### 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

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-FOYERMC

(1-800-533-6937)

www.sears.ca



2489

#### Owner's Manual

## **CRAFTZMAN®**

### **ROTARY LAWN MOWER**

160cc Honda Engine 21" Multi-Cut

Model No. **944.364151** 



#### **CAUTION:**

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

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

 $<sup>^{\</sup>circledR}$  / TM Trademarks of Sears, Roebuck and Co. used under license by Sears Canada

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

### 

Warranty - Lawn Mower	
Product Specifications	
Assembly Pre-Operation	
Operation	
Maintenance Schedule	12

Safety Rules

Maintenance	12-15
Service and Adjustments	15-16
Storage	16-17
Troubleshooting	18-19
Repair Parts	
Warranty - Honda Motor	28-29
Sears Service	

#### **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 richochet 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.
- Neverleave 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**

#### 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.

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.

- · 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.

#### 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 JURISDICATIONS 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 additional 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.

LIST OF APPLICABLE WARRANTY PERIODS: The following list contains the applicable

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

Email: 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.

or

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

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. 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, noninstitutional, 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.
- 5. 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, plea se 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/1,14 Liters (Unleaded Regular)
Oil Capacity:	0,58 Quart/0,66 Liter
Oil Type (API SG-SL):	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

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

#### **ASSEMBLY / PRE-OPERATION**

Read these instructions and this manual in its entirety before you attempt to assemble or operate your new lawn mower. **IMPORTANT:** This lawn mower is shipped WITHOUT OIL OR GASOLINE in the engine.

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

#### TO REMOVE 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.

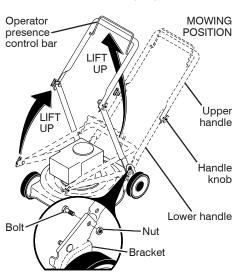
#### **HOW TO SET UP YOUR LAWN MOWER**

#### 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 posi-
- 2. Insert bolt through handle and bracket and secure with nut.
- 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 "AD-JUST HANDLE" in the Service and Adjustments section of this manual.



#### **CAMSHAFT PULLEY**

KEY	PART	
NO.	NO.	DESCRIPTION
1 14	1320-ZL8-010	Pulley, Camshaft
2 14	1324-ZL8-000	Shaft, Cam Pulley
3 14	1400-Z0J-014	Belt, Timing
		(84HU7 G-200)
6 14	1461-ZL8-000	Shaft, Rocker Arm
11 90	0112-333-000	Screw, Tappet Adjusting
12 90	0206-001-000	Nut, Tappet Adjusting
13 9	1301-ZM0-V31	O-Ring (6.8 x 1.9) (ARAI)
15 14	1431-Z0J-000	Rocker Arm, Intake Valve
16 14	1441-Z0J-000	Rocker Arm,
		Exhaust Valve

OI	L PAN	
ΚE	Y PART	
NC	). 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		Washer, Thrust (6 mm)
18		Clip, Governor Holder
19	0 : _ 0 _ <b></b> 0 0 0	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)

Pin, Lock (8 mm)

Pin, Dowel (#8 x 20)

22 94251-08000

23 94301-08200

KEY PART	
NO. NO.	DESCRIPTION
1 13101-Z2A-010	Piston
2 13111-ZE0-000	Pin, Piston
3 13200-Z0J-000	Connecting Rod Assem-
bly	
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)
LAREIC	

**PISTON / CONNECTING ROD** 

#### LABELS

KEY	PART	
NO.	NO.	DESCRIPTION
9 87	528-Z0L-V20	Mark, Choke Indication
20 87	114-ZH7-821	Label, Warning
30 87	101-Z8B-000	Mark, Emblem (GCV160)
31 87	169-Z8E-000	Mark, Recoil Cover
32 87	524-Z8B-000	Mark, Caution,
		Fuel Petcock

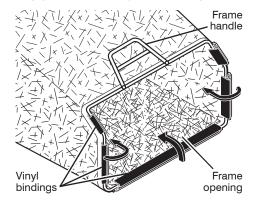
#### **CHOKE BASE** KEV DART

KE	I FANI	
NC	). 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, Cho

16610-Z2D-802 Lever Assembly, Choke

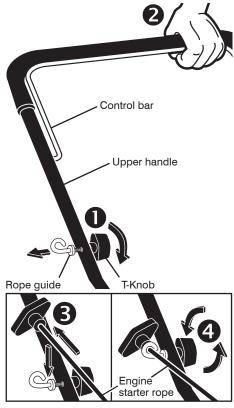
#### TO ASSEMBLE GRASS CATCHER

- 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.
- 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.



