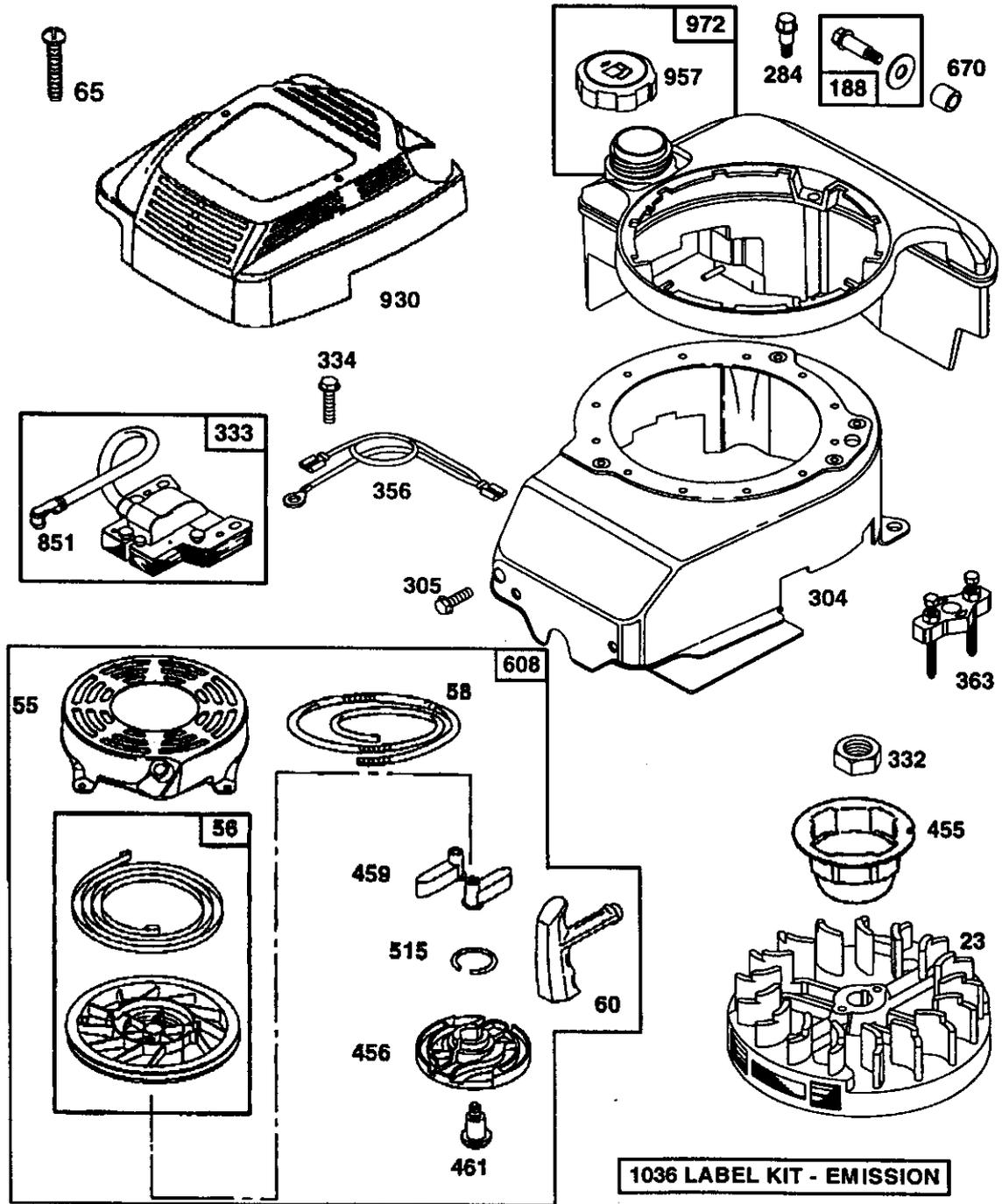
Available accessories not included with lawn mower:

--	71 33623	Gas Can (2.5 gal.)
--	71 33500	Fuel Stabilizer
--	71 33300	SAE 30W Oil (20 oz.)









