# Owner's Manual

# **CRAFTSMAN®** 5.5 HORSEPOWER 21" REAR DISCHARGE ROTARY LAWN MOWER

Model No. 917.388290



- Safety
- Assembly
- Operation
- Maintenance
- Español
- Repair Parts

# **CAUTION:**

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

Sears, Roebuck and Co., Hoffman Estates, IL 60179 Visit our Craftsman website: www.sears.com/craftsman

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# WARRANTY

LIMITED TWO YEAR WARRANTY ON CRAFTSMAN POWER MOWER

For two years from date of purchase, when this Craftsman Lawn Mower is maintained, lubricated, and tuned up according to the operating and maintenance instructions in the owner's manual, Sears will repair free of charge any defect in material or workman-ship.

If this Craftsman Lawn Mower is used for commercial or rental purposes, this warranty applies for only 90 days from the date of purchase.

This Warranty does not cover:

- Expendable items which become worn during normal use, such as rotary mower blades, blade adapters, belts, air cleaners and spark plug.
- Repairs necessary because of operator abuse or negligence, including bent crankshafts and the failure to maintain the equipment according to the instructions contained in the owner's manual.

Warranty service is available by returning the Craftsman power mower to the nearest Sears Service Center/Department in the United States. This warranty applies only while this product is in use in the United States.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

SEARS, ROEBUCK AND CO., D/817 WA, HOFFMAN ESTATES, ILLINOIS 60179

# SAFETY RULES

Safety standards require operator presence control to minimize the risk of injury. Your unit is equipped with cuch 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.
- 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 your 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.

**CAUTION:** Always disconnect spark plug wire and place wire where it cannot contact spark plug in order to prevent accidental starting when setting up, transporting, adjusting or making repairs. **WARNING**: The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

# ACCESSORIES

These accessories were available when this lawn mower was produced. They are not shipped with your mower. They are also available at most Sears retail outlets and service centers. Most Sears stores can also order repair parts for you, when you provide the model number of your lawn mower. Some of these accessories may not apply to your lawn mower.



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. 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. All parts such as nuts, washers, bolts, etc., necessary to complete the assembly have been placed in the parts bag.

#### 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 handle 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 into place on lower handle and tighten both handle knobs.
- 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.

#### TO INSTALL ATTACHMENTS

Your lawn mower was shipped ready to be used as a mulcher.



# OPERATION

### KNOWYOUR LAWN MOWER

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

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



#### 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.

Operator Presence Control Bar- must be<br/>held down to the handle to start the engine.Primer - pumps additional fuel from the<br/>carburetor to the cylinder for use when<br/>starting a cold engine.Release to stop the engine.Starter Handle - used for starting the engine.

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 CONTROL**

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

### **ENGINE ZONE CONTROL**

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

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

TO ADJUST CUTTING HEIGHT

- Raise wheels for low cut and lower wheels for high cut.
- Adjust cutting height to suit your requirements. Medium position is best for most lawns.
- To change cutting height, squeeze adjuster lever toward wheel. Move wheel up or down to suit your requirements. Be sure all wheels are in the same setting.

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

Lower Wheels for High Cut



Raise Wheels for Low Cut

# TO ATTACH GRASS CATCHER

- · Lift the rear door of the lawn mower and place the grass catcher frame side hooks onto the door pivot pins.
- The grass catcher is secured to the lawn mower housing when the rear door is lowered onto the grass catcher frame.

ЯСЕТНИК СПЕНУНС

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.



### **TO EMPTY GRASS CATCHER**

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

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



# **BEFORE STARTING ENGINE**

### OIL

Your lawn mower is shipped without oil in the enaine.

- Be sure mower is level and area around oil fill is clean.
- Remove engine oil cap and fill to the full line on the dipstick.

NOTE: Allow oil to settle down into engine for accurate dipstick 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. Fill to full line on dipstick.
- To read proper level, tighten engine oil cap each time.
- Reinstall engine oil cap and tighten.
- 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.

#### GAS

- Fill fuel tank. Use fresh, clean, regular unleaded gasoline with a minimum of 87 octane. Do not mix oil with gasoline.
- 7

Purchase fuel in quantities that can be used within 30 days to assure fuel freshness.

WARNING: Experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Drain the fuel tank, start the engine and let it run until 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 fuel tank or permanent damage may occur.



### 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. Clean UNDERSIDE OF MOWER HOUSING after each use. 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. If the lawn is overgrown it will be necessary to raise the height of cut to reduce pushing effort and to keep from <u>i</u> overloading the engine and leaving clumps of mulched grass. For extremely heavy mulching, reduce your width of cut, mow slowly and raise the rear of the lawn mower one wheel adjuster setting higher than the front.
- 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.





1 - Change more often when operating under a heavy load or in high ambient temperatures.

