

Get it fixed, at your home or ours!

Just Call:

**1-800-4-MY-HOME®**

(1-800-469-4663)

24 hours a day, 7 days a week

For the repair of major brand appliances **in your own home...**  
no matter who made it, no matter who sold it!

For your nearest **Sears Parts and Service** location,  
to bring in products like vacuums, lawn equipment and electronics.

For **Sears Parts & Service**, to order the replacement parts,  
accessories and owner's manuals that you need to do-it-yourself.

[www.sears.ca](http://www.sears.ca)

To purchase or inquire about a Sears Maintenance Agreement, call:

**1-800-361-6665**

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

Pour service en français:

**1-800-LE-FOYER<sup>MC</sup>**

(1-800-533-6937)

[www.sears.ca](http://www.sears.ca)



02489

® / <sup>TM</sup> Trademarks of Sears, Roebuck and Co. used under license by Sears Canada

<sup>MD</sup> Marque déposée / <sup>MC</sup> Marque de commerce de Sears, Roebuck and Co. utilisée en vertu d'une licence de Sears Canada

Owner's Manual



## ROTARY LAWN MOWER

160cc Honda Engine

21" Multi-Cut

Model No.

**944.364153**



### CAUTION:

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

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

## TABLE OF CONTENTS

Safety Rules .....	2-3	Maintenance.....	12-15
Warranty - Lawn Mower .....	4-5	Service and Adjustments .....	15-16
Product Specifications .....	5	Storage.....	16-17
Assembly/Pre-Operation.....	6-7	Troubleshooting .....	18-19
Operation .....	8-11	Repair Parts.....	20-27
Maintenance Schedule .....	12	Warranty - Honda Motor .....	28-29
		Sears Service .....	Back Cover

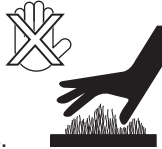
## SAFETY RULES

**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.**

⚠ **WARNING:** In order to prevent accidental starting when setting up, transporting, adjusting or making repairs, always disconnect spark plug wire and place wire where it cannot come in contact with plug.

⚠ **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. CHILDREN



**WARNING: CHILDREN CAN BE SERIOUSLY INJURED OR KILLED BY THIS EQUIPMENT.** Carefully read and follow all of the safety instructions below.

The American Academy of Pediatrics recommends that children be a minimum of 12 year of age before operating a pedestrian controlled lawn mower and a minimum of 16 years of age before operating a riding lawn mower.

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 mowing area and under the watchful care of a responsible adult *other than* the operator.
- 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.

### II. 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 blade. Stay behind the handle when the engine (motor) is running.
- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
- Do not operate machine barefooted or while wearing sandals. Always wear substantial footwear with good ankle support while mowing.
- Do not pull mower backwards unless absolutely necessary. Always look down and behind before and while moving backwards.
- Never direct discharged material toward anyone. Avoid discharging material against a wall or obstruction. Material may ricochet back toward the operator. Stop blade when crossing gravel surfaces.
- 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.
- Never leave a running machine unattended.
- Stop the engine (motor) and wait until the blade comes to a complete stop before cleaning the machine, removing the grass catcher, or unclogging the discharge chute.

## SERVICE NOTES

- 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; walk, never run.
- Disengage the drive system, if 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 eye protection when operating machine.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.
- When loading or unloading this machine, do not exceed the maximum recommended operation angle of 15°.
- Wear proper Personal Protective Equipment (PPE) while operating this machine, including (at a minimum) sturdy footwear, eye protection, and hearing protection. Do not mow in shorts or open toed footwear.
- Never refuel the machine indoors.
- Never store the machine or fuel container where there is an open flame, spark or pilot light such as a water heater or on other appliances.
- Never fill containers inside a vehicle, on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before filling.
- Remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment with a portable container, rather than from a gasoline dispenser nozzle.
- Keep the nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete. Do not use a nozzle lock-open device.
- If fuel is spilled on clothing, change clothing immediately.
- Never overfill fuel tank. Replace gas cap and tighten securely.

Always let someone know you are outside mowing.

### III. SLOPE OPERATION

Slopes are a major factor related to slip & 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, bumps or hidden objects. Uneven terrain could cause a slip and fall accident. Tall grass can hide obstacles.

#### DO NOT:

- Do not mow near drop-offs, ditches or embankments. You could lose your footing or balance.
- Do not mow on wet grass or excessively steep slopes. Poor footing could cause a slip and fall accident.

### IV. SAFE HANDLING OF GASOLINE

To avoid personal injury or property damage, use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive.

- Extinguish all cigarettes, cigars, pipes and other sources of ignition.
- Use only an approved container.
- Never remove gas cap or add fuel with the engine running.
- Allow engine to cool before refueling.

### V. GENERAL SERVICE

- 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 all nuts and bolts tight to be sure the equipment is in safe working condition.
- Never tamper with safety devices. Check their proper operation regularly. Never do anything to interfere with the intended function of a safety device or reduce the protection provided by a safety device.
- 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 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.
- Maintain or replace safety and instruction labels, as necessary.

## WARRANTY

**GENERAL:** Craftsman products are warranted to be free from defects in materials or workmanship for a specific time period as set-out below (the "Warranty Period"). Warranties extend to the original purchaser of a Craftsman product only. Purchases made through an online auction or through any website other than www.sears.ca are excluded. The relevant Warranty Period commences on the original date of purchase. Within this period, Sears Canada, Inc. will, at its sole option, repair or replace any products or components which fail in normal use. Such repairs or replacement will be made at no charge to the customer for parts or labor, provided that the customer shall be responsible for any transportation cost.

**EXCLUSIONS:** This warranty does not cover failures due to normal wear, abuse, misuse, neglect (including but not limited to the use of stale fuel, dirt, abrasives, moisture, rust, corrosion, or any adverse reaction due to improper storage or use habits), improper maintenance or failure to follow maintenance guidelines and/or instructions, failure to operate the product in accordance with the owner's manual or any additional instructions or information provided at the time of purchase or in subsequent communications with the original purchaser, accident or unauthorized alterations or repairs made or attempted by others. Also excluded from warranty coverage – except as provided below - are the following: maintenance, adjustments, components subject to wear including but not limited to: cosmetic components, belts, blades, blade adapters, bulbs, tires, filters, guide bars, lubricants, seats, grips, recoil assy's, saw chains and bars, trimmer lines and spools, spark plugs, starter ropers and tines, and discoloration resulting from ultraviolet light. Any product missing the model and/or serial number identification label will be disqualified from coverage under this warranty.

**REPAIRS:** Repairs have a 90 day warranty. If the defective product is still within the Warranty Period, then the new warranty is 90 days from the date of repair or to the end of the original Warranty Period, whichever period is longer.

**DISCLAIMERS:** THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER ORAL OR WRITTEN (OTHER THAN AS STATED HEREIN), AND WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO ANY. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, WHICH MAY VARY FROM PROVINCE TO PROVINCE.

IN NO EVENT SHALL SEARS BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE OR INABILITY TO USE THE PRODUCT OR FROM DEFECTS IN THE PRODUCT. THE EXCLUSIONS IN THIS PARAGRAPH SHALL NOT APPLY IN JURISDICTIONS WHERE APPLICABLE LAW DOES NOT ALLOW FOR THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. IN SUCH JURISDICTIONS, THIS PARAGRAPH SHALL NOT APPLY, BUT THE REMAINING PROVISIONS OF THIS DOCUMENT SHALL REMAIN VALID.

Sears retains the exclusive right to repair or replace the product or offer a full refund of the purchase price at its sole discretion. SUCH REMEDY SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY FOR ANY BREACH OF WARRANTY.

**CUSTOMER RESPONSIBILITIES:** In addition to complying with all suggested maintenance guidelines and instructions, customers' obligations shall include but shall not be limited to: operating the product in accordance with the owner's manual or any additional instructions or information provided at the time of purchase or in subsequent communications to the purchaser from time to time, exhibit reasonable care in the use, operation, maintenance, general upkeep and storage of the product. Failure to comply with these requirements will void any applicable warranty.

Only Honda approved replacement parts may be used in the performance of any warranty repairs and must be provided without charge to the owner. The use of replacement parts not equivalent to the original parts may impair the effectiveness of your engine emission control system. If such a replacement part is used in the repair or maintenance of your engine, and an authorized Honda dealer determines it is defective or causes a failure of a warranted part, your claim for repair of your engine may be denied. If the part in question is not related to the reason your engine requires repair, your claim will not be denied.

**TO OBTAIN WARRANTY SERVICE:**

You must, at your own expense, take your Honda Power Equipment engine or the product on which it is installed, along with your sales registration card or other proof of original purchase date, to any Honda Power Equipment dealer who is authorized by Honda to sell and service that Honda product during his normal business hours. Claims for repair or adjustment found to be caused solely by defects in material or workmanship will not be denied because the engine was not properly maintained and used.

