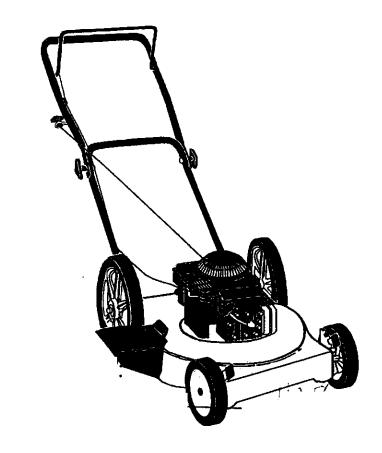
# Owner's Manual

# **CRAFTSMAN®**

# 5.0 HORSEPOWER 22" ECONOMY SIDE DISCHARGE ROTARY LAWN MOWER

Model No. **917.388230** 

- 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

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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 controls 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 you 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.

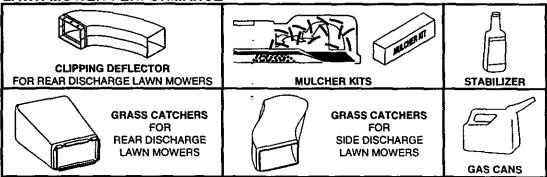
▲ CAUTION: Always disconnect spark plug wire and place wire where it cannot contact spark plug in order to prevent accidental starting when setting up, transporting, adjusting or making repairs. WARNING

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

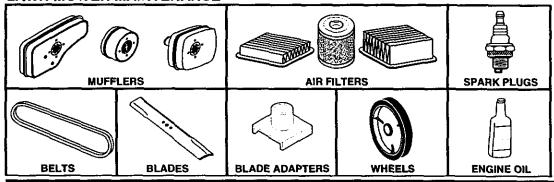
# **ACCESSORIES**

These accessories were available when this lawn mower was produced. They are 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 MAINTENANCE



#### **ASSEMBLY**

Read these instructions and this manual in its entirety before you attempt to assemble or operate your new lawn mower. Yournew lawn mower has been assembled at the factory with the exception of those parts left unassembled for shipping purposes. All parts such as nuts, washers, bolts, etc., necessary to complete the assembly have been placed in the parts bag. 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.

# 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.

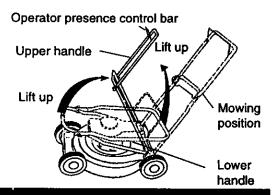
# HOW TO SET UP YOUR LAWN MOWER

#### TO UNFOLD HANDLE

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

- Raise handles until lower handle section locks into place in moving position.
- Remove protective padding, raise upper handle section into place on lower handle and tighten both handle knobs.
- Remove handle padding holding operator presence control bar to upper handle.

· Your lawn mower handle can be adjusted for your mowing comfort. Refer to "Adjust Handle" in the Service and Adjustment 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.











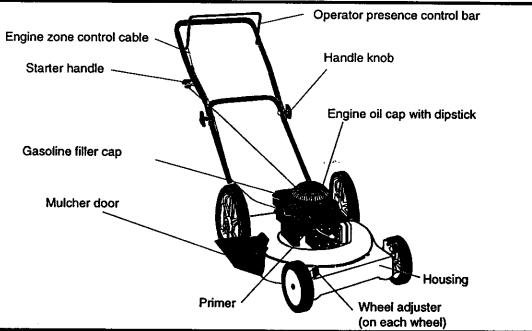




CAUTION ENGINE OR WARNING

ENGINE

DANGER, KEEP HANDS AND FEET AWAY



## 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. Mulcher - allows conversion to discharge or bagging operation.

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**

**ACAUTION:** 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 CUITING 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.

Lever Plate tab

Lower wheels for high cut



Raise wheels for low cut

#### **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.

- Use 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.

#### GAS

 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.