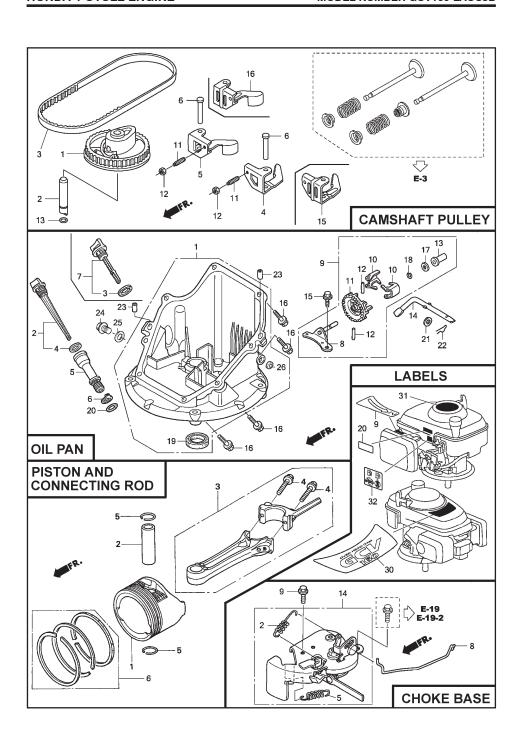
#### **INSTALL STARTER ROPE**

- 1. Loosen T-knob.
- Hold control bar against upper handle.
   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.



OR WARNING



ON





OFF

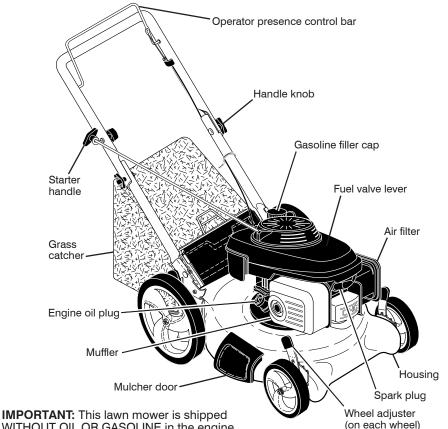








DANGER, KEEP HANDS AND FEET AWAY



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. A 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. Starter handle - used for starting engine.

