SEARS

# CRAFISMAN

MODEL NUMBER 917.380481 OWNER'S MANUAL

- Assembly
- Operation
- Customer Responsibilities
- Service
- Adjustments
- Repair Parts

#### Caution:

Read and Follow all Safety Rules and Instructions Before Operating This Equipment



#### SAFETY RULES



CAUTION: ALWAYS DISCONNECT SPARK PLUG WIRE AND PLACE WIRE WHERE IT CANNOT CONTACT SPARK PLUG TO PREVENT ACCIDENTAL STARTING WHEN SETTING UP, TRANSPORTING, ADJUSTING OR MAKING REPAIRS.



#### IMPORTANT

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 blade 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 - ATTENTION!!! BECOME ALERT!!! YOUR SAFETY IS INVOLVED.

**CONGRATULATIONS** on your purchase of a Sears Craftsman Lawn Mower. It has been designed, engineered and manufactured to give you the best possible dependability and performance.

Should you experience any problems you cannot easily remedy, please contact your nearest Sears Service Center/Department. Sears has competent, well trained technicians and the proper tools to service or repair this unit.

Please read and retain this manual. The instructions will enable you to assemble and maintain your lawn mower properly. Always observe the "SAFETY RULES".

MODEL NUMBER 917.380481
SERIAL NUMBER
DATE OF PURCHASE
THE MODEL AND SERIAL NUMBERS WILL BE FOUND ON A DECAL ATTACHED TO THE REAR OF THE LAWN MOWER HOUSING.
YOU SHOULD RECORD BOTH SERIAL NUMBER AND DATE OF PURCHASE AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

#### **PRODUCT SPECIFICATIONS**

HORSEPOWER:	5.0
DISPLACEMENT:	11.5 cu. in.
GASOLINE CAPACITY:	1.5 quart (Unleaded)
OIL (20 oz. Capacity):	SAE 30 (Above 32°F) 5W30 (Below 32°F)
SPARK PLUG (GAP .030 in.):	Champion RJ19LM or Sears <u>71</u> 33312 or STD 361458 or STD 360950
VALVE CLEARANCE: Intake: Exhaust:	
SOLID STATE IGNITION AIR GAP:	.0125 in.
BLADE BOLT TORQUE:	35-40 ftlbs.

#### MAINTENANCE AGREEMENT

A Sears Maintenance Agreement is available on this product. Contact your nearest Sears store for details.

#### **CUSTOMER RESPONSIBILITIES**

- · Read and observe the safety rules.
- Follow a regular schedule in maintaining, caring for and using your lawn mower.
- Follow the instructions under "Customer Responsibilities" and "Storage" sections of this Owner's Manual.

#### 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

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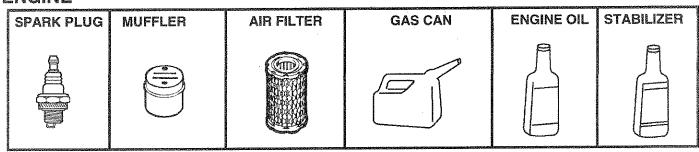
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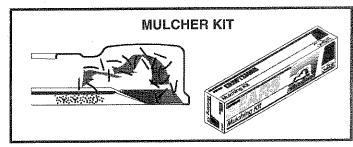
### LAWN MOWER ACCESSORIES

These accessories were available when this lawn mower was produced. 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.

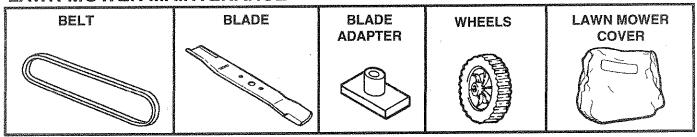
#### ENGINE



#### LAWN MOWER PERFORMANCE



#### LAWN MOWER MAINTENANCE



# **ASSEMBLY**

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

# HOW TO SET UP YOUR LAWN MOWER

#### TO UNFOLD HANDLE (See Fig. 1)

IMPORTANT: UNFOLD HANDLE CAREFULLY SO AS NOT TO PINCH OR DAMAGE CONTROL CABLES.

