

Owner's Manual

1621

CRAFTSMAN®

03027

ROTARY LAWN MOWER

5.0 Horsepower

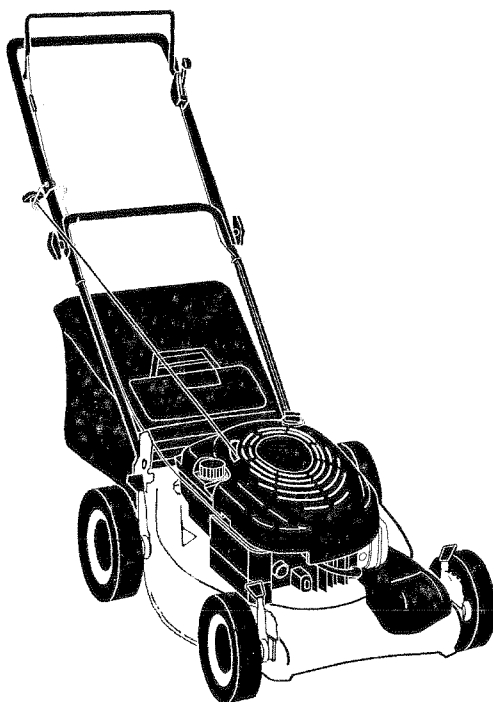
Power-Propelled

21" Rear Discharge

FILE COPY

Model No.

144.362292



CAUTION:

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

Harsco Canada, Inc., Toronto, Ontario M5B 2B8

TABLE OF CONTENTS

Warranty	2	Product Specifications	10
Safety Rules	2-4	Service and Adjustments.....	12-13
Assembly/Pre-Operation	4	Storage.....	14-15
Operation.....	5-8	Troubleshooting	15-16
Maintenance Schedule.....	9	Repair Parts.....	17-25
Maintenance	9-12	Sears Service	Back Cover

WARRANTY

LIMITED TWO YEAR WARRANTY ON CRAFTSMAN POWER MOWER

For Two years from date of purchase Sears Canada, Inc. will repair or replace at Sears option free of charge parts which are defective as a result of material or workmanship.

COMMERCIAL OR RENTAL USE:

Warranty on Power Mower (Gas) will be ninety (90) days from date of purchase if used for commercial or rental purposes.

This Warranty does NOT cover:

- Pre-delivery set-up.
- 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 Centre/Department in Canada. This warranty applies only while this product is used in Canada.

This warranty is in addition to any statutory warranty and does not exclude or limit legal rights you may have but shall run concurrently with applicable provincial legislation. Furthermore, some provinces do NOT allow limitation on how long an implied warranty will last so the above limitations may not apply to you.

SEARS CANADA, INC., TORONTO, ONTARIO M5B 2B8

SAFETY RULES

IMPORTANT: This cutting machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

⚠ 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.

⚠ CAUTION: Muffler and other engine parts become extremely hot during operation and remain hot after engine has stopped. To avoid severe burns on contact, stay away from these areas.



I. GENERAL OPERATION

- Read, understand, and follow all instructions on the machine and in the manual(s) before starting. Be thoroughly familiar with the controls and the proper use of the machine before starting.
- Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
- Only allow responsible individuals, who are familiar with the instructions, to operate the machine.
- Clear the area of objects such as rocks, toys, wire, bones, sticks, etc., which could be picked up and thrown by the blade.
- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.

Do not operate the mower when bare-foot or wearing open sandals. Always wear substantial foot wear.

Do not pull mower backwards unless absolutely necessary. Always look down and behind before and while moving backwards.

Do not operate the mower without proper guards, plates, grass catcher or other safety protective devices in place. See manufacturer's instructions for proper operation and installation of accessories. Only use accessories approved by the manufacturer.

Stop the blade(s) when crossing gravel drives, walks, or roads.

Stop the engine (motor) whenever you leave the equipment, before cleaning the mower or unclogging the chute.

Shut the engine (motor) off and wait until the blade comes to complete stop before removing grass catcher.

Mow only in daylight or good artificial light.

Do not operate the machine while under the influence of alcohol or drugs.

Never operate machine in wet grass. Always be sure of your footing: keep a firm hold on the handle and walk; never run. Disengage the self-propelled mechanism or drive clutch on mowers so equipped before starting the engine (motor).

If the equipment should start to vibrate abnormally, stop the engine (motor) and check immediately for the cause. Vibration is generally a warning of trouble.

Always wear safety goggles or safety glasses with side shields when operating mower.

. SLOPE OPERATION

Slopes are a major factor related to slip and fall accidents which can result in severe injury. All slopes require extra caution. If you feel uneasy on a slope, do not mow it.

Mow across the face of slopes: never up and down. Exercise extreme caution when changing direction on slopes.

Remove obstacles such as rocks, tree limbs, etc.

Watch for holes, ruts, or bumps. Tall grass can hide obstacles.

O NOT:

Do not trim near drop-offs, ditches or embankments. The operator could lose footing or balance.

Do not trim excessively steep slopes.

Do not mow on wet grass. Reduced footing could cause slipping.

III. CHILDREN

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. *Never* assume that children will remain where you last saw them.

- Keep children out of the trimming area and under the watchful care of another responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and while walking backwards, look behind and *down* for small children.
- Never allow children to operate the machine.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

IV. SERVICE

- Use extra care in handling gasoline and other fuels. They are flammable and vapors are explosive.
 - Use only an approved container.
 - Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling. Do not smoke.
 - Never refuel the machine indoors.
 - Never store the machine or fuel container inside where there is an open flame, such as a water heater.
- Never run a machine inside a closed area.
- Never make adjustments or repairs with the engine (motor) running. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting.
- Keep nuts and bolts, especially blade attachment bolts, tight and keep equipment in good condition.
- Never tamper with safety devices. Check their proper operation regularly.
- Keep machine free of grass, leaves, or other debris build-up. Clean oil or fuel spillage. Allow machine to cool before storing.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
- Never attempt to make wheel height adjustments while the engine (motor) is running.
- Grass catcher components are subject to wear, damage, and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.
- Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves, and use extra caution when servicing them.
- Do not change the engine governor setting or overspeed the engine.

ASSEMBLY / PRE-OPERATION

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. 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

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

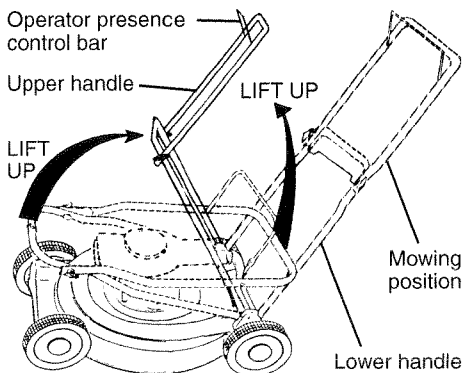
HOW TO SET UP YOUR LAWN MOWER

TO UNFOLD HANDLE

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

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

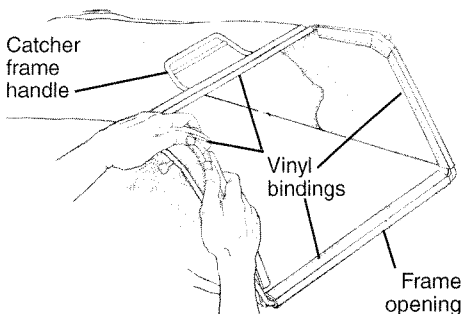
Your lawn mower handle can be adjusted for your mowing comfort. Refer to "ADJUST HANDLE" in the Service and Adjustments section of this manual.



TO ASSEMBLE GRASS CATCHER

1. 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.
2. 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.



