# **Owner's Manual**

# **CRAFTSMAN**<sup>®</sup> 6.75 HORSEPOWER 21" MULTI-CUT POWER PROPELLED ROTARY LAWN MOWER

Model No. 917.377912



- 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 workmanship.

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 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.
- 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 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.

A Look for this symbol to point out important safety precautions. It means CAUTION!!! BECOMEALERT!!! 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.

### **AWARNING**

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. LAWN MOWER PERFORMANCE



### 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 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. To convert to bagging or discharging; See OPERATION section of this manual.

### **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. STOP CAUTION ENGINE ENGINE FAST SLOW CHOKE FUEL OIL DANGER, KEEP HANDS **OR WARNING** ON OFF AND FEET AWAY Operator presence control bar Drive control bar-Speed control lever Starter handle Cable clip Grass catcher Gasoline cap Wheel adjuster lever Primer Mulcher plug Engine oil cap w/dipstick Mulcher door **IMPORTANT:** This lawn mower is shipped without oil or gasoline in the engine. Housing

#### 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 held down to the handle to start the engine. Release to stop the engine. Primer - pumps additional fuel from the carburetor to the cylinder for use when starting a cold engine. Starter handle - used for starting the

engine.

Drive control bar - used to engage power-propelled foward motion of lawn mower.

Mulcher plug - Located at the rear discharge opening must be removed when converting to bagging operation.



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.

Lower Wheels for high cut



Raise Wheels for low cut

### **GROUND DRIVE SPEEDS**

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

- Lower speeds are for slow, 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 bar 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.
- To convert to mulching or discharging operation, install mulcher plug into rear discharge opening of mower.

### SIDE DISCHARGING-

- Rear door must be open.
- Open mulcher door and install discharge deflector under guard as shown.
- Mower is now ready for discharging operation.
- To convert to mulching or bagging ٠ 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.



### TO ATTACH GRASS CATCHER

- Lift the rear door of the lawn 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 rear mulcher plug 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 engine.

- 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.

### ADD GASOLINE

 Fill fuel tank. Use fresh, clean, regular unleaded gasoline with a minimum of 87 octane. (Use of leaded gasoline will increase carbon and lead oxide deposits and reduce valve life). 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. 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.



### MAINTENANCE

	MAINTENANCE SCHEDU FILL IN DATES AS YOU COMPLETE REGULAR SERVICE	affor	AF EAC	HUSEUSE EACH 10 H VERY 10 H VERY 10 H	OURS HOU V25ERV REVERV BEF	RS SON SEASTO ORE STO SE	RVICE	DATE	s
MO¥ER	Check for Loose Fasteners Clean/Inspect Grass Catcher (If Equipped) Clean Lawn Mower Clean Under Drive Cover (Power-Propelled Mowers) Check drive belt/pulleys (Power-Propelled Mowers) Check/Sharpen/Replace Blade Lubrication Chart Clean Battery/Recharge (Electric Start Mowers)	<b>v</b> <b>v</b>	×	V V 3 V	V V V V				
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 1.2 V 2 V V V 2					

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 "LUBRICA-TION CHART").

### **LUBRICATION CHART**



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

## **PRODUCT SPECIFICATIONS**

SERIALNUMBER	
DATE OF PURCHASE	
GASOLINE CAPACITY/ TYPE:	1.25 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.

**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.

### **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, wipe clean with dry cloth. Reassemble dry. Do not lubricate. 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.



### 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 as shown 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 overfill.
- 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.

### LAWNMOWER

### 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.



### TO ASSEMBLE 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.

**ACAUTION:** 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.



### **ENGINE SPEED**

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

### CARBURETOR

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 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 authorized service center, 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.

#### 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, 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. **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.

PROBLEM	CAUSE	CORRECTION
Will 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/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 in "Higher Cut" position.</li> <li>Set in "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>Low engine speed.</li> <li>Buildup of grass, leaves, and trash under mower.</li> </ol>	<ol> <li>Replace blade. Tighten blade bolt.</li> <li>Set engine speed control in fast position.</li> <li>Clean underside of mower housing</li> </ol>
Excessive vibration	<ol> <li>Worn, bent or loose blade.</li> <li>Bent engine crankshaft.</li> </ol>	<ol> <li>Replace blade. Tighten blade bolt.</li> <li>Contact an authorized service center/department.</li> </ol>