CRAFTSMAN 4-CYCLE ENGINE

MODEL NUMBER 12H802-2675-E1

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	493260	Cylinder Assembly	55	4974420	Housing, Rewind Starter
2	399269	Bushing, Cylinder	56	498144	Pulley, Rewind Starter
3	299819	* Seal, Oil	58	280399	Rope, Rewind Starter (Cut To 88-5/8")
4	493279	Sump, Engine	60	281434	Grip, Starter Rope
5	214368	Head, Cylinder	65	94696	Screw, Phillips
7	272916	**** Gasket, Cylinder Head	81	223664	Lock, Muffler Screw
8	495786	Breather Assembly	95	94098	Screw, Round Head
9	272481	**** Gasket, Valve Cover	104	231371	** Pin, Float Hinge
9A	272238	* Gasket, Baffle Plate	110	---	*** Gasket, Sealing (Sold in Kit Only)
10	94650	Screw, Hex Head	117	494870	Jet, Main
11	231933	Tube, Breather	121	498260	Carburetor Kit
12	272198	* Gasket, Crankcase	124	94525	Screw, Carburetor Mounting
13	94547	Screw, Cylinder Head	125	498170	Carburetor
15	94720	Plug, Oil Drain	127	---	** Plug, Welch (Sold in Kit Only)
16	498565	Crankshaft	130	224908	Valve, Throttle
	94388	Timing Gear Key	131	493267	Shaft, Throttle 133 398187
20	399781	* Seal, Oil	134	398188	Float, Carburetor
22	94220	Screw, Hex Head	137	---	Valve, Inlet (Includes Seat)
	94612	Screw, Hex Head (Used in Hole Nearest Breather)	163	272653	*** Gasket, Bowl (Sold in Kit Only)
23	492177	Flywheel	187	492790	* Gasket, Air Cleaner
24	222698	Key, Flywheel	188	398540	Hose, Fuel
25	499429	Piston Assembly, Standard Size	188A	94644	Screw, Hex Head
	499430	Piston Assy. (.010" O.S.)	202	262579	Screw, Hex Head
	499431	Piston Assy. (.020" O.S.)	209	263044	Link, Governor
	499432	Piston Assy. (.030" O.S.)			Spring, Governor
26	499425	Ring Set, Piston, Standard Size			
	499426	Ring Set (.010" O.S.)			
	499427	Ring Set (.020" O.S.)			
	499428	Ring Set (.030" O.S.)			
27	263190	Lock, Piston Pin			* Included in Gasket Set (497316)
28	499423	Pin, Piston, Standard Size			** Included in Carburetor Kit (498260)
29	499424	Rod, Connecting			*** Included in both Carburetor Kit (498260), and Carburetor Gasket Set (498261)
32	94699	Screw, Connecting Rod			****Included in both Gasket Set (497316), and Valve overhaul Gasket Set (498528).
33	262651	Valve, Exhaust			
34	262652	Valve, Intake			
35	262224	Spring, Valve			
40	93312	Retainer, Valve Spring			
45	262204	Tappet, Valve			
46	498275	Gear, Cam			
47	493737	Slinger, Oil			
51	272199	* Gasket, Intake Elbow			
54	94526	Screw, Hex Head			

NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
227	492349	Lever, Governor			
230	67072	Washer, Thrust	635	66538	Elbow, Spark Plug
258	94512	Screw, Hex Head	670	280512	Spacer, Fuel Tank
284	94511	Screw, Hex Head	670A	493823	* Spacer, Bracket
300	497838	Muffler, Exhaust	741	262598	Gear, Timing
304	493293	Housing, Blower	842	280966	* Seal, O-Ring
305	94744	Screw, Sems	843	272616	Sleeve, Lever
306	224324	Shield, Cylinder	847	495263	Tube Assembly, Oil
307	94515	Screw, Hex Head	851	493880	Terminal, Ignition Cable
332	94877	Nut, Flywheel	869	213512	Seat, Intake Valve
333	802574	Armature, Magneto	870	213513	Seat, Exhaust Valve
334	94731	Screw, Sems	871	262001	Guide, Exhaust Valve
337	802592	Plug, Spark		63709	Guide, Intake Valve
356	497833	Wire, Ground	922	262640	Spring, Brake
358	497316	Gasket Set	923	493442	Brake Assembly
363	19069	Puller, Flywheel	930	497233	Guard, Finger
383	89838	Wrench, Spark Plug	957	397974	Cap, Fuel Tank
387	496115	Primer, Carburetor	966	496116	Base, Air Cleaner
455	225121	Cup, Starter	967	491588	Filter, Air
456	281503	Retainer, Starter	968	281340	Cover, Air Cleaner
459	281505	Pawl, Ratchet	969	94872	Screw, Hex Head
461	94943	Screw, Shoulder	971	94873	Screw, Hex Head
515	263073	Spring, Retainer	971A	94749	Screw, Hex Head
523	495264	Cap, Oil Filler	972	495224	Tank, Fuel
524	280393	* Seal, Filler Tube	975	493640	Bowl, Float
525	495265	Tube, Oil Fill	977	498261	Gasket Set, Carburetor
529	281299	Grommet	1036	499341	Label Kit, Emission
562	94852	Bolt, Governor Lever	1095	498258	Gasket Set, Valve
572	224328	Baffle, Cylinder			Overhaul
592	231082	Nut, Hex	2500	12J802-2915	Replacement Engine
601	93053	Clamp, Hose	—	498826	Replacement Shortblock
606	224815	Strap, Bracket			
608	497680	Starter, Rewind			
Includes:					RPM Settings: Low: 1900-2100; High: 3000-3200
	94904	Screw, Hex			
	94908	Nut, Hex	*		Included in Gasket Set (497316)
613	94231	Screw, Hex Head	**		Included in Carburetor Kit (498260)
615	94474	Fastener	***		Included in both Carburetor Kit (498260), and Carburetor Gasket Set (498261)
616	263175	Crank, Governor	****		Included in both Gasket Set (497316), and Valve overhaul Gasket Set (498528).
617	270344	*** Seal, Intake Elbow			
620	499135	Bracket, Carburetor			
621	396847	Switch, Stop			
625	497465	Tube, Fuel Intake			
634	---	*** Washer, Shaft (Sold in Kit Only)			

NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm

For in-home major brand repair service:

Call 24 hours a day, 7 days a week

1-800-4-MY-HOMESM (1-800-469-4663)

Para pedir servicio de reparación a domicilio

1-800-676-5811

In Canada for all your service and parts needs call

Au Canada pour tout le service ou les pièces

1-800-665-4455

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PartsDirectSM

1-800-366-PART (1-800-366-7278)

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1-800-659-7084

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1-800-488-1222

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1-800-827-6655