TO INSTALL ATTACHMENTS

Your lawn mower was shipped ready to be used as a mulcher. To convert to bagging, see "TO CONVERT MOWER" in the Operation section of this manual.

OPERATION

KNOW YOUR LAWN MOWER

READ THIS OWNER'S MANUAL AND ALL 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
READ WARNING



ENGINE
ON



ENGINE
OFF



FAST



SLOW



CHOKE



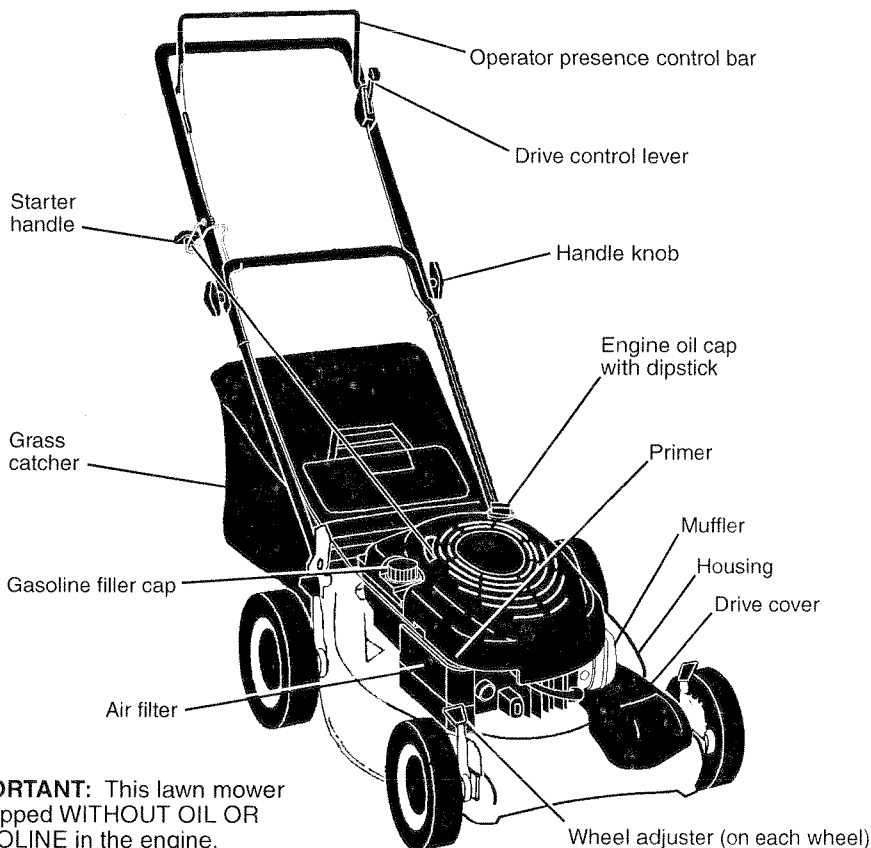
FUEL



OIL



DANGER, KEEP HANDS
AND FEET AWAY



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

MEETS CPSC SAFETY REQUIREMENTS

Meets 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.

Drive control lever – used to engage power-propelled forward motion of lawn mower.



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 standard safety glasses or a wide vision safety mask worn over spectacles.

HOW TO USE YOUR LAWN MOWER

ENGINE SPEED

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

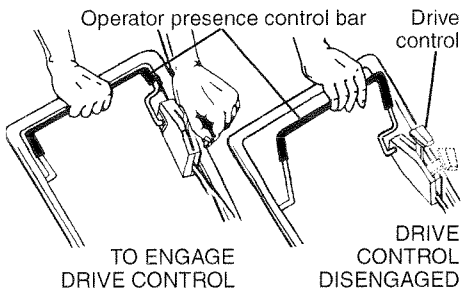
ENGINE ZONE CONTROL

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.

DRIVE CONTROL

- Self-propelling is controlled by holding the operator presence control bar down to the handle and pushing the drive control lever forward until it clicks; then releasing the lever.
- Forward motion will stop when the operator presence control bar is released. To stop forward motion without stopping engine, release the operator presence control bar slightly until the drive control disengages. Hold operator presence control bar down against handle to continue mowing without self-propelling.
- To keep drive control engaged when turning corners, push down on handle and lift front wheels off ground while turning lawn mower.



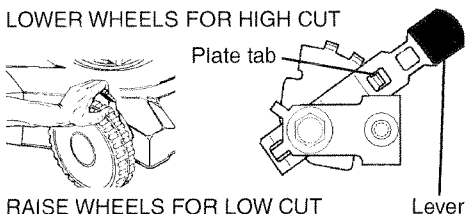
TO ADJUST CUTTING HEIGHT

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



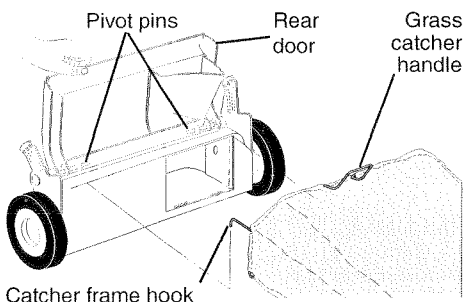
RAISE WHEELS FOR LOW CUT

TO CONVERT MOWER

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

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

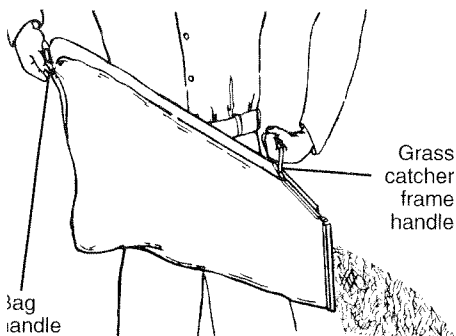
CAUTION: Do not run your lawn mower without rear door closed or approved grass catcher in place. Never attempt to operate the lawn mower with the rear door removed or propped open.



TO EMPTY GRASS CATCHER

- Lift up on grass catcher using the frame handle.
- Remove grass catcher with clippings from under lawn mower handle.
- Empty clippings from bag using both frame handle and bag handle.

NOTE: Do not drag the bag when emptying; it will cause unnecessary wear.



BEFORE STARTING ENGINE

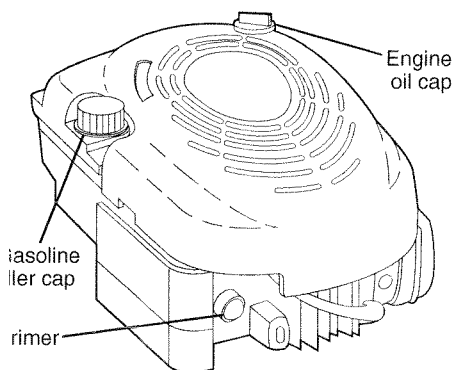
ADD OIL

Your lawnmower is shipped without oil in the engine. For type and grade of oil to use, see "ENGINE" in the Maintenance section of this manual.

CAUTION: DO NOT overfill engine with oil, or it will smoke on startup.

1. Be sure lawnmower is level and area around oil fill is clean.
2. Remove oil dipstick from oil fill spout. Make sure that rim of spout is clean.
3. You receive a container of oil with the unit. Slowly pour the entire container down the oil fill spout into the engine.
4. Wait one minute to allow oil to settle. Insert and tighten dipstick, then remove it to check oil level.
5. Always be sure to retighten oil dipstick before starting engine.

Check oil level before each use. Add oil if needed. Fill to full line on dipstick. 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

- Fill fuel tank to bottom of tank filler neck. Do not overfill. 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.

CAUTION: Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame.

