### **NEED A PART?**

SEARS HAS ACCESS TO OVER 800,000 PARTS
WHETHER IT'S A SPARK PLUG OR LAWNMOWER BLADE.
SEARS PARTS AND SERVICE CAN SUPPLY YOU WITH
TOP QUALITY REPAIR PARTS FOR ALL YOUR PRODUCTS.
JUST CALL:

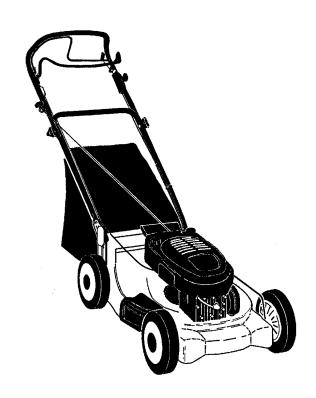
1-800-4MY-HOME

## Owner's Manual

# **CRAFTSMAN®**

6.75 HORSEPOWER
21" MULTI-CUT
POWER PROPELLED
ROTARY LAWN MOWER

Model No. **944.360340** 



- Safety
- Assembly
- Operation
- Maintenance
- Repair Parts

### **CAUTION:**

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

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### **WARRANTY**

### LIMITED TWO YEARS WARRANTY ON CRAFTSMAN POWER MOWER

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

### COMMERCIAL OR RENTAL USE:

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

This Warranty does NOT cover:

- Pre-delivery set-up.
- Expendable items which become worn during normal use, such as rotary mower blades, blade adapters, belts, filters and spark plugs.
- Repairs necessary because of operator abuse or negligence, including bent crankshafts and the failure to operate and maintain the equipment according to the instructions contained in the Owner's Manual.

Warranty service is available by returning the Craftsman Power Mower to the nearest Sears Service Centre/Department in Canada. This warranty applies only while this product is in use in Canada.

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

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

### **SAFETY RULES**

Safety standards require operator presence controls to minimize the risk of injury. Your unit is equipped with such controls. Do not attempt to defeat the function of the operator presence controls under any circumstances.

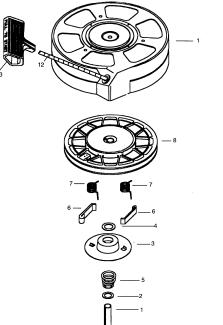
### TRAINING:

- Read this operator's manual carefully.
   Become familiar with the controls and know how to operate your mower properly. Learn how to quickly stop mower.
- Do not allow children to use your mower.
   Never allow adults to use mower without proper instructions.
- Keep the area of operation clear of all persons, especially small children and pets.

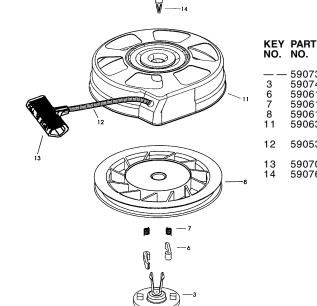
- Use mower only as the manufacturer intended and as described in this manual.
- Do not operate mower if it has been dropped or damaged in any manner.
   Always have damage repaired before using your mower.
- Do not use accessory attachments that are not recommended by the manufacturer. Use of such attachments may be hazardous.
- The blade turns when the engine is running.

### PREPARATION:

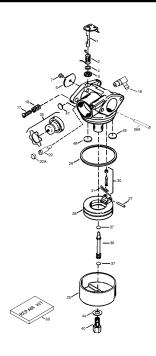
 Always thoroughly check the area to be mowed and clear it of all stones, sticks, wires, bones, and other foreign objects. These objects will be thrown by the blade and can cause severe injury.



	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 11	590702 590599A 590690 590696 590601 590697 590698 590699 590700 590703	Recoil Starter Spring Pin (Incl. 4) Washer Retainer Washer Brake Spring Starter Dog Dog Spring Pulley & Rewind Spring Ass'y Starter Housing Ass'y. (40 degree grommet)
12	590535	Starter Rope ( 98" X 9/64" dia.)
13	590701	Starter Handle



NO.	NO.	DESCRIPTION
	590739 590740 590616 590617 590618A	Rewind Starter Retainer Starter Dog Dog Spring Pulley & Rewind Spring Ass'
11	590638	Starter Housing Ass'y (40 degree grommet)
12	590535	Starter Rope (Length 98" x 9/64" dia.)
13 14	590701 590760	Starter Handle Spring Clip



KEY	PART	
NO.	NO.	DESCRIPTION

	640271	Carburetor (Incl. 184 of Engine Parts List)
1 2 4 5 6 7 16	631615 631767 631184 * 631183 * 640070 650506 * 631807 651025	Throttle Shaft & Lever Assembly Throttle Return Spring Dust Seal Washer Dust Seal (Throttle) Throttle Shutter Shutter Screw Full Fitting Throttle Crack Screw/Idle
25 27 28 29 30 31 35 36 36 37 40 44 47	631024 * 632019 631028 * 631021 * 631022 640259 640080 632766 632547 * 640030 27110A *	Speed Screw Tension Spring Idle Restrictor Screw Idle Restrictor Screw Idle Restrictor Scrwe Cap (Black) Float Bowl Float Shaft Float Bowl "O" Ring Inlet Needle, Seat, & Clip (Incl. 31) Spring Clip Primer Bulb/Retainer Ring Main Nozzle Tube Carburetor Tube "O" Ring, Main Nozzle Tube High Speed Bowl Nut Bowl Nut Washer Welch Plug, Idle Mixture Well Welch Plug, Atmospheric Vent Repair kit (Incl. Items Marked *)