Service more often when operating in dirty or dusty conditions.
 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



SAE 30 MOTOR OIL. REFER TO 2 ENGINE - MAINTENANCE SECTION.

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

# **PRODUCT SPECIFICATIONS**

917.388290		
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5.5		
1.5 QUARTS		
UNLEADED R	EGULAR	
SAE 30 (ABOVE 32°F)		
SAE 5W-30 (BI	ELOW 32°F)	
20 OZS.		
CHAMPION R.	J19LM OR J19LM	
INTAKE:	.004008	
EXHAUST:	.004008	
.0125 IN.		
35-40 FT. LBS.		
	5.5 1.5 QUARTS UNLEADED RI SAE 30 (ABOV SAE 5W-30 (BE 20 OZS. CHAMPION R. INTAKE: EXHAUST: .0125 IN.	

• 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.

### LAWNMOWER

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.

#### 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.'

**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. Crank shaft



### **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.

### ENGINE

### LUBRICATION

Use only high quality detergent oil rated with API service classification SF, SH or SG. 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 cover by turning counterclockwise 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 clockwise to tighten.



# MUFFLER

Inspect and replace corroded muffler as it could create afire 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 underside of mower housing after each use.

**CAUTION:** 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

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# CAUTION: Before performing any service or 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

#### CARBURETOR

Your carburetor has a non-adjustable 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 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 AUTHORIZED service center, which has proper equipment and experience to make any necessary adjustments. 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.

# 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.

#### LAWNMOWER

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
- You can fold your lawn mower handle for storage.
- 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 may damage the control cables.





# ENGINE

FUELSYSTEM

**IMPORTANT:** It is important to prevent gum deposits from forming in essential fuel system parts such as carburetor, fuel filter, fuel hose, or tank during storage.

Also, experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage.

- 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.

#### **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.

CAUTION: Never store the lawn mower with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

PROBLEM	CAUSE	CORRECTION		
Does not start	1. Dirty air filter.	1. Clean/replace air filter.		
	2. Out of fuel.	2. Fill fuel tank.		
	3. Stale fuel.	<ol><li>Drain tank and refill with fresh clean fuel.</li></ol>		
	4. Water in fuel.	<ol> <li>Drain fuel tank and carburetor and refill tank with fresh gasoline.</li> </ol>		
	<ol><li>Spark plug wire is disconnected.</li></ol>	5. Connect wire to plug.		
	6. Bad spark plug.	6. Replace spark plug.		
	<ol> <li>Loose blade or broken blade adapter.</li> </ol>	<b>J</b>		
	8. Control bar in released	replace blade adapter.		
	position.	<ol> <li>Depress control bar to handle.</li> </ol>		
. ÷.	9. Control bar defective.	9. Replace control bar.		
Loss of power	<ol> <li>Rear of lawn mower housing or cutting blade dragging in heavy grass.</li> </ol>	<ol> <li>Set to "Higher Cut" position.</li> </ol>		
	2. Cutting too much grass.	2. Set to "Higher Cut" position.		
	3. Dirty air filter.	3. Clean/replace air filter.		
	4. Buildup of grass, leaves, and trash under mower.	<ol> <li>Clean underside of mower housing.</li> </ol>		
	5. Too much oil in engine.	5. Check oil level.		
	6. Walking speed too fast.	<ol> <li>6. Cut at slower walking speed.</li> </ol>		

# **TROUBLESHOOTING CHART**

# TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION		
Poor cut – uneven	· · · · · · · · · · · · · · · · · · ·	1. Replace blade. Tighten		
	2. Wheel heights uneven.	blade bolt. 2. Set all wheels at same		
	3. Buildup of grass, leaves and trash under mower.	height 3. Clean underside of mower housing.		
Excessive vibration	1. Worn, bent or loose blade.	<ol> <li>Replace blade. Tighten blade bolt.</li> </ol>		
	2. Bent engine crankshaft.	2. Contact an authorized service center.		
Starter rope hard to pull	<ol> <li>Engine flywheel brake is on when control bar is released.</li> </ol>	<ol> <li>Depress control bar to upper handle before pulling starter rope.</li> </ol>		
	2. Bent engine crankshaft.	2. Contact an authorized service center.		
	3. Blade adapter broken.	3. Replace blade adapter.		
	4. Blade dragging in grass.	<ol> <li>Move lawn mower to cut grass or to hard surface to start engine.</li> </ol>		
Grass catcher	1. Cutting height too low.	1. Raise cutting height.		
not filling (if so	2. Lift on blade worn off.	2. Replace blade.		
equipped)	3. Catcher not venting air.	3. Clean grass catcher.		
Hard to push	1. Grass is too high or wheel height is too low.	1. Raise cutting height.		
	2. Rear of lawn mower housing or blade dragging in grass.	<ol> <li>Raise rear of lawn mower housing one (1) setting higher.</li> </ol>		
	3. Grass catcher too full.	3. Empty grass catcher.		
	4. Handle height position not right for you.	4. Adjust handle height to suit.		
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**REPAIR PARTS** 