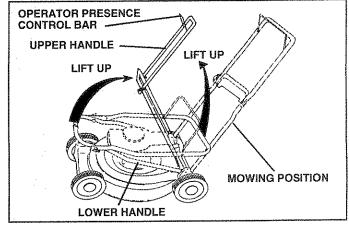


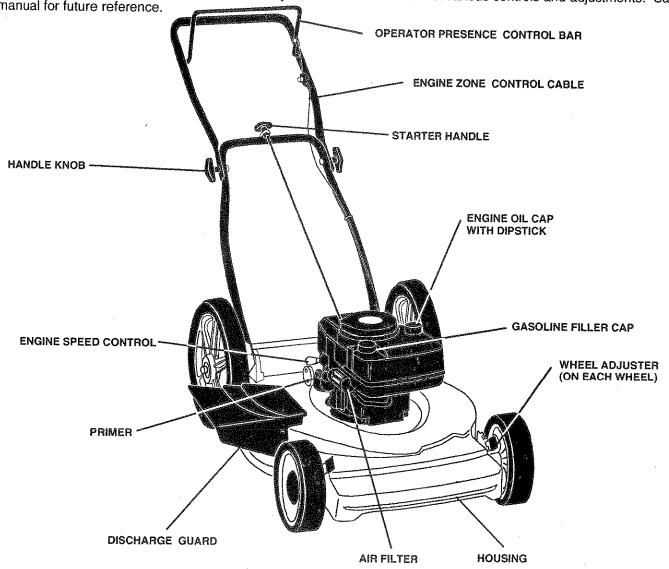
FIG. 1

- Raise handles until lower handle section locks into place in mowing position.
- Raise upper handle section into place on lower handle, remove protective padding and tighten both handle knobs
- Remove handle padding holding operator presence control bar to upper handle.
- Your lawn mower handle can be adjusted for your mowing comfort. Refer to "Adjust Handle" in the Service and Adjustment 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.



#### 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.

**ENGINE SPEED CONTROL** - located on the side of the engine which allows you to select either fast (❤) or slow (♠) engine speed.

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

STARTER HANDLE - used for starting the engine.

### **OPERATION**

# HOW TO USE YOUR LAWN MOWER ENGINE SPEED (See Fig. 2)

The engine speed is controlled by a lever located on the side of the engine. Fast (�) position is for starting engine, normal cutting and better grass bagging. Slow (�) position is for light cutting, trimming and fuel economy.

#### **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 (See Fig. 3)

- Raise wheels for low cut and lower wheels for high cut.
- Wheels are set in low cut for shipping. 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.

# BEFORE STARTING ENGINE OIL (See Fig. 4)

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 w/dipstick and fill to the full line on the dipstick.
- Use 20 ozs. of oil. For type and grade of oil to use, see "ENGINE" in Customer Responsibilities 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.
- After the first two (2) hours of mowing, change the oil, and every 25 hours thereafter. You may need to change the oil more often under dusty, dirty conditions.

#### GAS (See Fig. 4)

Fill gasoline tank with fresh, clean, unleaded gasoline.
 DO NOT USE PREMIUM GASOLINE. BE CAREFUL NOT TO OVER FILL TANK.

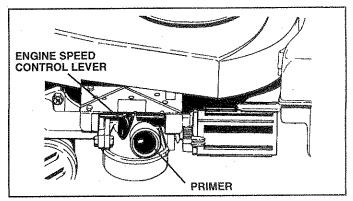


FIG. 2

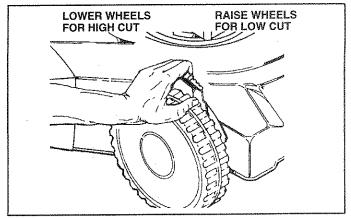


FIG. 3

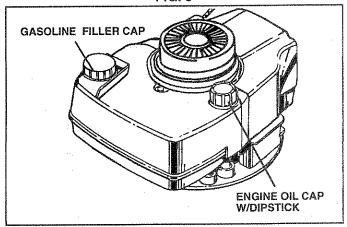


FIG. 4

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.