- Always wear safety glasses or eye shields when starting and while using your mower.
- Dress properly. Do not operate mower when barefoot or wearing open sandals.
   Wear only solid shoes with good traction when mowing.
- Check fuel tank before starting engine. Do not fill gas tank indoors, when the engine is running or when the engine is hot. Allow the engine to cool for several minutes before filling the gas tank. Clean off any spilled gasoline before starting the engine.
- Always make wheel height adjustments before starting your mower. Never attempt to do this while the engine is running.
- Mow only in daylight or good artificial light.

### **OPERATION:**

- Keep your eyes and mind on your mower and the area being cut. Do not let other interests distract you.
- Do not mow wet or slippery grass. Never run while operating your mower. Always be sure of your footing — keep a firm hold on the handles and walk.
- Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
- Always stop the engine whenever you leave or are not using your mower, or before crossing driveways, walks, roads, and any gravel—covered areas.
- Never direct discharge of material toward bystanders nor allow anyone near the mower while you are operating it.
- Before cleaning, inspecting, or repairing your mower, stop the engine and make absolutely sure the blade and all moving parts have stopped. Then disconnect the spark plug wire and keep it away from the spark plug to prevent accidental starting.
- Do not continue to run your mower if you hit a foreign object. Follow the procedure outlined above, then repair any damage before restarting and operating you mower.
- Do not change the governor settings or overspeed the engine. Engine damage or personal injury may result.

- Do not operate your mower if it vibrates abnormally. Excessive vibration is an indication of damage; stop the engine, safely check for the cause of vibration and repair as required.
- Do not run the engine indoors. Exhaust fumes are dangerous.
- Never cut grass by pulling the mower towards you. Mow across the face of slopes, never up and down or you might lose your footing. Do not mow excessively steep slopes. Use caution when operating the mower on uneven terrain or when changing directions maintain good footing.
- Never operate your mower without proper guards, plates, grass catcher or other safety devices in place.

### MAINTENANCE AND STORAGE:

- Check the blade and the engine mounting bolts often to be sure they are tightened properly.
- Check all bolts, nuts and screws at frequent intervals for proper tightness to be sure mower is in safe working condition.
- Keep all safety devices in place and working.
- To reduce fire hazard, keep the engine free of grass, leaves or excessive grease and oil.
- Check grass catcher often for deterioration and wear and replace worn bags.
   Use only replacement bags that are recommended by and comply with specifications of the manufacturer of your mower.
- Always keep a sharp blade on your mower.
- Allow engine to cool before storing in any enclosure.
- Never store mower with fuel in the tank inside a building where fumes may reach an open flame or an ignition source such as a hot water heater, space heater, clothes dryer, etc.

▲Look for this symbol to point out important safety precautions. It means CAUTION!!! BECOME ALERT!!! YOUR SAFETY IS INVOLVED.

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

NOTE: This engine could have been built with

590702 starter.

### **ASSEMBLY**

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

**IMPORTANT:** This lawn mower is shipped WITHOUT OIL OR GASOLINE in the engine. Your new lawn mower has been assembled at the factory with the exception of those parts left unassembled for shipping purposes. All parts such as nuts, washers, bolts, etc., necessary to complete the assembly have been placed in the parts bag. To ensure safe and proper operation of your lawn mower, all parts and hardware you assemble must be tightened securely. Use the correct tools as necessary to ensure proper tightness.

### TO REMOVE LAWN MOWER FROM CARTON

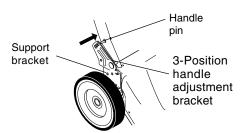
- Remove loose parts included with mower.
- · Cut down two end corners of carton and lay end panel down flat.
- · Remove all packing materials except padding between upper and lower handle and padding holding operator presence control bar to upper handle.
- Roll lawn mower out of carton and check carton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

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

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

- · Raise lower handle section to operating position and squeeze the bottom ends of lower handle towards each other until the pin in handle can be inserted into one of the three height adjustment holes.
- · Remove protective padding, raise upper handle section to operating position and tighten handle knobs securely.
- Remove any packing material from around control bar.
- · Your handles may be adjusted for your mowing comfort. Refer to Service and Adjustments section of this manual.

