SAFE OPERATIONS PRACTICES FOR WALK-BEHIND MOWERS

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.

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 barefoot 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 a 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.

II. 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.

DO:
- 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.

DONOT:
- 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.
CONGRATULATIONS on your purchase of a new lawn mower. It has been designed, engineered and manufactured to give you the best possible dependability and performance. Should you experience any problem you cannot easily remedy, please contact your nearest authorized service center/department. We have competent, well-trained technicians and the proper tools to service or repair this lawn mower.

Please read and retain this manual. The instructions will enable you to assemble and maintain your lawn mower properly. Always observe the “SAFETY RULES”.

PRODUCT SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>GASOLINE CAPACITY AND TYPE</td>
<td>1.6 quarts UNLEADED REGULAR ONLY</td>
</tr>
<tr>
<td>OIL TYPE (API-SF-SJ)</td>
<td>SAE 30 (above 32°F)</td>
</tr>
<tr>
<td></td>
<td>SAE 5W-30 (BELOW 32°F)</td>
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<tr>
<td>OIL CAPACITY</td>
<td>20 ozs.</td>
</tr>
<tr>
<td>SPARK PLUG</td>
<td>Champion RJ19LM (GAP: .030&quot;)</td>
</tr>
<tr>
<td>BLADE BOLT TORQUE</td>
<td>35-40 FT. LBS.</td>
</tr>
</tbody>
</table>

CUSTOMER RESPONSIBILITIES

- Read and observe the safety rules.
- Follow a regular schedule in maintaining, caring for and using your lawn mower.
- Follow the instructions under “Customer Responsibilities” and “Storage” sections of this owner’s manual.

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SECTION 1: LIMITED WARRANTY
Husqvarna Forest & Garden Company ("Husqvarna") warrants Husqvarna product to the original purchaser to be free from defects in material and workmanship from the date of purchase for the "Warranty Period" of the product as set forth below:

Lifetime Warranty: All tine tines, trimmer shafts, ignition coils and modules on hand held product.
2-Year Warranty: Riding lawn mowers, yard and garden tractors, walk behind mowers, tillers, chain saws, trimmers, brushcutters, clearing saws, snow blowers, handheld blowers, backpack blowers, hedge trimmers, and electrical products for noncommercial, nonprofessional, non-institutional or non-income producing use, except as herein stated. Emission control system components necessary to comply with CARB-95 and EPA regulations, except for those components which are part of engine systems manufactured by third party engine manufacturers for which the purchaser has received a separate warranty with product information supplied at time of purchase.

1-Year Warranty: Power cutters, stump grinder, hydraulic pole pruners and hydraulic pole saws for non-commercial, non-professional, non-institutional or non-income producing use. All trimmers, brushcutters, clearing saws, hovering trimmers, stick edgers, backpack blowers, hand held blowers, hedge trimmers and model series 580 & 600 walk-behind mowers used for commercial, institutional, professional or income producing purposes or use.

90-Day Warranty: Chain saws, power cutters, stump grinders, trimmers, brushcutters, clearing saws, hovering trimmers, stick edgers, hedge trimmers, backpack blowers, hand held blowers, hydraulic pole saws, hydraulic pole pruners, snow blowers or any Husqvarna product used for rental purposes or use except as otherwise provided herein.

30-Day Warranty: Husqvarna bow guide bars, replacement parts including bar and chains, product accessorises, tools, display features and safety apparel.

SECTION 2: HUSQVARNA'S OBLIGATIONS UNDER THE WARRANTY
Husqvarna will repair or replace defective components without charge for parts or labor if a component fails due to a defect in material or workmanship during the warranty period.

SECTION 3: ITEMS NOT COVERED BY THIS WARRANTY
The following items are not covered by this warranty:

1) Normal customer maintenance items which become worn through normal regular use, including, but not limited to, belts, blades, blade adapters, bulbs, filters, guide bars, lubricants, rewind springs, saw chain, spark plugs, starter ropes and tines;

2) Natural discoloration of material due to ultraviolet light;

3) Engine and drive systems not manufactured by Husqvarna; these items are covered by the respective manufacturer's warranty as provided in writing with the product information supplied at the time of purchase; all claims must be sent to the appropriate manufacturer;

4) Lawn and garden attachments are covered by a third party that gives a warranty, all claims for warranty should be sent to the manufacturer; and

5) Emission Control System components necessary to comply with CARB-95 and EPA regulations which are manufactured by third party engine manufacturer.

6) Batteries have a one-year prorated limited warranty with 100% replacement during the first 6 months.

