

**SEARS**

# **CRAFTSMAN®**

**MODEL NUMBER 917.380231**

**OWNER'S MANUAL**

- **Assembly**
- **Operation**
- **Maintenance**
- **Service**
- **Adjustments**
- **Repair Parts**

**Caution:**  
**Read and Follow**  
**all Safety Rules**  
**and Instructions**  
**Before Operating**  
**This Equipment**



**SEARS, ROEBUCK AND Co., Chicago, IL. 60684 U.S.A.**

## 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 TO YOUR LAWN MOWER.**



## IMPORTANT

**FEDERAL REGULATIONS REQUIRE OPERATOR PRESENCE BLADE STOP CONTROLS TO MINIMIZE THE RISK OF BLADE CONTACT INJURY. YOUR LAWN MOWER IS EQUIPPED WITH SUCH CONTROLS. DO NOT ATTEMPT TO DEFEAT THE FUNCTION OF THE OPERATOR PRESENCE CONTROL UNDER ANY CIRCUMSTANCES.**

- **BE CAREFUL WHEN THE ENGINE IS RUNNING THE BLADE IS TURNING.**
- Please read your owner's manual. Only allow persons who know the safety rules to use your lawn mower.
- **DO NOT** tie the operator presence control bar to the handle. Control must be free to permit brake engagement when handles and control are released.
- **DO NOT** allow children to use your lawn mower.
- Check your lawn mower over before each use. Tighten any loose bolts, nuts, etc.
- Remove all sticks, stones, wires, cans, boards, etc. from area to be mowed. These objects can be thrown by the blade.
- **DO NOT** allow children, bystanders or pets in the area while mowing.
- Always wear shoes when mowing. **DO NOT** operate lawn mower when barefoot or wearing open sandals.
- Always wear safety glasses or eye shields before starting your lawn mower and while mowing.
- Always shut off engine before trying to adjust wheel heights.
- When engine is running, **DO NOT** put hands or feet under lawn mower or in the discharge chute, nor make any adjustments.
- Stay clear of discharge opening at all times.
- Do not fill gas tank when engine is running, when indoors or when engine is hot. Allow engine to cool for several minutes before filling gas tank. Clean off any spilled gasoline before starting engine.
- Mow only in good light.
- Always stop blade when not cutting grass or when crossing gravel drive, sidewalk, or roadway.
- **DO NOT** continue to run your lawn mower if you hit a foreign object. Stop the engine, disconnect the spark plug wire from the spark plug, inspect the lawn mower for damage and make repairs as required.
- **DO NOT** use a damaged lawn mower. Always have damage repaired before mowing.
- **DO NOT** run your lawn mower if it vibrates too much. Stop engine and make repairs. Vibration is an indication of damage.
- Never use your lawn mower without proper guards or deflectors in place.
- Always mow across a slope or inclined area. **DO NOT** mow up or down a slope or inclined area.
- **DO NOT** mow in wet grass. Be careful of footing when mowing in wet grass, use shoes with good traction.
- **DO NOT** run with the lawn mower.
- **DO NOT** run your lawn mower indoors. Exhaust gases are deadly poison.
- Always disconnect the spark plug wire from spark plug to prevent accidental starting when transporting or storing your lawn mower after the mowing season.
- **DO NOT** attempt to raise engine speed above factory settings. Engine damage or personal injury may result.
- If a grass catcher is used on your lawn mower, check the catcher often for damage or deterioration. It will wear through normal use. Use only a recommended replacement catcher.
- Always stop blade to remove or install catcher.
- **DO NOT** store your lawn mower or gasoline where fumes may reach an open flame and cause a fire.
- **DRAIN THE GASOLINE** from your lawn mower before transporting your lawn mower inside your car or other vehicle.



**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 problem you cannot easily remedy, please contact your nearest Sears Service Center/Department. We have 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".

## PRODUCT SPECIFICATIONS

HORSE POWER:	3.5
DISPLACEMENT:	9.06 cu. in.
GASOLINE CAPACITY:	1.0 quart (Unleaded)
OIL (21 oz. Capacity):	SAE 30 or (SAE 10W30)
SPARK PLUG (GAP .030 in.):	Champion RJ19-LM or Sears Z1 33312 or STD 361458 or STD 360950
VALVE CLEARANCE:	Intake: .008 in. Exhaust: .008 in.
SOLID STATE IGNITION AIR GAP:	.0125 in.
BLADE BOLT TORQUE:	35-40 ft.-lbs.

MODEL  
NUMBER 917.380231

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.

## 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 "Maintenance" and "Storage" sections of this Owner's Manual.

### ONE YEAR LIMITED WARRANTY ON CRAFTSMAN POWER MOWER

For one year from the date of purchase, when this Craftsman Lawn Mower is maintained, lubricated and tuned-up according to the instructions in the owner's manual, Sears will repair, free of charge, any defect in material and 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 may vary from state to state.

Sears, Roebuck and Company, D/731CR-W, Sears Tower, Chicago, IL 60684

## TABLE OF CONTENTS

SAFETY RULES .....	2	SERVICE AND ADJUSTMENT .....	11,12
PRODUCT SPECIFICATIONS .....	3	STORAGE .....	13
CUSTOMER RESPONSIBILITIES .....	3	SERVICE RECOMMENDATIONS .....	14
WARRANTY .....	3	TROUBLE SHOOTING .....	15
LAWN MOWER ACCESSORIES .....	5	REPAIR PARTS-LAWN MOWER .....	16,17
ASSEMBLY .....	5	REPAIR PARTS-ENGINE .....	18-20
OPERATION .....	6,7,8	PARTS ORDERING/SERVICE .....	Back Cover
MAINTENANCE .....	9,10		




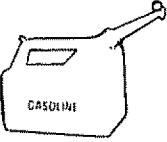


### INDEX

A	H	R
Adjustments:	Handle:	Repair/Replacement Parts
Carburetor .....	Adjustment .....	Responsibilities, Customer .....
Engine Speed .....	Assembly .....	16,17
Handle Height .....	Height, Cutting .....	3
Height of Cut .....		S
Air Filter:		Safety Rules .....
Replacement .....	L	Service and Adjustments:
Assembly:	Lubrication:	Carburetor .....
Handle .....	Brake Spring Bracket .....	Discharge Guard .....
Accessories .....	Discharge Guard Hinge Pin .....	Engine Speed .....
	Engine .....	Handle .....
B	Handle Mounting Pin .....	Rear Deflector .....
Blade:	Wheel Adjuster .....	Service Recommendation .....
Replacement .....		Spark Plugs .....
Sharpening .....	M	Specifications .....
	Maintenance:	Speed Control:
C	Agreement .....	Engine .....
Controls:	Air Filter .....	Starting the Engine:
Engine Speed Control .....	Blade Care/Replacement .....	Starter Handle .....
Engine Zone Control .....	Engine .....	Storage .....
Operator Presence Control Bar .....	Grass Catcher .....	
Customer Responsibilities .....	Lubrication .....	T
Cutting Levels .....	Spark Plug .....	Trouble Shooting Chart .....
	Mowing Tips .....	15
E	O	W
Engine:	Oil:	Warranty .....
Oil Change .....	Engine .....	Wheels:
Oil Level .....	Storage .....	Wheel Adjusters .....
Oil Type .....	Operation:	3
Starting .....	Operating Lawn Mower .....	7,14
Storage .....	Operator Presence Control Bar .....	
	Options:	
F	Attachments .....	
Fuel:	P	
Capacity .....	Parts .....	
Type .....	Engine .....	
Storage .....	Lawn Mower .....	
	Primer .....	