### TROUBLESHOOTING CHART

### TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION
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>	<ol> <li>Depress control bar to upper handle before pulling starter rope.</li> <li>Contact an authorized service center/department.</li> <li>Replace blade adapter.</li> <li>Move lawn mower to cut grass or to hard surface to start engine.</li> </ol>
Grass catcher not filling (If so equipped)	<ol> <li>Cutting height too low.</li> <li>Lift on blade worn off.</li> <li>Catcher not venting air.</li> <li>Low engine speed.</li> </ol>	<ol> <li>Raise cutting height.</li> <li>Replace blade.</li> <li>Clean grass catcher.</li> <li>Set engine speed control in fast position.</li> </ol>
Hard to push	<ol> <li>Grass is too high or wheel height is too low.</li> <li>Rear of lawn mower housing/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 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>	<ol> <li>Check/replace drive belt.</li> <li>Check/reinstall drive belt.</li> <li>Replace drive cable.</li> <li>Clean drive pinions.</li> </ol>



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### ROTARY LAWN MOWER MODEL NUMBER 917.377912

1       167163       Handle, Upper Dix Comf. (Includes Grip)       35       166032       Pulley, Fixed         2       161105X479       Handle, Lower       36       170045       Bearing Support As         3       131036       Bail, Cont. Wire Dix Comf. Blk       37       150406       Boit, Engine         4       132001       Guide, Rope, Side       38        Engine (See Breakd         5       63601       Nut, Hex Lockwasher 1/4-20       0       Craftsman 143.9967         6       66426       Wire, Tie       39       169294       Grass Catcher Bag         7       131959       Boit, Handle 5/16-18 x 1.75       40       161358       Grass Catcher Fram         8       87692       Knob, Handle       41       85463       Danger Decal	
2         161105X479         Handle, Lower         36         170045         Bearing Support As           3         131036         Bail, Cont. Wire Dlx Comf. Blk         37         150406         Bolt, Engine           4         132001         Guide, Rope, Side         38          Engine (See Breakd Craftsman 143.9967           5         63601         Nut, Hex Lockwasher 1/4-20         39         169294         Grass Catcher Bag           7         131959         Bolt, Handle 5/16-18 x 1.75         40         161358         Grass Catcher Fram	
3         131036         Bail, Cont. Wire Dix Comf. Blk         37         150406         Boit, Engine           4         132001         Guide, Rope, Side         38          Engine (See Breakd           5         63601         Nut, Hex Lockwasher 1/4-20         39         169294         Grass Catcher Bag           6         66426         Wire, Tie         39         169294         Grass Catcher Fram           7         131959         Boit, Handle 5/16-18 x 1.75         40         161358         Grass Catcher Fram	sy.
4         132001         Guide, Rope, Side         38          Engine (See Breakd Craftsman 143.9967           5         63601         Nut, Hex Lockwasher 1/4-20         Craftsman 143.9967           6         66426         Wire, Tie         39         169294         Grass Catcher Bag           7         131959         Bolt, Handle 5/16-18 x 1.75         40         161358         Grass Catcher Fram	
5         63601         Nut, Hex Lockwasher         1/4-20         Crattsman 143.9967           6         66426         Wire, Tie         39         169294         Grass Catcher Bag           7         131959         Bolt, Handle         5/16-18 x 1.75         40         161358         Grass Catcher Fram	
6         66426         Wire, Tie         39         169294         Grass Catcher Bag           7         131959         Bolt, Handle 5/16-18 x 1.75         40         161358         Grass Catcher Fram	02
7 131959 Bolt, Handle 5/16-18 x 1.75 40 161358 Grass Catcher Fram	
	e
9 164265 Grip Hell Foam Smooth 45 166034 Rod, Pulley Engage	
10 161551 Bolt Sa Neck 46 166041 Busning	
11 73990500 Nut. Hex Lockwasher Ins. 5/16-18 UNC 48 169605 Hetainer Clip	
12 51793 Cotter Hairpin 49 166039X008 Clamp	
13 161586 Engine Zone Control Cable 50 54583 Screw	
14 850733Y004 Bracket Unston 51 169980 Spacer	
15 83816 Screw Hex Washer Head Tapping 10-2 52 170047 Wave Washer	
16 162085 Kit Door Rear 53 166037 Belt Cover, Bottom	
17 161548 Seal Door 54 750097 Screw	
18 165261 Plug Mulcher 55 166383X4/9 Cable Support Brac	cet
10 166007 Kit Housing 56 63601 NUL	
20 161569X479 Handle Bracket Asm Left 57 166391X004 Bracket Assy.	
21 168227X479 Handle Bracket Asm Right 58 5/808 Screw	
22 150078 Screw Hex Wshd 59 166042 V-Groove Pulley	
23 163183 Bolt Hey Head 5/16-18 x 5/8 60 166050 Idler Arm Spacer	
24 63124 Nut Hex Lock Wshr 5/16-18 61 145212 Flange Nut	
25 161333 Baffle. Side 62 155552 Locknut	
26 163409 Screw 12 x 5/8 63 166022X008 Idler Arm	
27 161550 Skirt 04 100043 Iuler Pulley	
28 88652 Screw Hinde 1/4-20 x 1 25 65 160829 Shoulder Bolt	
29 166036¥479 Belt Cover Top 66 171962 Door Assy.	
30 851514 Adapter, Blade w/key Longer 57 88349 Not	
31 159267 Blade 21" 68 166028 Multi Cut Guard	
32 851074 Washer Hardened 161058 Warning Decal (Not	Shown)
33 850263 Lockwasher, Helical Spring 3/8 171048 Owner's Manual	
34 851084 Screw, Hex Head 3/8-24 x 1.38	