### **OPERATION**

#### 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.
- Move engine speed control lever to fast (\*) position.
- 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.

 For extremely heavy cutting, reduce the width of cut and raise the rear of the lawn mower housing one (1) wheel adjuster setting higher than the front for better

discharge of grass.

 For better grass bagging and most cutting conditions, the engine speed should be set in the fast (\*) position.

- For side discharge lawn mowers, cutting in a counterclockwise direction, starting at the outside of the area to be cut, spreads grass clippings more evenly and puts less load on the engine. To keep clippings off of walkways, flower beds, etc., make the first cuts in a clockwise direction.
- 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.

# **CUSTOMER RESPONSIBILITIES**

	MAINTENANCE SCHEDULE  FILL IN DATES AS YOU COMPLETE REGULAR SERVICE  Check for Loose Fasteners  Clean/Inspect Grass Catcher													
FILL IN DATES AS YOU COMPLETE REGULAR SERVICE				EER	EACT IRST	2HOU 2HOU	SHOY SERY	25 TERY	SEA SE	SEF	RVIC	E DA	TES	>
N	Check for Loose Fasteners Clean/Inspect Grass Catcher (If Equipped)	V						<b>V</b>					-	
WE	Clean Lawn Mower Inspect/Clean Drive Wheels (Self-Propelled Mowers)			:	•									
R	Sharpen/Replace Mower Blade Lubrication Chart					<b>V</b> 3		V						
	Clean Battery/Recharge (Electric Start Mowers)					V	TARREST STATE	<b>V</b> 4						
EZ	Check Engine Oil Level Change Engine Oil			V	<u>/</u>	1,2								
	Clean Air Filter Inspect Muffler					V 2								
NE	Replace Spark Plug Replace Air Filter Paper Cartridge						<b>V</b> 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 moving 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, clean or 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.

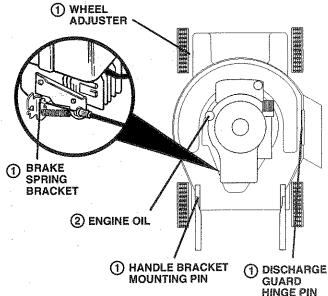
#### BEFORE EACH USE

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

#### LUBRICATION

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

### **LUBRICATION CHART**



- SPRAY LUBRICANT
- 2 REFER TO CUSTOMER RESPONSIBILITIES "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, POWERED GRAPHITE TYPE LUBRICANT SPARINGLY.

# **CUSTOMER RESPONSIBILITIES**

#### 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 (See Fig. 5)

- 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 counter-clockwise. Use a 9/16" box or open-end wrench.
- 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 (See Fig. 5)

- 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.

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

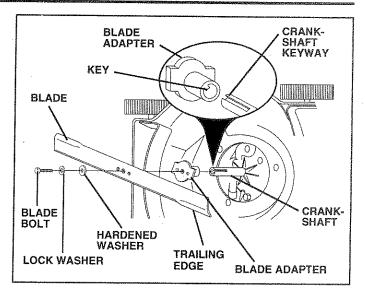


FIG. 5

#### TO SHARPEN BLADE

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

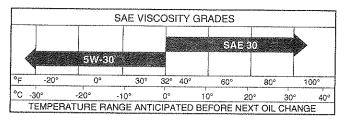
(If purchased as an accessory)

- 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.

# CUSTOMER RESPONSIBILITIES

# ENGINE LUBRICATION

Use only high quality detergent oil rated with API service classification 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 the first two hours of operation and every 25 hours thereafter 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 (See Fig. 6)

**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 (See Fig. 7)

- 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.

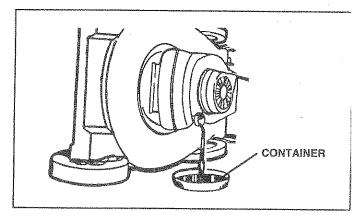


FIG. 6

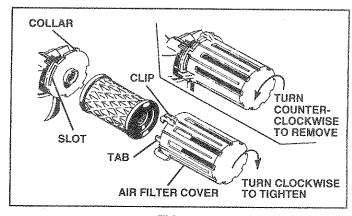


FIG. 7

#### 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**

Clean the underside of your mower after each use.