#### 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

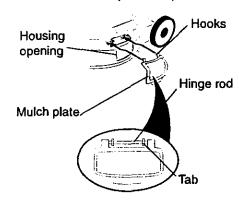
flood engine, wait a few minutes before attempting to start and do not repeat priming steps.

# TO CONVERT TO DISCHARGING MOWER

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

- Lift discharge guard and remove mulcher plate.
- Mower can now be used for side discharge or optional grass catcher can be attached.
- To return to mulching operation, simply reinstall mulcher plate as shown.

**CAUTION:** Do not run your lawn mower without discharge guard, approved grass catcher or mulcher plate in place.



#### **MOWING TIPS**

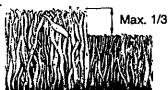
- Under certain conditions, such as very tall grass, it may be necessary to raise the height of cut to reduce pushing effort and to keep from overloading the engine and leaving clumps of grass clippings. It may also be necessary to reduce ground speed and/or run the lawn mower over the area a second 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.
- For side discharge lawn mowers, cutting in a counter-clockwise direction, starting at the outside of the area to be cut, spreads grass clippings more evenly and puts less load on the engine. To keep clippings off of walkways, flower beds, etc., make the first cuts in a clockwise direction.

- 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. 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 by overlapping previously cut path and mow slowly.
- 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



## **MAINTENANCE**

	MAINTENANCE SCHEDU	JLE		/	HUSEUS	OURS	PS SON	RAGE		
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Г	Check for Loose Fasteners	V				1				
	Clean/Inspect Grass Catcher (If Equipped)	~	1		_	~				
lм	Clean Lawn Mower		1			<b>V</b>				
lö.	Clean Under Drive Cover (Power-Propelled Mowers)			1				1 T		
E	Check drive belt/pulleys (Power-Propelled Mowers)				~					
R	Check/Sharpen/Replace Blade				V 3		T			
	Lubrication Chart	T			V	1		ТТ		
L	Clean Battery/Recharge (Electric Start Mowers)				V_	<b>V</b> 4				
E	Check Engine Oil Level	1			]					
ĺÑ	Change Engine Oil				1,2				$\neg$	
IG	Clean Air Filter				1/2					
	Inspect Muffler				<b>V</b>					
N	Clean or Replace Spark Plug				<b>V</b>					
E	Replace Air Filter Paper Cartridge	•	i		<b>√</b> 2		ı	1 1	1	

- 1 Change more often when operating under a heavy load or in high ambient temperatures.
- 2 Service more often when operating in dirty or dusty conditions.
- 3 Replace blades more often when mowing in sandy soit.
- 4 Charge 48 hours at end of season.

#### **GENERAL RECOMMENDATIONS**

The warranty on this lawn mower does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain mower as instructed in this manual. Some adjustments will need to be made periodically to properly maintain your unit. All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

- Once a year, replace the spark plug, clean or replace air filter element and check blade for wear. A new spark plug and clean/new air filter element assures proper air-fuel mixture and helps your engine run better and last longer.
- Follow the maintenance schedule in this manual.

#### **BEFORE EACH USE**

- Check engine oil level.
- Check for loose fasteners.

#### LUBRICATION

Keep unit well lubricated (See "LUBRICATION CHART").

# 2 Engine oil 1 Handle bracket mounting pin

- ① Spray lubricante
- Refer to MAINTINANCE "ENGINE" SECTION.

IMPORTANT: Do not oil or grease plastic wheel bearings. Viscous lubricants will attract dust and dirt that will shorten the life of the self lubricating bearings. If you feel they must be lubricated, use only a dry, powdered graphite type lubricant sparingly.

# PRODUCT SPECIFICATIONS

MODEL NUMBER	917.388230
SERIAL NUMBER	
DATE OF PURCHASE	
HORSEPOWER:	5.0
DISPLACEMENT:	11.5 CU. IN.
GASOLINE CAPACITY/ TYPE:	1.5 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: .004008
	EXHAUST: .004008
SOLID STATE IGNITION	
AIR GAP:	.0125 IN.
BLADE BOLT TORQUE:	35-40 FT. LBS.