SECTION 4: EXCEPTIONS AND LIMITATIONS
This warranty shall be inapplicable to defects resulting from the following:

1) Accident, abuse, misuse, negligence and neglect, including stale fuel, dirt, abrasives, moisture, rust, corrosion, or any adverse reaction due to incorrect storage or use habits;

2) Failure to operate or maintain the unit in accordance with the Owner's/Operator's manual or instruction sheet furnished by Husqvarna;

3) Alterations or modifications that change the intended use of the product or affects the product's performance, operation, safety, or durability, or causes the product to fail to comply with any applicable laws; or:

4) Additional damage to parts or components due to continued use occurring after any of the above.

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. HUSQVARNA SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THESE PRODUCTS EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THESE PRODUCTS IS LIMITED IN DURATION TO THE WARRANTY PERIOD AS DEFINED IN THE LIMITED WARRANTY STATEMENT.

HUSQVARNA RESERVES THE RIGHT TO CHANGE OR IMPROVE THE DESIGN OF THE PRODUCT WITHOUT NOTICE, AND DOES NOT ASSUME OBLIGATION TO UPDATE PREVIOUSLY MANUFACTURED PRODUCTS.

Some states do not allow the exclusion of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

SECTION 5: CUSTOMER RESPONSIBILITIES
The product must exhibit reasonable care, maintenance, operation, storage and general upkeep as written in the maintenance section of the Owner's/Operator's manual. Should an operational problem or failure occur, the product should not be used, but delivered as is to an authorized Husqvarna dealer for evaluation. Proof of purchase, as explained in section 6, rests solely with the customer.

SECTION 6: PROCEDURE TO OBTAIN WARRANTY CONSIDERATION
It is the Owner's/Dealer's responsibility to make certain that the Warranty Registration Card is properly filled out and mailed to Husqvarna Forest & Garden Company. This card should be mailed within ten (10) days from the date of purchase in order to confirm the warranty and to facilitate post-sale service. Proof of purchase must be presented to the authorized Husqvarna dealer in order to obtain warranty service. This proof must include date purchased, serial number, model number, and complete name and address of the selling dealer. To obtain the benefit of this warranty, the product must be delivered to an authorized Husqvarna dealer in a timely manner, no later than thirty (30) days from date of the operational problem or failure. The product must be delivered at the owner's expense. Pick-up and delivery charges are not covered by this warranty. An authorized Husqvarna dealer can normally be located through the "Yellow Pages" of the local telephone directory or by calling 1-800-HUSKY62 for a dealer in your area.

HUSQVARNA
9006 PERIMETER WOODS DRIVE
CHARLOTTE, NC 28216

531 83 81-23 11/99
ASSEMBLY

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

IMPORTANT: THIS LAWN MOWER IS SHIPPED WITHOUT OIL OR GASOLINE IN THE ENGINE.

Your new lawn mower has been assembled at the factory with the exception of those parts left unassembled for shipping purposes. 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 (See Fig 1)

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 INSTALL ATTACHMENTS

Your lawn mower was shipped ready to be used as a mulcher. To convert to bagging or discharging; See “TO CONVERT MOWER” in the operation section of this manual.
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 OR WARNING
- ENGINE ON
- ENGINE OFF
- FAST
- SLOW
- CHOKE
- FUEL
- OIL
- DANGER, KEEP HANDS AND FEET AWAY

MEETS CPSC SAFETY REQUIREMENTS

Our 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.
HOW TO USE YOUR LAWN MOWER

ENGINE SPEED (See Fig. 3)
The engine speed is controlled by a throttle located on the side of the upper handle. Fast position is for starting, normal cutting, trimming and better grass bagging. Slow position is for light cutting, trimming and fuel economy.

![Fig. 3]

ENGINE ZONE CONTROL

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

TO ADJUST CUTTING HEIGHT (See Fig. 4)
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.

TO CONVERT TO DISCHARGING MOWER (See Fig. 5)
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.
BEFORE STARTING ENGINE

ADD OIL (See Fig. 6)

Your lawnmower is shipped without oil in the engine. Engine holds 20 oz. of oil. For type and grade of oil to use, see “ENGINE” in Customer Responsibilities section of this manual.

1. Be sure lawnmower is level and area around oil fill is clean.
2. Remove engine oil cap and fill to the full line on dipstick. Pour oil slowly. Do not overfill.

NOTE: ALLOW OIL TO SETTLE DOWN INTO ENGINE FOR ACCURATE READING. TO READ PROPER LEVEL, TIGHTEN ENGINE OIL CAP, THEN REMOVE IT TO READ THE DIPSTICK.