Operator presence control Upper handle Lift up Mowing position Lower handle



### TO INSTALL ATTACHMENTS

4

Your lawn mower was shipped ready to be used as a mulcher. To convert to bagging or discharging; See OPERA-TION section of this manual

	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
1 2 6 7 12 12A	37465 26727 33734 36557 36775 36558	Cylinder (Incl. 2 & 20) Dowel Pin Breather Element Breather Ass'y. (Incl. 6 & 12A) Breather Tube Breather Cover & Tube (Incl. 12B)	172 174 178 182	36783 * 36784 30200 29752 6201 26756	Valve Cover Gasket Valve Cover Screw, 10-24 x 9/16" Nut & Lock Washer, 1/4-28 Screw, 1/4-28 x 7/8" Carburetor To Intake Pipe Gasket
12B 14 15 16 17 18	36694 28277 30589 34839A 31335 651018	Breather Tube Elbow Washer	186 189 191 195 207	37466 32653 650839 36559A 610973 34336 33086	Intake Pipe Governor Link Screw, 1/4-20 x 3/8" S.E. Brake Bracket (Incl. 195) Terminal Throttle Link R.P.M. Adjusting Lever
19 20 30 40 41	36281 32600 37459 40027 40042	Extension Spring Oil Seal Crankshaft	223 224 238 239 241	650451 36786 * 650932 34338 * 36919 36905	Screw, 1/4-20 x 1" Intake Pipe Gasket Screw, 10-32 x 49/64" Air Cleaner Gasket Air Cleaner Filter
42 43 45	40006 20381 36777	Ring Set (Std.) Piston Pin Retaining Ring Connecting Rod Ass'y. (Incl. 46)	250 260 261	36920 36980 30200 650831	Air Cleaner Cover Blower Housing Screw, 10-24 x 9/16" Screw, 1/4-20 x 1/2"
46 48 50 52 69 70	32610A 27241 37460 29914 35261 * 34311E	Connecting Rod Bolt Valve Lifter Camshaft (MCR) Oil Pump Ass'y. Mounting Flange Gasket Mounting Flange (Incl. 72 thru	263/ 275 277 285 287 290	A 36921 37462 650988 35000A 650926 29774	Starter Grill Muffler Screw, 1/4-20 x 2-5/16" Starter Cup Screw, 8-32 x 21/64" Fuel Line
72 73 75 80 81 82 83 86 89 90 92 93 100	30572 28833 27897 30574A 30590A 30591 30588A 650488 611004 611112 650815 650816 34443B	83) Oil Drain Plug (Incl. 73) Drain Plug Gasket Oil Seal Governor Shaft Washer Governor Gear Ass'y. (Incl. 81) Governor Spool Screw, 1/4-20 x 1-1/4" Flywheel Key Flywheel Belleville Washer Flywheel Nut Solid State Ignition	298 300 301 305 306 307 309 310 313 347		Fuel Line Clamp Screw, 10-32 x 35/64" Fuel Tank (Incl. 292 & 301) Fuel Cap (Black) Oil Fill Tube "O"-Ring "O"-Ring Screw, 10-32 x 1/2" Dipstick Spacer Screw, 10-32 x 51/64" Starter Handle Lubrication Decal Primer Decal (3 X)
101 103 110	610118 651007 37047	Spark Plug Čover Screw, Torx T-15, 10-24 x 15/ 16" Ground Wire	390	640271	Warning Decal Carburetor (Incl. 184) Rewind Starter Gasket Set (Incl. Items
119 120 125	36787 * 36825 36780	Cylinder Head Gasket Cylinder Head Exhaust Valve (1/32" OS) (Incl. 151)	416		Marked *) Spark Arrestor Kit (Incl. 417)(Optional) Screw, 8-32 x 3/8" (Optional)
126	37288 36782	Exhaust Valve (Std.) (Incl. 151) Intake Valve (1/32" OS) (Incl.	900 900		Replacement Engine NONE Replacement S/B 750866, order from 71-999
130 135	37289 6021A 35395	151) Intake Valve (Std.) (Incl. 151) Screw, 5/16-18 x 1-1/2" Resistor Spark Plug (RJ19LM)		E: All comp	RPM High 2900 to 3200 onent dimensions given in U.S. 5.4 mm

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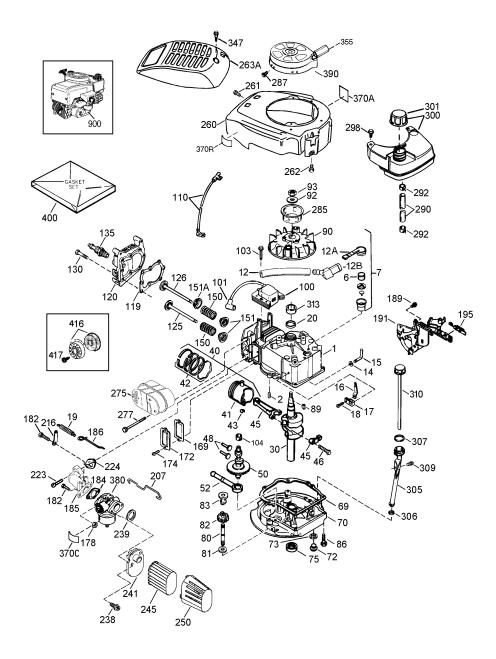
31672