#### **LAWN MOWER**

provided above.

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 counterclockwise.

 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.

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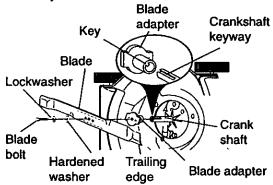
**IMPORTANT**: Blade bolt is grade 8 heat treated.

#### 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**

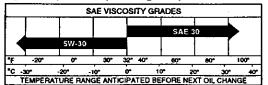
(If purchased as an accessory)

- 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, SG or SH. 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 orat 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 as shown 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 CHANGE AIR FILTER

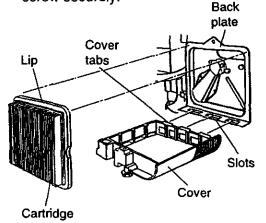
- · Loosen screw and tilt cover to remove.
- · Carefully remove cartridge.
- Clean by gently tapping on a flat surface. If very dirty, replace cartridge.

**ACAUTION:** Petroleum solvents, such as kerosene, are not to be used to clean

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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, kiip mower housing free of built-grass and trash. Clean the underside of your mower 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

**ACAUTION:** Before performing any service and 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 mower, is provided to minimize the possibility that objects will be thrown out of the rear of the mower into the operator's mowing position. If the deflector becomes damaged, it should be replaced.

#### **DISCHARGE GUARD**

The discharge guard, attached to the discharge opening of your lawn mower, is provided to prevent the possibility of injury resulting from objects being thrown out of the discharge opening into the operator mowing position. If the discharge guard becomes damaged, it should be replaced.

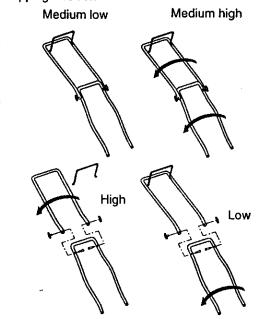
#### **TO ADJUST HANDLE**

Your lawn mower handle can be raised or lowered for your mowing comfort. Four (4) positions are available: high, medium high, medium low and low. Handles are shipped mounted in the medium low position.

- To change from medium low to medium high position, the upper and lower handle sections will have to be turned over.
- · Remove the cable clips.
- Remove the controls and operator presence control bar from the upper handle.
- Remove the starter rope guide from the upper handle.
- Remove hairpin cotters.
- Disconnect the lower handle from the handle brackets.
- Turn the handle over and reassemble the hairpin cotters that have been removed.

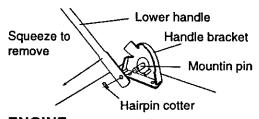
- Reassemble the starter rope guide.
- Reassemble the controls and the operator presence control bar to the upper handle.

Shipping Position



ACAUTION: The operator presence control bar must pivot freely to permit blade/ brake engagement when control bar is released. Do not overtighten the fasteners holding the controls to the upper handle.

- To change from medium low to high position only the upper handle section will have to be turned over.
- To change from medium low to low position, only the lower handle section will have to be turned over.



# 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 engine is running too fast or too slow, take your mower to an authorized service center for repair and adjustment.

#### **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 and/or adjustment.

IMPORTANT: Never tamper with the engine governor, which is factory set for the proper engine speed. Overspeeding the engine above the factory high speed scan 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.

## 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.

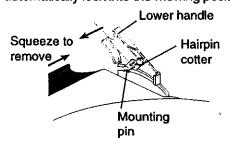
#### **HANDLE**

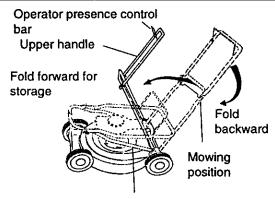
You can fold your lawn mower handle for storage.