- 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



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 REAR DEFLECTOR

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

#### DISCHARGE GUARD

The discharge guard, attached to the discharge opening of your lawn mower, is provided to prevent the possibility of injury resulting from objects being thrown out of the discharge guard opening into the operator mowing position.



CAUTION: Do not run your lawn mower without discharge guard or approved grass catcher in place.

TO ADJUST HANDLE (See Figs. 8 - 10)

Your lawn mower handle can be raised or lowered for your mowing comfort. Four (4) positions are available: high, medium high, medium low and low. Handles are shipped mounted in the medium low position.

- To change from medium low to medium high position, the upper and lower handle sections will have to be turned over (See Fig. 8B).
- Remove the cable clips.
- Remove the controls and operator presence control bar from the upper handle.
- Remove the starter rope guide from the lower handle.
- Remove hairpin cotters.
- Disconnect the lower handle from the handle brackets (See Fig. 10).
- Turn the handle over and reassemble the hairpin cotters that have been removed.
- Reassemble the starter rope guide.
- Reassemble the controls and the operator presence control bar to the upper handle.

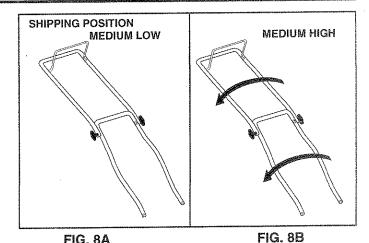


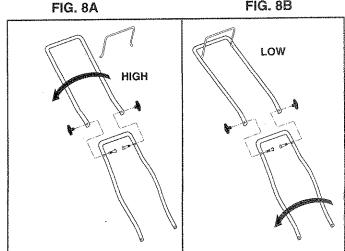
CAUTION: The operator presence control bar must pivot freely to permit blade/ brake engagement when control bar is released. Do not overtighten the fasteners holding the controls to the upper handle.

- To change from medium low to high position only the upper handle section will have to be turned over (See Fig. 9A).
- To change from medium low to low position, only the lower handle section will have to be turned over (See Fig. 9B).

#### ENGINE **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 engine is running too fast or too slow, take your mower to an authorized service center for repair and adjustment.





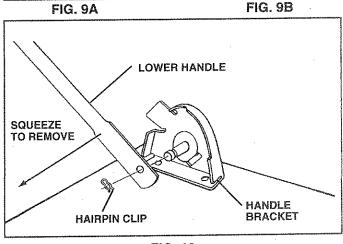


FIG. 10

#### 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 12 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.

#### LAWN MOWER

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

- Clean entire lawn mower (See "CLEANING" in the Customer Responsibilities section of this manual).
- Lubricate as shown in the Customer Responsibilities 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 (See Fig. 11)

You can fold your lawn mower handle for storage.

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

IMPORTANT: WHEN FOLDING THE HANDLE FOR STORAGE OR TRANSPORTATION, BE SURE TO FOLD THE HANDLE AS SHOWN OR YOU MAY DAMAGE THE CONTROL CABLES.

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

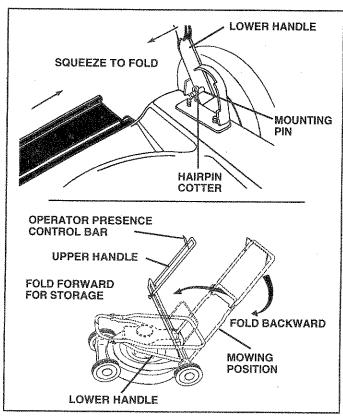


FIG. 11

#### ENGINE FUEL SYSTEM

IMPORTANT: IT IS IMPORTANT TO PREVENT GUM DEPOSITS FROM FORMING IN ESSENTIAL FUEL SYSTEMPARTS 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 Customer Responsibilities 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.