### CRAFTSMAN ROTARY LAWN MOWER -- MODEL NO. 917.388290

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	131696	Control Bar	27	851856	Screw 1/4-20 x 3/8
2	166860X479	UpperHandle	28	63124	Nut
3	161105X479	LowerHandle	29	160835X007	Wheel Adjusting Bracket - Front
4	132001	Rope Guide	30	19112222	Spacer
5	63601	Locknut 1/4-20	31	151161	Wheel
6	131959	Handle Bolt	33	87877	Selector Knob
7	66426	Wire Tie	34	167130X004	Axle Arm Assembly - LR
8 9	74780512	Hex Bolt 5/16-18 x 3/4	35	57143	Wave washer
9	166785	Locknut 5/16-18	36	160828	Shoulder Bolt 5/16-18
10	164362	Shoulder Bolt	37	151162	Wheel Assembly
11	168552	Engine Zone Control Cable	38	73990500	Nut
12	750097	Hex Washer Head Screw #10-24 x 1/2	39	83923	Flanged Locknut
13	850733X004	Up-Stop Bracket	40	77400	Hubcap
14	136376	Handle Knob	41	88652	HingeScrew
15	51793	Hairpin Cotter	42	165766	Spring (LH)
16	147286	Hinge Rod	43	165767	Spring (RH)
17	165946X479	Support Bracket	44	165912	Door Bolt
18	17600406	Screw	45	150406	Hex Head Thread Rolling Screw 3/8-16 x 1
19	167132X004	Axle Arm Assembly - LF	46	85463	DangerDecal
20	167133X004	Axle Arm Assembly - RF	47	161551	Adjustment Bolt
21	165858	Rear Skirt	48	167131X004	Axle Arm Assembly - RR
22	168360X004	Selector Spring	52	166872	Housing Assembly (Incl. Ref. #17, 18 & 46)
23	166875	Rear Door Assembly Kit (Incl. Springs)	53	851084	Hex Head Screw 3/8-24 x 1-3/8 Grd. 8
24	751153	Locknut 5/16-18	54	850263	Helical Lockwasher
25	166236X479	Handle Bracket Assembly (Left)	55	851074	Hardened Washer
26	166243X479	Handle Bracket Assembly (Right)	56	165833	21" Blade
			57	851514	Blade Adapter
			67	166113	Grass Bag
			68	165755	Catcher Frame
			70	•••••	Engine - (See Breakdown) Craftsman 143.995502
				161058	Warning Decal (Not Shown)
				166881	Owner's Manual