#### **FAN COVER FLYWHEEL** PART PART KEY KEY NO. DESCRIPTION NO. DESCRIPTION NO. NO. 6 16950-Z0Y-003 1 13331-357-000 Petcock Assembly Key, Special, Woodruff 7 16952-ZA8-800 Filter, Fuel (25 x 18) 8 16961-Z0L-900 Stay, Fuel Petcock 3 30500-ZL8-014 Coil Assembly, Ignition 9 17511-Z0L-030 Tank, Fuel 4 31105-ZM0-000 Flywheel Assembly 10 17514-Z0L-000 Seal. Fuel Filler Neck 5 32195-ZM0-800 Wire, Stop Switch Clip, Tank Mounting 6 35120-ZM0-003 Switch Assembly, 11 17516-Z0L-000 12 17532-Z0L-000 Rubber A, Tank Mounting Engine Stop (NC) 13 17533-Z0L-000 Rubber B. Tank Mounting 8 75113-ZM0-000 Spring, Brake Lever 14 17534-Z0L-000 Nut, Tank Mounting 10 90014-952-000 Bolt, Flange (#6 x 14) Cap Assembly, Fuel Tank 15 17620-Z0J-800 (CT200) Bolt, Flange (#6 x 23) 16 17636-Z0L-000 Gauge, Fuel Level 11 90018-ZE1-000 21 19610-Z0L-861ZC Cover Assembly, Fan (CT200) "T89" (Craftsman Red) 12 90018-ZE1-000 Bolt, Flange (#6 x 23) 19610-Z0L-861ZA Cover Assembly, Fan (CT200) "T89" ("NH1") (Black) 13 90201-Z0T-800 Nut, Special (14 mm) 19610-Z0L-861ZD Cover Assembly, Fan Holder, Wire (Fastex) 14 51125-Z0L-003 "T93" (Husqvarna Grey) 90681-959-003 Clip A, Cable (3.8mm) 19610-Z0L-861ZE Cover Assembly, Fan (Black) (NIFCO) "T98" (M.T.D. Red) 15 93892-04012-00 Screw, Washer Head Collar, Fan Cover 22 19619-ZL8-300 (#4 x 12) 24 90013-883-000 Bolt, Flanged (#6 x 12) 16 94103-04000 Washer, Plain (4 mm) (CT200) 21 75110-Z0Y-000 Brake Sub Assembly 25 90015-883-000 Bolt, Flanged (#6 x 28) 25 91601-Z0L-300 Grommet, Brake Plate (CT200) 27 90043-ZL8-000 Bolt, Stud (H=42.5mm) **AIR CLEANER** 28 90043-ZL8-000 Bolt. Stud (H=42.5mm) KEY PART 33 93913-25220 Screw, Tapping (PO) NO. NO. DESCRIPTION 1 15721-ZM0-000 (#5 x 12) Tube, Breather 35 91424-Z8B-821 Tube. Fuel Tank 2 17211-ZL8-023 Element. Air Cleaner Tube, Fuel (7.3 x 160) 36 91427-Z8B-821 3 17220-ZM0-010 Case Assy., Air Cleaner 40 95002-40800-08 Clip, Tube (D8) (S/N 1167575 and below) 42 95002-41200-08 Clip. Tube (D12) 17220-ZM0-020 Case Assy., Air Cleaner (S/N 1167576-1239013) **MUFFLER** Case Assy., Air Cleaner 17220-ZM0-030 (S/N 1239014 and above) KEY PART Gasket. Air Cleaner DESCRIPTION NO. 5 17228-ZM0-000 1 18310-ZM0-000 Muffler 6 17231-Z0L-030 Cover, Air Cleaner 2 18321-Z0L-J00 Protector, Muffler (S/N 1167575 and below) (S/N 1243452 and below) Cover, Air Cleaner 17231-Z0L-040 (S/N 1167575 and below) 18321-Z0L-J01 Protector, Muffler (S/N 1243453 and above) 17231-Z0L-050 Cover. Air Cleaner 3 90004-ZL8-000 Bolt, Flange #6 x 79 7 90003-ZM0-010 Bolt, Flange (#6 x 85) (CT200) (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



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 recom-

Use ear protectors to avoid

mend standard safety glasses or a wide vision safety mask over spectacles. damage to hearing.

#### **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**

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

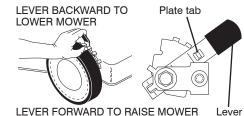
 Your lawn mower is equipped with an operator presence control bar which requires the operator to be positioned behind the lawn mower handle to start and operate the lawn mower.

#### TO ADJUST 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 set-

**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.

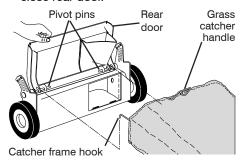


#### TO CONVERT MOWER

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

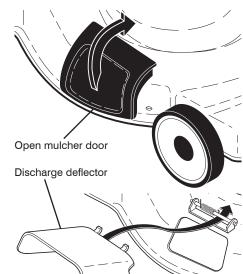
#### **REAR BAGGING**

- · 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.