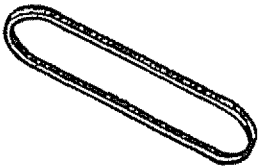
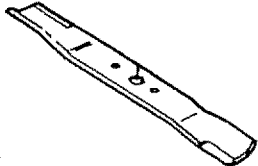
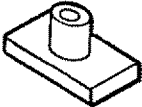


# LAWN MOWER ACCESSORIES

These accessories were available when this lawn mower was produced. They are also available at most Sears retail outlets, catalog and service centers. Most Sears stores can 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

<b>SPARK PLUG</b>	<b>MUFFLER</b>	<b>AIR FILTER</b>	<b>GAS CAN</b>	<b>ENGINE OIL</b>	<b>STABILIZER</b>
					

## LAWN MOWER MAINTENANCE

<b>BELT</b>	<b>BLADE</b>	<b>BLADE ADAPTER</b>	<b>WHEELS</b>	<b>MOWER COVER</b>
				

# ASSEMBLY

Your lawn mower has been completely assembled at the factory.

## TO REMOVE LAWN MOWER FROM CARTON

- Cut down the corners of the carton and lay ends and sides down flat.
- Remove packing materials.
- Lift lawn mower off of shipping base and check carton for loose parts.

## HOW TO SET-UP YOUR LAWN MOWER

### TO UNFOLD HANDLE

- Raise handles until lower handle section locks into place in mowing position (See Fig. 1).
- 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.

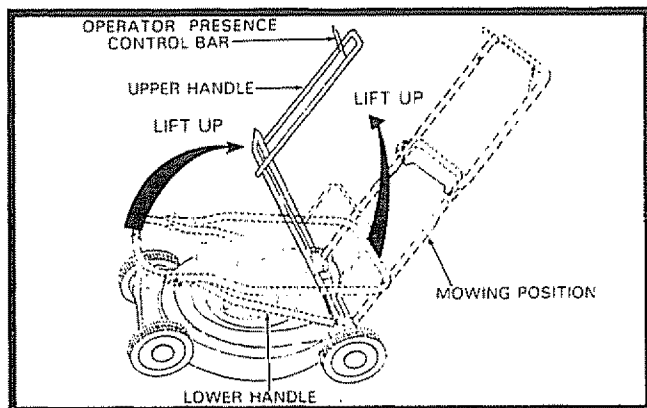


FIG. 1

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# OPERATION

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## 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.

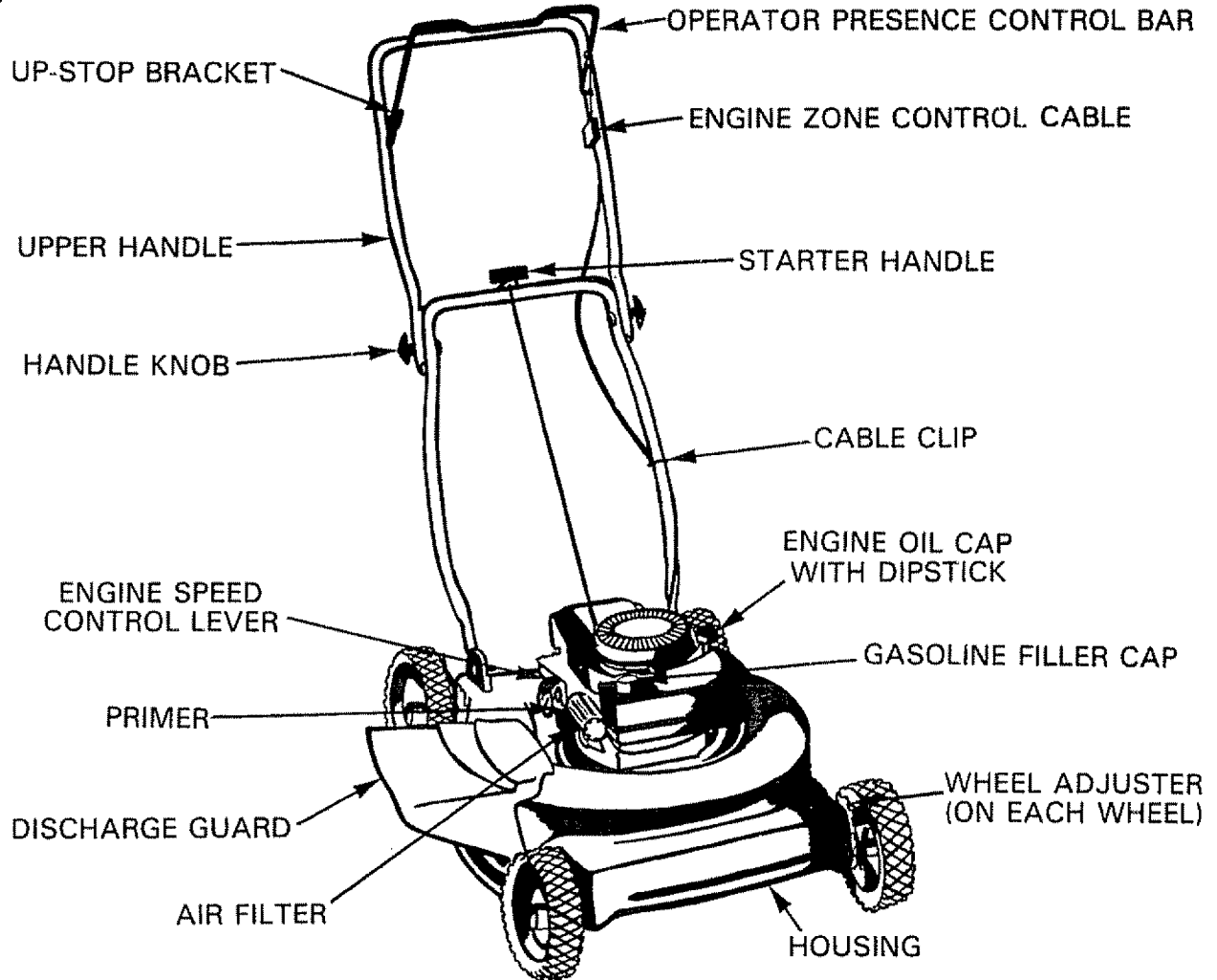


FIG. 2

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## 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 right side of the engine which allows you to select either "HIGH" or "LOW" 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

## ENGINE SPEED CONTROL

The engine speed is controlled by a lever (red knob) located on the right side of the engine. "HIGH" position is for starting engine, normal cutting and better grass bagging. "LOW" position is for light cutting, trimming and fuel economy (See Fig. 3).

## TO ADJUST CUTTING HEIGHT

- 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 (See Fig. 4).

## BEFORE STARTING ENGINE

### OIL:

A 20 oz. bottle of Pennzoil SAE 30 Oil is included with your new lawn mower.