- Squeeze the bottom ends of the lower handle toward each other until the lower handle clears the handle bracket, then move handle forward.
- Loosen upper handle mounting bolts enough to allow upper handle to be folded back.

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

 When setting up your handle from the storage position, the lower handle will automatically lock into the mowing position.





Lower handle

#### 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.

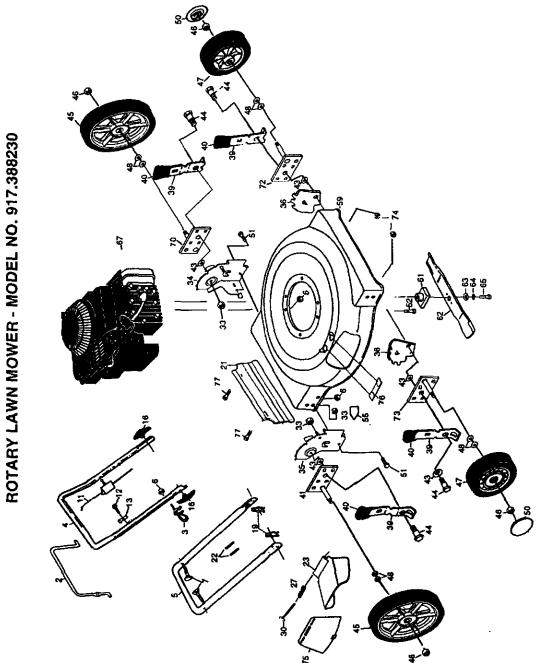
#### TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION
Does not start	Dirty air filter.	Clean/replace air filter.
	Out of fuel.	• Fill fuel tank.
	Stale fuel.	Drain tank and refill with fresh clean fuel.
	Water in fuel.	<ul> <li>Drain fuel tank and carburetor and refill tank with fresh gasoline.</li> </ul>
	<ul> <li>Spark plug wire is disconnected.</li> </ul>	Connect wire to plug.
	Bad spark plug.	Replace spark plug.
	<ul> <li>Loose blade or broken blade adapter.</li> </ul>	Tighten blade bolt or replace blade adapter.
	<ul> <li>Control bar in released position.</li> </ul>	Depress control bar to handle.
	Control bar defective.	Replace control bar.