If you are unable to obtain emission warranty service or are dissatisfied with the warranty service you received, contact the owner of the dealership involved. Normally this should resolve your problem. However, if you require further assistance, contact the Honda office in your region:

American Honda Motor Co., Inc.  
Power Equipment Customer Relations  
4900 Marconi Drive  
Alpharetta, Georgia 30005-8847  
Telephone: (888) 888-3139

Honda Canada Inc.  
Power Equipment Customer Relations  
Visit www.honda.ca  
for contact information.  
Telephone: (888) 946-6329

Email: powerequipmentemissions@ahm.honda.com

**EXCLUSIONS:**

Failures other than those resulting from defects in material or workmanship are not covered by this warranty. This warranty does not extend to emission control systems or parts that are affected or damaged by owner abuse, neglect, improper maintenance, misuse, misfueling, improper storage, collision, the incorporation of, or use of, unsuitable attachments, or the unauthorized alteration of any part.

This warranty does not cover replacement of expendable maintenance items made in connection with required maintenance service after the item's first scheduled replacement as listed in the maintenance section of the product owner's manual, such as: spark plugs and filters.

**Disclaimer of Consequential Damage and Limitation of Implied Warranties:**

American Honda Motor Co., Inc. and Honda Canada Inc. disclaim any responsibility for incidental or consequential damages such as loss of time or the use of the power equipment, or any commercial loss due to the failure of the equipment; and any implied warranties are limited to the duration of this written warranty. This warranty is applicable only where the California, U.S. EPA, or Environment Canada emission control system warranty regulation is in effect.

**EMISSION CONTROL SYSTEM WARRANTY PARTS:**

SYSTEMS COVERED:	PARTS DESCRIPTION:
Fuel Metering	Carburetor Assembly (Includes Starting Enrichment System), Engine Temperature Sensor, Engine Control Module, Fuel Regulator, Intake Manifold
Evaporative	Fuel Tank, Fuel Cap, Fuel Hoses, Vapor Hoses, Carbon Canister, Canister Mounting Brackets, Fuel Strainer, Fuel Cock, Fuel Pump, Fuel Hose Joint, Canister Purge Hose Joint
Exhaust	Catalyst, Exhaust Manifold
Air Induction	Air Filter Housing, Air Filter Element*
Ignition	Flywheel Magneto, Ignition Pulse Generator, Crankshaft Position Sensor, Power Coil, Ignition Coil Assembly, Ignition Control Module, Spark Plug Cap, Spark Plug*
Crankcase Emission Control	Crankcase Breather Tube, Oil Filler Cap
Misc. Items	Tubing, Fittings, Seals, Gaskets & Clamps associated with these listed systems

**Note:** This list applies to parts supplied by Honda and does not cover parts supplied by the equipment manufacturer. Please see the original equipment manufacturer's emissions warranty for non-Honda parts.

\* Covered up to the first required replacement only.  
See the Maintenance Schedule in the owner's manual.

# HONDA

## EMISSION CONTROL SYSTEM WARRANTY

Your new Honda Power Equipment engine complies with the U.S. EPA, Environment Canada, and State of California emission regulations (models certified for sale in California only). American Honda Motor Co., Inc. provides the emission warranty coverage for engines in the United States and its territories. Honda Canada Inc. provides the emission warranty for engines in the 13 provinces and territories of Canada. In the remainder of this Emission Control System Warranty, American Honda Motor Company Inc. and Honda Canada Inc. will be referred to as Honda.

### YOUR WARRANTY RIGHTS AND OBLIGATIONS:

#### California

The California Air Resources Board and Honda are pleased to explain the emission control system warranty on your Honda Power Equipment engine. In California, new spark-ignited small off-road equipment engines must be designed, built, and equipped to meet the State's stringent anti-smog standards.

#### Other States, U.S. territories, and Canada

In other areas of the United States and in Canada, your engine must be designed, built, and equipped to meet the U.S. EPA and Environment Canada emission standards for spark-ignited engines at or below 19 kilowatts. Specific Honda products that do not meet the California emissions regulations can be identified by a "Not for sale in California" decal.

#### All of the United States and Canada

Honda must warrant the emission control system on your power equipment engine for the period of time listed below, provided there has been no abuse, neglect, or improper maintenance of your power equipment engine. Where a warrantable condition exists, Honda will repair your power equipment engine at no cost to you including diagnosis, parts, and labor.

Your emission control system may include such parts as the carburetor or fuel injection system, the ignition system, and catalytic converter. Also included may be hoses, connectors, and other emission-related assemblies (see next page for additional covered parts).

#### OWNER'S WARRANTY RESPONSIBILITY:

As the power equipment engine owner, you are responsible for the performance of the required maintenance listed in your owner's manual. Honda recommends that you retain all receipts covering maintenance on your power equipment engine, but Honda cannot deny warranty coverage solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the power equipment engine owner, you should however be aware Honda may deny you warranty coverage if your power equipment engine or a part has failed due to abuse, neglect, improper maintenance, or unapproved modifications.

You are responsible for presenting your power equipment engine to a Honda Power Equipment dealer as soon as a problem exists. The emission related warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. If you have any questions regarding your emission warranty rights and responsibilities, you should contact the Honda office in your region:

American Honda Motor Co., Inc.  
Power Equipment Customer Relations  
4900 Marconi Drive  
Alpharetta, Georgia 30005-8847  
Telephone: (888) 888-3139

or

Honda Canada Inc.  
Power Equipment Customer Relations  
Visit [www.honda.ca](http://www.honda.ca)  
for contact information.  
Telephone: (888) 946-6329

Email: [powerequipmentemissions@ahm.honda.com](mailto:powerequipmentemissions@ahm.honda.com)

#### WARRANTY COVERAGE:

Honda power equipment engines sold in the United States and Canada are covered by this warranty for a period of two years from the date of delivery to the original retail purchaser or the length of the Honda Distributor's Limited Warranty, whichever is longer. This warranty is transferable to each subsequent purchaser for the duration of the warranty period.

If any emission-related part on your engine is defective, the part will be repaired or replaced by Honda without charge for diagnosis, parts, or labor. All defective parts replaced under this warranty become the property of Honda. A list of warranted parts is on the reverse side of this warranty statement. Normal maintenance items, such as spark plugs and filters, that are on the warranted parts list are warranted up to their required replacement interval only.

Honda will also replace other engine components damaged by a failure of any warranted part during the warranty period.

American Honda Motor Co., Inc. / Honda Canada Inc. 10/2009 00X51-ZG0-6110 PWL50975-M

## WARRANTY

**LIST OF APPLICABLE WARRANTY PERIODS:** The following list contains the applicable Warranty Period for your Craftsman product and is based on a combination of the type of product or component and the intended and actual use of the product or component:

- 90 DAYS:** Craftsman products intended for use or actually used for commercial, institutional, professional or income-producing purposes
- 2 YEARS:** Craftsman riding lawn mowers, yard and garden tractors, walk behind mowers, tillers, brush cutters, snow blowers, handheld blowers, backpack blowers, hedge trimmers and electrical products for noncommercial, nonprofessional, non-institutional, or non-income-producing use, except for those components which are part of engine systems manufactured by third party engine manufacturers for which the purchase has received an separate warranty with product information supplied at the time of purchase.
- 1 YEAR:** Craftsman power cutters, stump grinders, pole pruners, gas chain saws, electric chain saws, trimmer attachments, baggers and pole saws for noncommercial, nonprofessional, non-institutional, or non-income-producing use.
- 90 DAYS:** All defective batteries, which will be replaced during this 90-day Warranty Period.
- 60 DAYS:** Additional Warranty Period of 60 days will apply to adjustments and worn products or components BUT DOES NOT INCLUDE WEAR OR ADJUSTMENTS for products used for commercial, institutional, professional or income-producing purposes. Wear items include but are not limited to: belts, blades, tires, spark plugs, air filters, chains, shear bolts, skid plates, scraper bars, drift cutters, ropes, tines, collection bags and pulleys.

As the Warranty Period runs from the date of purchase and NOT from the date that a product is delivered, opened, assembled or first used, please ensure during this time period that your product or component has been assembled and tested for correction operation regardless of when you intend to actually use it. Claims made after the Warranty Period has expired will not be honored.

**PROOF OF PURCHASE/DOCUMENTATION:** Warranty coverage is conditioned upon the original purchaser furnishing Sears Canada or its authorized third party service provider if applicable, with the original sales receipt or other adequate written proof of the original purchase date and identification of the product. In the event that the original purchaser is unable to provide a company of the original sales receipt, Sears Canada Inc. reserves the right to determine in its sole discretion what other written proof of the original purchase date and identification of the product is acceptable.

## PRODUCT SPECIFICATIONS

Serial Number:	
Date of Purchase:	
Gasoline Capacity / Type:	1 Quart/0,94 Liters (Unleaded Regular)
Oil Capacity:	0,58 Quart/0,55 Liter
Oil Type (API SJ-SN):	SAE 30 (above 0°C/32°F) or SAE 10W-30
Spark Plug (Gap: 0,03"/0,76 mm)	NGK BPR5ES
Valve Clearance (± 0.04 mm):	Intake: 0.015 mm; Exhaust: 0.020 mm
Blade Bolt Torque:	35–40 ft. lbs. (47–54 Nm)

• The model and serial numbers will be found on a decal on the rear of the lawn mower housing. Record both serial number and date of purchase in space provided above.