- Remove Engine Oil Cap (See Fig. 5) and fill to the FULL line on the dipstick.
- Use 20 ozs. of SAE 30 oil. SAE 10W 30 oil can also be used.  
DO NOT use SAE 10W 40 oil.
- POUR OIL SLOWLY. DO NOT OVERFILL.
- 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:

- Fill gasoline tank with fresh, clean unleaded gasoline. BE CAREFUL NOT TO OVERFILL TANK (SEE FIG. 5)

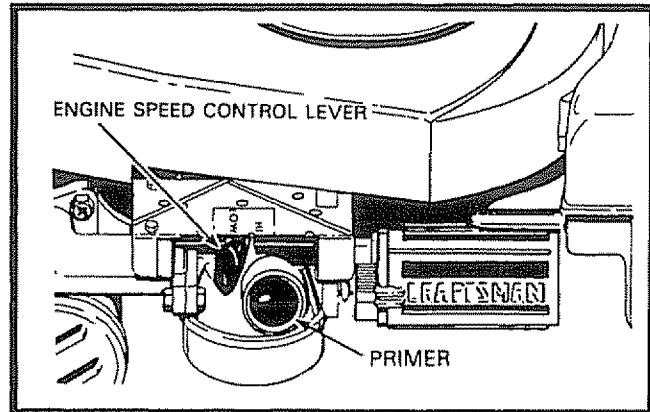


FIG. 3

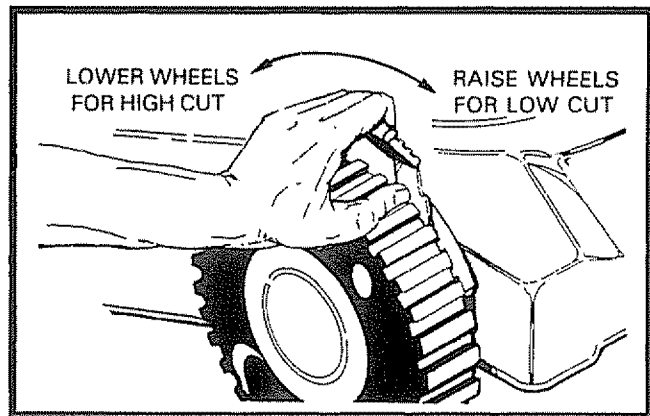


FIG. 4

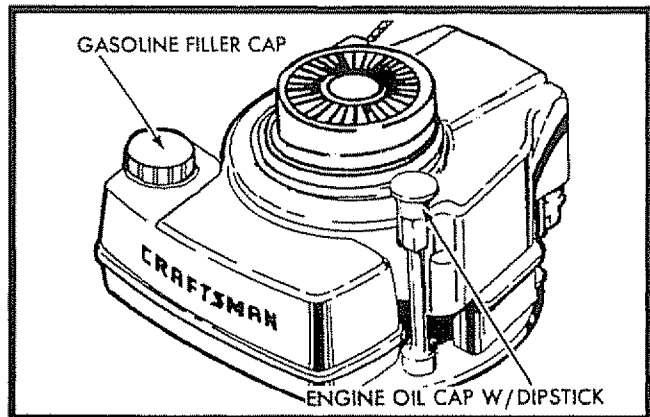


FIG. 5

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# OPERATION

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## GAS (CONT'D)

**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 for 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.

## 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 Engine Control Bar which requires the operator to be positioned behind the Lawn Mower Handle to start and operate the lawn mower.

## TO START ENGINE

- Push engine speed control lever forward to HIGH position.
- 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.
- 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 side discharge lawn mowers, cutting in a counter-clockwise 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.
- Keep top of engine around starter clear and clean of grass clippings and chaff. This will help engine air flow and extend engine life.



# MAINTENANCE

## GENERAL RECOMMENDATION

- Once a year you should replace the Spark Plug, Air Filter and check Blade for wear. A new Spark Plug and Air Filter assures proper air-fuel mixture and helps your engine run better and last longer.
- You should check all fasteners and be sure they are tight.
- Follow the Service Recommendation Schedule on page 14.

## LAWN MOWER

### BLADE/BLADE ADAPTER CARE

Your lawn mower will work better with a sharp Blade.



**CAUTION: DISCONNECT SPARK PLUG WIRE FROM SPARK PLUG AND PLACE WIRE WHERE IT CANNOT COME IN CONTACT WITH THE SPARK PLUG.**

#### TO REMOVE BLADE:

- Turn lawn mower on its side. Make sure Air Filter and Carburetor are up.
- Use block of wood between Blade and Lawn Mower Housing to prevent Blade from turning when removing the 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, Lockwasher and Hardened Washer) (See Fig. 6).

**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 Keyway in Crankshaft are aligned.
- Position Blade on to the Blade Adapter aligning the two (2) holes in the Blade with the raised lugs on the Adapter.

**NOTE:** Be sure the word TOP (stamped on the Blade) is toward the engine (See Fig. 6).

- Install the Blade Bolt with the Lockwasher and Hardened Washer into Blade Adapter and Crankshaft (See Fig. 6).

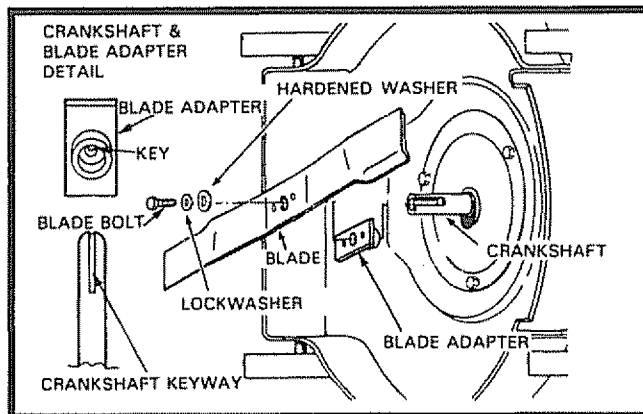


FIG. 6

- 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.
- Torque wrenches are available at most Sears stores and through the catalog.



**CAUTION: A LOOSE BLADE CAN BE DANGEROUS AND MAY MAKE THE ENGINE HARD TO START.**

Use only a Sears authorized replacement blade to get the best cutting results.

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

#### TO SHARPEN BLADE:

- The blade can be sharpened with a file or on a grinding wheel. Do not attempt to sharpen while on the lawn mower.
- Care should be taken to keep the blade balanced. An unbalanced blade will cause excessive vibration when running and eventual damage to lawn mower or engine.
- 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, blade is not balanced. Sharpen the heavy end until the blade is balanced.

# MAINTENANCE

## 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 from Sears. Give the lawn mower model number when ordering.

## ENGINE

### TO CHANGE OIL (WARM OIL DRAINS BETTER)



**CAUTION: DISCONNECT SPARK PLUG WIRE FROM SPARK PLUG AND PLACE WIRE WHERE IT CANNOT COME IN CONTACT WITH SPARK PLUG.**

- Remove Engine Oil Cap with dipstick; lay aside on a clean surface.
- Tip lawn mower on its side as shown in Fig. 7 and drain oil into 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 SAE 30 or 10W 30 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 Cover by turning counter-clockwise to the stop and pull away from Collar (See Fig. 8).
- Remove Filter from inside of Cover (See Fig. 8).
- 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 (See Fig. 8).

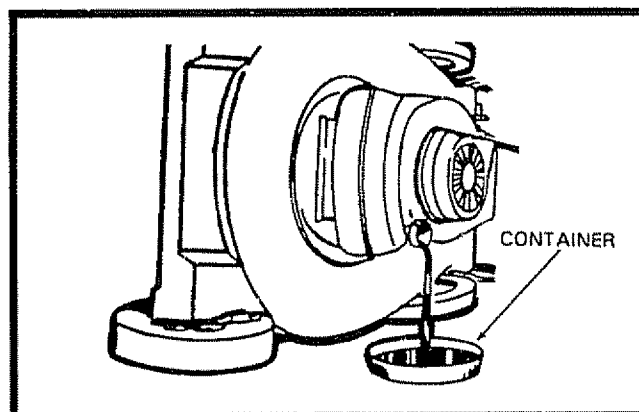


FIG. 7

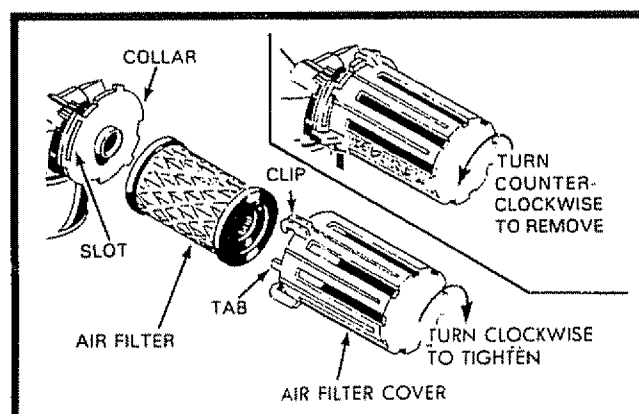


FIG. 8

### 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

We recommend that you clean the underside of your lawn mower after each use.