CAUTION: 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 gas tank, start the engine and let it run until the 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 the fuel tank or permanent damage may occur.

TO START ENGINE

NOTE: Due to protective coatings on the engine, a small amount of smoke may be present during the initial use of the product and should be considered normal.

1. 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.
2. 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

- 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.

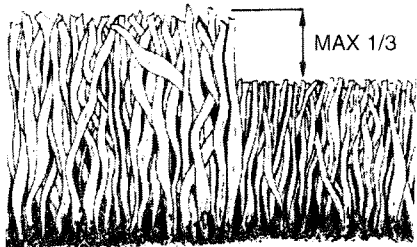
MOWING TIPS

- 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.
- When using a rear discharge lawn mower in moist, heavy grass, clumps of cut grass may not enter the grass catcher. Reduce ground speed (pushing speed) and/or run the lawn mower over the area a second time.
- If a trail of clippings is left on the right side of a rear discharge mower, mow in a clockwise direction with a small overlap to collect the clippings on the next pass.
- 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 the 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 grass, 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 lawn.

MAINTENANCE

MAINTENANCE SCHEDULE

FILL IN DATES

AS YOU COMPLETE

REGULAR SERVICE

		BEFORE EACH USE				AFTER EACH USE				EVERY 10 HOURS				EVERY 25 HOURS OR EVERY SEASON				EVERY 100 HOURS				BEFORE STORAGE				SERVICE DATES			
MOWER	Check for Loose Fasteners	✓																✓											
	Clean/Inspect Grass Catcher (If Equipped)	✓	✓															✓											
	Clean Lawn Mower		✓															✓											
	Clean Under Drive Cover (Power-Propelled Mowers)			✓																									
	Check drive belt/pulleys (Power-Propelled Mowers)								✓																				
	Check/Sharpen/Replace Blade								✓ ₃																				
	Lubrication Chart								✓									✓											
ENGINE	Clean Battery/Recharge (Electric Start Mowers)								✓									✓ ₄											
	Check Engine Oil Level	✓																											
	Change Engine Oil								✓ _{1,2}																				
	Clean Air Filter								✓ ₂																				
	Inspect Muffler								✓																				
	Clean or Replace Spark Plug								✓																				
	Replace Air Filter Paper Cartridge												✓ ₂																

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 soil.

4 - Change 48 hours at end of season.

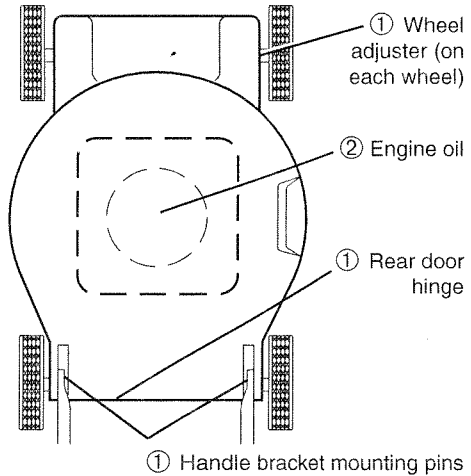
GENERAL RECOMMENDATIONS

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

LUBRICATION CHART



① Spray lubricant

② See "ENGINE" in Maintenance 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

Serial Number:	
Date of Purchase:	
Gasoline Capacity / Type:	1,5 Liters (Unleaded Regular)
Oil Type (API-SF-SJ):	SAE 30 (above 32°F/0°C); SAE 5W-30 (below 32°F/0°C)
Oil Capacity:	0,58 Liters
Spark Plug:	Champion RJ19LM (Gap: 0,76 mm)
Blade Bolt Torque:	35-40 ft. lbs. / 47-54 N-m
• The model and serial numbers will be found on a decal on the rear of the mower housing. Record both serial number and date of purchase in space provided above.	

LAWN MOWER

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

1. Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with spark plug.
2. Turn lawn mower on its side. Make sure air filter and carburetor are up.
3. Use a wood block between blade and mower housing to prevent blade from turning when removing blade bolt.

NOTE: Protect your hands with gloves and/or wrap blade with heavy cloth.

4. Remove blade bolt by turning counter-clockwise.
5. 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

1. Position the blade adapter on the engine crankshaft. Be sure key in adapter and crankshaft keyway are aligned.
2. Position blade on the blade adapter aligning the two (2) holes in the blade with the raised lugs on the adapter.
3. Be sure the trailing edge of blade (opposite sharp edge) is up toward the engine.

4. Install the blade bolt with the lock washer and hardened washer into blade adapter and crankshaft.
 5. 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. / 47-54 N-m.

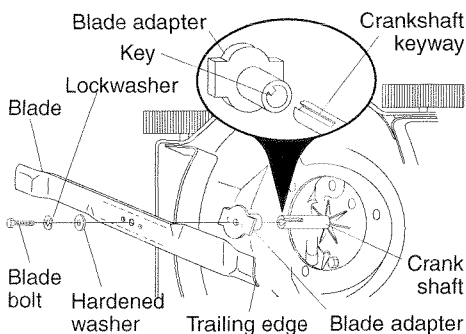
IMPORTANT: Blade bolt is grade 8 heat treated.

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.

DRIVE WHEELS

Check front drive wheels each time before you mow to be sure they move freely. The wheels not turning freely means trash, grass cuttings, etc. are in the drive wheel area and must be cleaned to free drive wheels.

If necessary to clean the drive wheels, be sure to clean both front wheels.

- Remove hubcaps, hairpin cotters and washers.
- Remove wheels from wheel adjusters.
- Remove any trash or grass cuttings from inside the dust cover, pinion and/or drive wheel gear teeth.
- Put wheels back in place.

NOTE: If after cleaning, the drive wheels do not turn freely, contact a Sears or other qualified service center.

GEAR CASE

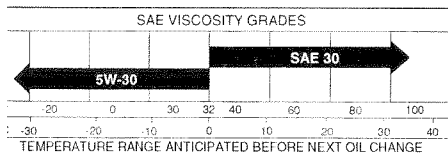
To keep your drive system working properly, the gear case and area around the drive should be kept clean and free of trash build-up. Clean under the drive cover twice a season.

The gear case is filled with lubricant to the proper level at the factory. The only time the lubricant needs attention is if service has been performed on the gear case. If lubricant is required, use only Elf brand oil, Part No. REDUCTELF 100. Do not substitute.

ENGINE

LUBRICATION

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

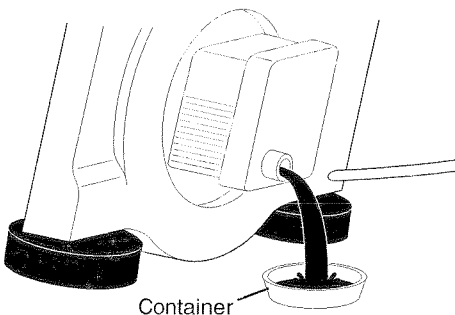


NOTE: Although multi-viscosity oils (5W30, 10W30 etc.) improve starting in cold weather, these multi-viscosity oils will result in increased oil consumption when used above 32°F. Check your engine oil level more frequently to avoid possible engine damage from running low on oil. Change the oil after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

1. Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with spark plug.
2. Remove engine oil cap; lay aside on a clean surface.
3. 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.
4. Wipe off any spilled oil from lawn mower or side of engine.
5. Fill engine with oil. The engine oil capacity is 20 oz. If oil is not completely drained from engine, you may not need the entire container of a 20 oz. bottle of oil. Slowly pour 3/4 of the oil from the container down the oil fill spout into the engine.
6. Wait one minute to allow oil to settle. Insert and tighten dipstick, then remove it to check oil level.
7. Continue adding small amounts of oil and rechecking the dipstick until it reads full. DO NOT overfill, or engine will smoke on startup.
8. Always be sure to retighten oil dipstick before starting engine.
9. Reconnect spark plug wire to spark plug.