151 31673

151A 40017

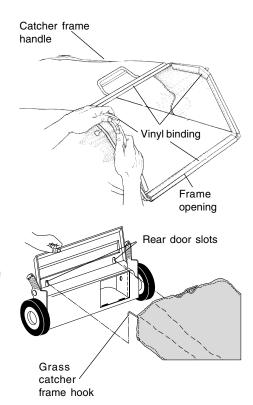
Valve Spring Valve Spring Cap

Intake Valve Seal



# TO ASSEMBLE & ATTACH GRASS CATCHER

- 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.
- Close the lift top lid. Lift top lid must be closed while operating lawn mower.
- Lift the rear on the mower and place the grass catcher frame hooks into the slots of the rear door.
- The grass catcher is secured to the lawn mower housing when the rear door is lowered onto the grass catcher frame. CAUTION: Do not run your lawn mower without clipping deflector or approved grass catcher in place.
   Never attempt to operate the lawn mower with the rear door removed or propped open.



### **OPERATION**

### KNOW YOUR LAWN MOWER

READ THIS OWNER'S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR LAWN MOWER. Compare the illustrations with your lawn mower to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.

These symbols may appear on your lawn mower or in literature supplied with the product. Learn and understand there meaning.

SLOW



CAUTION

OR WARNING



ON









OFF



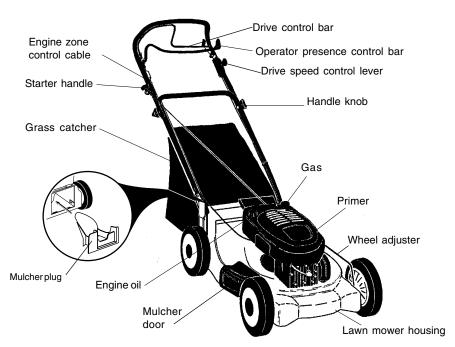
CHOKE



**FUEL** 



DANGER, KEEP HANDS AND FEET AWAY



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

### MEETS CPSC SAFETY REQUIREMENTS

Sears rotary walk-behind power lawn mowers conform to the safety standards of the American National Standards Institute and the U.S. Consumer Product Safety Commission. The blade turns when the engine is running.

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Operator presence control bar - must be held down to the handle to start the engine. Release to stop the engine.

Mulcher plug - located at the discharge opening, just be removed when converting to bagging operation.

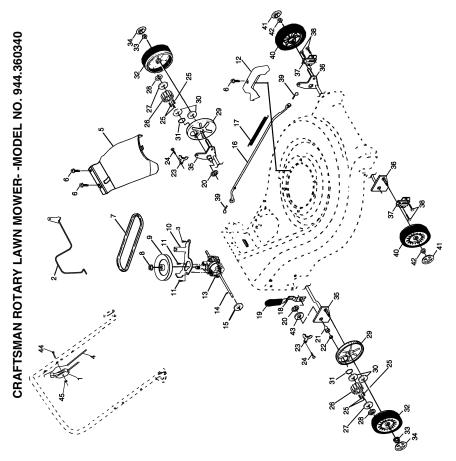
**Primer -** pumps additional fuel from the carburetor to the cylinder for use when starting a cold engine.

Starter handle - used for starting the engine.

# CRAFTSMAN ROTARY LAWN MOWER- -MODEL NO. 944.360340

NO.	KEY PART NO. NO.	DESCRIPTION	Å NO.	KEY PART NO. NO.	DESCRIPTION
-	166047	Speed Control	24	57808	Screw Hex Head Tapping 1/4-20 x .7
N	167259	Bail Control Drive	52	170011	Drive Pawl
က	17060408	Screw	56	166450	Pinion, Drive
4	170050	DriveCable	27	52160	Washer
2	161537	Cover Drive	58	12000058	E-Ring 7/16
9	750634	Screw Thdrol 10-25 x .50	59	88080	Cover, Dust Wheel
7	166060	V-Belt	8	67725	Washer 1/2 x 1-1/2 x .134
ω	132010	Nut Lock Flanged 3/8-16 Zinc	3	57143	Wave Washer
6	166049		32	172324	Wheel 9 x 2
우	166021X004	Belt Keeper Bracket	33	145212	Nut Hex Flange Lock
Ξ	17541011		34	150181	Hubcap, Mag Platinum 9"
7	166189		32	160785 X004	Shaft Asm. Rear
5	166388	Transmission Asm.	36	160786X004	Shaft Asm. Front
4	145354	Pin Spring Thrust	37	161463	Retainer Front Shaft
5	57079	Washer Hardened	88	163409	Screw 12 x 5/8
9	161584X479	_	33	700279	Clip Retainer
17	161602	Spring Extension	40	172323	Wheel 8 x 2
8	160477X004	Spring Selector	41	150182	Hubcap, Mag Platinum 8"
6	167650	Knob Selector Spring	42	83923	Nut, Hex Flange Lock 3/8-16
8	12000022	E-Ring 7/8	43	19572216	Washer
7	163365	Bearing Support	4	144929	Screw 1/4 x 2.12
ଧ	169911		45	751152	Locknut
ន	161118X004	Retainer Drive Asm. Stmp.			