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.

## TOOLS REQUIRED FOR ASSEMBLY

1/2" Wrench

## TO REMOVE 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 mower out of carton and check carton thoroughly for additional loose parts.

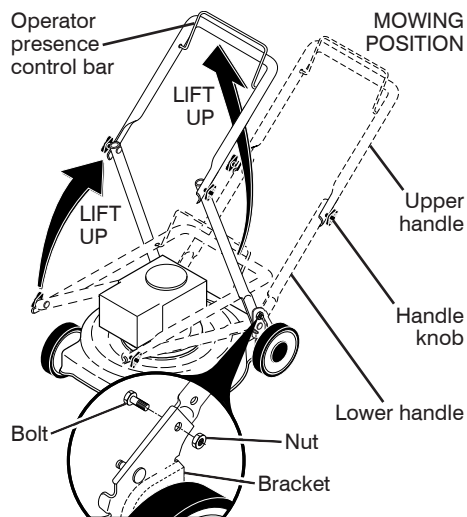
## HOW TO SET UP YOUR LAWN MOWER

### 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. Insert bolt through handle and bracket and secure with nut. A 1/2" wrench will be required.
3. Remove protective padding, raise upper handle section into place on lower handle and tighten both handle knobs.
4. 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.



## CAMSHAFT PULLEY

NO.	NO.	DESCRIPTION
1	14320-ZL8-010	Pulley, Camshaft
2	14324-ZL8-000	Shaft, Cam Pulley
3	14400-Z0J-014	Belt, Timing (84HU7 G-200)
6	14461-ZL8-000	Shaft, Rocker Arm
11	90112-333-000	Screw, Tappet Adjusting
12	90206-001-000	Nut, Tappet Adjusting
13	91301-ZM0-V31	O-Ring (6.8 x 1.9) (ARAI)
15	14431-Z0J-000	Rocker Arm, Intake Valve
16	14441-Z0J-000	Rocker Arm, Exhaust Valve

## OIL PAN

NO.	NO.	DESCRIPTION
1	11300-ZM0-811	Pan Assembly, Oil
2	15650-ZM0-801	Gauge Assembly, Oil Level
4	15625-ZE6-000	Gasket, Oil Filler Cap
5	15631-ZM0-000	Extension, Oil Filler
6	15639-ZM0-000	Lock Washer, Extension
8	16508-ZM0-010	Shaft, Governor Holder
9	16510-ZM0-010	Governor Assembly
10	16511-ZL8-000	Weight, Governor
11	16512-ZM0-000	Holder, Governor Weight
12	16513-ZE1-000	Pin, Governor Weight
13	16531-ZE1-000	Slider, Governor
14	16541-ZM0-000	Shaft, Governor Arm
15	90014-952-000	Bolt, Flange (#6 x 14) (CT200)
16	90121-952-000	Bolt, Flange (#6 x 25) (CT200)
17	90451-ZE1-000	Washer, Thrust (6 mm)
18	90602-ZE1-000	Clip, Governor Holder
19	91202-ZL8-003	Oil Seal (28 x 41.25 x 6)
20	91356-MA6-005	O-Ring (14.8 x 2.4) (NOK)
21	94101-068000	Washer, Plain (6 mm)
22	94251-08000	Pin, Lock (8 mm)
23	94301-08200	Pin, Dowel (#8 x 20)

## PISTON / CONNECTING ROD

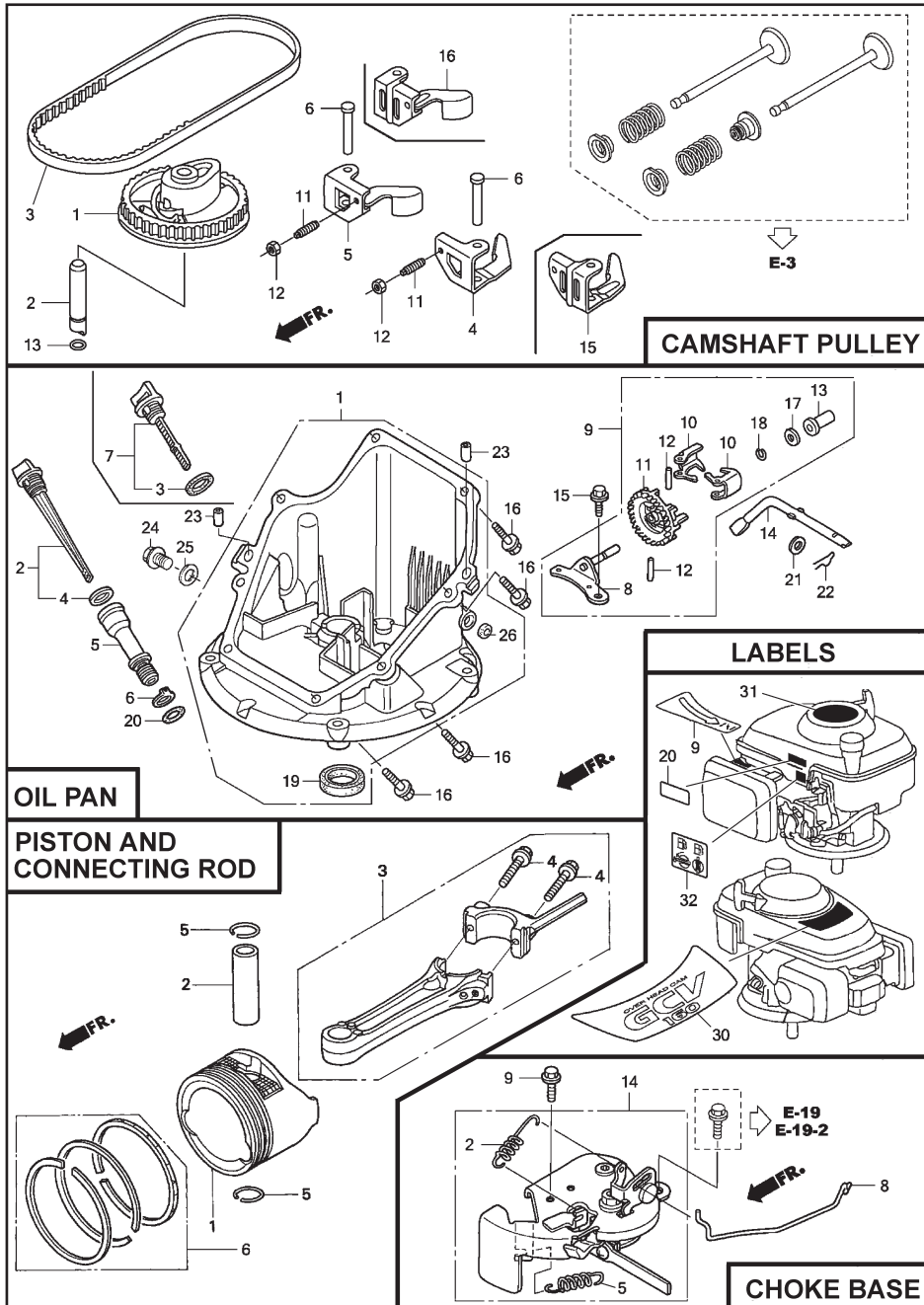
NO.	NO.	DESCRIPTION
1	13101-Z2A-010	Piston
2	13111-ZE0-000	Pin, Piston
3	13200-Z0J-000	Connecting Rod Assembly
4	90001-ZE1-000	Bolt, Connecting Rod
5	90551-ZE0-000	Clip, Piston Pin (13 mm)
6	13010-Z0L-014	Ring Set, Piston, Standard (Teikoku)

## LABELS

NO.	NO.	DESCRIPTION
9	87528-Z0L-V20	Mark, Choke Indication
20	87114-ZH7-821	Label, Warning
30	87101-Z8B-000	Mark, Emblem (GCV160)
31	87169-Z8E-000	Mark, Recoil Cover
32	87524-Z8B-000	Mark, Caution, Fuel Petcock

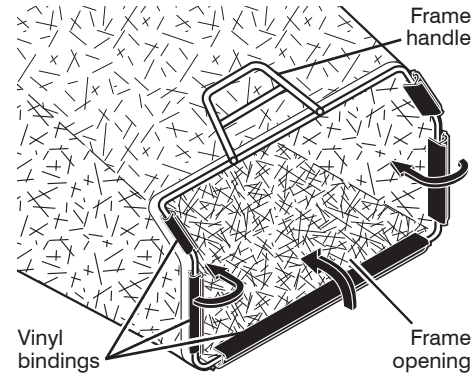
## CHOKE BASE

NO.	NO.	DESCRIPTION
2	16592-Z2D-800	Spring, Return
5	16614-Z2D-800	Spring, Choke Lever
8	16632-Z0L-801	Rod, Stop
9	90022-888-010	Bolt, Flange (#6 x 20) (CT200)
14	16610-Z2D-801	Lever Assembly, Choke
	16610-Z2D-802	Lever Assembly, Choke