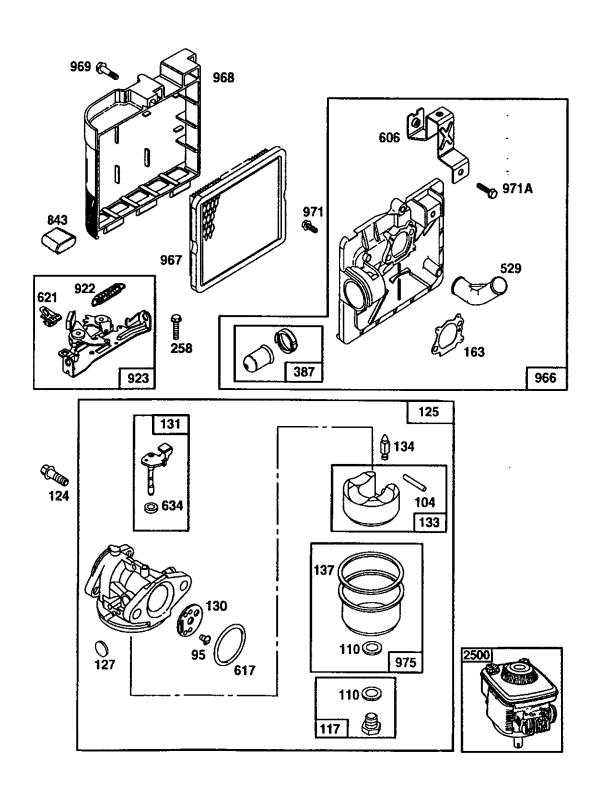
## TROUBLESHOOTING CHART

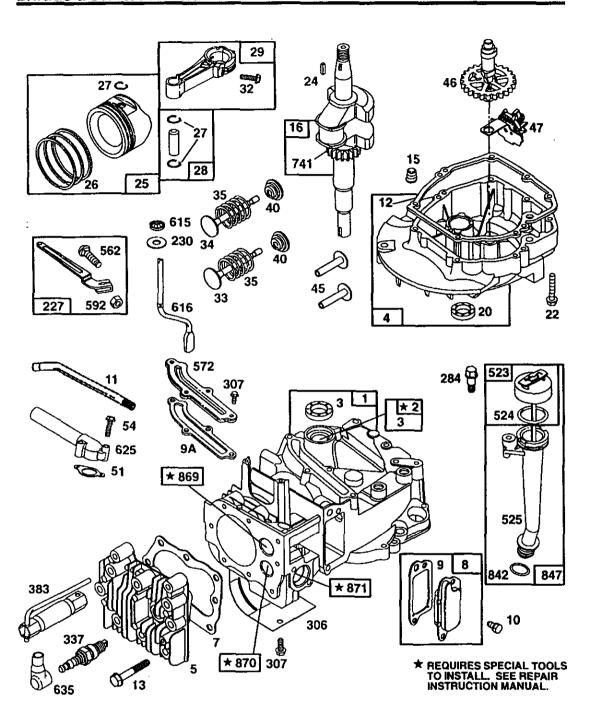
PROBLEM	CAUSE	CORRECTION
Loss of power	Rear of lawn mower housing or cutting blade dragging in heavy grass.	Set to "Higher Cut" position.
	Cutting too much grass.	Set to "Higher Cut"     position.
	Dirty air filter.     Buildup of grass, leaves,	Clean/replace air filter.     Clean underside of mower
	and trash under mower.  Too much oil in engine.	housing.  • Check oil level.
	Walking speed too fast.	Cut at slower walking speed.
Poor cut – uneven	Worn, bent or loose blade.	Replace blade. Tighten     blade bolt.
	Wheel heights uneven.	Set all wheels at same     height
	Buildup of grass, leaves and trash under mower.	Clean underside of mower housing.
Excessive vibration	Worn, bent or loose blade.	Replace blade. Tighten blade bolt.
	Bent engine crankshaft.	Contact an authorized service center.
Starter rope hard to pull	Engine flywheel brake is on when control bar is released.	Depress control bar to upper handle before pulling starter rope.
	Bent engine crankshaft.	Contact an authorized service center.
	<ul><li>Blade adapter broken.</li><li>Blade dragging in grass.</li></ul>	Replace blade adapter.     Move lawn mower to cut grass or to hard surface
Grass catcher not filling (if so	Cutting height too low.     Lift on blade worn off.	Raise cutting height.     Replace blade.
equipped)	Catcher not venting air.	Clean grass catcher.
Hard to push	Grass is too high or wheel height is too low.	Raise cutting height.
	<ul> <li>Rear of lawn mower housing or blade dragging in grass.</li> </ul>	<ul> <li>Raise rear of lawn mower housing one (1) setting higher.</li> </ul>
	<ul> <li>Grass catcher too full.</li> <li>Handle height position not right for you.</li> </ul>	<ul><li>Empty grass catcher.</li><li>Adjust handle height to suit.</li></ul>