**REPAIR PARTS** 



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The operation of any lawn mower can result in foreign objects thrown into the eyes,

which can result in severe eye damage. Always wear safety glasses or eye shields while operating your lawn mower or performing any adjustments or repairs. We recommend a wide vision safety mask over spectacles or standard safety glasses.

# HOW TO USE YOUR LAWN MOWER ENGINE SPEED

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

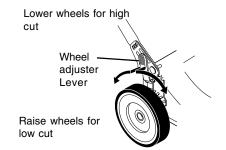
### **ENGINE ZONE CONTROL**

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

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

### TO ADJUST CUTTING HEIGHT

- All four wheels are adjusted by a single lever.
- Pull adjuster lever toward wheel. To raise mower, move lever forward to desired position, To lower mower, move the lever toward the rear.



### **GROUND DRIVE SPEEDS**

Your lawn mower provides multiple speeds to let you select the speed that suits you best.

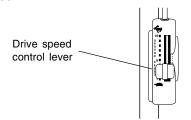
- Lower speeds are for, heavy/thick grass cutting or trimming.
- Medium speeds are for normal grass cutting or trimming.
- High is for light cutting and for ground transport.

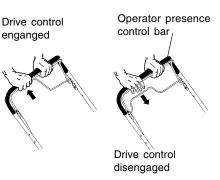
**NOTE:** Do not move speed control lever unless the engine is running

### TO OPERATE DRIVE SYSTEM

- With engine running select ground speed by moving speed control lever to desired position.
- To start forward motion, pull drive control bar back against handle.
- To stop forward motion, release drive control bar.

**IMPORTANT**: Always keep drive control fully engaged against handle when in use.





### TO CONVERT MOWER

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

### REAR BAGGING

- Open rear door and remove mulcher plug. Store mulcher plug in a safe place.
- · You can now install grass catcher.
- To convert to mulching or discharging operation, install mulcher plug into rear discharge opening of mower.

### SIDE DISCHARGING

- Mulcher plug must be installed into rear discharge opening of mower (see above instructions).
- Open mulcher door and install discharge deflector under guard 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 -

- Rear mulcher plug installed.
- Mulcher door closed.

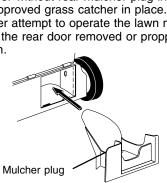
### FOR REAR BAGGING -

- · Rear mulcher plug removed.
- · Grass catcher installed.
- · Mulcher door closed.

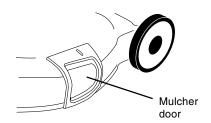
### FOR SIDE DISCHARGING -

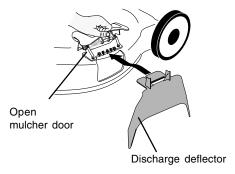
- · Rear mulcher plug installed.
- · Side discharge deflector installed.

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



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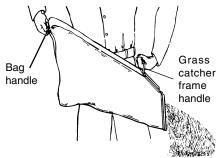




### TO EMPTY GRASS CATCHER

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

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

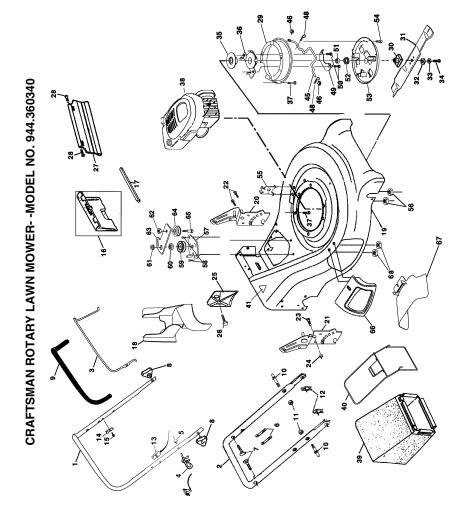


# CRAFTSMAN ROTARY LAWN MOWER- -MODEL NO. 944.360340

# able Support Bracke DESCRIPTION acket Assy Handle, Upper Dlx Comf. (Including grip) 5/16-18 UNC DESCRIPTION

KEV PART NO. NO. NO. 119599 8 87692 9 164265 10 161551 11 573990500 151783 151783

### **REPAIR PARTS**



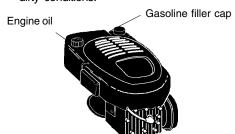
### BEFORE STARTING ENGINE

Your lawn mower is shipped without oil in the engine.

- Be sure mower is level and area around oil fill is clean.
- Remove engine oil plug and fill to the top of slot in filler hole.

**NOTE**: Allow oil to settle down into engine for accurate reading.

- Engine holds 20 ozs. of oil. For type and grade of oil to use, see "ENGINE" in Maintenance section of this manual.
- Pour oil slowly. Do not over fill.
- Check oil level before each use. Add oil if needed.
- Change the oil after every 25 hours of operation or each season. You may need to change the oil more often under dusty, dirty conditions.



### **ADD GASOLINE**

 Fill fuel tank. 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.

**AWARNING**: Experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Drain the gas tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. See Storage Instructions for additional information. Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.