AIR FILTER

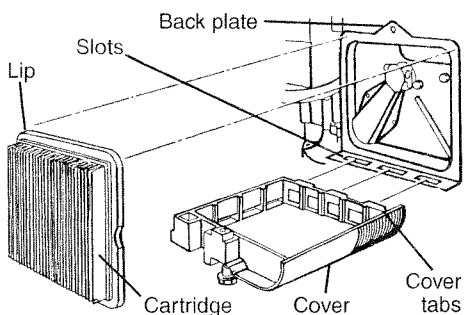
Your engine will not run properly and may be damaged by using a dirty air filter. Replace the air filter every 100 hours of operation or every season, whichever occurs first. Service air cleaner more often under dusty conditions.

TO CLEAN AIR FILTER

1. Loosen screw and tilt cover to remove.
2. Carefully remove cartridge.
3. 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.

4. 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

Replace spark plug at the beginning of each mowing season or after every 100 hours of operation, whichever occurs first. Spark plug type and gap setting are shown in "PRODUCT SPECIFICATIONS" in Maintenance section of this manual.

CLEANING

IMPORTANT: For best performance, keep mower housing free of built-up 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.

- 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.

CLEAN UNDER DRIVE COVER

Clean under drive cover at least twice a season. Scrape underside of cover with putty knife or similar tool to remove any build-up of trash or grass on underside of drive cover.

SERVICE AND ADJUSTMENTS

WARNING: To avoid serious injury, before performing any service or adjustments:

1. Release control bar and stop engine.
2. Make sure the blade and all moving parts have completely stopped.
3. 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 mowing position. If the deflector becomes damaged, it should be replaced.

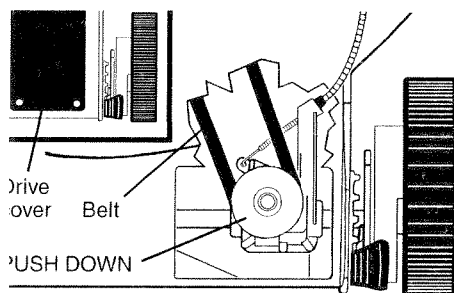
TO REMOVE DRIVE BELT

1. Remove drive cover. Remove belt from gearcase pulley by pushing down on pulley and rolling belt off it.
2. Turn lawn mower on its side with air filter and carburetor up.
3. Remove blade.
4. Remove debris shield.
5. Remove belt from engine pulley on crankshaft.

TO REPLACE DRIVE BELT

1. Install new belt on engine pulley.
2. Reinstall debris shield and blade.
3. Return mower to upright position.
4. Install new belt on gearcase pulley.
5. Reinstall drive cover.

NOTE: Always use factory approved belt to assure fit and long life.

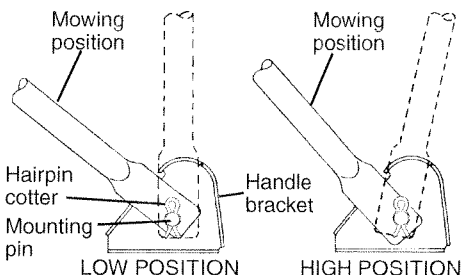
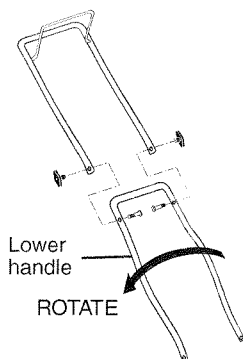


TO ADJUST HANDLE

The handle can be mounted in a high or low position. The mounting holes in the bottom of lower handle are off center for raising or lowering the handle.

NOTE: The upper handle has an "anti-fold" bracket located on the right side of the handle. This bracket prevents the upper handle from folding forward, which helps protect control cable(s) from damage.

- Remove upper handle and all parts attached to lower handle.
- Remove hairpin cotters from lower handle bracket mounting pin.
- Squeeze lower handle in to remove it from mounting pins.
- Turn lower handle over to raise or lower handle.
- Squeeze lower handle in and position holes onto mounting pins on handle bracket.
- Reassemble upper handle and all parts removed from lower handle.



ENGINE

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 a Sears or other qualified service center for repair and adjustment.

CARBURETOR

Your carburetor is not adjustable. If your engine does not operate properly due to suspected carburetor problems, take your lawn mower to a Sears or other qualified 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 a Sears or other qualified 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.

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

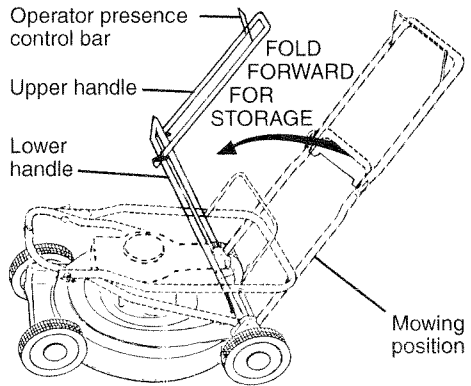
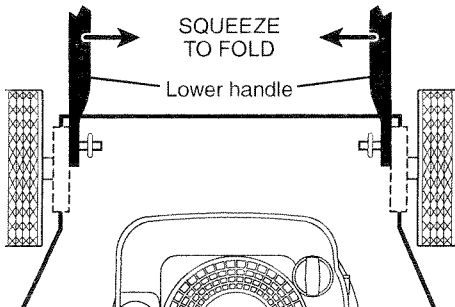
HANDLE

You can fold your lawn mower handle for storage.

1. Squeeze the bottom ends of the lower handle toward each other until the lower handle clears the handle bracket, then move handle forward.
2. 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.



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, 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.

1. Drain the fuel tank.
 2. 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

1. Remove spark plug.
2. Pour 30 ml of oil through spark plug hole into cylinder.
3. Pull starter handle slowly a few times to distribute oil.
4. 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 protect it 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 - See appropriate section in manual unless directed to a Sears Service Center.