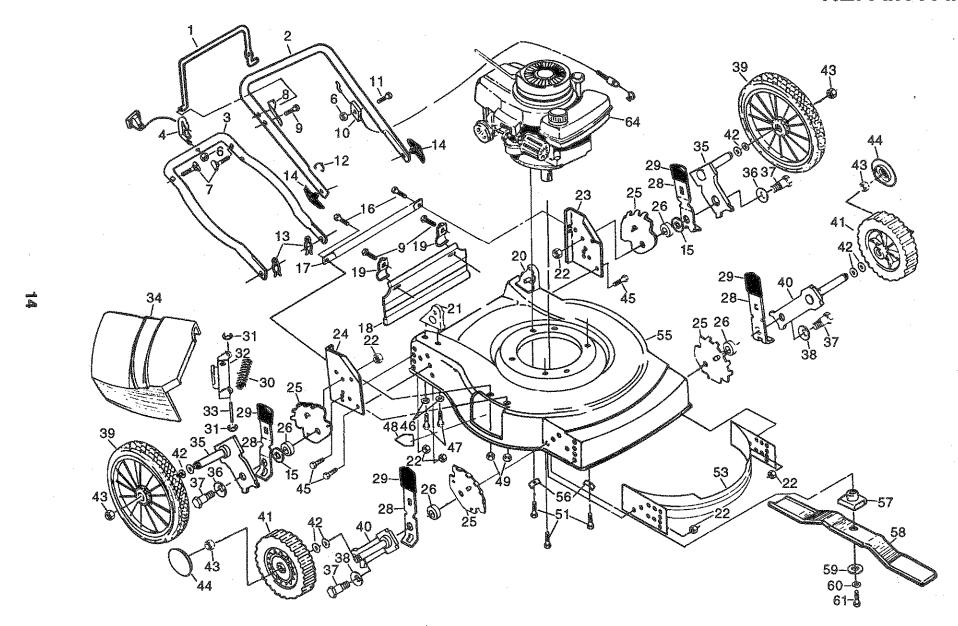
#### OTHER

- 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.



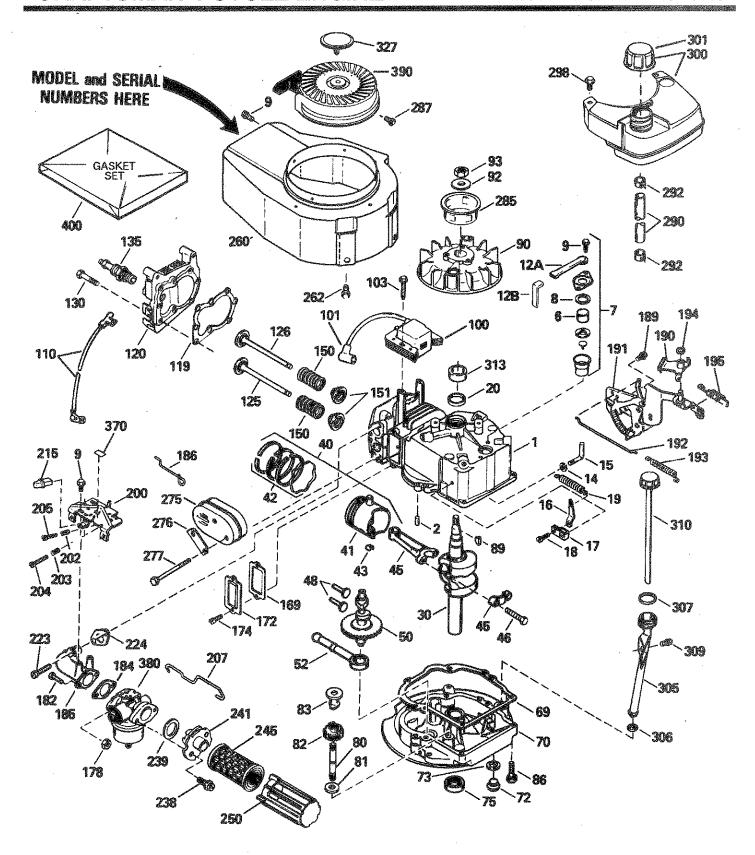
CAUTION: Never store the lawn mower with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.