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

### TO START ENGINE

- To start a cold engine, push primer five (5) times before trying to start. Use a firm push. This step is not usually necessary when starting an engine which has already run for a few minutes.
- Hold operator presence control bar down to the handle and pull starter handle quickly. Do not allow starter rope to snap back.
- To stop engine, release operator presence control bar.

**NOTE**: In cooler weather it may be necessary to repeat priming steps. In warmer weather over priming may cause flooding and engine will not start. If you do flood engine, wait a few minutes before attempting to start and do not repeat priming steps.

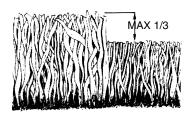
### **MOWING TIPS**

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

### **MULCHING MOWING TIPS**

**IMPORTANT**: For best performance, keep mower housing free of built-up grass and trash. See "Cleaning" in MAINTENANCE section of this manual.

- The special mulching blade will recut
  the grass clippings many times and
  reduce them in size so that as they fall
  onto the lawn they will disperse into the
  grass and not be noticed. Also, the
  mulched grass will biodegrade quickly
  to provide nutrients for the lawn.
  Always mulch with your highest engine
  (blade) speed as this will provide the
  best recutting action of the blades.
- Avoid cutting your lawn when it is wet.
  Wet grass tends to form clumps and
  interferes with the mulching action.
  The best time to mow your lawn is the
  early afternoon. At this time the grass
  has dried and the newly cut area will
  not be exposed to the direct sun.
- For best results, adjust the lawn mower cutting height so that the lawn mower cuts off only the top one-third of the grass blades (See Fig. X). If the lawn is overgrown it will be necessary to raise the height of cut to reduce pushing effort and to keep from overloading the engine and leaving clumps of mulched grass. For extremely heavy mulching, reduce your width of cut by overlapping previously cut path and mow slowly.
- Certain types of grass and grass conditions may require that an area be mulched a second time to completely hide the clippings. When doing a second cut, mow across or perpendicular to the first cut path.
- Change your cutting pattern from week to week. Mow north to south one week then change to east to west the next week. This will help prevent matting and graining of the lawn.



**NOTES** 

	ROUBLESHOUTING CHART						
PROBLEM	CAUSE	CORRECTION					
Excessive vibration	<ol> <li>Worn, bent or loose blade.</li> <li>Bent engine crankshaft.</li> </ol>	Replace blade. Tighten blade bolt.     Contact an authorized service center.					
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 starter rope.     Contact an authorized service center.     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	Grass is too high or wheel height is too low.     Rear of lawn mower housing or blade dragging in grass.     Grass catcher too full.     Handle height position not right for you.	<ol> <li>Raise cutting height.</li> <li>Raise rear of lawn mower housing one (1) setting higher.</li> <li>Empty grass catcher.</li> <li>Adjust handle height to suit.</li> </ol>					
Loss of drive	<ol> <li>Belt wear.</li> <li>Belt off of pulley.</li> <li>Drive cable worn or broken.</li> <li>Dirt in drive pinions.</li> </ol>	Check/replace drive belt.     Check/reinstall drive belt.     Replace drive cable.     Clean drive pinions.					

### **MAINTENANCE**

	MAINTENANCE SCHEDU FILL IN DATES AS YOU COMPLETE REGULAR SERVICE		aEFO!	AFTER AFTER	HUSE EACH 10'S EACH 10'S EVERY 10'S	HOURS HOURS	RS SON	PAGE PRAGE ERVIC	E DATE	≣S
М	Check for Loose Fasteners Clean/Inspect Grass Catcher (If Equipped) Clean Lawn Mower	<b>V</b>	<b>V</b>			\( \times \)				
O W E R	Clean Under Drive Cover (Power-Propelled Mowers) Check drive belt/pulleys (Power-Propelled Mowers) Check/Sharpen/Replace Blade			•	✓ ✓ <sub>3</sub>					
	Lubrication Chart Clean Battery/Recharge (Electric Start Mowers)				<b>V</b>	<b>V V</b> <sub>4</sub>				
ENG-NE	Check Engine Oil Level Change Engine Oil Clean Air Filter Inspect Muffler Clean or Replace Spark Plug Replace Air Filter Paper Cartridge				V <sub>1,2</sub> V <sub>2</sub> V					

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

### **GENERAL RECOMMENDATIONS**

The warranty on this lawn mower does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain mower as instructed in this manual.

Some adjustments will need to be made periodically to properly maintain your unit. All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

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

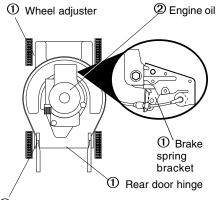
### **BEFORE EACH USE**

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

### **LUBRICATION**

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

### **LUBRICATION CHART**



- ① Handle bracket mounting pin
- ① Spray lubricant
- 2 Refer to Maintenance "ENGINE" section.