3. Reinstall engine oil cap and tighten.
   • 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 (See Fig. 6)

NOTE: BEFORE FILLING FUEL TANK, REMOVE AND DISCARD THE DEBRIS PLUG THAT IS INSIDE THE TANK.

1. 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 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.

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 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.

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

TO START ENGINE

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. Move throttle control lever to fast position.
3. 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.
- 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 only the top one-third of the grass blades (See Fig. 7). 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 lawn.

FIG. 7
CUSTOMER RESPONSIBILITIES

MAINTENANCE SCHEDULE

<table>
<thead>
<tr>
<th>FILL IN DATES</th>
<th>SERVICE DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS YOU COMPLETE</td>
<td>BEFORE EACH USE</td>
</tr>
<tr>
<td>REGULAR SERVICE</td>
<td>AFTER EACH USE</td>
</tr>
<tr>
<td></td>
<td>EVERY 10 HOURS</td>
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<tr>
<td></td>
<td>EVERY SEASON</td>
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<tr>
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<td>BEFORE STORAGE</td>
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<table>
<thead>
<tr>
<th>MOWER</th>
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</tr>
<tr>
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<tr>
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<td>Clean Lawn Mower ✓</td>
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</tbody>
</table>

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 - 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

1. Check engine oil level.
2. Check for loose fasteners.

LUBRICATION

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

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.
CUSTOMER RESPONSIBILITIES

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 (See Fig. 8)
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 (See Fig. 8)
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.

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.

FIG. 8
CUSTOMER RESPONSIBILITIES

ENGINE
Read the Maintenance section of your engine manual.

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 (See fig. 9)
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 on lawn mower and on side of engine.
5. Fill engine with oil. (See “Add Oil” in the Operation section of this manual.)
6. 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, see engine manual.

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

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

CLEANING
IMPORTANT: FOR BEST PERFORMANCE, KEEP MOWER HOUSING FREE OF BUILT-UP GRASS AND TRASH.
CLEAN 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.

FIG. 9
SERVICE AND ADJUSTMENTS

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.

TO ADJUST HANDLE (See Fig.10)
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.
1. Remove upper handle and all parts attached to lower handle.
2. Remove hairpin cotters from lower handle bracket mounting pin.
3. Squeeze lower handle in to remove it from mounting pins.
4. Turn lower handle over to raise or lower handle.
5. Squeeze lower handle in and position holes onto mounting pins on handle bracket.
6. Reassemble upper handle and all parts removed from lower handle.

FIG. 10

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

CARBURETOR
The carburetor has been preset at the factory and adjustment should not be necessary. However, minor adjustment may be required to compensate for differences in fuel, temperature, altitude or load.
- The air filter must be assembled to the carburetor when running engine.
- Best carburetor adjustment is obtained when fuel tank is 1/4 full.
- In order for the engine to run, the control bar must be held in the operating position. Therefore, an assistant will be required to hold the control bar in the operating position when making final adjustment to the carburetor.

See the Adjustment section of your engine manual for further instruction.

THROTTLE CONTROL
If it becomes necessary to adjust or replace the throttle control, see the adjustment section of your engine manual.
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 (See Fig.11)

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, 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.
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 Customer Responsibilities section of this manual).

CYLINDER

1. Remove spark plug.
2. Pour one ounce (29 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 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.