**CAUTION: 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 with Carburetor up.
- Clean the underside of your lawn mower by scraping to remove build-up of grass and trash.
- Clean your lawn mower and engine often to keep trash from accumulating around engine. A clogged engine runs hotter and shortens engine life.
- 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 shortening engine life.

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# SERVICE AND ADJUSTMENT

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## 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 Sears Service Center for repair and adjustment.

## 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 lawn mower to an authorized Sears Service Center for repair and adjustment.

## 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 opening into the operator mowing position.

If the Discharge Guard becomes damaged, it should be replaced.



**CAUTION: DO NOT RUN YOUR LAWN MOWER WITHOUT DISCHARGE GUARD OR APPROVED GRASS CATCHER IN PLACE.**

## 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.

# SERVICE AND ADJUSTMENT

## TO ADJUST HANDLE

Your Lawn Mower Handle can be raised or lowered for your mowing comfort. Figs. 9A, 9B, 10A, and 10B show the four (4) positions that are available: High, Medium High, Medium Low and Low. Handles are shipped mounted in the Medium Low position (See Fig. 9A).

- To change from Medium Low to Medium High position, the Upper and Lower Handle sections will have to be turned over (See Fig. 9B).
- Remove the Controls and the Operator Presence Control Bar from the Upper Handle.
- Remove the Starter Rope Guide from the Lower Handle.
- Remove Hairpin Cotter.
- Disconnect the Lower Handle from the Handle Brackets (See Fig. 11).
- Turn the Handle over and reassemble the Hairpin Cotter that have been removed (See Fig. 11).
- Reassemble the Starter Rope Guide to the Lower Handle.
- 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. 10A).
- To change from Medium Low to Low position, only the Lower Handle section will have to be turned over (See Fig. 10B).

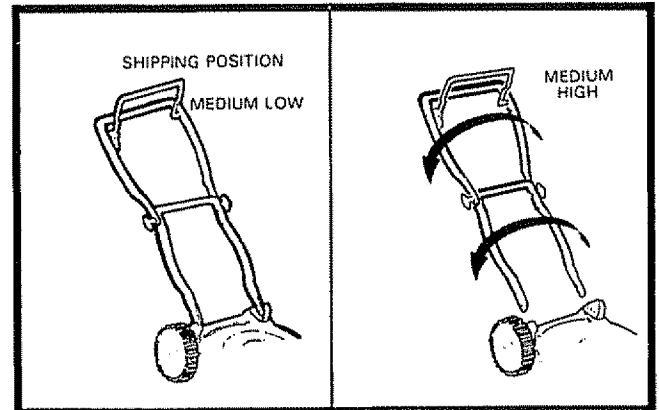


FIG. 9A

FIG. 9B

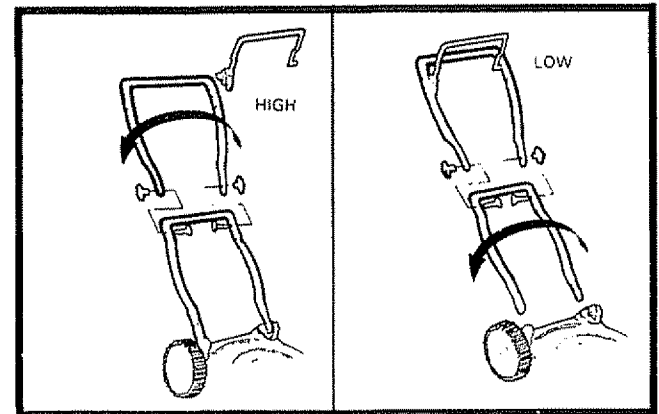


FIG. 10A

FIG. 10B

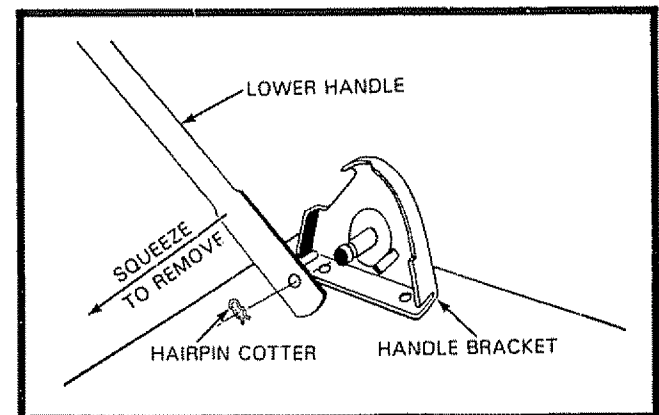


FIG. 11

# STORAGE

Your lawn mower and engine should be prepared for off-season storage as follows:

## LAWN MOWER

- Clean underside of Lawn Mower Housing. (See "Cleaning" in maintenance section of manual.)
- Inspect and replace/sharpen Blade, if required (See "Blade/Blade Adapter Care" in maintenance section of manual).
- Hose Grass Catcher off with water and let dry before storing (if purchased as an accessory).
- Lubricate as shown in Service Recommendation chart on page 14 of manual.

## HANDLE

- You can fold your Lawn Mower Handle for storage as shown in Fig. 12.
- To fold, squeeze the bottom ends of the Lower Handle toward each other until the Lower Handle clears the Handle Bracket, then move Handle forward (See Fig. 13).

**IMPORTANT:** WHEN FOLDING THE HANDLE FOR STORAGE OR TRANSPORTATION, BE SURE TO FOLD THE HANDLE AS SHOWN IN FIG. 12. IF YOU FOLD THE UPPER HANDLE SECTION THE WRONG WAY, YOU MAY DAMAGE THE CONTROL CABLES.

## ENGINE

- Change oil (See "To Change Oil" in maintenance section of manual).
- Drain fuel and run engine until fuel system is empty.

**IMPORTANT:** IT IS IMPORTANT TO PREVENT GUM DEPOSITS FROM FORMING IN ESSENTIAL FUEL SYSTEM PARTS SUCH AS THE 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.

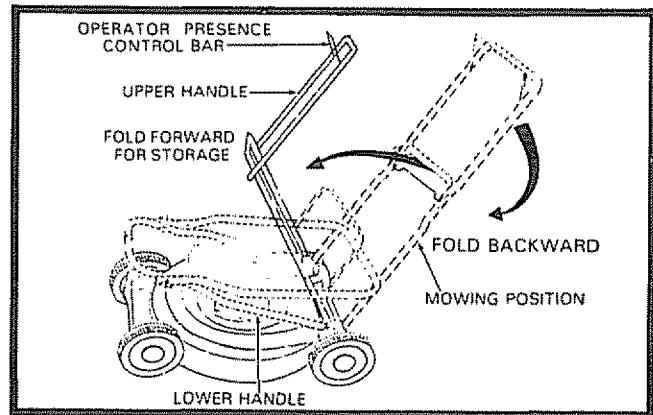


FIG. 12

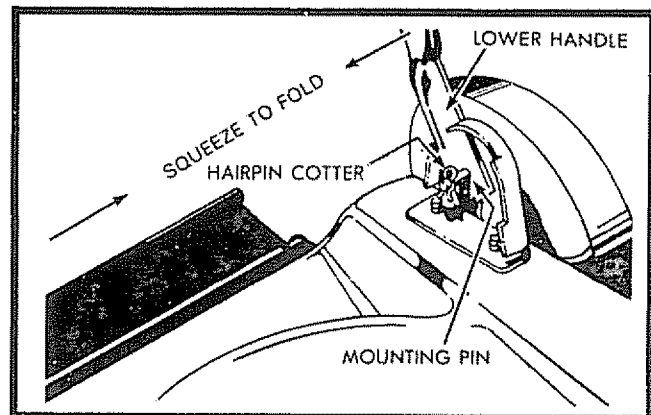


FIG. 13

## 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 can cause problems.
- Do not store your lawn mower under any plastic cover. Plastic cannot breathe which allows condensation to form and can cause your lawn mower to rust.
- When setting up your Handle from the storage position, the Lower Handle will automatically lock into the mowing position.