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

### PRODUCT SPECIFICATIONS

SERIALNUMBER	
DATE OF PURCHASE	
GASOLINE CAPACITY/ TYPE:	1.5 QUARTS UNLEADED REGULAR
OIL TYPE (API-SF/SG/SH):	SAE 30 (ABOVE 32°F) SAE 5W-30 (BELOW 32°F)
OIL CAPACITY:	20 OZS.
SPARK PLUG (GAP: .030")	CHAMPION RJ19LM OR J19LM
VALVE CLEARANCE:	INTAKE: .004008 EXHAUST: .004008
SOLID STATE IGNITION	
AIR GAP:	.0125 IN.
BLADE BOLT TORQUE:	35-40 FT. LBS.

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

### **LAWN MOWER**

Always observe safety rules when performing any maintenance.

### TIRES

- Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.
- Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.

### **BLADE CARE**

For best results, mower blade must be kept sharp. Replace bent or damaged blades.

### TO REMOVE BLADE

- Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with spark plug.
- Turn lawn mower on its side. Make sure air filter and carburetor are up.
- Use a wood block between blade and mower housing to prevent blade from turning when removing blade bolt.
- Protect your hands with gloves and/or wrap blade with heavy cloth.
- Remove blade bolt by turning counterclockwise.
- Remove blade and attaching hardware (bolt, lock washer and hardened washer).

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

### TO REPLACE BLADE

- Position the blade adapter on the engine crankshaft. Be sure key in adapter and crankshaft keyway are aligned.
- Position blade on the blade adapter aligning the two (2) holes in the blade with the raised lugs on the adapter.
- Be sure the trailing edge of blade (opposite sharp edge) is up toward the engine.
- Install the blade bolt with the lock washer and hardened washer into blade adapter and crankshaft.
- Use block of wood between blade and lawn mower housing and tighten the blade bolt, turning clockwise.
- The recommended tightening torque is 35-40 ft. lbs.

### **ENGINE OIL**

Drain oil (with engine warm) and replace with clean engine oil. (See "ENGINE" in the Maintenance section of this manual).

### **CYLINDER**

- Remove spark plug.
- Pour one ounce (29 ml) of oil through spark plug hole into cylinder.
- Pull starter handle slowly a few times to distribute oil.
- · Replace with new spark plug.

### OTHER

 Do not store gasoline from one season to another.

- Replace your gasoline can if your can starts to rust. Rust and/or dirt in your gasoline will cause problems.
- If possible, store your unit indoors and cover it to give protection from dust and dirt.
- Cover your unit with a suitable protective cover that does not retain moisture. Do not use plastic. Plastic cannot breathe which allows condensation to form and will cause your unit to rust.

**IMPORTANT**: Never cover mower while engine and exhaust areas are still warm.

**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.

### TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION
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> </ol>	<ol> <li>Clean/replace air filter.</li> <li>Fill fuel tank.</li> <li>Drain tank and refill with fresh clean fuel.</li> <li>Drain fuel tank and carburetor and refill tank with fresh 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> </ol>
Loss of power	<ol> <li>Rear of lawn mower housing or cutting blade dragging in heavy 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>Set to "Higher Cut" position.</li> <li>Set to "Higher Cut" position.</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.

### **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**

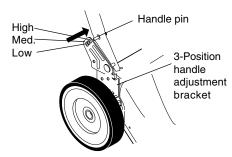
When lawn mower is to be stored for a period of time, clean it thoroughly, remove all dirt, grease, leaves, etc. Store in a clean, dry area.

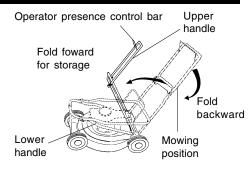
- Clean entire lawn mower (See "CLEAN-ING" in the Maintenance section of this manual).
- Lubricate as shown in the Maintenance section of this manual.
- Be sure that all nuts, bolts, screws, and pins are securely fastened. Inspect moving parts for damage, breakage and wear.
   Replace if necessary.
-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

### **HANDLE**

- Loosen the two (2) handle knobs on sides of the upper handle and allow handle to fold down to the rear.
- Squeeze the bottom ends of lower handle toward each other until pins in handle clear the brackets and pivot entire handle assembly forward and allow it to rest on mower.
- When setting up your handle from the storage position, the lower handle will require manually locking into the mowing position.

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





### ENGINE FUELSYSTEM

**IMPORTANT**: It is important to prevent gum deposits from forming in essential fuel system parts such as carburetor, f fuel filter, fuel hose or tank during storage. Also, experience indicates that alcohol blended fuels ( called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage.

- Drain the fuel tank.
- Start the engine and let it run until the fuel lines and carburetor are empty.
- Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.
- · Use fresh fuel next season.

**NOTE:** Fuel stabilizer is an acceptable alternative in minimizing the formation of fuel gum deposits during storage. Add stabilizer to gasoline in fuel tank or storage container. Always follow the mix ratio found on stabilizer container. Run engine at least 10 minutes after adding stabilizer to allow the stabilizer to reach the carburetor. Do not drain the gas tank and carburetor if using fuel stabilizer.

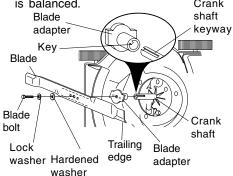
**IMPORTANT**: Blade bolt is grade 8 heat treated.

### TO SHARPEN BLADE

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

Care should be taken to keep the blade balanced. An unbalanced blade will cause eventual damage to lawn mower or engine.