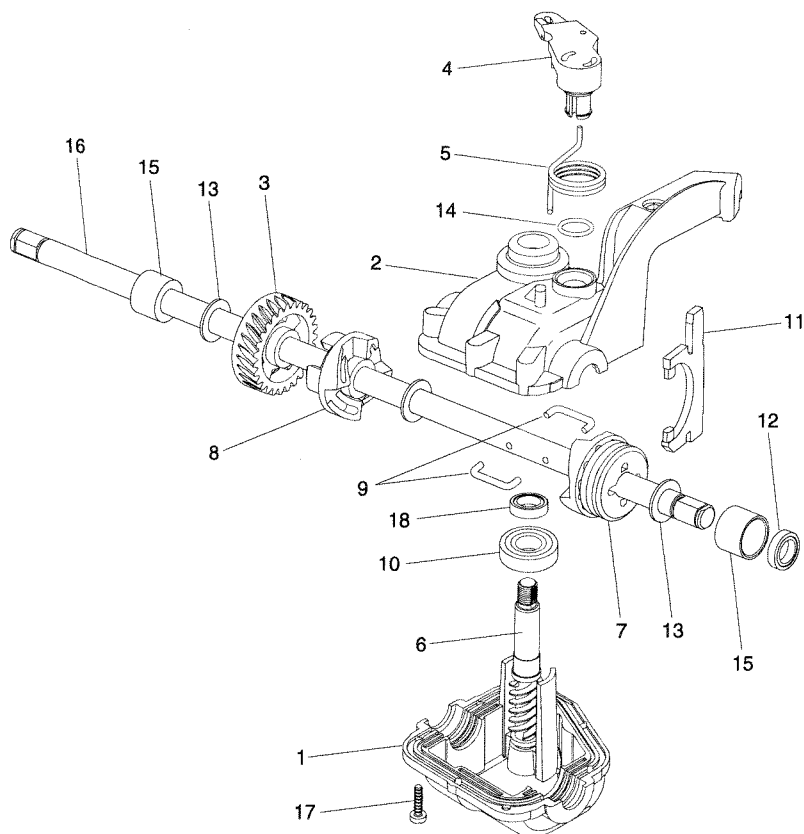
PROBLEM	CAUSE	CORRECTION
Does not start	<ol style="list-style-type: none">1. Dirty air filter.2. Out of fuel.3. Stale fuel.4. Water in fuel.5. Spark plug wire is disconnected.6. Bad spark plug.7. Loose blade or broken blade adapter.8. Control bar in released position.9. Control bar defective.10. Fuel valve lever (if so equipped) in OFF position.11. Weak battery (if equipped).12. Disconnected battery connector (if equipped).	<ol style="list-style-type: none">1. Clean/replace air filter.2. Fill fuel tank.3. Drain fuel tank and refill tank with fresh, clean gasoline.4. Drain fuel tank and refill tank with fresh, clean 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.10. Turn fuel valve lever to the ON position.11. Charge battery.12. Connect battery to engine.
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. Raise cutting height.2. Raise cutting height.3. Clean/replace air filter.4. Clean underside of mower housing.5. Check oil level.6. Cut at slower walking speed.

TROUBLESHOOTING - See appropriate section in manual unless directed to a Sears Service Center.

PROBLEM	CAUSE	CORRECTION
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.
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 a Sears or other qualified 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 a Sears or other qualified 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 cutting 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.
Loss of drive or slowing of drive speed	<ol style="list-style-type: none"> 1. Belt wear. 2. Belt off of pulley. 3. Drive cable worn or broken. 4. "Loose" drive control system. 	<ol style="list-style-type: none"> 1. Check/replace drive belt. 2. Check/reinstall drive belt. 3. Replace drive cable. 4. Adjust drive control.

REPAIR PARTS

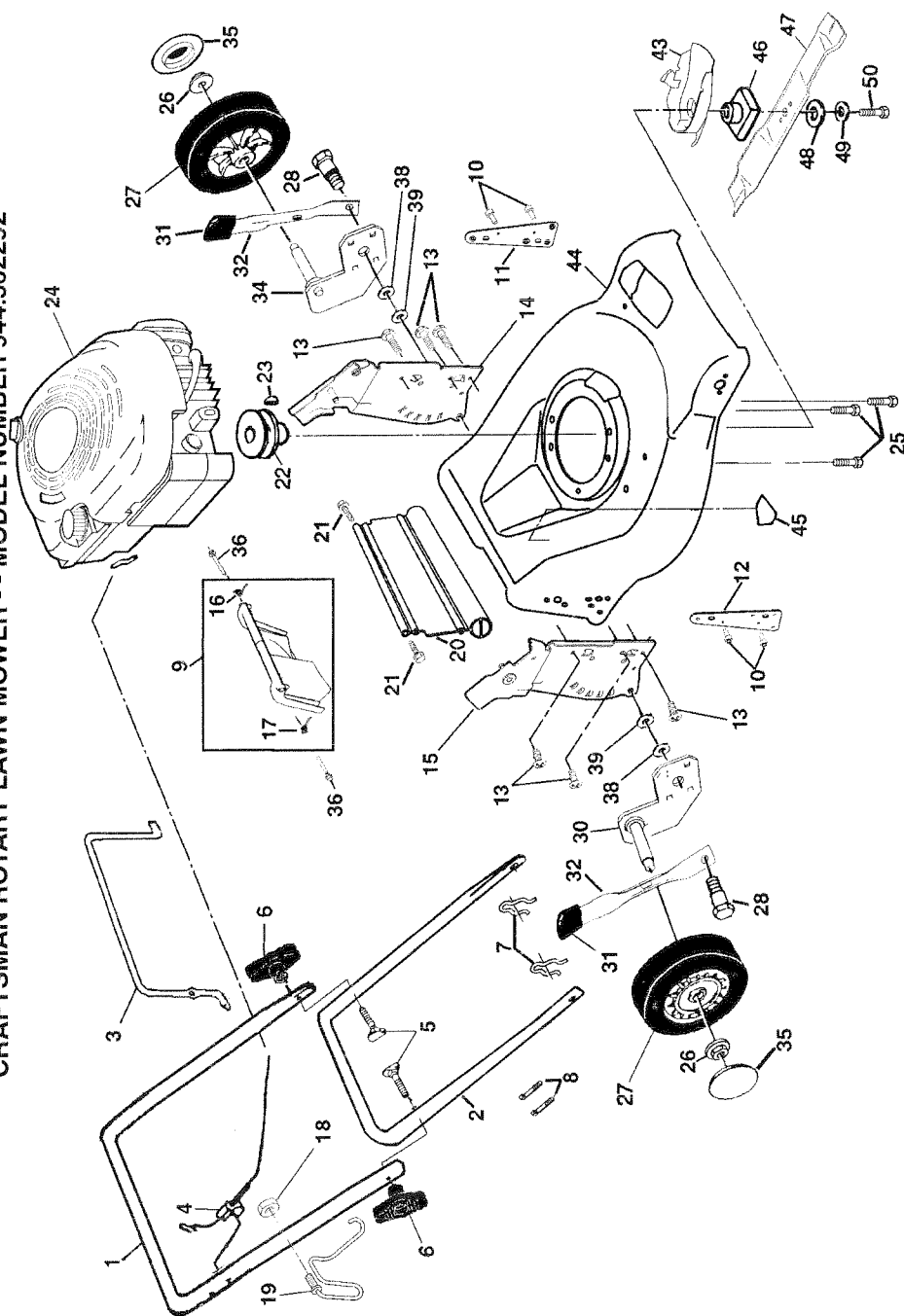
CRAFTSMAN ROTARY LAWN MOWER - - MODEL NUMBER 944.362292 GEAR CASE ASSEMBLY - - PART NUMBER 180184



KEY NO.	PART NO.	DESCRIPTION
1	183497	Case, Lower
2	183498	Case, Upper
3	183499	Gear, 27 Teeth
4	183500	Lever, Clutch
5	183501	Spring, Return
6	183502	Shaft, Input
7	183503	Dog, Movable
8	183504	Dog, Fixed
9	183505	Wire, Formed
10	183506	Bearing, Ball
11	183507	Fork, Shift
12	183508	Seal, Output Shaft
13	183509	Washer
14	183510	Seal, Case
15	183511	Bushing
16	183512	Shaft, Output
17	183513	Screw
18	183514	Seal, Input Shaft
--	183404	Kit, Gearcase Replacement