# SERVICE RECOMMENDATIONS

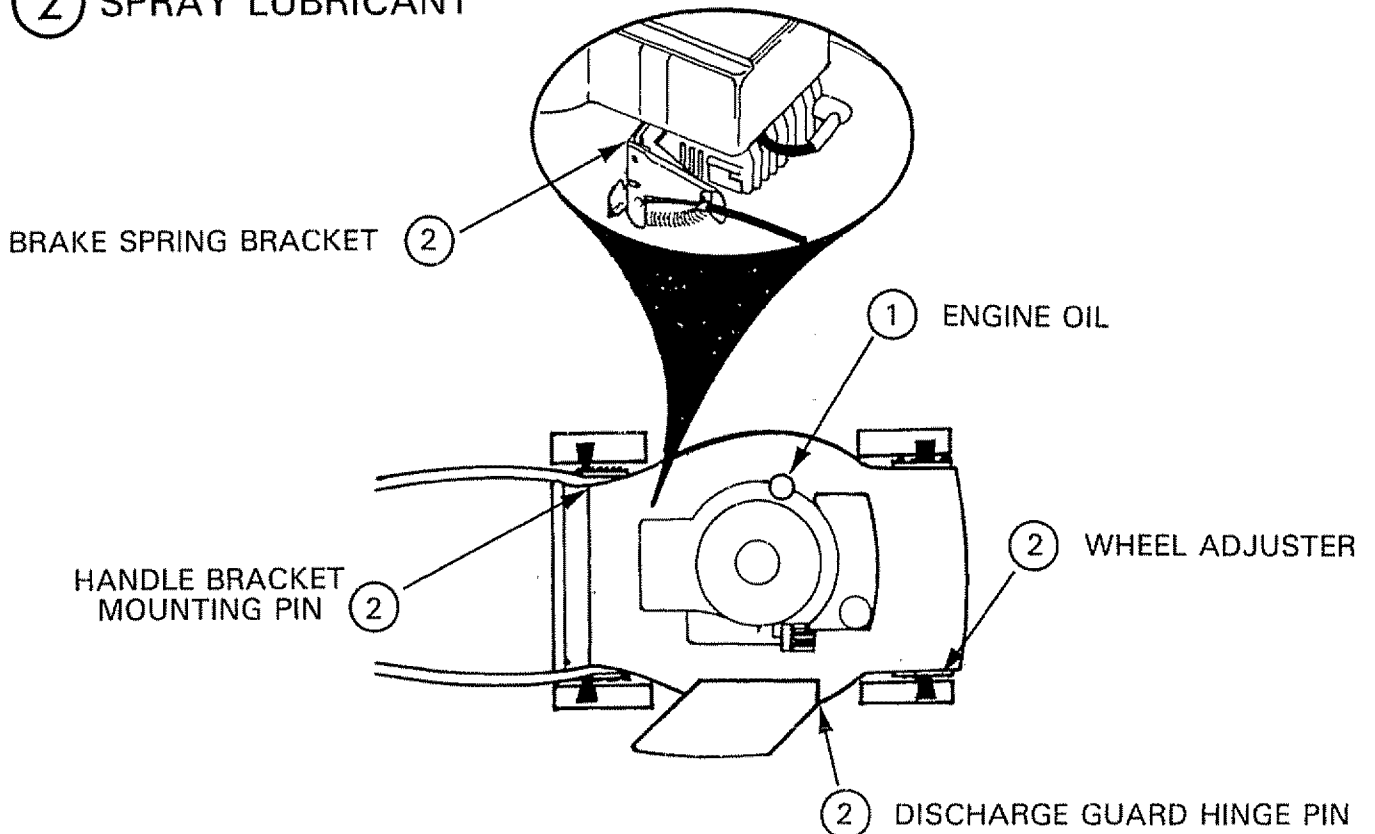
SERVICE RECORD Fill in dates as you complete regular service	SCHEDULE				SERVICE DATES		
	First 2 Hours	Every 10 Hours	Every 25 Hours	Every Use			
Blade Checked		✓					
Blade Replaced (Sharpened)			✓				
Engine Oil Change	✓		✓				
Engine Oil Check				✓			
Air Cleaner			✓				
Spark Plug Replaced			✓				
Lubricate Lawn Mower			✓				
Cleaning				✓			
Grass Catcher (if applicable)				✓			
Muffler			✓				

✓ - CHECK

## LUBRICATION CHART

① SAE 30 MOTOR OIL (10W 30)