#### 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.





### SIMPLE STEPS TO REMEMBER WHEN CONVERTING YOUR LAWN MOWER

FOR MULCHING -

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

FOR SIDE DISCHARGING -

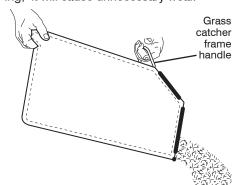
- 1. Rear door closed.
- 2. Discharge deflector installed.

**ACAUTION:** 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.
- You recieve 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:**

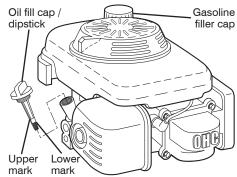
- Check oil level before each use. Add oil if needed. Fill to full line on dipstick.
- Change the oil after every 25 hours of operation or each season. You may need to change the oil more often under dusty, dirty conditions. See "TO CHANGE ENGINE OIL" in the Maintenance section of this manual.

#### 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.



#### **CYLINDER BARREL** KEY PART NO. NO. DESCRIPTION 1 12000-Z0L-406 Cylinder Assembly 12000-Z0L-840 Cylinder Assembly Cover. Cylinder Head 3 12310-Z0J-000 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) Bolt, Flange (#6 x 14) 6 90014-952-000 (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-Z0J-000 Valve, Intake (Rocknel) Valve, Intake 14711-Z0J-800 Valve. Exhaust 12 14721-ZL8-000 13 14751-ZL8-000 Spring, Valve Retainer, Valve Spring 14 14771-Z0J-000 CARRURETOR

UF	INDUNLION	
KE	Y PART	
NC	). NO.	DESCRIPTION
1	16010-883-015	Gasket Set
2	16013-ZL1-003	Float Set
3	16015-Z0L-881	Chamber Set, Float
5	16028-ZE0-005	Screw Set
	16028-ZK7-S91	Screw Set
7	16100-Z0L-852	Carburetor Assembly
		(BB62Z B)

8 16155-ZM0-013 Valve, Float 9 16166-ZM0-003 Nozzle, Main 10 16211-7I 8-000 Insulator Carb

10 16211-ZL8-000 Insulator, Carburetor

11 16212-ZL8-000 Gasket, Insulator13 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-Z0L-000 Guide, Air

#### **CONTROL**

KE	Y PARI	
NO	. NO.	DESCRIPTION
1	16551-ZM0-010	Arm, Governor
2	16555-Z0L-801	Rod, Governor
3	16561-Z0L-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	93892-04012-00	Screw, Washer Head
		(#4 x 12)
16	94103-04000	Washer, Plain (4 mm)

#### **CRANKSHAFT**

KEI	PARI	
NO.	NO.	DESCRIPTION
3	13310-ZM0-610	Crankshaft
5	90402-71 8-000	Washer Thrust

#### **RECOIL STARTER**

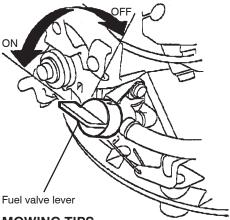
ΚE	Y PART	
NC	). NO.	DESCRIPTION
1	28400-Z0L-V20Z	A Starter Assembly
		Recoil, "NH1"
		(Long Rope) (Black)
8	28461-ZL8-003	Grip, Recoil Starter
9	28462-Z0L-V20	Rope, Recoil Starter,
		"Long Type" (Black)
11	90201-ZM0-000	Nut, Flange (6 mm)

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.

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



#### **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.

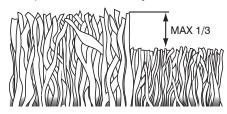
- Under certain conditions, such as very tall grass, it may be necessary to raise the height of cut to reduce pushing effort and to keep from overloading the engine and leaving clumps of grass clippings. It may also be necessary to reduce ground speed and/or run the lawn mower over the area a second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

 Keep top of engine around starter clear and clean of grass clippings and chaff. This will help engine air flow and extend engine life.