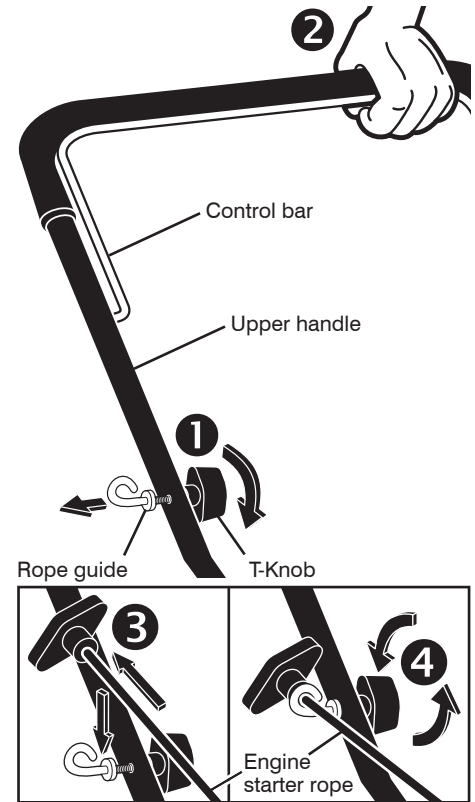
**TO ASSEMBLE GRASS CATCHER**

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.



**INSTALL STARTER ROPE**

1. Loosen T-knob.
2. Hold control bar against upper handle.
3. Slowly pull engine starter rope out until rope will slip into loop of rope guide.
4. Tighten T-knob.



**TO INSTALL ATTACHMENTS**

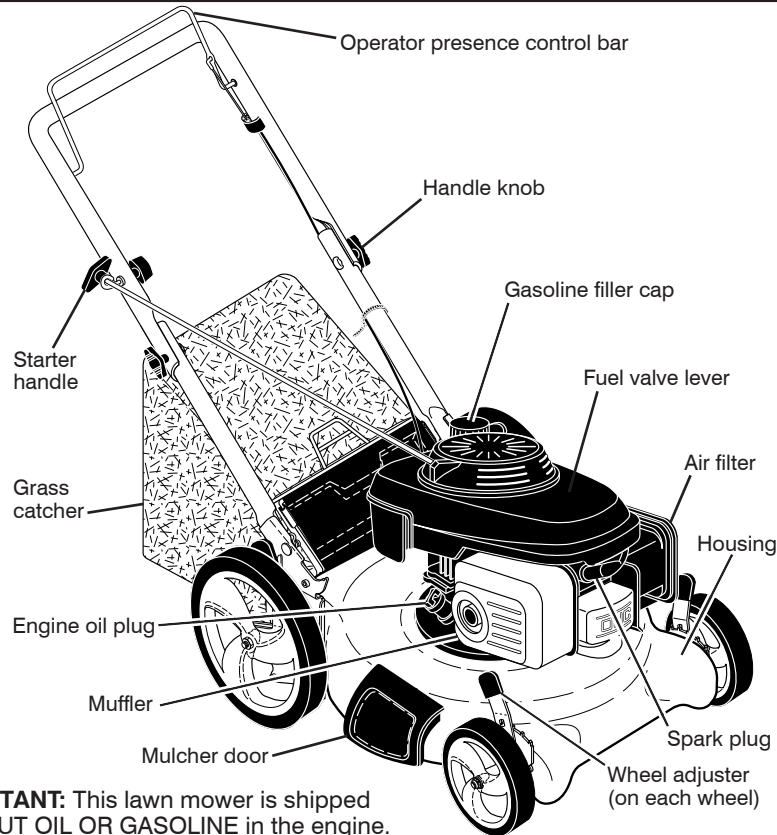
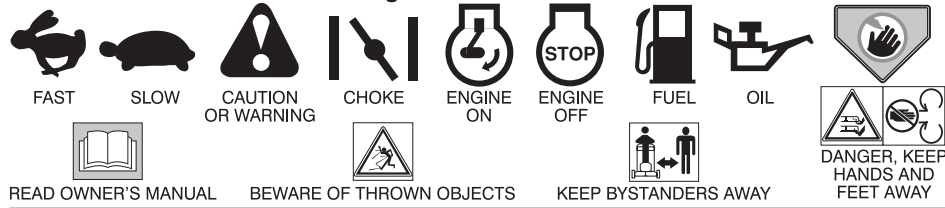
Your lawn mower was shipped ready to be used as a mulcher. To convert to bagging, see "TO CONVERT MOWER" in the Operation section of this manual.

# 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.



**IMPORTANT:** This lawn mower is shipped WITHOUT OIL OR GASOLINE in the engine.  
**NOTE:** Gasoline containing up to 10% ethanol (E10) is acceptable for use in this machine. The use of any gasoline exceeding 10% ethanol (E10) will void the product warranty.

### MEETS CPSC SAFETY REQUIREMENTS

Sears rotary walk-behind power lawn mowers conform to the safety standards of the American National Standards Institute and the U.S. Consumer Product Safety Commission. **⚠ WARNING:** 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.

**Mulcher door** – allows conversion to discharging or bagging operation.  
**8 Starter handle** – used for starting engine.

## FAN COVER

KEY PART NO.	NO.	DESCRIPTION
6	16950-Z0Y-003	Petcock Assembly
7	16952-ZA8-800	Filter, Fuel
8	16961-Z0L-900	Stay, Fuel Petcock
9	17511-Z0L-030	Tank, Fuel
10	17514-Z0L-000	Seal, Fuel Filler Neck
11	17516-Z0L-000	Clip, Tank Mounting
12	17532-Z0L-000	Rubber A, Tank Mounting
13	17533-Z0L-000	Rubber B, Tank Mounting
14	17534-Z0L-000	Nut, Tank Mounting
15	17620-Z0J-800	Cap Assembly, Fuel Tank
16	17636-Z0L-000	Gauge, Fuel Level
21	19610-Z0L-861ZC	Cover Assembly, Fan "T89" (Craftsman Red)
	19610-Z0L-861ZA	Cover Assembly, Fan "T89" ("NH1") (Black)
	19610-Z0L-861ZD	Cover Assembly, Fan "T93" (Husqvarna Grey)
	19610-Z0L-861ZE	Cover Assembly, Fan "T98" (M.T.D. Red)
22	19619-ZL8-300	Collar, Fan Cover
24	90013-883-000	Bolt, Flanged (#6 x 12) (CT200)
25	90015-883-000	Bolt, Flanged (#6 x 28) (CT200)
27	90043-ZL8-000	Bolt, Stud (H=42.5mm)
28	90043-ZL8-000	Bolt, Stud (H=42.5mm)
33	93913-25220	Screw, Tapping (PO) (#5 x 12)
35	91424-Z8B-821	Tube, Fuel Tank
36	91427-Z8B-821	Tube, Fuel (7.3 x 160)
40	95002-40800-08	Clip, Tube (D8)
42	95002-41200-08	Clip, Tube (D12)

## MUFFLER

KEY PART NO.	NO.	DESCRIPTION
1	18310-ZM0-000	Muffler
2	18321-Z0L-J00	Protector, Muffler (S/N 1243452 and below)
	18321-Z0L-J01	Protector, Muffler (S/N 1243453 and above)
3	90004-ZL8-000	Bolt, Flange #6 x 79 (CT200)
4	90013-883-000	Bolt, Flange #6 x 12 (CT200)
5	18381-ZL8-305	Gasket, Muffler
9	18350-ZL8-000	Arrester, Spark
10	18356-ZL8-000	Plate, Arrester Number
11	90055-ZE1-000	Screw, Tapping #4 x 6
12	06180-Z0J-000	Kit, Spark Arrester

## FLYWHEEL

KEY PART NO.	NO.	DESCRIPTION
1	13331-357-000	Key, Special, Woodruff (25 x 18)
3	30500-ZL8-014	Coil Assembly, Ignition
4	31105-ZM0-000	Flywheel Assembly
5	32195-ZM0-800	Wire, Stop Switch
6	35120-ZM0-003	Switch Assembly, Engine Stop (NC)
8	75113-ZM0-000	Spring, Brake Lever
10	90014-952-000	Bolt, Flange (#6 x 14) (CT200)
11	90018-ZE1-000	Bolt, Flange (#6 x 23) (CT200)
12	90018-ZE1-000	Bolt, Flange (#6 x 23) (CT200)
13	90201-Z0T-800	Nut, Special (14 mm)
14	51125-Z0L-003	Holder, Wire (Fastex)
	90681-959-003	Clip A, Cable (3.8mm) (Black) (NIFCO)
15	93892-04012-00	Screw, Washer Head (#4 x 12)
16	94103-04000	Washer, Plain (4 mm)
21	75110-Z0Y-000	Brake Sub Assembly
25	91601-Z0L-300	Grommet, Brake Plate