### REPAIR PARTS

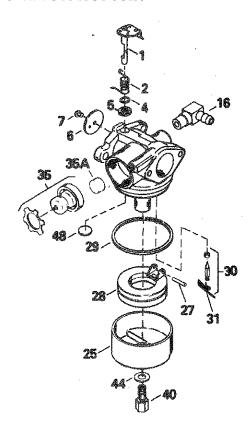
# CRAFTSMAN 22" ROTARY LAWN MOWER MODEL NO. 917.380481

	NO.		DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
ind T	12346789011234567890112345678901233456789012333333333333333333333333333333333333	86902 133088X479 84676X479 103672X STD541425 131959 86899X004 750097 851664 74350424 85827 51793 136376 88348 STD512505 750157 128797 87584X004 135151X417 751592 750388X417 750386X417 850955 84920 850855X004 87877 87589 12000014 87593 87590 750149 750913X004 61651 84921	Lower Handle Rope Guide Locknut 1/4-20 Handle Bolt Up-Stop Bracket Hex Thread Rolling Screw #10-24 x 3/4 Engine Zone Control Cable Hex Head Bolt 1/4-20-1-1/2 Cable Clip Hairpin Cotter Handle Knob Flat Washer 3/8 Hex Head Self Tapping Screw 1/4-20 x 1/2 Support Rod Rear Deflector Deflector Bracket Handle Bracket Assembly (Left) Handle Bracket Assembly (Right) Locknut 3/8-16 Support Bracket (Left)		71 33072Gras 71 33201Mulo 71 33623Gas 71 33500Fuel	Rear Baffle (Not Shown) Lawn Mower Housing (Incl. Ref. #48, 53, 54) Engine Washer Blade Adapter 22" Blade Washer Helical Hardened Lockwasher 3/8 Hex Head Machine Screw 3/8-24 x 1/4 Grd. 8 Engine - Craftsman Model No. 143. 434102 Owner's Manual (English) Owner's Manual (Spanish) es not included with lawn mower: as Catcher cher Kit Can (2.5 gal.) Stabilizer 50W Oil (20 oz.)