② SPRAY LUBRICANT

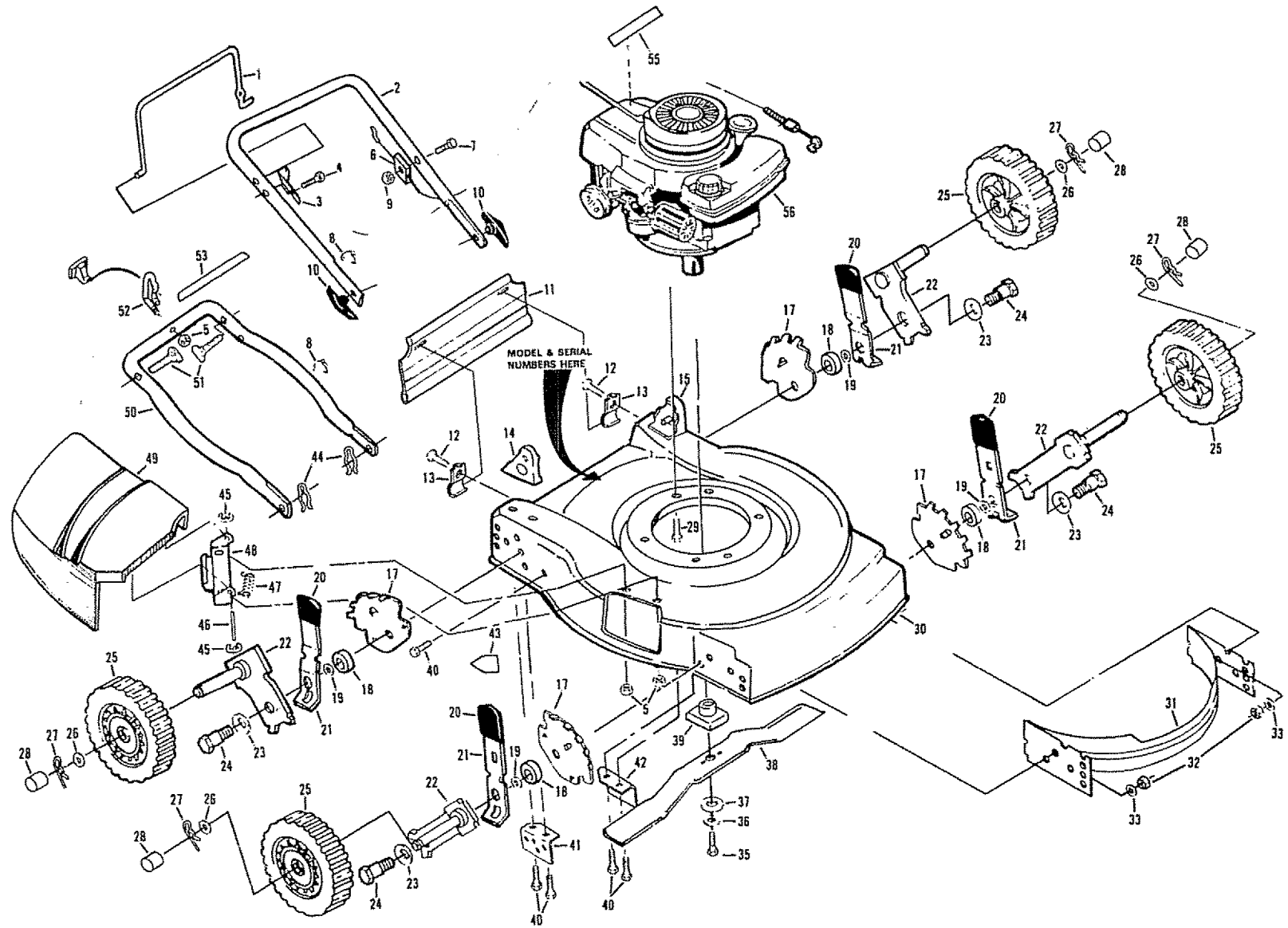


# TROUBLE SHOOTING POINTS

PROBLEM	CAUSE	CORRECTION
Does not Start	<ol style="list-style-type: none"> <li>1. Dirty air filter.</li> <li>2. Out of gasoline.</li> <li>3. Stale gasoline.</li> <li>4. Spark plug wire is disconnected from the spark plug.</li> <li>5. Bad spark plug.</li> <li>6. Water in gasoline.</li> <li>7. Loose blade or broken blade adapter.</li> <li>8. Operator presence control bar in released position.</li> <li>9. Operator presence control bar defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace air filter.</li> <li>2. Fill gasoline tank.</li> <li>3. Drain gas tank and refill with fresh gasoline.</li> <li>4. Connect wire to spark plug.</li> <li>5. Replace spark plug.</li> <li>6. Drain tank and refill with fresh, clean gasoline.</li> <li>7. Tighten blade bolt and/or replace blade adapter.</li> <li>8. Depress operator presence control bar.</li> <li>9. Replace operator presence control bar.</li> </ol>
Loss of Power	<ol style="list-style-type: none"> <li>1. Rear of lawn mower housing/blade dragging in heavy grass.</li> <li>2. Cutting too much grass.</li> <li>3. Dirty air filter.</li> <li>4. Build-up of grass, leaves, and trash under lawn mower housing.</li> <li>5. Walking speed too fast.</li> <li>6. Too much oil in engine.</li> </ol>	<ol style="list-style-type: none"> <li>1. Raise rear of lawn mower housing one (1) setting higher than front.</li> <li>2. Set in HIGHER CUT position.</li> <li>3. Clean or replace air filter.</li> <li>4. Disconnect spark plug wire and clean underside of lawn mower housing.</li> <li>5. Cut at slower walking speed.</li> <li>6. Check engine oil level.</li> </ol>
Poor cut- Uneven	<ol style="list-style-type: none"> <li>1. Worn, bent or loose blade.</li> <li>2. Wheel heights uneven.</li> <li>3. Low engine speed.</li> <li>4. Build-up of grass, leaves and trash under lawn mower housing.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace blade. Tighten blade bolt.</li> <li>2. Set all wheels at same height.</li> <li>3. Set engine speed control in HIGH position.</li> <li>4. Disconnect spark plug wire &amp; clean underside of lawn mower housing.</li> </ol>
Too much Vibration	<ol style="list-style-type: none"> <li>1. Worn or bent blade.</li> <li>2. Loose blade.</li> <li>3. Bent engine crankshaft.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace blade.</li> <li>2. Tighten blade bolt.</li> <li>3. Contact Sears Service Department.</li> </ol>
Starter Rope Hard to Pull	<ol style="list-style-type: none"> <li>1. Flywheel brake is on when operator presence control bar is released.</li> <li>2. Bent engine crankshaft.</li> <li>3. Blade adapter sheared.</li> <li>4. Blade dragging in grass.</li> </ol>	<ol style="list-style-type: none"> <li>1. Depress operator presence control bar to upper handle before pulling on starter rope.</li> <li>2. Contact Sears Service Department.</li> <li>3. Replace blade adapter.</li> <li>4. Get over low grass and/or hard surface to start engine.</li> </ol>
Catcher Not Filling Completely	<ol style="list-style-type: none"> <li>1. Cutting height too low.</li> <li>2. Lift on blade worn off.</li> <li>3. Catcher bag dirty, poor air venting.</li> <li>4. Low engine speed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Raise cutting height.</li> <li>2. Replace blade.</li> <li>3. Clean/replace catcher bag. (If optional grass catcher is being used).</li> <li>4. Set engine speed control in HIGH position.</li> </ol>
HARD TO PUSH	<ol style="list-style-type: none"> <li>1. High grass or cutting height too low.</li> <li>2. Rear of lawn mower housing/blade dragging in heavy grass.</li> <li>3. Grass catcher too full.</li> <li>4. Handle height position not right for you.</li> </ol>	<ol style="list-style-type: none"> <li>1. Raise cutting height.</li> <li>2. Raise rear of lawn mower housing one (1) setting higher than front.</li> <li>3. Empty grass catcher.</li> <li>4. Adjust handle height to suit.</li> </ol>