## AIR CLEANER

KEY PART NO.	NO.	DESCRIPTION
1	15721-ZM0-000	Tube, Breather
2	17211-ZL8-023	Element, Air Cleaner
3	17220-ZM0-010	Case Assy., Air Cleaner (S/N 1167575 and below)
	17220-ZM0-020	Case Assy., Air Cleaner (S/N 1167576-1239013)
	17220-ZM0-030	Case Assy., Air Cleaner (S/N 1239014 and above)
5	17228-ZM0-000	Gasket, Air Cleaner
6	17231-Z0L-030	Cover, Air Cleaner (S/N 1167575 and below)
	17231-Z0L-040	Cover, Air Cleaner (S/N 1167575 and below)
	17231-Z0L-050	Cover, Air Cleaner
7	90003-ZM0-010	Bolt, Flange (#6 x 85) (CT200)

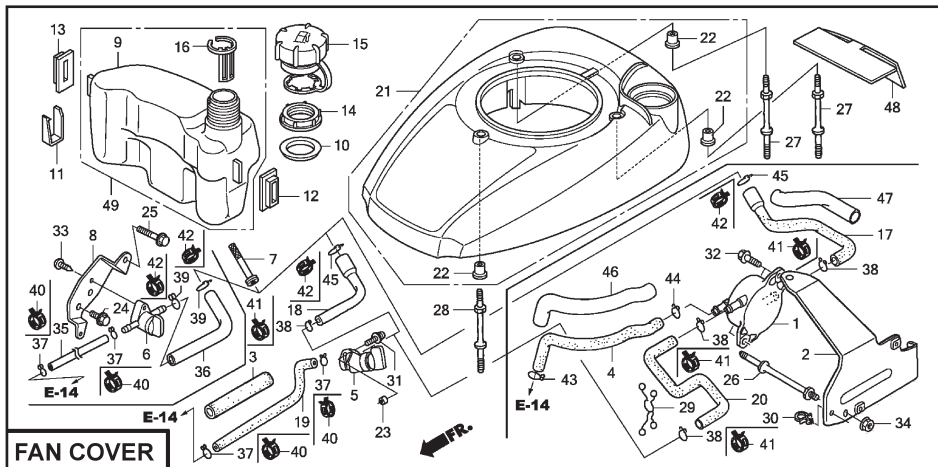




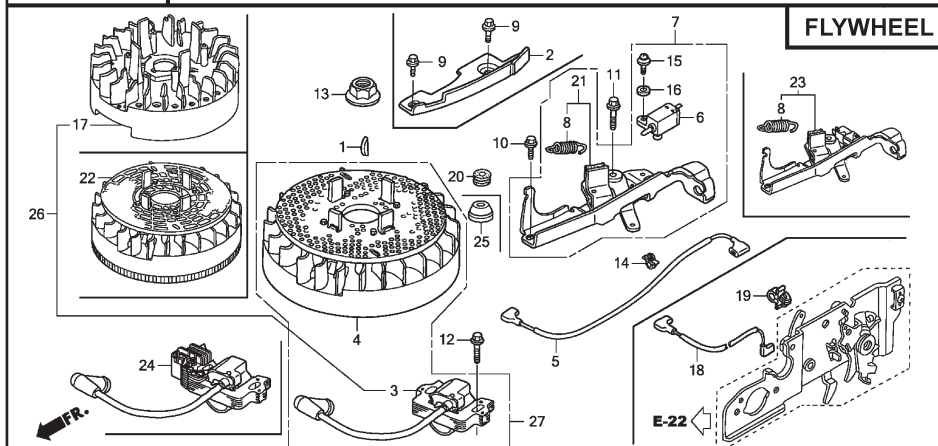
The operation of any lawn mower can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your lawn mower or performing any adjustments or repairs. We recommend standard safety glasses or a wide vision safety mask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



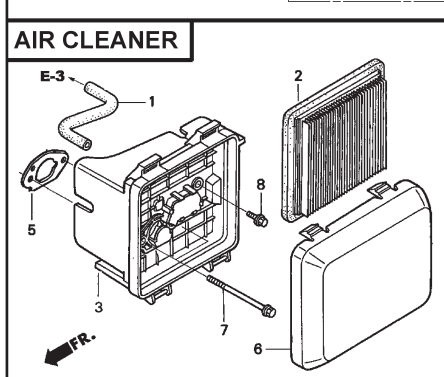
Use ear protectors to avoid damage to hearing.



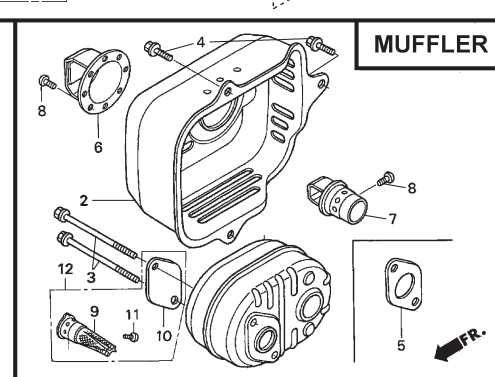
FAN COVER



FLYWHEEL



AIR CLEANER



MUFFLER

**HOW TO USE YOUR LAWN MOWER ENGINE SPEED**

Engine speed was set at the factory for optimum performance. It is not adjustable.

**ENGINE ZONE CONTROL**

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

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

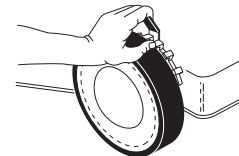
**TO ADJUST CUTTING HEIGHT**

Raise wheels for low cut and lower wheels for high cut, adjust cutting height to suit your requirements. Medium position is best for most lawns.

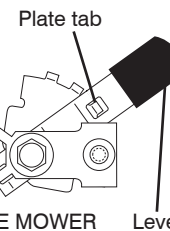
- To change cutting height, squeeze adjuster lever toward wheel. Move wheel up or down to suit your requirements. Be sure all wheels are in the same setting.

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

LEVER BACKWARD TO LOWER MOWER



LEVER FORWARD TO RAISE MOWER

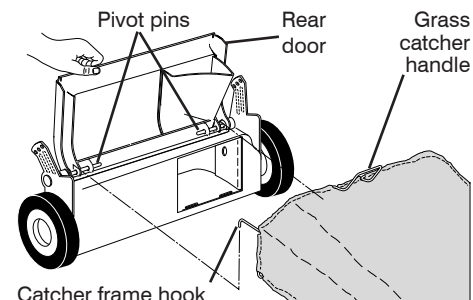


**TO CONVERT MOWER**

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

**REAR BAGGING**

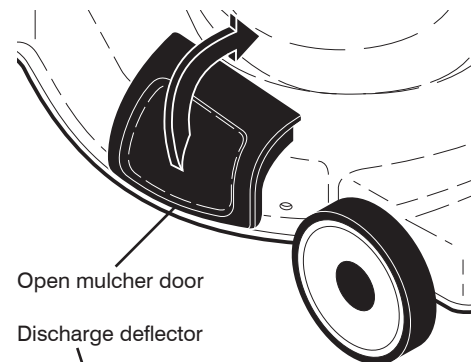
- Lift rear door of the lawn mower and place the grass catcher frame hooks onto the door pivot pins.
- To convert to mulching or discharging operation, remove grass catcher and close rear door.



Catcher frame hook

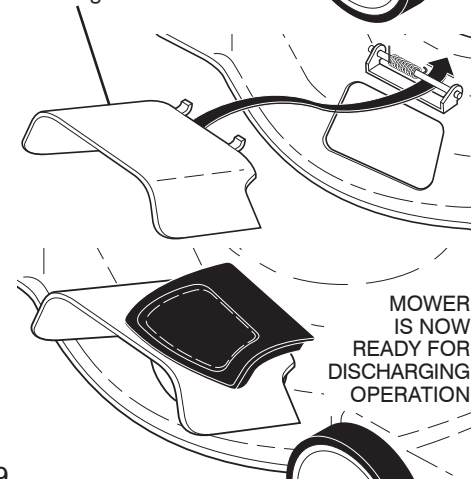
**SIDE DISCHARGING**

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



Open mulcher door

Discharge deflector



MOWER IS NOW READY FOR DISCHARGING OPERATION

## SIMPLE STEPS TO REMEMBER WHEN CONVERTING YOUR LAWN MOWER FOR MULCHING -

1. Rear door closed.
  2. Mulcher door closed.
- ### FOR REAR BAGGING -
1. Grass catcher installed.
  2. Mulcher door closed.
- ### FOR SIDE DISCHARGING -

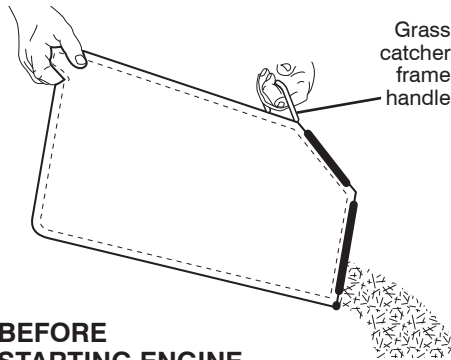
1. Rear door closed.
2. Discharge deflector installed.