# CRAFTSMAN 4-CYCLE ENGINE

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KEY	PART		KEY	PART	
NO.	NO.	DESCRIPTION	NO.	NO.	DESCRIPTION
	07066	Culinder			
1	37266	Cylinder (Incl. 2,20 & 150)	172 174	36784 30200	Valve Cover
2	26727	Dowel Pin	174	29752	Screw, 10-24 x 9/16"
6	33734	Breather Element		25152	Nut & Lock Washer, 1/4- 28
7	36557	Breather Ass'y.	182	6201	Screw, 1/4-28 x 7/8"
		(Incl. 6 & 12A)	184	26756	* Carburetor To Intake
12	36775	Breather Tube			Pipe Gasket
12A	36558	Breather Cover & Tube	185	36785	Intake Pipe
100	26604	(Incl. 12B) Breathar Tuba Elbaur	186	32653	Governor Link
12B 14	36694 28277	Breather Tube Elbow Washer	189	650839	Screw, 1/4-20 x 3/8"
15	30589	Governor Rod (Incl. 14)	191	36559A	S.E. Brake Bracket (Incl.
16	34839A	Governor Lever	195	610973	195) Terminal
17	31335	Governor Lever Clamp	207	34336	Throttle Link
18	651018	Screw, Torx T-15, 8-32 x	216	33086	R.P.M. Adjusting Lever
		19/64"	223	650451	Screw, 1/4-20 x 1"
19	36281	Extension Spring	224	36786	* Intake Pipe Gasket
20 30	32600 36776	Oil Seal Crankshaft	238	650932	Screw, 10-32 x 49/64"
40	40004	Piston, Pin & Ring Set	239	34338	* Air Cleaner Gasket
-10	10001	(Std.)	241 245	35797 35066	Air Cleaner Collar
	40005	Piston, Pin & Ring Set	245	35065	Air Cleaner Filter Air Cleaner Cover
		(.010" OS)	260	36980	BlowerHousing
41	36070	Piston & Pin Ass'y.	261	30200	Screw, 10-24 x 9/16"
		(Std.) (Incl. 43)	262	650831	Screw, 1/4-20 x 1/2
	36071	Piston & Pin Ass'y.	275	36790A	Muffler
42	40006	(.010" OS) (Incl. 43) Bing Sot (Std.)	277	650988	Screw, 1/4-20 x 2-5/16"
72	40007	Ring Set (Std.) Ring Set (.010" OS)	285	35000A	Starter Cup
43	20381	Piston Pin Retaining Ring	287 290	650926 29774	Screw, 8-32 x 21/64"
45	36777	Connecting Rod Ass'y.	290	26460	Fuel Line Fuel Line Clamp
		(Incl. 46)	298	28763	Screw, 10-32 x 35/64"
46	32610A	Connecting Rod Bolt	300	36916	Fuel Tank (Incl. 292 &
48	27241	Valve Lifter			301)
50 52	36778 29914	Camshaft (MCR)	301	36246	FuelCap
69	35261	Oil Pump Ass'y. * Mounting Flange Gasket	305	35647	Oil Fill Tube
70	34311E	Mounting Flange (Incl. 72	306 307	36996 35499	* "O"-Ring
		thru 83,306)	- 309	650562	"O"-Ring Screw, 10-32 x 1/2"
72	36083	Oil Drain Plug	310	35648	Dipstick
75	27897	Oil Seal	313	34080	Spacer
80 81	30574A	Governor Shaft	325	37152	Spring Clip
82	30590A 30591	Washer	370A	36261	Lubrication Decal
02	50591	Governor Gear Ass'y. (Incl. 81)	370C	37199	Primer Decal
83	30588A	Governor Spool	370K 380	36695 640174	Starter Decal
86	650488	Screw, 1/4-20 x 1-1/4"	390	590737	Carburetor (Incl. 184) Rewind Starter
89	611004	Flywheel Key	400	36792B	Gasket Set (Incl. Items
90	611112	Flywheel			Marked *)
92	650815	Belleville Washer	416	36085	Spark Arrestor Kit (Incl.
93 100	650816 34443B	Flywheel Nut			417)(Optional)
101	610118	Solid State Ignition Spark Plug Cover	417	650821	Screw, 10-32 x 1/2"
103	651007	Screw, Torx T-15, 10-24	000		(Optional)
		x 15/16"	900		Replacement Engine 750826A, order from 71-
110	37047	Ground Wire			999
119	36787	* Cylinder Head Gasket	900		Replacement Short Block
120	36825	Cylinder Head			750796B, order from 71-
125	37288	Exhaust Valve (Std.)			999
126	37289	(Incl. 151)		<u> </u>	RPM High 2900 to 3200
120	01203	Intake Valve	107-	- <b>W</b> L :	
130	6021A	(Std.) (Incl. 151) Screw, 5/16-18 x 1-1/2"			ould have been built with 590694
135	35395	Resistor Spark Plug	Starter		nt dimensions given in U.S. inches
_		(RJ19LM)	1 inch	= 25.4 mm	n amenaiona given in U.S. Inches
150	31672	Valve Spring		a,	
151 151A	31673	Valve Spring Cap			
151A 169	40017 36783	Intake Valve Seal			
100	50705	* Valve Cover Gasket			

#### **CRAFTSMAN 4-CYCLE ENGINE**

**KEY** 

NO.

20A

36A



48A 

Repair kit (Incl. Items Marked \*)

# CRAFTSMAN 4-CYCLE ENGINE

#### MODEL NUMBER 143.995502









#### DESCRIPTION

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) Starter Rope (98" X 9/ 64" dia.) Starter Handle







KEY NO.	PART NO.	DESCRIPTION
	590737	Rewind Starter
3	590740	Retainer
6	590616	Starter Dog
7	590617	Dog Spring
8	590618A	Pulley & Rewind Spring Ass'v
11	590687A	Starter Housing Ass'y (40 degree grommet)
12	590535	Starter Rope (Length 98" x 9/64" dia.)
13	590701	Starter Handle
14	590760	Spring Clip

For in-home major brand repair service: Call 24 hours a day, 7 days a week

1-800-4-MY-Home<sup>sM</sup> (1-800-469-4663) Para pedir servicio de reparación a domicilio 1-800-676-5811

In Canada for all your service and parts needs call Au Canada pour tout le service ou les pièces 1-800-665-4455

For the repair or replacement parts you need: Call 6 am-11pm CST, 7 days a week PartsDirect<sup>sm</sup> 1-800-366-PART (1-800-366-7278)

Para ordenar piezas con entrega a domicilio 1-800-659-7084

For the location of a Sears Parts and Repair Center in your area: Call 24 Hours a day, 7 days a week 1-800-488-1222

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1-800-827-6655



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