CRAFTSMAN 20" ROTARY LAWN MOWER MODEL NUMBER 917.380231

REPAIR PARTS





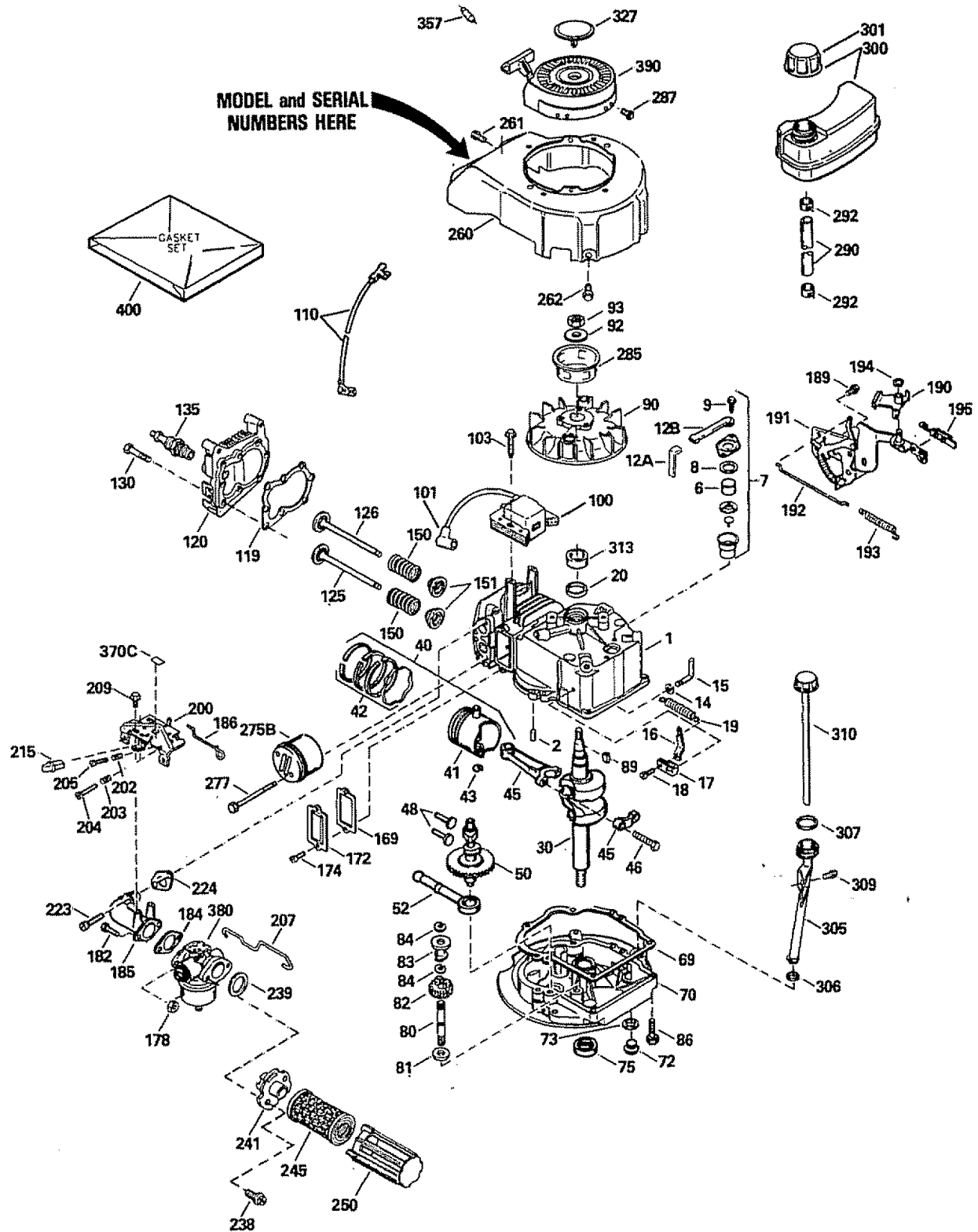
**CRAFTSMAN 20" ROTARY LAWN MOWER MODEL NUMBER 917.380231**

**REPAIR PARTS**

Ref. No.	Part No.	Part Name	Ref. No.	Part No.	Part Name
1	86902	Control Bar	30	48177	Lawn Mower Housing Kit (Incl. Ref. # 31, 43)
2	850991X479	Upper Handle			Front Baffle
3	86899X004	Up-Stop Bracket	31	87575X479	Locknut 3/8 - 16
4	750097	Hex Washer Head Tapping Screw 10-24 x 1/2	32	751592	Washer
5	STD541425	Locknut 1/4-20	33	61537	Hex Head Machine Screw 3/8-24 x 1-1/4 Grd. 8
6	851664	Engine Zone Control Cable	35	851084	Helical Washer 3/8
7	53109	Hex Head Bolt 1/4-20 x 1-1/2	36	850263	Hardened Washer
8	85827	Cable Clip	37	851074	Blade 20"
9	STD541425	Locknut 1/4-20	38	850972	Blade Adapter
10	63688	Handle Knob	39	850977	Self Tapping Screw 5/16 - 18 x 3/4
11	751228	Rear Skirt	40	55187	Handle Support Bracket (Right)
12	81276	Selt Tapping Screw 10-24 x 1/2	41	88272X479	Handle Support Bracket (Left)
13	87584X004	Skirt Bracket	42	88271X479	Danger Decal
14	63644X417	Handle Bracket Assembly (Right)	43	85463	Hairpin Cotter
15	63645X417	Handle Bracket Assembly (Left)	44	51793	E-Ring
17	850904	Wheel Adjusting Bracket	45	33750	Hinge Rod
18	84920	Spacer	46	87590	Torsion Spring
19	88348	Washer	47	87589	Housing Bracket Assembly
20	87877	Selector Knob	48	87593	Discharge Guard
21	850856	Selector Spring	49	750149	Lower Handle
22	85022	Axle Arm Assembly	50	84676X479	Handle Bolt
23	62335	Belleville Washer	51	58714	Rope Guide
24	84921	Shoulder Bolt	52	103672X	Instruction Decal
25	750500	Wheel & Tire Assembly 7-1/2 x 1-1/2	53	128544	Rear Baffle (Not Shown)
26	52160	Washer	54	87576X479	"EAGER I" Decal
27	85179	Retainer Clip	55	751214	Engine - Craftsman
28	800090	Hubcap	56	752062	Model Number 143.414232
29	850998	Hex Head Thread Rolling Screw 3/8 - 16 - 1	--	752094	Owner's Manual