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

### TO EMPTY GRASS CATCHER

1. Lift up on grass catcher using the frame handle.
2. Remove grass catcher with clippings from under lawn mower handle.
3. Empty clippings from bag.

**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.
2. Remove oil dipstick from oil fill spout.
3. You receive a container of oil with the unit. Slowly pour the entire container down the oil fill spout into the engine.
4. Insert and tighten dipstick.

### IMPORTANT:

- 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. See "TO

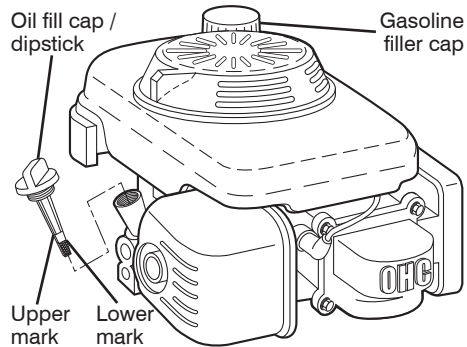
CHANGE ENGINE OIL" in the Maintenance section of this manual.

### 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. Empty 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 STOP ENGINE

- To stop engine, release operator presence control bar. Wait until blade and all moving parts have stopped and turn fuel valve to OFF position if you do not intend to restart the engine soon.

### 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. Be sure fuel valve is in ON position.
2. Hold operator presence control bar down to the handle and pull starter handle quickly. Do not allow starter rope to snap back.

## HONDA 4-CYCLE ENGINE

MODEL NUMBER GCV160-LAOS3B

### CYLINDER BARREL

KEY NO.	PART NO.	DESCRIPTION
1	12000-ZOL-406	Cylinder Assembly
	12000-ZOL-840	Cylinder Assembly
3	12310-ZOJ-000	Cover, Cylinder Head
	12311-ZL8-D00	Cover, Head
	12311-ZL8-000	Cover, Head
4	12355-ZL8-000	Cover, Breather (Breather Valve Assembly)
5	90013-883-000	Bolt, Flange (#6 x 12) (CT200)
6	90014-952-000	Bolt, Flange (#6 x 14) (CT200)
7	91201-ZL8-003	Oil Seal (25.4 x 62 x 6)
8	98079-55846	Spark Plug (BPR5ES) (NGK)
10	12209-ZM0-003	Seal, Valve Stem
11	14711-ZL8-000	Valve, Intake (Technostar)
	14711-ZOJ-000	Valve, Intake (Rocknel)
	14711-ZOJ-800	Valve, Intake
12	14721-ZL8-000	Valve, Exhaust
13	14751-ZL8-000	Spring, Valve
14	14771-ZOJ-000	Retainer, Valve Spring

### CARBURETOR

KEY NO.	PART NO.	DESCRIPTION
1	16010-883-015	Gasket Set
2	16013-ZL1-003	Float Set
3	16015-ZOL-881	Chamber Set, Float
5	16028-ZE0-005	Screw Set
	16028-ZK7-S91	Screw Set
7	16100-ZOL-852	Carburetor Assembly (BB62Z B)
8	16155-ZM0-013	Valve, Float
9	16166-ZM0-003	Nozzle, Main
10	16211-ZL8-000	Insulator, Carburetor
11	16212-ZL8-000	Gasket, Insulator
13	16228-ZL8-000	Gasket, Carburetor
15	93500-05006-0H	Screw, Pan (#5 x 6)
16	99101-124-0600	Jet, Main (#60)
	99101-124-0620	Jet, Main (#62)
	99101-124-0650	Jet, Main (#65)
26	16951-ZOL-000	Guide, Air

### CONTROL

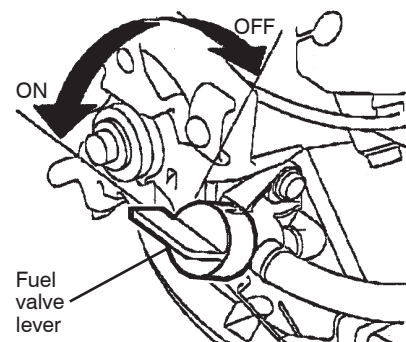
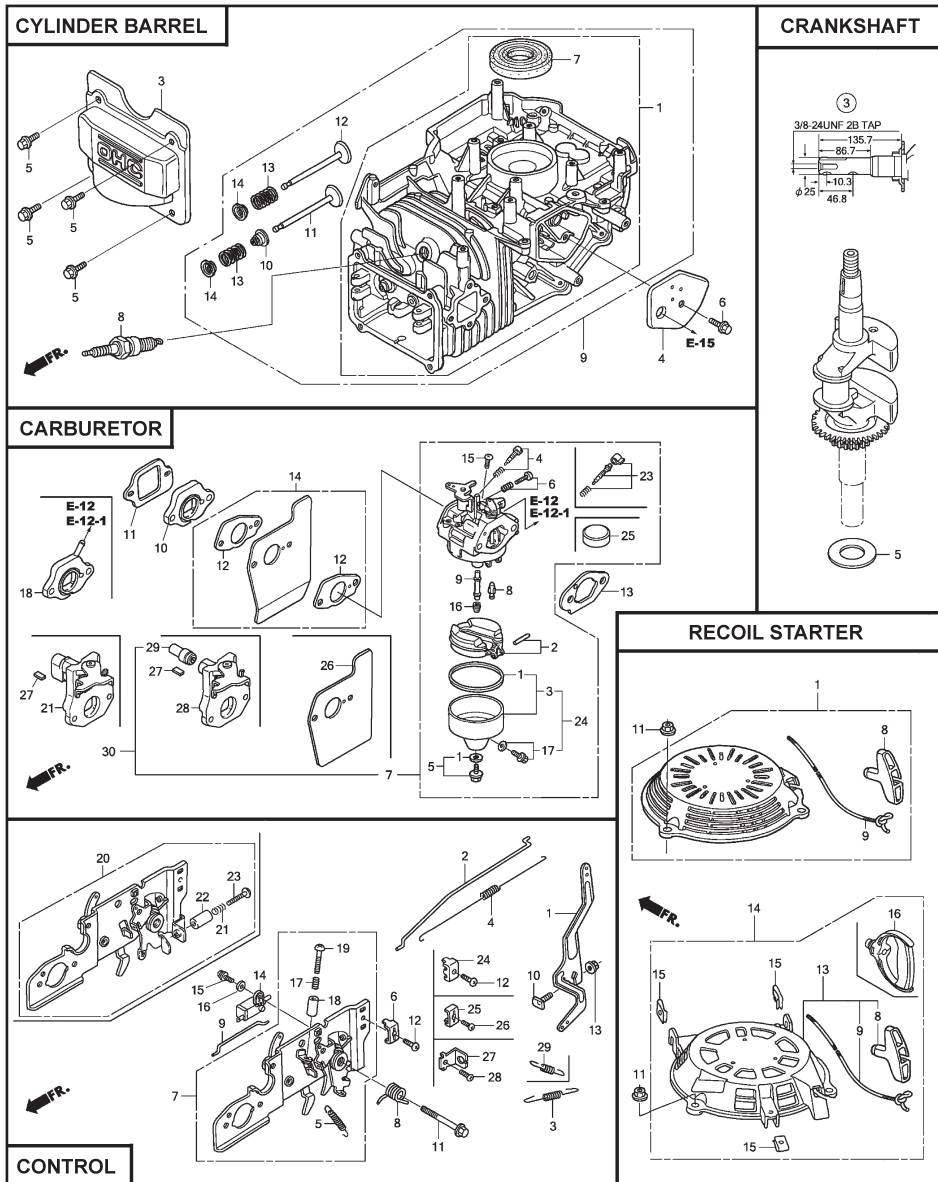
KEY NO.	PART NO.	DESCRIPTION
1	16551-ZM0-010	Arm, Governor
2	16555-ZOL-801	Rod, Governor
3	16561-ZOL-000	Spring, Governor
4	16562-ZM0-000	Spring, Throttle Return
10	90015-ZE5-010	Bolt, Governor Arm
13	94050-06000	Nut, Flange (6 mm)
15	93892-04012-000	Screw, Washer Head (#4 x 12)
16	94103-04000	Washer, Plain (4 mm)

### CRANKSHAFT

KEY NO.	PART NO.	DESCRIPTION
3	13310-ZM0-610	Crankshaft
5	90402-ZL8-000	Washer, Thrust

### RECOIL STARTER

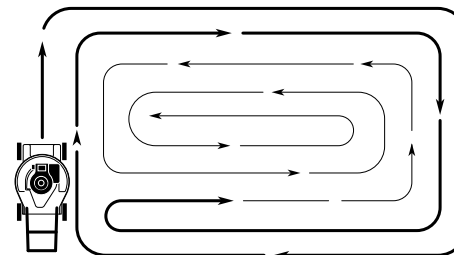
KEY NO.	PART NO.	DESCRIPTION
1	28400-ZOL-V20ZA	Starter Assembly, Recoil, "NH1" (Long Rope) (Black)
8	28461-ZL8-003	Grip, Recoil Starter
9	28462-ZOL-V20	Rope, Recoil Starter, "Long Type" (Black)
11	90201-ZM0-000	Nut, Flange (6 mm)



**MOWING TIPS**

**CAUTION:** Do not use de-thatcher blade attachments on your mower. Such attachments are hazardous, will damage your mower and could void your warranty.