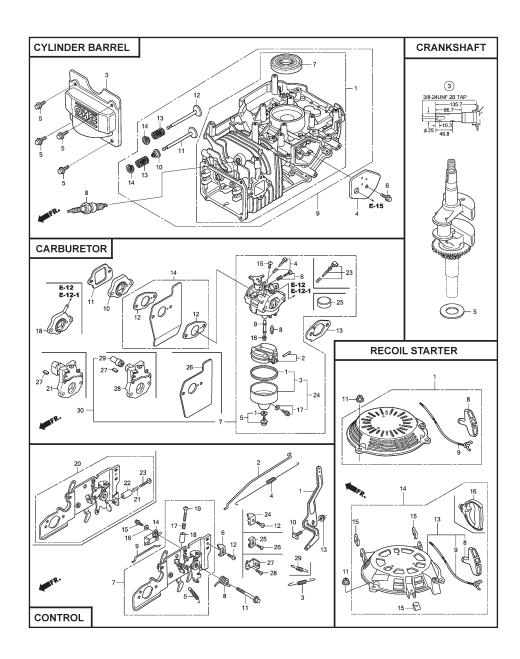
#### **MULCHING MOWING TIPS**

**IMPORTANT**: For best performance, keep mower housing free of built-up grass and trash. 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.



#### mZ-SZm Dm≷O≥ ZĘÞГ SCHEDULE Change Engine Oil Check / Sharpen / Replace Blade Check Drive Belt / Pulleys \*\*\* Clean / Inspect Grass Catcher \* MAINTENANCE Clean and Recharge Battery \*\* Clean under Drive Cover \*\*\* Clean Lawn Mower \*\*\*\* Check Drive Wheels \*\*\* Replace Spark Plug Inspect Muffler Clean Air Filter Check Engine Oil level Check Tires Check for Loose Fasteners \_ubrication BEFORE EACH MAINTENANCE USE 5 AFTER EACH USE 7 EVERY 10 HOURS EVERY 25 HOURS OR SEASON 2 2 HOURS EVERY 100 BEFORE STORAGE 7 2

## GENERAL RECOMMENDATIONS \*\*\*\* Use a scraper \*\*\* Power-Propelled mowers to clean under deck

\*\* Electric-Start mowers (if so equipped)

Empty fuel system or add Stabilizer Replace Air Filter Paper Cartridge

Change more often if operating under a heavy load or in high outdoor temperatures.
 Service more often if operating in dirty or dusty conditions.
 Replace blades more often when mowing in sandy soil.

4 - Charge 48 hours at end of season.5 - And after each 5 hours of use.

## Some adjustments will need to be made maintain unit as instructed in this manual.

full value from the warranty, operator must operator abuse or negligence. To receive cover items that have been subjected to The warranty on this lawn mower does no

periodically to properly maintain your unit

described in the Service and Adjustments section of this manual. you should make any of the adjustments At least once a season, check to see if

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

## (1) Spray lubricant

See "ENGINE" in Maintenance section.

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 wheel bearings. IMPORTANT: Do not oil or grease plastic Viscous lubricants will

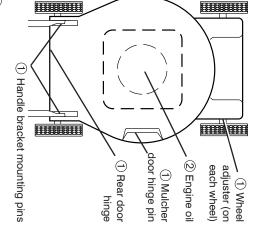
Keep unit well lubricated (See "LUBRICATION CHART").