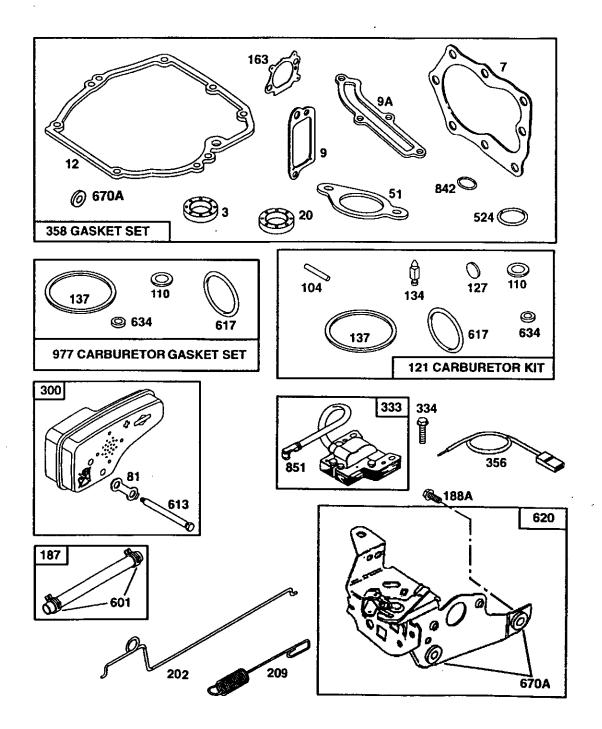
# **SERVICE NOTES**

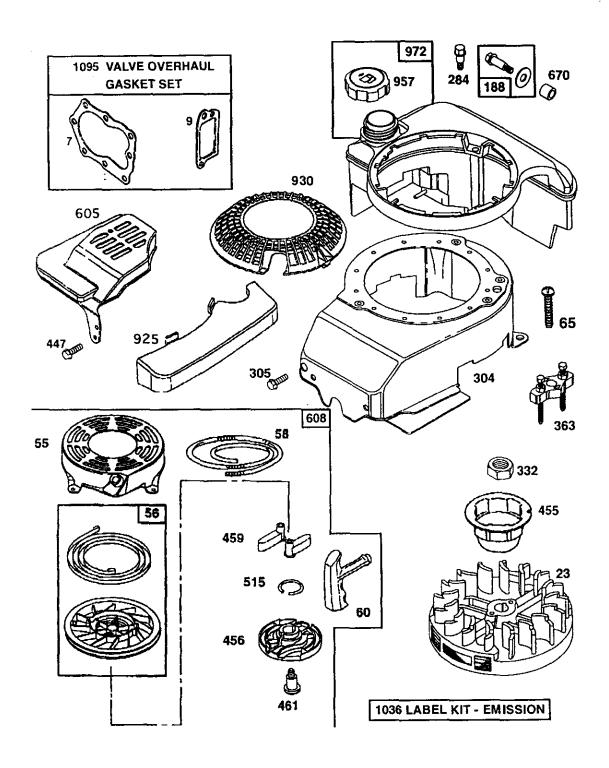


DESCRIPTION	Locknut 1/16-18	Wheel Assembly (Front)	Washer	Hubcap	Hex Head Bolt 5/16-18 x 3/4	Hex Head Thread Rolling Screw 3/8-16 x 1	Danger Decal	Lawn Mower Housing (Inct. Key Nos. 55)	Blade Adapter	22" Blade	Hardened Washer	Helical Lockwasher 3/8	Control Doc 100 J v 4.2/8 (Grd 9)	Sciew nex nead Wo-24 x 1-00 (old: 0)	Engine - Briggs & Stratton 12H802	Axle Arm Assem.(LR)	Axle Arm Assm. ((LF)	Axle Arm Assm. (RF)	Nit	Dieta Matahar	Plate: Mulcher	Cilp. Closedol	Hex ma 1/4 octew	Owner's Manual (English/Spanish)	Warning Decal (Not shown)			Available accessories not included with lawir mower. 71 33623 (Sax Can (2.5 dal.)	Fuel Stabilizer	SAE 30W Oil (20 oz.)	Grass Catcher	
KEY PART NO. NO	ω,		-,	_	_	52 150406	55 85463	59 161345	_		_		1000000	65 651084	•	70 167130X004	72 167132X004	73 167133X004		•	75 150830	- 1	// /4/60412	166865	161058			Available accessories not 71 33623	71 33500	71,33000	33076	
DESCRIPTION	Control Bar	Rope Guide	Upper Handle	Lower Handle	1 ocknit 1/4.20	Localis Doll E/16.18	Carine Zone Control Cable	Compared Country Capacity 410,04 v 4/0	THE OFFICE PERCHANGE TO SET A 112	Up-Stop Bracket	Handle Knob	Hairpin Coller	Rea Deflector	Wire Tie	Discharge Guard	Total Octano		Hinge Hod	Lockful 5/16-18	Wheel Bracket Support (Left)	Wheel Bracket Support (Right)	Wheel Bracket Adjuster	Selector Spring	Selector Knob	Axle Arm Assembly (RR)	Washer	Shoulder Boit	Wheel Assembly (Rear)				
KEY PART NO. NO	2 86902	3 132001	4 160834X479	5 160609X479	6 63601																					43 19112222						









KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
					223 1,4,1
1	493260	Cylinder Assembly	46	498275	Gear, Cam
2	293708	Bushing, Cylinder	47	493737	Slinger, Oil
3	299819	* Seal, Oil	51	272199	<ul> <li>Gasket, Intake Elbow</li> </ul>
4	493279	Sump, Engine	54	94526	Screw, Hex Head
5	214368	Head, Cylinder	55	497442	Housing, Rewind Starter
7	272916	**** Gasket, Cylinder Head	56	498144	Pulley, Rewind Starter
8	495786	Breather Assembly	58	280399	Rope, Rewind Starter
9	272481	**** Gasket, Valve Cover			(Cut To 88-5/8")
9A	272238	* Gasket, Baffle Plate	60	281434	Grip, Starter Rope
10	94650	Screw, Hex Head	65	94696	Screw, Phillips
11	231933	Tube, Breather	81	223664	Lock, Muffler Screw
12	272198	Gasket, Crankcase	95	94098	Screw, Round Head
13	94547	Screw, Cylinder Head	104	231371	** Pin, Float Hinge
15	94880	Plug, Oil Drain	110		*** Gasket, Sealing (Sold in
16	498565	Crankshaft			Kit Only)
-00	94388	Timing Gear Key	117	494870	Jet, Main
20	399781	* Seal, Oil	121	498260	Carburetor Kit
22	94220	Screw, Hex Head	124	94840	Screw, Carburetor
	94612	Screw, Hex Head	405		Mounting
		(Used in Hole Nearest	125	498170	Carburetor
23	492177	Breather) Flywheel	127		** Plug, Welch (Sold in Kit
23 24	222698	Key, Flywheel	400	004000	Only)
24 25	499429	Piston Assembly,	130	224908	Valve, Throttle
23	499429	Standard Size	131	493267	Shaft, Throttle
	499430	Piston Assy. (.010" O.S.)	133 134	398187 398188	Float, Carburetor
	499431	Piston Assy. (.020" O.S.)	134	390100	Valve, Inlet (Includes
	499432	Piston Assy. (.030" O.S.)	137		Seat) *** Gasket, Bowl (Sold in Kit
	700702	1 Islan 7.009. (.000 O.D.)	137		Only)
26	499425	Ring Set, Piston,	163	272653	* Gasket, Air Cleaner
	733720	Standard Size	187	298049	Hose, Fuel
	499426	Ring Set (.010" O.S.)	188	398540	Screw, Hex Head
	499427	Ring Set (.020" O.S.)	188A	94644	Screw, Hex Head
	499428	Ring Set (.030" O.S.)	202	262579	Link, Governor
27	263190	Lock, Piston Pin	209	263044	Spring, Governor
28	499423	Pin, Piston, Standard	200	200044	Opinig, Governor
		Size	•	Included in Ga	asket Set (497316)
29	499424	Rod, Connecting,			
		Standard Size	**	Included in Ca	arburetor Kit (498260)
32	94699	Screw, Connecting Rod			
33	262651	Valve, Exhaust	***	included in bo	oth Carburetor Kit (498260),
34	262652	Valve, Intake			or Gasket Set (498261)
35	262224	Spring, Valve			· === · ,
40	93312	Retainer, Valve Spring	****Inc	luded in both G	asket Set (497316),
45	262204	Tappet, Valve			and Valve overhaul
		• •		Gasket Set (4	
				•	•