FIG. 11
## TROUBLESHOOTING POINTS

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CAUSE</th>
<th>CORRECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Out of fuel.</td>
<td>2. Fill fuel tank.</td>
</tr>
<tr>
<td></td>
<td>3. Stale fuel.</td>
<td>3. Drain tank and refill with fresh clean fuel.</td>
</tr>
<tr>
<td></td>
<td>4. Water in fuel.</td>
<td>4. Drain fuel tank and carburetor and refill tank with fresh gasoline.</td>
</tr>
<tr>
<td></td>
<td>5. Spark plug wire is disconnected.</td>
<td>5. Connect wire to plug.</td>
</tr>
<tr>
<td></td>
<td>7. Loose blade or broken blade adapter.</td>
<td>7. Tighten blade bolt or replace blade adapter.</td>
</tr>
<tr>
<td></td>
<td>8. Control bar in released position.</td>
<td>8. Depress control bar to handle.</td>
</tr>
<tr>
<td>Loss of power</td>
<td>1. Rear of lawn mower housing or cutting blade dragging in heavy grass.</td>
<td>1. Set to “Higher Cut” position.</td>
</tr>
<tr>
<td></td>
<td>2. Cutting too much grass position.</td>
<td>2. Set to “Higher Cut”</td>
</tr>
<tr>
<td></td>
<td>3. Dirty air filter.</td>
<td>3. Clean/replace air filter.</td>
</tr>
<tr>
<td></td>
<td>4. Buildup of grass, leaves, and trash under mower.</td>
<td>4. Clean underside of mower housing.</td>
</tr>
<tr>
<td></td>
<td>5. Too much oil in engine.</td>
<td>5. Check oil level.</td>
</tr>
<tr>
<td>Poor cut – uneven</td>
<td>1. Worn, bent or loose blade.</td>
<td>1. Replace blade. Tighten blade bolt.</td>
</tr>
<tr>
<td></td>
<td>2. Wheel heights uneven. height</td>
<td>2. Set all wheels at same height.</td>
</tr>
<tr>
<td></td>
<td>3. Buildup of grass, leaves and trash under mower.</td>
<td>3. Clean underside of mower housing.</td>
</tr>
<tr>
<td>Excessive vibration</td>
<td>1. Worn, bent or loose blade.</td>
<td>1. Replace blade. Tighten blade bolt.</td>
</tr>
<tr>
<td></td>
<td>2. Bent engine crankshaft.</td>
<td>2. Contact a qualified service center.</td>
</tr>
<tr>
<td>Starter rope hard to pull</td>
<td>1. Engine flywheel brake is on when control bar is released pulling starter rope.</td>
<td>1. Depress control bar to upper handle before</td>
</tr>
<tr>
<td></td>
<td>2. Bent engine crankshaft.</td>
<td>2. Contact a qualified service center.</td>
</tr>
<tr>
<td></td>
<td>4. Blade dragging in grass.</td>
<td>4. Move lawn mower to cut grass or to hard surface.</td>
</tr>
<tr>
<td>Grass catcher not filling (if so equipped)</td>
<td>1. Cutting height too low.</td>
<td>1. Raise cutting height.</td>
</tr>
<tr>
<td></td>
<td>2. Lift on blade worn off.</td>
<td>2. Replace blade.</td>
</tr>
<tr>
<td></td>
<td>3. Catcher not venting air.</td>
<td>3. Clean grass catcher.</td>
</tr>
<tr>
<td>Hard to push</td>
<td>1. Grass is too high or wheel height is too low.</td>
<td>1. Raise cutting height.</td>
</tr>
<tr>
<td></td>
<td>2. Rear of lawn mower housing or blade dragging in grass.</td>
<td>2. Raise rear of lawn mower housing one (1) setting higher.</td>
</tr>
<tr>
<td></td>
<td>3. Grass catcher too full.</td>
<td>3. Empty grass catcher.</td>
</tr>
<tr>
<td></td>
<td>4. Handle height position not right for you.</td>
<td>4. Adjust handle height to suit.</td>
</tr>
</tbody>
</table>
REPAIR PARTS

ROTARY LAWN MOWER - - MODEL NUMBER 6022SH (6022SHA)