- 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 side discharge operation, cut in a counterclockwise direction, starting at the outside of the area to be cut, in order to spread grass clippings more evenly and to put less load on the engine. To keep clippings off of walkways, flower beds, etc., make the first cuts in a clockwise direction.



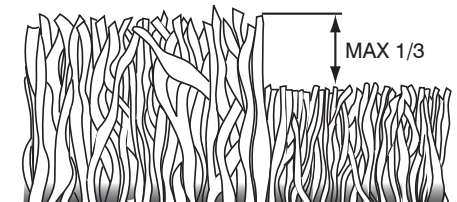
- If a trail of grass clipping is left on the right side of the lawn mower during rear discharge operation, mow in a clockwise direction with a small overlap to collect the clippings on the next pass.
- Pores in cloth grass catchers can become filled with dirt and dust with use and catchers will collect 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, yet the newly cut area will not be exposed to direct sunlight.
- 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.

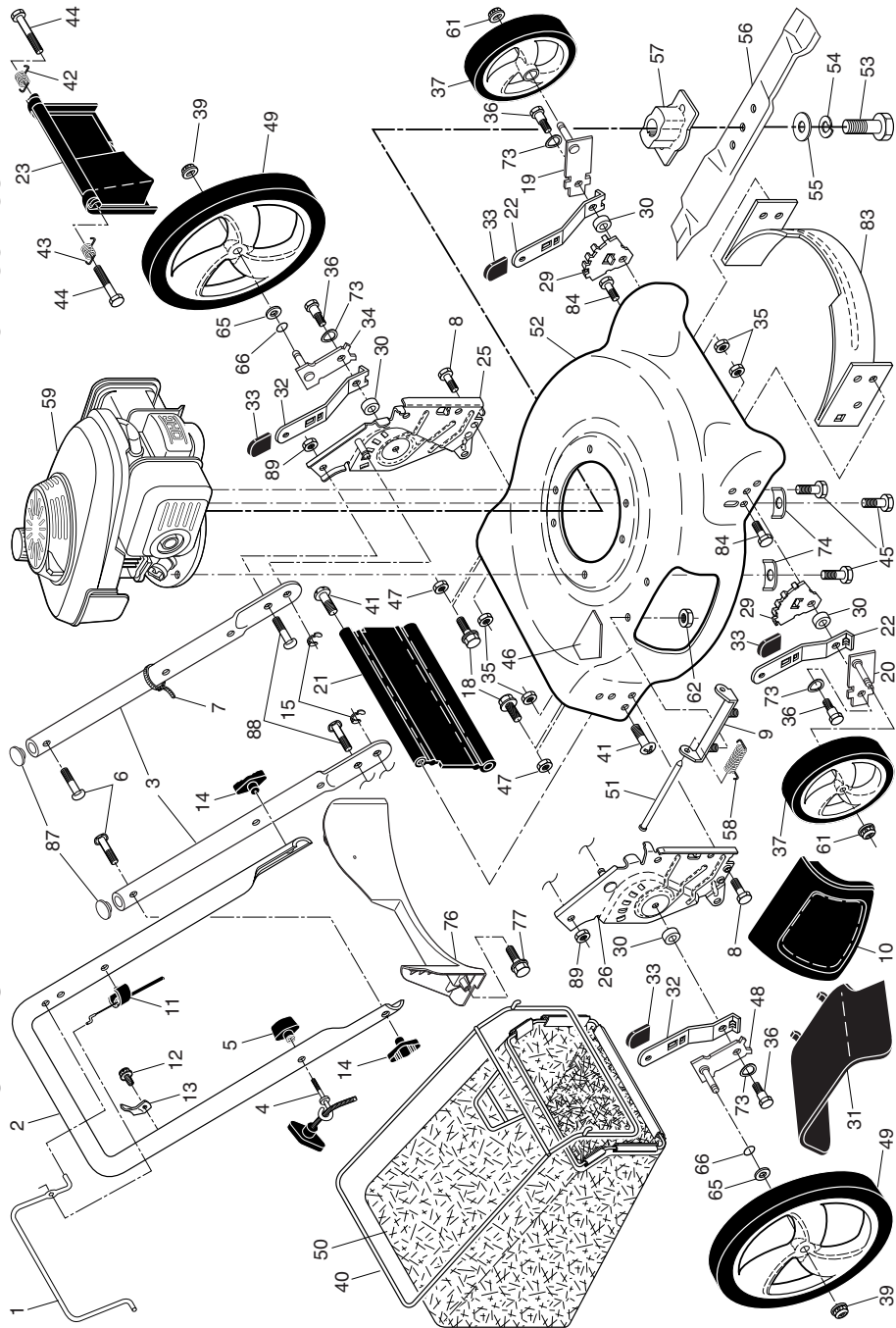


- Certain types of grass and grass conditions may require that an area be mulched a second time to completely hide the clippings. When doing a second cut, mow across (perpendicular) to the first cut path.
- Change your cutting pattern from week to week. Mow north to south one week then change to east to west the next week. This will help prevent matting and graining of the lawn.



## REPAIR PARTS

CRAFTSMAN ROTARY LAWN MOWER -- MODEL NUMBER 944.364153



## 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 a bent or damaged blade.

**CAUTION:** Use only a replacement blade approved by the manufacturer of your mower. Using a blade not approved by the manufacturer of your mower is hazardous, could damage your mower and void your warranty.

#### TO REMOVE BLADE

1. Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with 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, hardened washer).

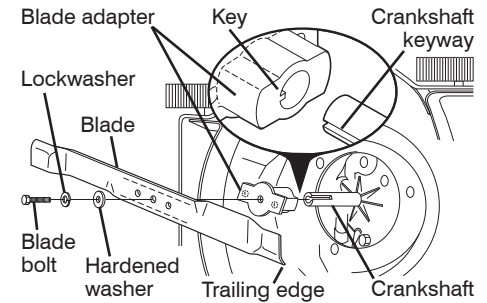
**NOTE:** Remove the blade adapter and check the key inside hub of blade adapter. The key must be in good condition to work properly. Replace adapter if damaged.

#### 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.

**IMPORTANT:** Blade bolt is heat treated. If bolt needs replacing, replace only with approved bolt shown in the Repair Parts section of this manual.



#### TO SHARPEN BLADE

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

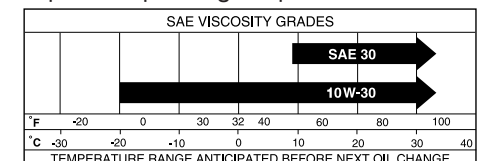
- The grass catcher may be hosed with water, but must be dry when used.
- Check your grass catcher often for damage or deterioration. Through normal use it will wear. If catcher needs replacing, replace only with approved replacement catcher shown in the Repair Parts section of this manual. Give the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

### ENGINE

Maintenance, repair, or replacement of the emission control devices and systems, which are being done at the customers expense, may be performed by any non-road engine repair establishment or individual. Warranty repairs must be performed by an authorized engine manufacturer's service outlet.

### LUBRICATION

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



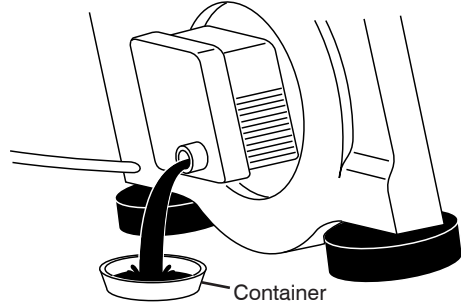
**NOTE:** Multi-viscosity oils (5W30, 10W30 etc.) improve starting in cold weather, and you should check your engine oil level frequently to avoid possible engine damage from running low on oil.

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.

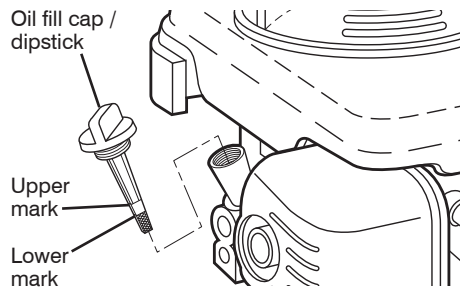
#### TO CHANGE ENGINE OIL

**NOTE:** Before tipping lawn mower to drain oil, empty 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 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 0.58 quarts. 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. Use gauge on oil fill cap/dipstick for checking level. Insert dipstick into the tube and rest the oil fill cap on the tube. **DO NOT** thread the cap into the tube when taking reading.
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 plug.



#### AIR FILTER

Your engine will not run properly and may be damaged by using a dirty air filter.