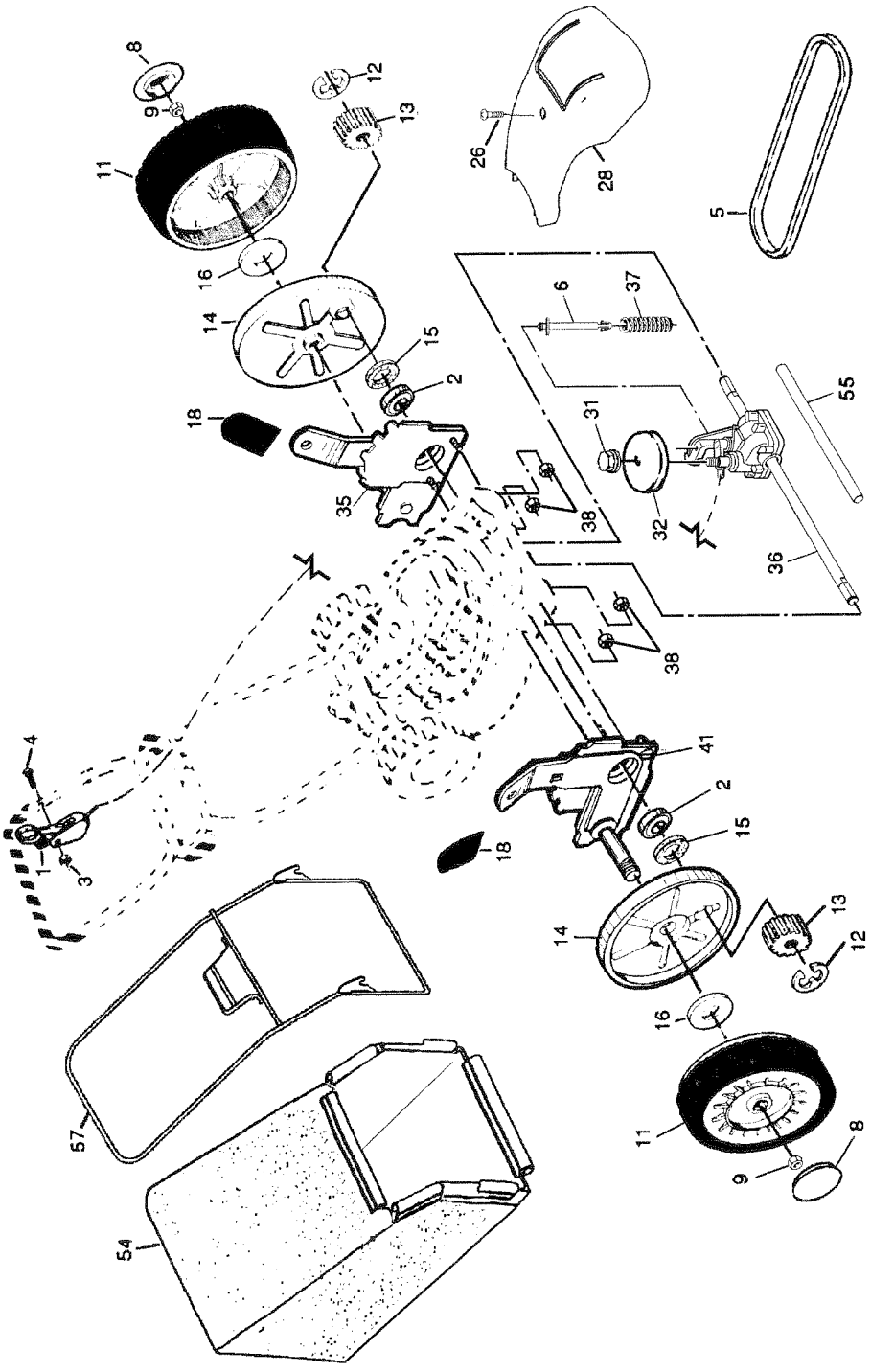
NOTE: Use Dow Corning #709 to reseat Gear Case Halves.

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



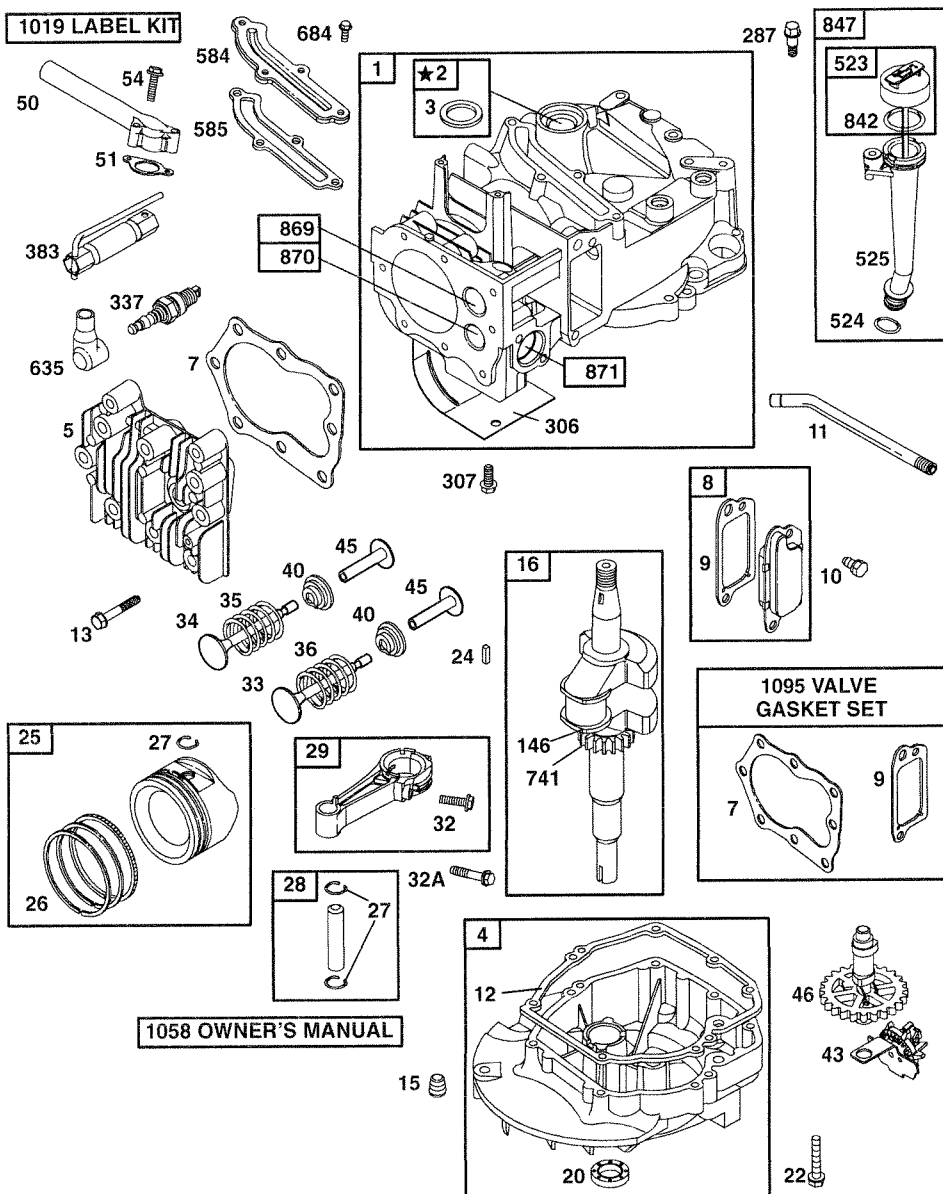
KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1	166860X479	25	150406
2	151721X479	26	Hex Head Thread Rolling Screw 3/8-16 x 1-1/8
3	146771	27	Hex Flange Nut
4	183567	28	Wheel
5	131959	29	Shoulder Bolt 5/16-18 x .33
6	136376	30	Axle Arm Assembly, RR
7	51793	31	Selector Knob
8	66426	32	Selector Spring
9	180479	33	Axle Arm Assembly, LR
10	128415	34	Hubcap
11	175069X479	35	Bolt
12	175070X479	36	Washer
13	17060410	37	Pushnut
14	175082X479	38	Debris Shield
15	175081X479	39	Kit, Housing (Includes Key #10, 11, 12 and 45)
16	180071	40	Danger Deal
17	180072	41	Blade Adapter
18	132004	42	Blade 21"
19	186079	43	Hardened Washer
20	178398	44	Helical Washer 3/8-24 x 1-3/8 Grade 8
21	88652	45	Hex Head Machine Screw 3/8-24 x 1-3/8 Grade 8
22	84596	46	Warning Decal (Not Shown)
23	87677	47	Owner's Manual, English
24	---	48	Owner's Manual, French