<table>
<thead>
<tr>
<th>KEY PART NO.</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1</td>
<td>532063601</td>
<td>Locknut 1/4-20</td>
</tr>
<tr>
<td>2</td>
<td>532176563</td>
<td>Control Bar</td>
</tr>
<tr>
<td>3</td>
<td>532132001</td>
<td>Rope Guide</td>
</tr>
<tr>
<td>4</td>
<td>532173693</td>
<td>Upper Handle w/Grip</td>
</tr>
<tr>
<td>5</td>
<td>532174291</td>
<td>Lower Handle</td>
</tr>
<tr>
<td>6</td>
<td>532063601</td>
<td>Locknut 1/4-20</td>
</tr>
<tr>
<td>7</td>
<td>532131959</td>
<td>Handle Bolt 5/16-18</td>
</tr>
<tr>
<td>8</td>
<td>532144929</td>
<td>Hex Washer Head Screw 1/4-20 x 2-1/8</td>
</tr>
<tr>
<td>9</td>
<td>532164137</td>
<td>Throttle Control</td>
</tr>
<tr>
<td>11</td>
<td>532133107</td>
<td>Engine Zone Control Cable</td>
</tr>
<tr>
<td>12</td>
<td>532750097</td>
<td>Hex Washer Head Screw #10-24 x 1/2</td>
</tr>
<tr>
<td>13</td>
<td>532125162</td>
<td>Up-Stop Bracket</td>
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<tr>
<td>14</td>
<td>532213146</td>
<td>Cable Clamp</td>
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<tr>
<td>15</td>
<td>532083816</td>
<td>Screw #10 x 5/8</td>
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<tr>
<td>16</td>
<td>532136376</td>
<td>Handle Knob</td>
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<tr>
<td>19</td>
<td>532051793</td>
<td>Hairpin Cotter</td>
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<tr>
<td>21</td>
<td>532165858</td>
<td>Rear Deflector</td>
</tr>
<tr>
<td>22</td>
<td>532066426</td>
<td>Wire Tie</td>
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<tr>
<td>23</td>
<td>532176561</td>
<td>Discharge Guard</td>
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<tr>
<td>27</td>
<td>532160832</td>
<td>Torsion Spring</td>
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<tr>
<td>30</td>
<td>532160833</td>
<td>Hinge Rod</td>
</tr>
<tr>
<td>33</td>
<td>532063124</td>
<td>Locknut 5/16-18</td>
</tr>
<tr>
<td>34</td>
<td>532174413</td>
<td>Wheel Bracket Support (Left)</td>
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<tr>
<td>35</td>
<td>532174414</td>
<td>Wheel Bracket Support (Right)</td>
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<tr>
<td>36</td>
<td>532165704</td>
<td>Wheel Bracket Adjuster</td>
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<tr>
<td>39</td>
<td>532168599</td>
<td>Selector Spring</td>
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<td>40</td>
<td>532087877</td>
<td>Selector Knob</td>
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<tr>
<td>41</td>
<td>532168602</td>
<td>Axle Arm Assembly (RR)</td>
</tr>
<tr>
<td>43</td>
<td>819112222</td>
<td>Washer</td>
</tr>
<tr>
<td>44</td>
<td>532160828</td>
<td>Shoulder Bolt</td>
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<table>
<thead>
<tr>
<th>KEY PART NO.</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>45</td>
<td>532752063</td>
<td>Wheel Assembly (Rear)</td>
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<td>46</td>
<td>532083923</td>
<td>Locknut 1/16-18</td>
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<td>47</td>
<td>532750550</td>
<td>Wheel Assembly (Front)</td>
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<td>532057143</td>
<td>Washer</td>
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<td>50</td>
<td>532077400</td>
<td>Hubcap</td>
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<td>51</td>
<td>874760514</td>
<td>Hex Head Bolt 5/16-18x</td>
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<td>52</td>
<td>532150406</td>
<td>Hex Head Thread Rolling Screw 3/8-16 x 1</td>
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<td>55</td>
<td>532107339</td>
<td>Danger Decal</td>
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<td>59</td>
<td>532176565</td>
<td>Lawn Mower Housing (Incl. Key Nos. 55)</td>
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<tr>
<td>61</td>
<td>532851514</td>
<td>Blade Adapter</td>
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<tr>
<td>62</td>
<td>532141114</td>
<td>22&quot; Blade</td>
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<td>63</td>
<td>532851074</td>
<td>Hardened Washer</td>
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<tr>
<td>64</td>
<td>532850263</td>
<td>Helical Lockwasher 3/8</td>
</tr>
<tr>
<td>65</td>
<td>532851084</td>
<td>Screw Hex Head 3/8-24 x 1-3/8 (Grd. 8)</td>
</tr>
<tr>
<td>67</td>
<td></td>
<td>Engine - Briggs &amp; Stratton Model No. 12H802</td>
</tr>
</tbody>
</table>

Order parts from engine manufacturer

<table>
<thead>
<tr>
<th>KEY PART NO.</th>
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<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>70</td>
<td>532168601</td>
<td>Axle Arm Assem. (LR)</td>
</tr>
<tr>
<td>72</td>
<td>532168605</td>
<td>Axle Arm Assm. (LF)</td>
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<tr>
<td>73</td>
<td>532168604</td>
<td>Axle Arm Assm. (RF)</td>
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<tr>
<td>74</td>
<td>532751153</td>
<td>Nut</td>
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<tr>
<td>75</td>
<td>532176562</td>
<td>Plate. Mulcher</td>
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<tr>
<td>76</td>
<td>532176560</td>
<td>Clip. Closeout</td>
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<tr>
<td>77</td>
<td>874760412</td>
<td>Screw</td>
</tr>
<tr>
<td>78</td>
<td>532164265</td>
<td>Foam Grip</td>
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<tr>
<td>-</td>
<td>532177945</td>
<td>Owner's Manual (English/French)</td>
</tr>
<tr>
<td>-</td>
<td>532162300</td>
<td>Warning Decal (Not Shown)</td>
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NOTE: All component dimensions given in U.S. inches
1 inch = 25.4 mm