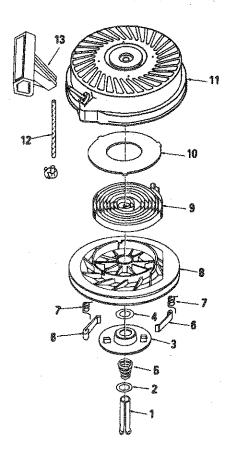
	•		
REF PART		REF PART	
NO. NO.	DESCRIPTION	NO. NO.	DESCRIPTION
1 36265	Cylinder Assembly (Incl. #2 and 20)	150 35991	Spring, Valve
2 26727	Pin, Dowel	151 31673	
6 33734	Element Breather	169 27234A	Cap, Lower Valve Spring
7 34214A	Breather Assembly (Includes	172 32755	* Gasket, Valve Spring Box
	Peteropee #6 9 0 104 and 100		Cover, Valve Spring Box
8 33735	Reference #6, 8, 9, 12A and 12B)	174 650128	Screw, Sems, Hex Hd. #10-24 x 1/2
9 30200	* Gasket, Breather	178 29752	Nut and Lock Washer 1/4-28
9 30200	Screw, Sems, Hex Washer Head,	182 6201	Screw, Hex Cap Head 1/4-28 x 7/8
20000	Self-Tapping #10-24 x 9/16	184 26756	* Gasket, Carburetor
12A 33886	Tube, Breather	185 31384A	Pipe Intake (Includes Ref. #224)
12B 34695	Elbow, Breather Tube	186 34337	Link, Governor Spring
14 28277	Washer, Flat	189 650839	Screw, Sems, Powerlok, Hex Head
15 30589	Rod, Governor (Includes Ref. #14)		1/4-20 x 3/8
16 31383A	Lever, Governor	190 35831	Lever, Brake
17 31335	Clamp, Governor Lever	191 35040B	Bracket, S.E. Brake (Includes #195)
18 650548	Screw, Hex Wash. Hd. #8-32 x 5/16	192 34966	Link, Control
19 36281	Spring Extension	193 34965	Spring, Extension
20 32600	Seal, Oil	194 32309	Ring, Retaining
30 35996	Crankshaft Assembly	195 610973	Terminal Assembly
40 36073	Piston, Pin & Ring Assembly, Std.	200 35727	Bracket Assembly, Control
36074	Piston, Pin & Ring Assy010" Over		(Includes Reference #202 thru 205)
36075	Piston, Pin & Ring Assy020" Over	202 33802	Spring Compression
	(Assemblys Include #41, 42 and 43)	203 31342	Spring, Compression
41 36070	Piston & Pin Assembly, Standard	204 650549	Spring, Compression
36071	Piston & Pin Assembly .010" Over	205 650777	Screw, Fillister Head #5-40 x 7/16
36072	Piston & Pin Assembly .020" Over		Screw, Fillister Head #6-32 x 21/32
00072	(Assembly Include Deference #40)	207 34336	Link, Throttle
42 36076	(Assemblys Include Reference #43)	215 32410	Knob, Control
36077	Ring Set, Piston, Standard Size	223 650451	Screw, Sems, Hex Head 1/4-20 x 1
36078	Ring Set, Piston .010" Oversize	224 34690A	* Gasket, Intake Pipe
43 20381	Ring Set, Piston .020" Oversize	238 650932	Screw, Hex Washer Head,
45 30963B	Ring, Piston Pin Retaining	000 04000	Shoulder #10-32 x 49/64
46 32610A	Rod Assy., Connecting (Incl. #46)	239 34338	* Gasket, Air Cleaner
	Bolt, Connecting Rod	241 35797	Collar, Air Cleaner
	Valve, Lifter	245 35066	Filter, Air Cleaner, Paper
50 35992	Camshaft (Mech. Comp. Release)	250 35065	Cover, Air Cleaner
52 29914	Pump Assembly, Oil	260 35393	Housing, Blower
69 35261	* Gasket, Mounting Flange	262 650831	Screw, Hex Washer Head,
70 34311D	Flange, Mount. (Incl. #72,73,75,80)		Powerlok Thread 1/4-20 x 15/32
72 30572	Plug, Oil Drain (Includes Ref. #73)	275 34613	Muffler Assembly (Includes #277)
73 28833	Gasket, Oil Drain Plug (Not	276 33753	Plate, Lock
	Required with Plastic Drain Plug)	277 650795	Screw, Hex Head 1/4-20 x 2-1/4
75 27897	Seal, Oil	285 35000	Hub, Starter
80 30574A	Shaft, Governor	287 650926	Screw, Hex Wash. Hd. #8-32 x 1/2
81 30590A	Washer, Flat	290 30705	Line, Fuel
82 30591	Gear Assy., Governor (Incl. #81)	292 26460	Clamp, Fuel Line
83 30588A	Spool, Governor	298 28763	Screw, Hex Washer Head,
86 650488	Screw, Sems, Hex 1/4-20 x 1-1/4		Shakeproof #10-32 x 35/64
89 611004	Key, Flywheel	300 34369A	Tank Acey Fuel (Incl. #200 9 201)
90 611112	Flywheel	301 35355	Tank Assy., Fuel (Incl. #292 & 301) Cap, Fuel
92 650815	Washer, Belleville	305 35577	Tubo Oil Eill
93 650816	Nut, Flywheel	306 34265	Tube, Oil Fill
100 34443A	Solid State Assembly	307 35499	* Gasket, Fill Tube
101 610118	Cover, Spark Plug	309 650562	"O" Ring
103 650814	Screw, Sems, Torx T-15, Hex	309 030362	Screw, Hex Washer Head,
100 000011	Washer Head #10-24 x 1	040 05570	Shakeproof #10-32 x 1/2
110 34961		310 35578	Dipstick, Oil Fill
119 33554A	Wire, Ground	313 34080	Spacer, Flywheel Key
120 34342	* Gasket, Cylinder head	327 35392	Plug, Starter
125 000100	Head, Cylinder	370 35167	Decal, Instruction
125 29313C	Valve, Exhaust, Standard Size	380 632644	Carburetor (Includes Ref. #184)
29315C	Valve, Exhaust, 1/32" Oversize	390 590686	Starter, Rewind
126 29314B	Valve, Intake, Standard Size	400 35997	Gasket Set (Incl. Items Mmarked*)
29315C	Valve, Intake, 1/32" Oversize) (All	RPM Settings	: Low: 2450-2750, High: 2900-3200
400 000	Valves Include Reference #151)	Indicates Parts Inc	cluded in Gasket Set. Reference #400
130 6021A	Screw, Hex Flange 5/16-18 x 1-1/2	NOTE: All compon	ent dimensions given in U.S. inches
135 35395	Spark Plug, Resistor (RJ-19LM)	1 inch = 25	.4 mm
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#### **CARBURETOR NO. 632644**