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REPAIR PARTS

### ROTARY LAWN MOWER MODEL NUMBER 917.377912

### ROTARY LAWN MOWER MODEL NUMBER 917.377912

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 5 6 7 8 9 20 1 12 23 14 5 16 7 18 19 20 12 22 23	166047 167259 17060408 170050 161537 750634 166060 132010 166049 166021X004 17541011 166189 166388 145354 57079 161584X479 161602 1604777X004 167650 12000022 163365 169911 161118X004	Speed Control Bail Control Drive Screw Drive Cable Cover Drive Screw Thdrol 10-25 x .50 V-Belt Nut Lock Flanged 3/8-16 Zinc Pulley Driven Belt Keeper Bracket Screw Hex Wash Head 10-24 X .668 Pivot Rod Cover Transmission Asm. Pin Spring Thrust Washer Hardened Rod Connecting Spring Extension Spring Selector Knob Selector Spring E-Ring 7/8 Bearing Support Bearing Ball Retainer Drive Asm. Stmp.	24 25 26 77 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45	57808 170011 166450 52160 12000058 88080 67725 57143 172324 145212 150181 160785 X004 160785 X004 160786X004 161463 163409 700279 172323 150182 83923 19572216 144929 751152	Screw Hex Head Tapping 1/4-20 x .75 Drive Pawl Pinion, Drive RH Washer E-Ring 7/16 Cover, Dust Wheel Washer 1/2 x 1-1/2 x .134 Wave Washer Wheel 9 x 2 Nut Hex Flange Lock Hubcap, Mag Platinum 9" Shaft Asm. Front Retainer Front Shaft Screw 12 x 5/8 Clip Retainer Wheel 8 x 2 Hubcap, Mag Platinum 8" Nut, Hex Flange Lock 3/8-16 Washer Screw 1/4 x 2.12 Locknut