LUBRICATION

 Check engine oil level. BEFORE EACH USE

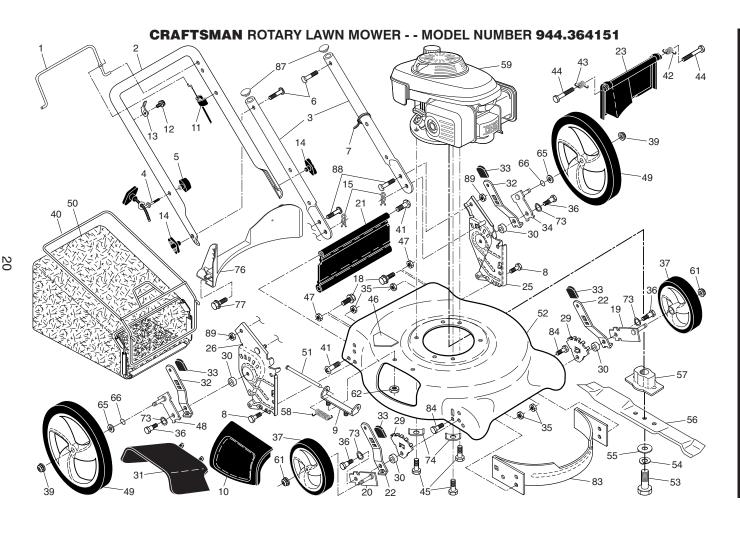
Check for loose fasteners

# LUBRICATION CHART



#### **CRAFTSMAN ROTARY LAWN MOWER - - MODEL NUMBER 944.364151**

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	194176X428	Control Bar	31	165760	Discharge Deflector	55	851074	Hardened Washer
2	447814X479	Upper Handle	32	440858X004	Selector Spring, Rear	56	406706	21" Blade
3	580638602	Bar, Lower Handle	33	701037	Selector Knob	57	418373	Blade Adapter
4	581902101	Rope Guide	34	401176X004	Axle Arm Assembly, Rear, LH	58	152124	Hinge Spring
5	581912601	T-Knob	35	426589	Locknut, Hex 5/16-18	59		Engine, Honda GCV160-
6	191574	Handle Bolt	36	401638	Bolt, Shoulder 5/16-18			LAOS3B (See Breakdown)
7	66426	Wire Tie	37	194230X427	Wheel & Tire Assembly, Front	61	409148	Locknut, Hex, Flanged
8	74780512	Bolt, Hex Head 5/16-18 x 3/4	39	409149	Nut, Hex	62	73800400	Locknut, Hex 1/4-20
9	154132	Hinge Bracket	40	411949	Frame, Grassbag	65	88348	Washer, Flat
10	165754	Mulcher Door	41	194186	Hinge Screw	66	197480	O-Ring
11	440934	Engine Zone Control Cable	42	405421	Spring, Rear Door, LH	73	401630	Washer, Curved, Cylindrical
. 12	178848	Hex Washer Head Screw	43	405423	Spring, Rear Door, RH	74	851201X004	Washer, Special, Engine,
<u>N</u> 13	429930X004	Up-Stop Bracket	44	184193	Bolt, Rear Door			Zinc-Plated
14	189713X428	Handle Knob	45	150406	Screw, Hex Head, Threaded,	76	410589	Baffle, Rear
15	51793	Hairpin Cotter			Rolled 3/8-16 x 1	77	17411312	Screw, Rear Baffle
18	17600406	Screw 1/4-20 x 3/8	46	404763	Danger Decal	83	428501	Baffle, Front
19	401174X004	Axle Arm Assembly, Front, LH	47	751153	Locknut, Hex 5/16-18	84	17000510	Screw, Front Baffle
20	401175X004	Axle Arm Assembly, Front, RH	48	401177X004	Axle Arm Assembly, Rear, RH	87	437516	Plug, Handle Bar
21	416860	Rear Skirt	49	431880X427	Wheel & Tire Assembly, Rear	88	586212501	Bolt, Carriage
22	401621X004	Selector Spring, Front	50	408955	Grassbag	89	73970500	Nut, Hex
23	401814X428	Rear Door Assembly	51	147286	Hinge Rod		404764	Warning Decal (not shown)
25	580915602	Handle Bracket Assembly, LH	52	441963	Kit, Mower Housing		581276301	Bag of Parts (Includes Key
26	580915702	Handle Bracket Assembly, RH			(Includes Key Number 46)			Numbers 88 and 89)
29	407494X005	Wheel Adjusting Bracket	53	851084	Screw, Hex Head, Grade 8		587785927	Owner's Manual, English
30	401629	Spacer			3/8-24 x 1-3/8		587785931	Owner's Manual, French
			54	850263	Helical Lockwasher			



## LAWN MOWER

Blade adapter

Crankshaf keyway

\_ockwasher

Blade

forming any maintenance Always observe safety rules when per-

- 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

and void your warranty. hazardous, could damage your mower by the manufacturer of your mower is blade approved by the manufacturer of **A CAUTION:** Use only a replacement sharp. Replace a bent or damaged blade For best results, blade must be kept your mower. Using a blade not approved

## TO REMOVE BLADE

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

ω

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

Remove blade bolt by turning counter clockwise.