REF NO.	PART NO.	DESCRIPTION
1 2 4 5 6 7 16 25	632644 631615 631767 631184 631183 632590 650506 632527 631867 631024	Carburetor, Complete Throttle Shaft and Lever Assembly Throttle Return Spring Dust Seal Washer, Throttle Dust Seal, Throttle Throttle Shutter Throttle and Choke Shutter Screw Fuel Fitting Float Bowl
28 29 30 31 35 35A 40 44	631024 632019 631028 631021 631022 36045 632647 632578 27110 631027	Shaft, Float Float Float "O" Ring, Float Bowl to Body Inlet Needle, Seat and Clip (Includes Reference Number 31) Spring Clip Primer Bulb/Retainer Ring Primer Bulb Filter High Speed Bowl Nut Bowl Nut Washer Welch Plug, Atmospheric Vent

#### **REWIND STARTER NO. 590686**



-		PART NO.	DESCRIPTION
	 1	590686 590599A	Starter, Rewind Pin, Spring (Includes Reference #4)
		590600	Washer
	2 3 4 5	590615	Retainer
	4	590601	Washer
		590598	Spring, Brake
	6	590616	Dog, Starter
	7	590617	Spring, Dog
	8	590618	Pulley
	9	590619	Spring, Rewind
	_	590620	Cover, Spring
1	1	590687	Housing Assembly, Starter, 40°
	2	590535 590452	Grommet Rope, Starter (98" long, 9/64" dia.) Handle, Starter

**NOTE:** All component dimensions given in U.S. inches 1 inch = 25.4 mm

# TROUBLESHOOTING POINTS

	1	
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 carburetorand 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>Wheel heights uneven.</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 all wheels at same height.</li> <li>Set engine speed control in fast position.</li> <li>Clean underside of mower housing.</li> </ol>
Excessive vibration	Worn, bent or loose blade.     Bent engine crankshaft.	Replace blade. Tighten blade bolt.     Contact authorized service center/department.
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 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>

# SEARS OWNER'S

MANUAL

MODEL NO. 917.380481

# HOW TO ORDER REPAIR PARTS

# CRAFTSMAN®

### 5.0 HORSEPOWER 22" SIDE DISCHARGE ROTARY LAWN MOWER

Each lawn mower has its own model number. Each engine has its own model number.

The model number for your lawn mower will be found on a decal attached to the rear of the lawn mower housing.

The model number for your engine will be found on the blower housing of the engine.

All parts listed herein may be ordered from any Sears, Roebuck and Co. Service Center/Department and most Retail Stores.

### WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- PRODUCT LAWN MOWER
- MODEL NUMBER 917.380481
- ENGINE CRAFTSMAN MODEL NO. 143.434102
- PART NUMBER
- PART DESCRIPTION

Your Sears merchandise has added value when you consider Sears has service units nationwide staffed with Sears trained technicians... professional technicians specifically trained to insure that we meet our pledge to you, we service what we sell.

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