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

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
110.	110.	DESCRIPTION	110.	110.	DESCRIPTION
227	492349	Lever, Governor	635	66538	Elbow, Spark Plug
230	67072	Washer, Thrust	670	280512	Spacer, Fuel Tank
258	94512	Screw, Hex Head	670A	493823	* Spacer, Bracket
284	94511	Screw, Hex Head	741	262598	Gear, Timing
300	497838	Muffler, Exhaust	842	280966	* Seal, O-Ring
304	493293	Housing, Blower	843	272616	Sleeve, Lever
305	94744	Screw, Sems	847	495263	Tube Assembly, Oil
306	224324	Shield, Cylinder	851	493880	Terminal, Ignition Cable
307	94515	Screw, Hex Head	869	213512	Seat, Intake Valve
332	94877	Nut, Flywheel	870	213513	Seat, Exhaust Valve
333	802574	Armature, Magneto	871	262001	Guide, Exhaust Valve
334	94731	Screw, Sems	•	63709	Guide, Intake Valve
337	802592	Plug, Spark	922	262640	Spring, Brake
356	497833	Wire, Ground	923	493442	Brake Assembly
358	497316	Gasket Set	925	281145	Cover, Linkage
363	19069	Puller, Flywheel	930	281136	Guard, Finger
383	89838	Wrench, Spark Plug	957	397974	Cap, Fuel Tank
387	496115	Primer, Carburetor	966	496116	Base, Air Cleaner
447	95013	Screw, Hex	967	491588	Filter, Air
455	225121	Cup, Starter	968	281340	Cover, Air Cleaner
456	281503	Retainer, Starter	969	94872	Screw, Hex Head
459	281505	Pawl, Rachet	3971	94873	Screw, Hex Head
461	94943	Screw, Shoulder	971A	94749	Screw, Hex Head
515	263073	Spring, Retainer	972	495224	Tank, Fuel
523	495264	Cap, Oil Filler	975	493640	Bowl, Float
524	280393	* Seal, Filler Tube	977	498261	Gasket Set, Carburetor
525	495265	Tube, Oil Fill	1036	499341	Label Kit, Emission
529	281299	Grommet	1095	498258	Gasket Set, Valve
562	94852	Bolt, Governor Lever			Overhaul
572	224328	Baffle, Cylinder	2500	12J802-2915	Replacement Engine
592	231082	Nut, Hex		498826	Replacement Shortblock
601	93053	Clamp, Hose			
605	225103	Cover, Control		RPM Settings:	Low: 1900-2100; High:
606	224815	Strap, Bracket		. 3	3000-3200
608	497680	Starter, Rewind			- 100 1-10
Include	es:	,	•	Included in Gasket	Set (497316)
	94904	Screw, Hex			
	94908	Nut, Hex	**	Included in Carbure	etor Kit (498260)
613	94231	Screw, Hex Head			` ,
615	94474	Fastener	***	Included in both Ca	arburetor Kit (498260),
616	263175	Crank, Governor		and Carburetor Ga	sket Set (498261)
617	270344	*** Seal, Intake Elbow			• •
620	499835	Bracket, Carburetor	****		asket Set (497316),
621	396847	Switch, Stop		Set (497316) and \	/alve overhaul
625	497465	Tube, Fuel Intake		Gasket Set (49852	8).
634	• • •	*** Washer, Shaft (Sold in		-	·
		Kit Only)	NOTE		ensions given in U.S. inches
				1 inch = 25.4 mm	

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- Product Type
  - Part Number
- Model Number Part Description











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