# CRAFTSMAN 4-CYCLE ENGINE

MODEL NUMBER: 143.414232

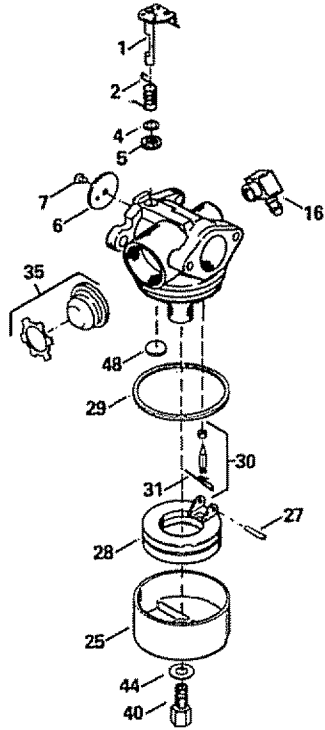


# CRAFTSMAN 4-CYCLE ENGINE

MODEL NUMBER: 143.414232

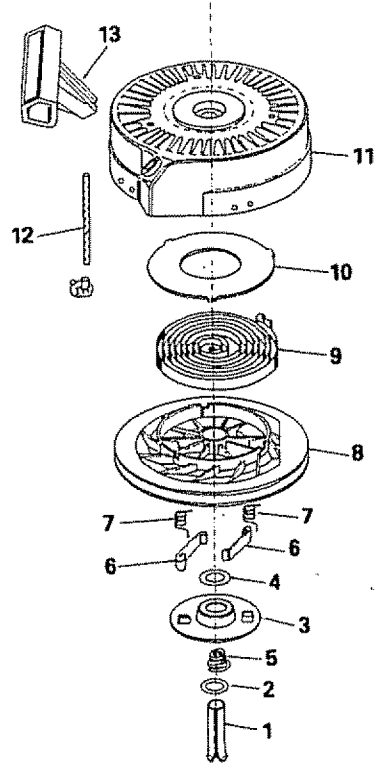
Ref. No.	Part No.	Part Name	Ref. No.	Part No.	Part Name
1	34975	Cylinder Assy. (Incl. Nos. 2, 8, 9 & 20)	150	31672	Spring, Valve
2	26727	Pin, Dowel	151	31673	Cap, Lower valve spring
6	33734	Element, Breather	169	*27234A	Gasket, Valve spring box
7	34214A	Breather Assy. (Incl. Nos. 6, 8, 9, 12A & 12B)	172	32755	Cover, Valve spring box
8	*33735	Gasket, Breather	174	650128	Screw, Hex hd. Sems, 10-24 x 1/2
9	30200	Screw, Hex washer hd. self-tap Sems, 10-24 x 9/16	178	29752	Nut & Lockwasher, 1/4-28
12A	34695	Elbow, Breather tube	182	6201	Screw, Hex hd., 1/4-28 x 7/8
12B	33886	Tube, Breather	184	*26756	Gasket, Carburetor
14	28277	Washer, Flat	185	31384A	Pipe, Intake (Incl. No. 224)
15	30589	Rod, Governor (Incl. No. 14)	186	34337	Link, Governor spring
16	31383A	Lever, Governor	189	650839	Screw, Hex washer hd. Powerlok, 1/4-20 x 3/8
17	31335	Clamp, Governor lever	190	35831	Lever, Brake
18	650548	Screw, Hex washer hd., 8-32 x 5/16	191	35040	Bracket, S.E. Brake (Incl. No. 195)
19	31361	Spring, Extension	192	34966	Link, Control
20	32600	Seal, Oil	193	34965	Spring, Extension
30	34473A	Crankshaft Assy.	194	32309	Ring, Retaining
40	34514	Piston, Pin & Ring Assy. (Std.) (Incl. Nos. 41, 42 & 43)	195	610973	Terminal Assy.
40	34515	Piston, Pin & Ring Assy. (.010 oversize) (Incl. Nos. 41, 42 & 43)	200	35727	Bracket Assy., Control (Incl. Nos. 202 thru 205)
40	34516	Piston, Pin & Ring Assy. (.020 oversize) (Incl. Nos. 41, 42 & 43)	202	33802	Spring, Compression
41	32538B	Piston & Pin Assy. (Std.) (Incl. No. 43)	203	31342	Spring, Compression
41	32548B	Piston & Pin Assy. (.010 oversize) (Incl. No. 43)	204	650549	Screw, Fil. hd., 5-40 x 7/16
41	32549B	Piston & Pin Assy. (.020 oversize) (Incl. No. 43)	205	650777	Screw, Fil. hd., 6-32 x 21/32
42	28986	Ring Set, Piston (Std.)	207	34336	Link, Throttle
42	28987	Ring Set, Piston (.010 oversize)	209	30200	Screw, Hex washer hd. self-tap Sems, 10-24 x 9/16
42	28988	Ring Set, Piston (.020 oversize)	215	32410	Knob, Control
43	20381	Ring, Piston pin retaining	223	650451	Screw, Hex hd. Sems, 1/4-20 x 1
45	30963B	Rod Assy., Connecting (Incl. No. 46)	224	*34690A	Gasket, Intake pipe
46	32610A	Bolt, Connecting rod	238	650932	Screw, Hex washer hd. shoulder, 10-32 x 49/64
48	27241	Valve, Lifter	239	*34338	Gasket, Air cleaner
50	33148A	Camshaft (Compression Release)	241	35797	Collar, Air cleaner
52	29914	Pump Assy., Oil	245	35066	Filter, Air cleaner (Paper)
69	*35261	Gasket, Mounting flange	250	35065	Cover, Air cleaner
70	35651B	Flange, Mounting (Incl. Nos. 72, 73, 75 & 80)	260	35478	Housing, Blower
72	30572	Plug, Oil drain (Incl. No. 73)	261	30200	Screw, Hex washer hd. self-tap Sems, 10-24 x 9/16
73	*28833	Gasket, Oil plug (Not required with plastic oil plug)	262	650831	Screw, Hex washer hd. Powerlok thread, 1/4-20 x 15/32
75	26208	Seal, Oil	275B	27181B	Muffler Assy. (Incl. No. 277)
80	30574	Shaft, Governor	277	650795	Screw, Hex hd., 1/4-20 x 2-1/4
81	30590A	Washer, Flat	285	35000	Hub, Starter
82	30591	Gear Assy., Governor (Incl. No. 81)	287	650884	Screw, Hex washer hd., 8-32 x 1/2
83	30588A	Spool, Governor	290	34357	Line, Fuel
84	29193	Ring, Retaining	292	26460	Clamp, Fuel line
86	650488	Screw, Hex hd. Sems, 1/4-20 x 1-1/4	300	35586	Tank Assy. (Incl. Nos. 292 & 301)
89	611004	Key, Flywheel	301	35355	Cap, Fuel
90	611112	Flywheel	305	35577	Tube, Oil fill
92	650815	Washer, Belleville	306	34265	Gasket, Fill tube
93	650816	Nut, Flywheel	307	35499	"O" Ring
100	34443A	Solid State Assy.	309	650562	Screw, Hex washer hd. shakeproof, 10-32 x 1/2
101	610118	Cover, Spark plug	310	35578	Dipstick, Oil fill
103	650814	Screw, Torx T-15 hex washer hd. Sems, 10-24 x 1	313	34080	Spacer, Flywheel key
110	34961	Wire, Ground	327	35392	Plug, Starter
119	*29953C	Gasket, Cylinder head	357	34985	Retainer, Starter rope
120	34335	Head, Cylinder	370C	35167	Decal, Instruction
125	29313C	Valve, Exhaust (Std.) (Incl. No. 151)	380	632046A	Carburetor (Incl. No. 184)
125	29315C	Valve, Exhaust (1/32" oversize) (Incl. No. 151)	390	590621	Starter, Rewind
126	29314B	Valve, Intake (Std.) (Incl. No. 151)	400	33238D	Gasket Set (Incl. items marked *)
126	29315C	Valve, Intake (1/32" oversize) (Incl. No. 151)			RPM Setting: Low Speed: 2000-2300 High Speed: 2900-3200
130	6021A	Screw, Hex flange hd., 5/16-18 x 1-1/2			*Indicates Parts Included in Gasket Set, Ref. No. 400.
135	35395	Spark Plug, Resistor (Champion R.J-19LM or equivalent)			

**CARBURETOR NO. 632046A**



Ref. No.	Part No.	Part Name
1	631615	Throttle Shaft & Lever Assy.
2	631767	Throttle Return Spring
4	631184	Dust Seal Washer
5	631971	Dust Seal
6	631616	Throttle Shutter
7	650506	Throttle Shutter Screw
16	632527	Fuel Fitting
25	631700	Float Bowl
27	631024	Shaft, Float
28	632019	Float
29	631028	"O" Ring, Float Bowl to Body
30	631021	Inlet Needle, Seat & Clip (Incl. No. 31)
31	631022	Spring Clip
35	632047	Primer Bulb/Retainer Ring
40	631937A	High Speed Bowl Nut
44	631334	Bowl Nut Washer
48	631027	Welch Plug, Atmospheric Vent

**REWIND STARTER NO. 590621**



Ref. No.	Part No.	Part Name
1	590621	Starter, Rewind
2	590599A	Pin, Spring (Incl. No. 4)
3	590615	Retainer
4	590601	Washer
5	590598	Spring, Brake
6	590616	Dog, Starter
7	590617	Spring, Dog
8	590618	Pulley
9	590619	Spring, Rewind
10	590620	Cover, Spring
11	590622	Housing Assy., Starter
12	590535	Rope, Starter (Length 98" & 9/64" dia.)
13	590452	Handle, Starter

# NOTES

# NOTES

# NOTES

**SEARS**

**OWNER'S  
MANUAL**

**MODEL NO.  
917.380231**

**HOW TO ORDER  
REPAIR PARTS**

**CRAFTSMAN®**

**3.5 HORSE POWER  
20" 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 the engine will be found on the Blower Housing of the engine adjacent to the spark plug.

All parts listed herein may be ordered through Sears, Roebuck and Co. Service Centers and most Retail Stores.

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

- \* PRODUCT - "ROTARY LAWN MOWER"
- \* MODEL NUMBER - 917.380231
- \* ENGINE - CRAFTSMAN  
MODEL NO. 143.414232
- \* PART NUMBER
- \* PART DESCRIPTION

Your Sears merchandise has added value when you consider that Sears has service units nationwide staffed with Sears trained technicians...professional technicians specifically trained on Sears products, having the parts, tools and the equipment to insure that we meet our pledge to you, we service what we sell.