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



### GRASS CATCHER

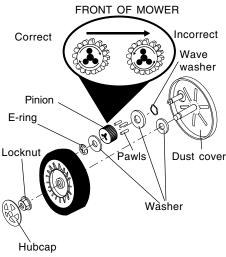
- The grass catcher may be hosed with water, but must be dry when used.
- Check your grass catcher often for damage or deterioration. Through normal use it will wear. If catcher needs replacing, replace only with a manufacturer approved replacement catcher. Give the lawn mower model number when ordering.

### **DRIVE WHEELS**

Check rear drive wheels each time you mow to be sure they move freely. The wheels not turning freely means trash, grass cuttings, etc., may be inside the drive wheel and dust cover area and must be cleaned out to free drive wheels. If necessary to clean the drive wheels, check both rear wheels.

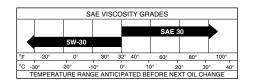
- · Remove hubcaps and locknuts.
- Remove wheels from wheel adjuster axles.

- Remove any trash or grass cuttings from inside the dust cover, pinion and/ or drive wheel gear teeth.
- If you remove the drive pinions, clean and lubricate with spray lubricant or dry powdered graphite type lubricant before reinstalling. Do not use oil or grease.
- The pinion gear, on both sides of the mower, are the same, however, they must be installed correctly. If installed incorrectly, the drive system will not work.
- There are arrows embossed on both sides of the pinion gear. With the arrow at the top of the pinion, the arrow must point towards front of mower. If the arrow points to the rear, turn the pinion around and assemble to mower.
- · Place wheels back on adjuster axles.
- · Replace locknuts and hubcaps.



# ENGINE LUBRICATION

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



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

Change the oil after every 25 hours of operation or at least once a year if the lawn mower is not used for 25 hours in one year.

Check the crankcase oil level before starting the engine and after each five (5) hours of continuous use. Tighten oil plug securely each time you check the oil level.

### TO CHANGE ENGINE OIL

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

- Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with spark plug.
- Remove engine oil cap; lay aside on a clean surface.
- Tip lawn mower on its side and drain oil into a suitable container. Rock lawn mower back and forth to remove any oil trapped inside of engine.
- Wipe off any spilled oil on lawn mower and on side of engine.
- Fill engine with oil. Fill only to the "FULL" line on the dipstick. DO NOT OVER FILL.
- · Replace engine oil cap.
- Reconnect spark plug wire to spark plug.



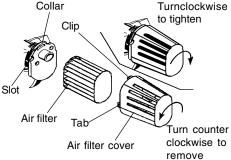
### **AIR FILTER**

Your engine will not run properly and may be damaged by using a dirty air filter. Replace the air filter every year, more often if you mow in very dusty, dirty conditions. Do not wash air filter.

### TO CHANGE AIR FILTER

- Remove the air filter by turning clockwise to the stop and pull away from collar.
- · Remove filter from inside of cover.

- Clean the inside of the cover and the collar to remove any dirt accumulation.
- Insert new filter into cover.
- Put air filter cover and filter into collar aligning the tab with the slot.
- Push in on cover and turn counterclockwise to tighten.



### **MUFFLER**

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

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

### CLEANING

**IMPORTANT:** For best performance, keep mower housing free of built-up grass and trash. Clean the underside of your mower after each use.

**ACAUTION:** Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with the spark plug.

- Turn lawn mower on its side. Make sure air filter and carburetor are up. Clean the underside of your lawn mower by scraping to remove build-up of grass and trash.
- Clean engine often to keep trash from accumulating. A clogged engine runs hotter and shortens engine life.
- Keep finished surfaces and wheels free of all gasoline, oil,etc.
- We do not recommend using a garden hose to clean lawn mower unless the electrical system, muffler, air filter and carburetor are covered to keep water out. Water in engine can result in shortened engine life.

### **SERVICE AND ADJUSTMENTS**

**ACAUTION:** Before performing any service and adjustments:

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

### **LAWN MOWER**

### TO ADJUST CUTTING HEIGHT

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

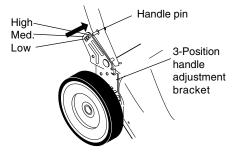
### **REAR DEFLECTOR**

The rear deflector, attached between the rear wheels of your lawn mower, is provided to minimize the possibility that objects will be thrown out the rear of the lawn mower into the operator's mowing position. If the rear deflector becomes damaged, it should be replaced.

### TO ADJUST HANDLE

The handle on your lawn mower has three (3) height positions - adjust to height that suits you.

 Squeeze the bottom ends of lower handle towards each other until the pin in handle can be inserted into one of the three height adjustment holes.



### **ENGINE SPEED**

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

Your carburetor has a non-adjustable

### **CARBURETOR**

fixed main jet for mixture control. If your engine does not operate properly due to suspected carburetor problems, take your lawn mower to an authorized service center for repair and/or adjustment.

IMPORTANT: never tamper with the engine governor, which is factory set for 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 your nearest authorzed service center, which has proper equipment and experience to make any necessary adjustments.