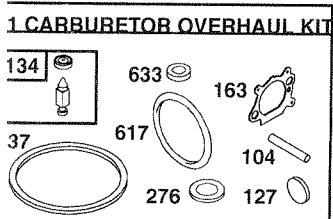
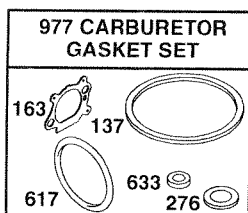
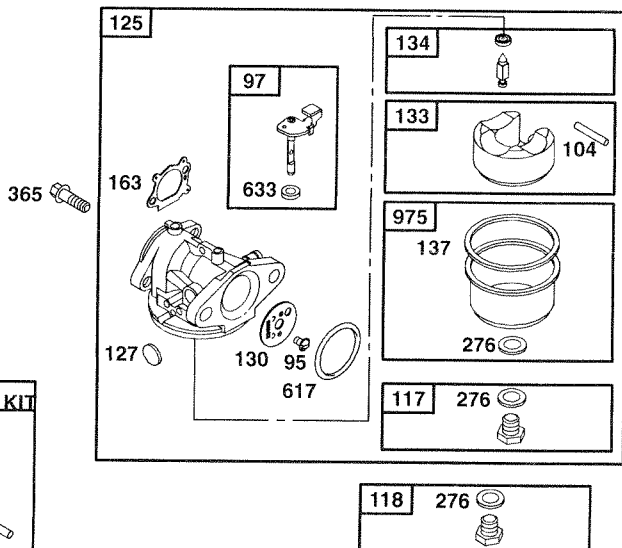
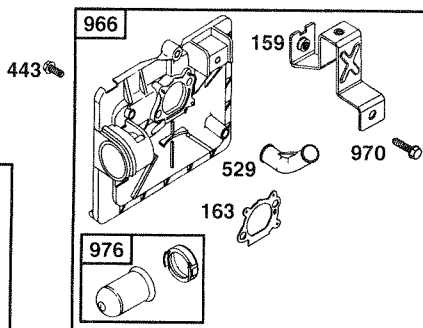
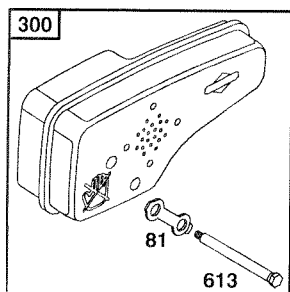
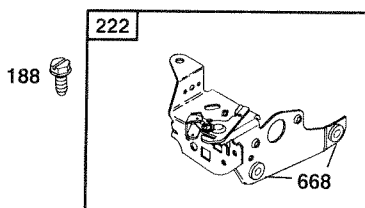
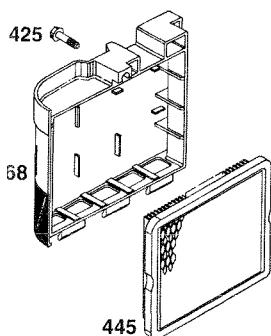
NOTE: All component dimensions given in U.S. inches.
1 inch = 25.4 mm

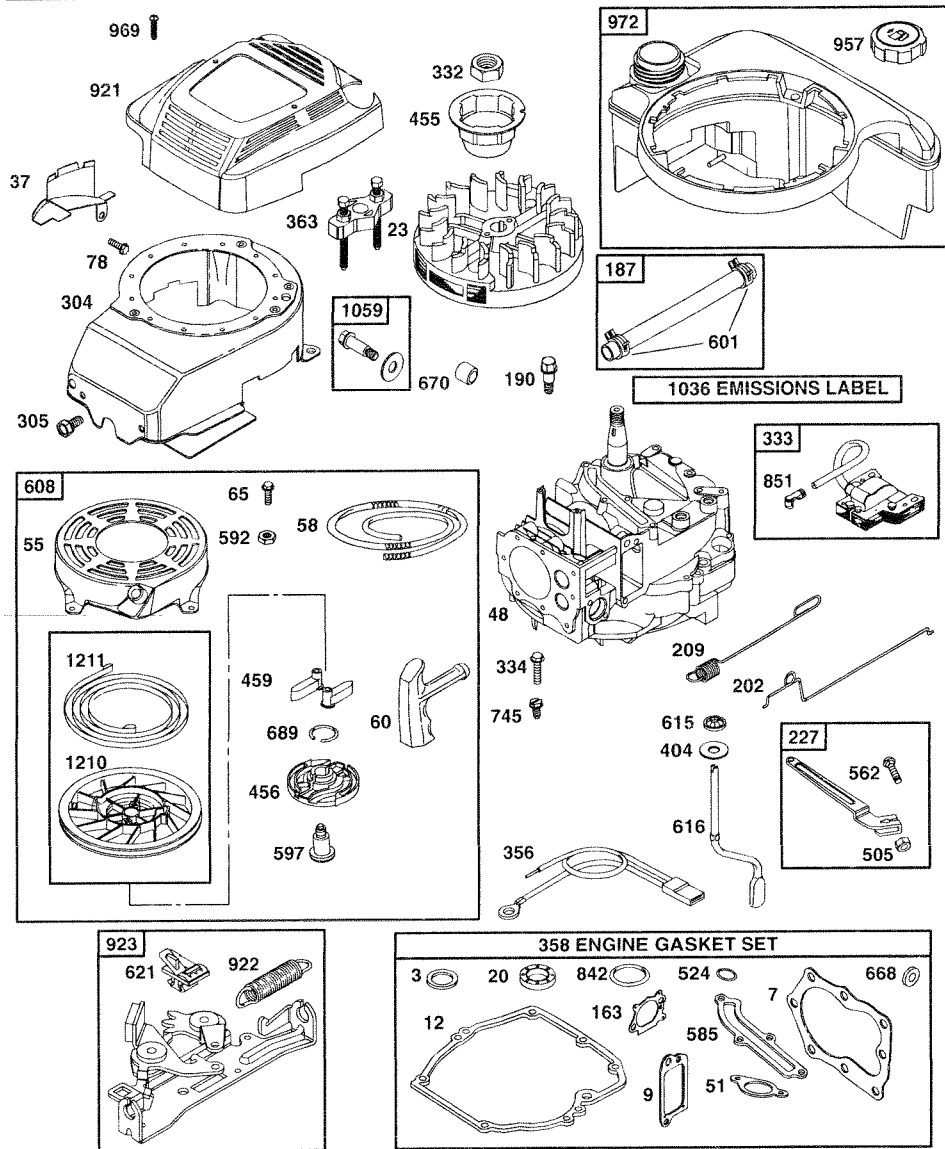


KEY PART NO.	KEY PART NO.	DESCRIPTION	DESCRIPTION
1	184586	Cable Assembly, Drive	Drive Cover
2	167387	Bearing, Wheel Adjuster	Hex Flange Nut
3	751152	Locknut #10-24	Drive Pulley
4	158755	Hex Washer Head Screw 1/4-20 x 2.12	Kit, Wheel Adjuster, LH
5	175436	V-Belt	(Includes Knob and Bearing)
6	150495	Spring Retainer	Gear Case (See Breakdown)
8	180637	Hubcap	Spring
9	145212	Locknut	Locknut 1/4-20
11	180775	Wheel & Tire Assembly	Kit, Wheel Adjuster, RH
12	12000058	E-Ring	(Includes Knob and Bearing)
13	137054	Pinion	Grassbag Assembly
14	180504	Dust Cover	Driveshaft Cover
15	88118	Felt Washer	Frame, Grassbag
16	67725	Washer 1/2 x 1-1/2 x .134	
18	87877	Selector Knob	
26	175262	Pan Head Tapping Screw #10-24 x 2-3/4	

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







KEY PART
NO. NO.