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

Push Rod Guide

				1002E 10110E11 140.990702
	PART NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1	36835A	Cylinder (Incl. 2 & 20)	154 650913	Rocker Arm Stud
2	26727	Dowel Pin	155 35624A	
6	33734	Breather Element	157 650914	
7	36557	Breather Ass'y. (Incl. 6 & 12A)	158 36629	Push Rod
12	32447	BreatherTube	159 35626	* Rocker Arm Cover Gasket
12A	36558	Breather Cover & Tube (Incl.	160 35718	Rocker Arm Housing
		12B)	161 30063	Screw, Torx T-30, 1/4-20 x 1/2*
12B	36694	Breather Tube Elbow	178 29752	Nut & Lock Washer, 1/4-28
	28277	Washer	182 30088A	Screw, 1/4-28 x 1"
	30589	Governor Rod (Incl. 14)	184 26756	* Carburetor Gasket
	34839A	Governor Lever	185 36579	Intake Pipe
	31335	GovernorLeverClamp	186 32653	Governor Link
18	651018	Screw, Torx T-15, 8-32 x 19/64"	187 36580	Spacer
	36281	Extension Spring	189 650839	Screw, 1/4-20 x 3/8"
	32600	Oil Seal	191 36559A	
	36587	Crankshaft Biston Bin & Bing Cat (Otd.)	195 610973	Terminal
40	35544A 35545A	Piston, Pin & Ring Set (Std.)	207 34336	Throttle Link
	33343A	Piston, Pin & Ring Set (.010"	216 33086	R.P.M. Adjusting Lever
	35546	OS) Pictop Din & Ping Set ( 000*	223 651044	
	00040	Piston, Pin & Ring Set (.020" OS)	223A 651043	
<b>A1</b>	35541	Piston & Pin Ass'y. (Std.)	224 36581	Intake Pipe Gasket
	35542	Piston & Pin Ass'y. (30.)	238 650932	
	00042	(Incl. 43)	239 34338	* Air Cleaner Gasket
	35543	Piston & Pin Ass'y. (.020" OS)	241 36919	Air Cleaner Collar
	00010	(Incl. 43)	245 36905	Air Cleaner Filter
42	35547A	Ring Set (Std.)	250 36920 260 37180	Air Cleaner Cover
	35548A	Ring Set (.010" OS)	261 30063	Blower Housing
	35549	Ring Set (.020" OS)	262 650831	Screw, Torx T-30, 1/4-20 x 1/2" Screw, 1/4-20 x 1/2"
43	20381	Piston Pin Retaining Ring	263A 37184	Starter Grill
45	32875A	Connecting Rod Ass'y. (Incl.	275 36950A	
		46)	276 36949	Locking Plate
	32610A	Connecting Rod Bolt	277 651039	
	35616	Valve Lifter	285 35000A	Starter Cup
	37285	Camshaft (MCR)	287 650926	
	29914	Oil Pump Ass'y.	290 29774	FuelLine
	35261	Mounting Flange Gasket	292 26460	Fuel Line Clamp
70	34311E	Mounting Flange (Incl. 72 thru	298 28763	Screw, 10-32 x 35/64*
-		83,306)	300 36916	Fuel Tank (Incl. 292 & 301)
	30572	Oil Drain Plug (Incl. 73)	301 36246	FuelCap
	28833	Drain Plug Gasket	305 35647	Oil Fill Tube
	27897 30574A	Oil Seal Governor Shaft	306 36996	* "O"-Ring
	30590A	Washer	307 35499	"O"-Ring
	30591	Governor Gear Ass'y. (Incl. 81)	309 650562	· · · · · · · · · · · · · · · · · · ·
	30588A	Governor Spool	310 35648	Dipstick
	650488	Screw, 1/4-20 x 1-1/4*	313 34080	Spacer
	611004	Flywheel Key	341A 36578	Blower Housing Support
	611112	Flywheel	947 654000	Bracket
	650815	Belleville Washer	347 651038 370A 36261	Screw, 10-32 x 27/32* Lubrication Decal
	650816	Flywheel Nut	370C 37199	Primer Decal
	34443B	Solid State Ignition	370R 37317	Warning Decal
101	610118	Spark Plug Cover	380 640195	
103	651007	Screw, Torx T-15, 10-24 x 15/	390 590739	
		16"	400 368068	
110	37047	Ground Wire		(Incl. Items Marked *)
	36738 '	Cylinder Head Gasket	900	Replacement Engine NONE
	36721	CylinderHead	900 — —	Replacement Short Block
125	36471	Exhaust Valve (Std.) (Incl. 151)		750853, order from 71-999
	36472	Exhaust Valve (1/32" OS) (Incl.		RPM High 3000 to 3300
		151)		5
126	29314C	Intake Valve (Std.) (Incl. 151)	NOTE: This e	engine could have been built with 590702
	29315C	Intake Valve (1/32" OS) (Incl.	starter	-
400	850040	151)		mponent dimensions given in U.S.
	650912	Screw, 5/16-18 x 1-1/2"	inches 1 inch	
	650999 34645	Screw, 5/16-18 x 2-41/64"		
	34645 31672	Resistor Spark Plug (RN4C)		
	31673	Valve Spring Valve Spring Cap		
	36649	Valve Spring Cap Push Rod Guide		



KEY NO.	PART NO.	DESCRIPTION
	640195	Carburetor (Incl. 184 of Engine Parts List)
1	631615	Throttle Shaft & Lever Assembly
	631767	Throttle Return Spring
2 4	631184	* Dust Seal Washer
5	631183	* Dust Seal (Throttle)
6	640070	Throttle Shutter
7	650506	* Shutter Screw
16	631807	Fuel Fitting
17	651025	Throttle Crack Screw/Idle Speed Screw
18	630766	Tension Spring_
20	640027	Idle Restrictor Screw
20A		Idle Restrictor Screw Cap
25		Float Bowl
	631024	* Float Shaft
28		Float
29	631028	* Float Bowl "O" Ring
30	631021	* Inlet Needle, Seat, & Clip (Incl. 31)
31	631022	Spring Clip
35		Primer Bulb/Retainer Ring
36		Main Nozzle Tube
36A	632766	Carburetor Tube
37	632547	* "O" Ring, Main Nozzle Tube
40	632746	High Speed Bowl Nut
44	27110A	Bowl Nut Washer
47	630748	* Weich Plug, Idle Mixture Well
48		* Welch Plug, Atmospheric Vent
48A		* Welch Plug
60	632760	Repair kit (Incl. Items Marked *)



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KEY NO.	PART NO.	DESCRIPTION
	590739	<b>Rewind Starter</b>
3	590740	Retainer
6	590616	Starter Dog
7	590617	Dog Spring
8	590618A	Pulley & Rewind Spring Ass'y
11	590638	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

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