Replace adapter if damaged. the key inside hub of blade adapter. The key NOTE: Remove the blade adapter and check must be in good condition to work properly Remove blade and attaching hardware (bolt, lock washer, hardened washer).

## TO REPLACE BLADE

- ы Position the blade adapter on the engine crankshaft. Be sure key in adapter and crankshaft keyway are aligned.
- aligning the two (2) holes in the blade Be sure the trailing edge of blade (op-Position blade on the blade adapter with the raised lugs on the adapter.
- Install the blade bolt with the lock washer and hardened washer into posite sharp edge) is up toward engine blade adapter and crankshaft

4 ω

blade bolt, turning clockwise lawn mower housing and tighten the Use block of wood between blade and

oil's SAE viscosity grade according to your

API service classification SG–SL. Select the Use only high quality detergent oil rated with LUBRICATION

The recommended tightening torque is

section of this manual approved bolt shown in the Repair Parts If bolt needs replacing, replace only with MPORTANT: Blade bolt is heat treated 35-40 ft. lbs. (47-54 Nm)

## bolt washer Hardened Trailing edge

Crankshaft

ening blade - but if you do, be sure the mower or engine. will cause eventual damage to lawn blade is balanced. An unbalanced blade NOTE: We do not recommend sharp-TO SHARPEN BLADE

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

## GRASS CATCHER

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

## ENGINE

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

## expected operating temperature. TEMPERATURE RANGE ANTICIPATED BEFORE NEXT OIL CHANGE SAE VISCOSITY GRADES

**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.

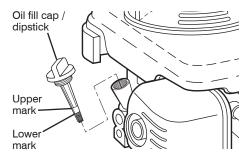
#### TO CHANGE ENGINE OIL

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

- 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.
- 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.
- Wait one minute to allow oil to settle.
   Use guage 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.
- 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**

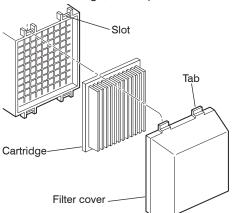
Your engine will not run properly and may be damaged by using a dirty air filter. Replace the air filter every 100 hours of operation or every season, whichever occurs first. Service air cleaner more often under dusty conditions.

#### 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.

**ACAUTION:** 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 SPECIFICA-TIONS" section of this manual.

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

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

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

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

**ACAUTION:** 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**

**AWARNING:** 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 plug.

### LAWN MOWER TO ADJUST CUTTING HEIGHT

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

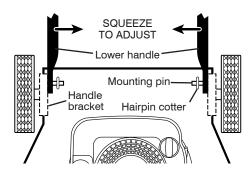
#### REAR DEFLECTOR

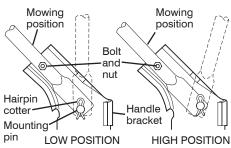
The rear deflector, attached between the rear wheels of your mower, is provided to minimize the possibility that objects will be thrown out of the rear of the mower into the operator mowing position. Replace the deflector if damaged.

#### 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 hairpin cotters from lower handle bracket mounting pin.
- 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.
- Squeeze lower handle in and position holes onto mounting pins on handle bracket.
- 7. Reinstall bolts and nuts.
- 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.

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

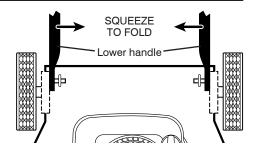
#### HANDLE

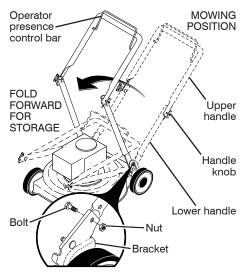
You can fold your lawn mower handle for storage.

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

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

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





#### **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.

#### **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.

**ACAUTION:** 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.