DESCRIPTION

1	697322	Cylinder Assembly
2	399269	Kit-Bushing/Seal
3	299819	• Seal-Oil (Magneeto Side)
4	493279	Sump-Engine
5	691160	Head-Cylinder
7	692249	•+Gasket-Cylinder Head
8	695250	Breather Assembly
9	696125	•+Gasket-Breather
10	691125	Screw (Breather Assembly)
11	499675	Tube-Breather
12	692232	• Gasket-Crankcase

KEY PART
NO. NO.

DESCRIPTION

13	690912	Screw (Cylinder Head)
15	691680	Plug-Oil Drain
16	691451	Crankshaft
20	399781	• Seal-Oil (PTO Side)
22	691092	Screw (Engine Sump)
23	692315	Flywheel
24	222698	Key-Flywheel
25	499429	Piston Assembly (Standard)
	499430	Piston Assembly (.010" Oversize)
	499431	Piston Assembly (.020" Oversize)
	499432	Piston Assembly (.030" Oversize)

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
3	499425	Ring Set-Piston (Standard)	425	690670	Screw (Air Cleaner Cover)
	499426	Ring Set-Piston (.010" Oversize)	443	692523	Screw (Air Cleaner Primer Base)
	499427	Ring Set-Piston (.020" Oversize)	445	491588	Filter-Air Cleaner Cartridge
	499428	Ring Set-Piston (.030" Oversize)	456	692299	Plate-Pawl Friction
7	691866	Lock-Piston Pin	459	281505	Pawl-Ratchet
3	499423	Pin-Piston	505	691251	Nut (Governor Control Lever)
	499424	Rod-Connecting	523	495264	Dipstick
2	691664	Screw (Connecting Rod)	524	692296	• Seal-Dipstick Tube
A	695759	Screw (Connecting Rod)	525	495265	Tube-Dipstick
	262651	Valve-Exhaust	529	691923	Grommet
	262652	Valve-Intake	562	691119	Bolt (Governor Control Lever)
	691270	Spring-Valve (Intake)	584	692342	Cover-Breather Passage
	691270	Spring-Valve (Exhaust)	585	691879	• Gasket-Breather Passage
	694086	Guard-Flywheel	592	690800	Nut (Rewind Starter)
	692194	Retainer-Valve	597	691696	Screw (Pawl Friction Plate)
	691997	Slinger-Governor/Oil	601	95162	Clamp-Hose
	690548	Tappet-Valve	608	497680	Starter-Rewind
	691449	Camshaft	613	691340	Screw (Muffler)
	498826	Short Block (Replacement Engine 123K02-0015-E1)	615	690340	Retainer-Governor Shaft
	497465	Manifold-Intake	616	698801	Crank-Governor
	272199	• Gasket-Intake	617	270344	Ø±Seal-O Ring (Intake Manifold)
	691650	Screw (Intake Manifold)	621	692310	Switch-Stop
	691421	Housing-Rewind Starter	633	691321	Ø±Seal-Throttle Shaft
	697316	Rope-Starter (Cut to Length)	635	66538	Boot-Spark Plug
	281434	Grp-Starter Rope	668	493823	• Spacer (Includes 2)
	690837	Screw (Rewind Starter)	670	692294	Grpc-Fuel Tank
	691108	Screw (Flywheel Guard)	684	690345	Screw (Breather Passage Cover)
	691740	Lock-Muffler Screw	689	691855	Spring-Friction
	691636	Screw (Throttle Valve)	741	691830	Gear-Timing
	696565	Shaft-Throttle	745	691648	Screw (Brake)
4	691242	Ø Pin-Float Hinge	842	691031	• Seal-O Ring (Dipstick Tube)
7	498978	Jet-Main (Standard)	847	692017	Assembly-Dipstick/Tube
3	494870	Jet-Main (High Altitude)	851	493880	Terminal-Spark Plug
1	498260	Kit-Carburetor Overhaul	869	691155	Seat-Valve (Intake)
5	498170	Carburetor	870	690380	Seat-Valve (Exhaust)
7	694468	Ø Plug-Welch	871	262001	Bushing-Guide (Exhaust)
3	696564	Valve-Throttle	921	697343	Bushing-Guide (Intake)
3	398187	Float-Carburetor	922	692135	Cover-Blower Housing
4	398188	Ø Valve-Needle/Seat	923	695891	Spring-Brake
7	693981	Ø±Gasket-Float Bowl	957	397974	Brake
5	690979	Key-Timing	966	496116	Cap-Fuel Tank
3	691753	Bracket-Air Cleaner Primer	968	692298	Base-Air Cleaner Primer
3	272653	•Ø±Gasket-Air Cleaner	969	692070	Cover-Air Cleaner
7	691050	Line-Fuel (Cut to Required Length)	969	690700	Screw (Blower Housing Cover)
3	690877	Screw (Control Bracket)	970	691669	Screw (Air Cleaner Primer Bracket)
3	690940	Screw (Fuel Tank)	972	495224	Tank-Fuel
2	691829	Link-Mechanical Governor	975	493640	Bowl-Float
3	699056	Spring-Governor	976	694395	Primer-Carburetor
3	692467	Bracket-Control	977	498261	Set-Carburetor Gasket
7	690783	Control Lever-Governor	1019	494256	Kit-Label
3	271716	Ø±Sealing Washer	1036	695111	Label-Emission
7	690940	Screw (Dipstick Tube)	1058	275177	Owner's Manual
3	692038	Muffler	1059	692311	Kit-Screw/Washer
7	695892	Housing-Blower	1095	498528	Set-Valve Gasket
3	691108	Screw (Blower Housing)	1210	498144	Assembly-Pulley/Spring (Pulley)
7	690450	Shield-Cylinder	1211	498144	Assembly-Pulley/Spring (Spring)
3	690345	Screw (Cylinder Shield)			
7	695161	Cup-Flywheel			
7	690662	Nut (Flywheel)			
7	802574	Armature-Magneto			
7	691061	Screw (Armature Magneto)			
7	802592	Spark Plug			
7	692390	Wire-Stop			
7	497316	Engine Gasket Set			
7	19069	Flywheel Puller			
7	692524	Screw (Carburetor)			
7	89838	Wrench-Spark Plug			
7	690272	Washer (Governor Crank)			

RPM Settings:

 Low Speed: 1900-2100
 High Speed: 3000-3200

• Included in Engine Gasket Set, Key No. 358

Ø Included in Carburetor Overhaul Kit, Key No. 121

‡ Included in Carburetor Gasket Set, Key No. 977

+ Included in Valve Gasket Set, Key No. 1095

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

SERVICE NOTES

1. The following information is for your reference only. It is not intended to be used as a substitute for professional advice. The information is provided as a service to our customers and is subject to change without notice. The information is not intended to be used as a substitute for professional advice. The information is provided as a service to our customers and is subject to change without notice.

SERVICE NOTES

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9 a.m. – 11 p.m. Mon. – Fri., EST, 9 a.m. – 4 p.m. Sat.

Pour service en français:

1-800-LE-FOYER^{MC}

(1-800-533-6937)

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