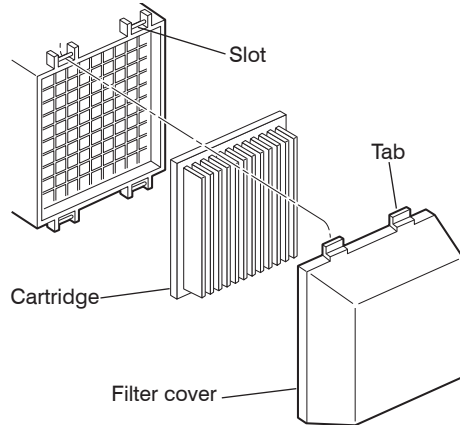
Replace the air filter every 100 hours of operation or every season, whichever occurs first. Service air cleaner more often under dusty conditions.

#### TO CLEAN AIR FILTER

1. Remove cover.
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.



#### 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 the "PRODUCT SPECIFICATIONS" section of this manual.

## TROUBLESHOOTING - See appropriate section in manual unless directed to a Sears Parts & Repair Centre.

PROBLEM	CAUSE	CORRECTION
<b>Loss of power</b>	<ol style="list-style-type: none"> <li>1. Rear of mower housing or blade dragging in grass.</li> <li>2. Cutting too much grass.</li> <li>3. Dirty air filter.</li> <li>4. Buildup of grass, leaves, and trash under mower.</li> <li>5. Too much oil in engine.</li> <li>6. Walking speed too fast.</li> </ol>	<ol style="list-style-type: none"> <li>1. Raise cutting height.</li> <li>2. Raise cutting height.</li> <li>3. Clean/replace air filter.</li> <li>4. Clean underside of mower housing.</li> <li>5. Check oil level.</li> <li>6. Cut at slower walking speed.</li> </ol>
<b>Poor cut – uneven</b>	<ol style="list-style-type: none"> <li>1. Worn, bent or loose blade.</li> <li>2. Wheel heights uneven.</li> <li>3. Buildup of grass, leaves and trash under mower.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace blade. Tighten blade bolt.</li> <li>2. Set all wheels at same height.</li> <li>3. Clean underside of mower housing.</li> </ol>
<b>Excessive vibration</b>	<ol style="list-style-type: none"> <li>1. Worn, bent or loose blade.</li> <li>2. Bent engine crankshaft.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace blade. Tighten blade bolt.</li> <li>2. Contact a Sears or other qualified service centre.</li> </ol>
<b>Starter rope hard to pull</b>	<ol style="list-style-type: none"> <li>1. Engine flywheel brake is on when control bar is released.</li> <li>2. Bent engine crankshaft.</li> <li>3. Blade adapter broken.</li> <li>4. Blade dragging in grass.</li> </ol>	<ol style="list-style-type: none"> <li>1. Depress control bar to upper handle before pulling the starter rope.</li> <li>2. Contact a Sears or other qualified service centre.</li> <li>3. Replace blade adapter.</li> <li>4. Move lawn mower to cut grass or to hard surface.</li> </ol>
<b>Grass catcher not filling (if so equipped)</b>	<ol style="list-style-type: none"> <li>1. Cutting height too low.</li> <li>2. Lift on blade worn off.</li> <li>3. Catcher not venting air.</li> </ol>	<ol style="list-style-type: none"> <li>1. Raise cutting height.</li> <li>2. Replace blade.</li> <li>3. Clean grass catcher.</li> </ol>
<b>Hard to push</b>	<ol style="list-style-type: none"> <li>1. Grass is too high or wheel height is too low.</li> <li>2. Rear of mower housing or blade dragging in grass.</li> <li>3. Grass catcher too full.</li> <li>4. Handle height position not right for you.</li> </ol>	<ol style="list-style-type: none"> <li>1. Raise cutting height.</li> <li>2. Raise rear of mower housing one (1) setting higher.</li> <li>3. Empty grass catcher.</li> <li>4. Adjust handle height to suit.</li> </ol>

**TROUBLESHOOTING - See appropriate section in manual unless directed to a Sears Parts & Repair Centre.**

PROBLEM	CAUSE	CORRECTION
<b>Does not start</b>	1. Dirty air filter.	1. Clean/replace air filter.
	2. Out of fuel.	2. Fill fuel tank.
	3. Stale fuel.	3. Empty fuel tank and refill tank with fresh, clean gasoline.
	4. Water in fuel.	4. Empty fuel tank and refill tank with fresh, clean gasoline.
	5. Spark plug wire is disconnected.	5. Connect wire to plug.
	6. Bad spark plug.	6. Replace spark plug.
	7. Loose blade or broken blade adapter.	7. Tighten blade bolt or replace blade adapter.
	8. Control bar in released position.	8. Depress control bar to handle.
	9. Control bar defective.	9. Replace control bar.
	10. Fuel valve lever (if so equipped) in OFF position.	10. Turn fuel valve lever to the ON position.
	11. Weak battery (if equipped).	11. Charge battery.
	12. Disconnected battery connector (if equipped).	12. Connect battery to engine.

**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 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.
- With the exception of the water washout port (if equipped), we do not recommend using a garden hose to clean the outside of your lawn mower unless the electrical system, muffler, air filter and carburetor are covered to keep water out. Water in engine can result in shortened engine life.

**SERVICE AND ADJUSTMENTS**

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

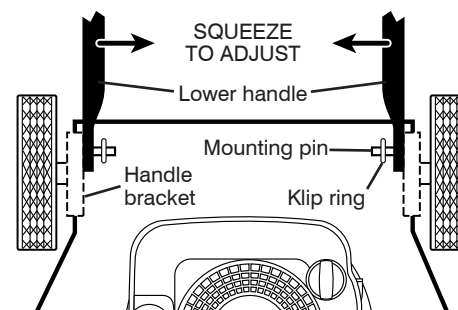
1. Release control bar and stop engine.
2. Make sure the blade and all moving parts have completely stopped.
3. Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with spark plug.

**LAWN MOWER TO ADJUST CUTTING HEIGHT**

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

**REAR DEFLECTOR**

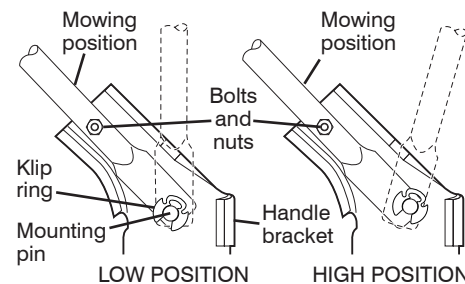
The rear deflector, attached between the rear wheels of your mower, is provided to minimize the possibility that objects will be thrown out of the rear of the mower into the operator mowing position. Replace the deflector if damaged.



**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.

1. Remove upper handle and wire tie(s) securing cable(s) to lower handle.
2. Remove klip rings from lower handle bracket mounting pins.
3. Remove bolts and nuts.
4. Squeeze lower handle in to remove it from mounting pins.
5. Turn lower handle over to raise or lower handle.
6. Squeeze lower handle in and position holes onto mounting pins on handle bracket.
7. Reinstall bolts and nuts.
8. Reassemble upper handle and all parts removed from lower handle.



**ENGINE**

Maintenance, repair, or replacement of the emission control devices and systems, which are being done at the customers expense, may be performed by any non-road engine repair establishment or individual. Warranty repairs must be performed by an authorized engine manufacturer's service outlet.

## ENGINE SPEED

Your engine speed has been factory set.

## 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 and/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 centre, 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.

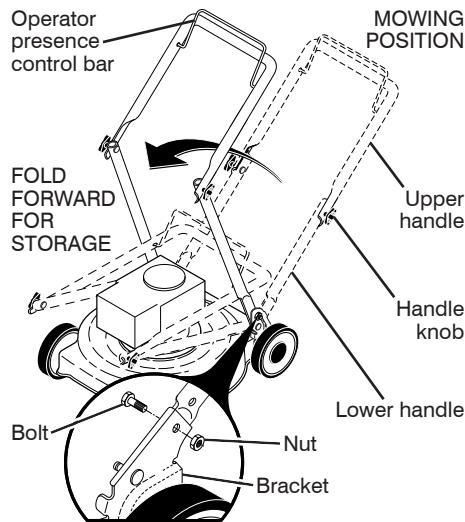
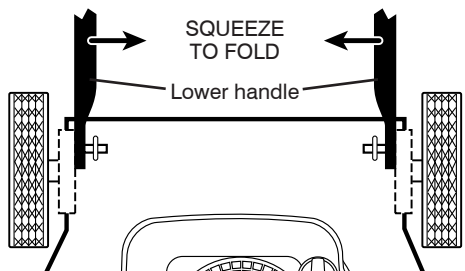
## HANDLE

You can fold your lawn mower handle for storage.

1. Remove bolts and nuts.
2. Squeeze the bottom ends of the lower handle toward each other until the lower handle clears the handle bracket, then move handle forward.
3. 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

Maintenance, repair, or replacement of the emission control devices and systems, which are being done at the customer's expense, may be performed by any non-road engine repair establishment or individual. Warranty repairs must be performed by an authorized engine manufacturer's service outlet.

## 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.

- Empty the fuel tank by starting the engine and letting 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 empty 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 1 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 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.