

SEARS

CRAFTSMAN®

MODEL NUMBER 917.378170 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.



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.
- Be aware that the mower blade turns when the engine is running.
- Always stop the engine whenever you leave or are not using your mower, or before crossing driveways, walks, roads, and any gravel-covered areas.
- Never direct discharge of material toward bystanders nor allow anyone near the mower while you are operating it.
- Before cleaning, inspecting, or repairing your mower, stop the engine and make absolutely sure the blade and all moving parts have stopped. Then disconnect the spark plug wire and keep it away from the spark plug to prevent accidental starting.
- Do not continue to run your mower if you hit a foreign object. Follow the procedure outlined above, then repair any damage before restarting and operating you mower.
- Do not change the governor settings or overspeed the engine. Engine damage or personal injury may result.
- Do not operate your mower if it vibrates abnormally. Excessive vibration is an indication of damage; stop the engine, safely check for the cause of vibration and repair as required.
- Do not run the engine indoors. Exhaust fumes are dangerous.
- Never cut grass by pulling the mower towards you. Mow across the face of slopes, never up and down or you might lose your footing. Do not mow excessively steep slopes. Use caution when operating the mower on uneven terrain or when changing directions - maintain good footing.
- Never operate your mower without proper guards, plates, grass catcher or other safety devices in place.

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.

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 917.378170
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:	3.5
DISPLACEMENT:	9.06 cu. in.
GASOLINE CAPACITY:	1.5 quarts (Unleaded)
OIL (20 oz. Capacity):	SAE 30 or (SAE 10W30)
SPARK PLUG (GAP .030 IN.): (0.76 mm)	Champion RJ19LM 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.

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.

LIMITED ONE YEAR WARRANTY ON CRAFTSMAN POWER MOWER

For one year 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/731CR-W SEARS TOWER, CHICAGO, IL 60684

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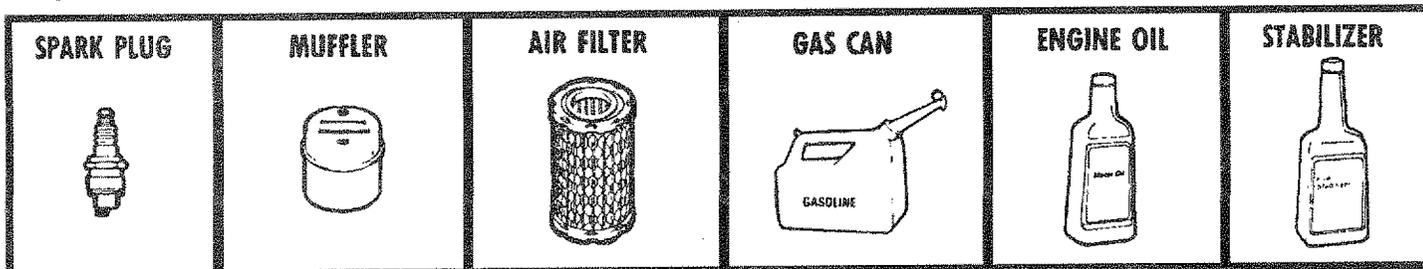
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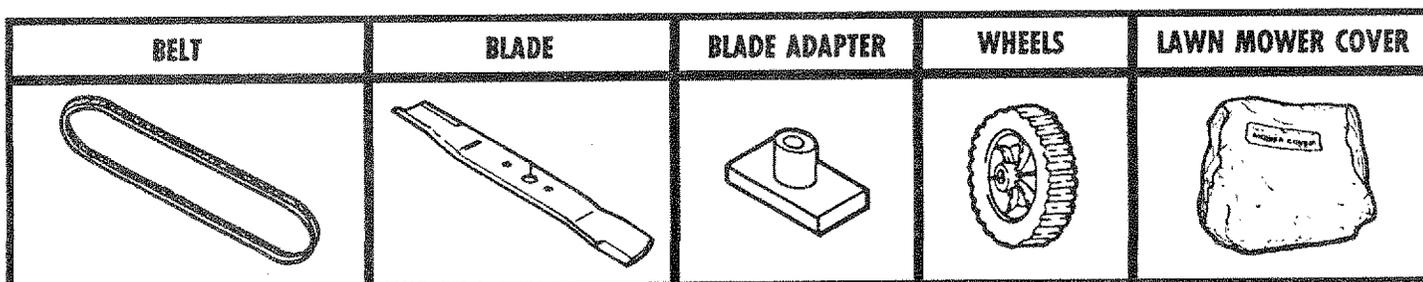
LAWN MOWER ACCESSORIES

These accessories were available when this lawn mower was produced. They are also available at most Sears retail outlets, catalog 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 MAINTENANCE



ASSEMBLY

Your lawn mower has been assembled at the factory.

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 (See 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.

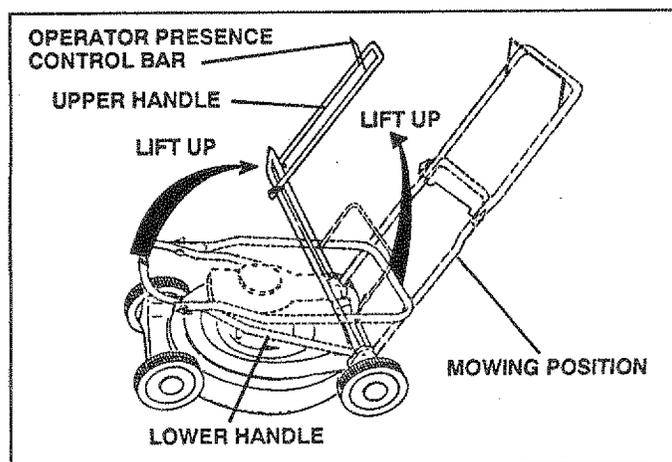


FIG. 1

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.

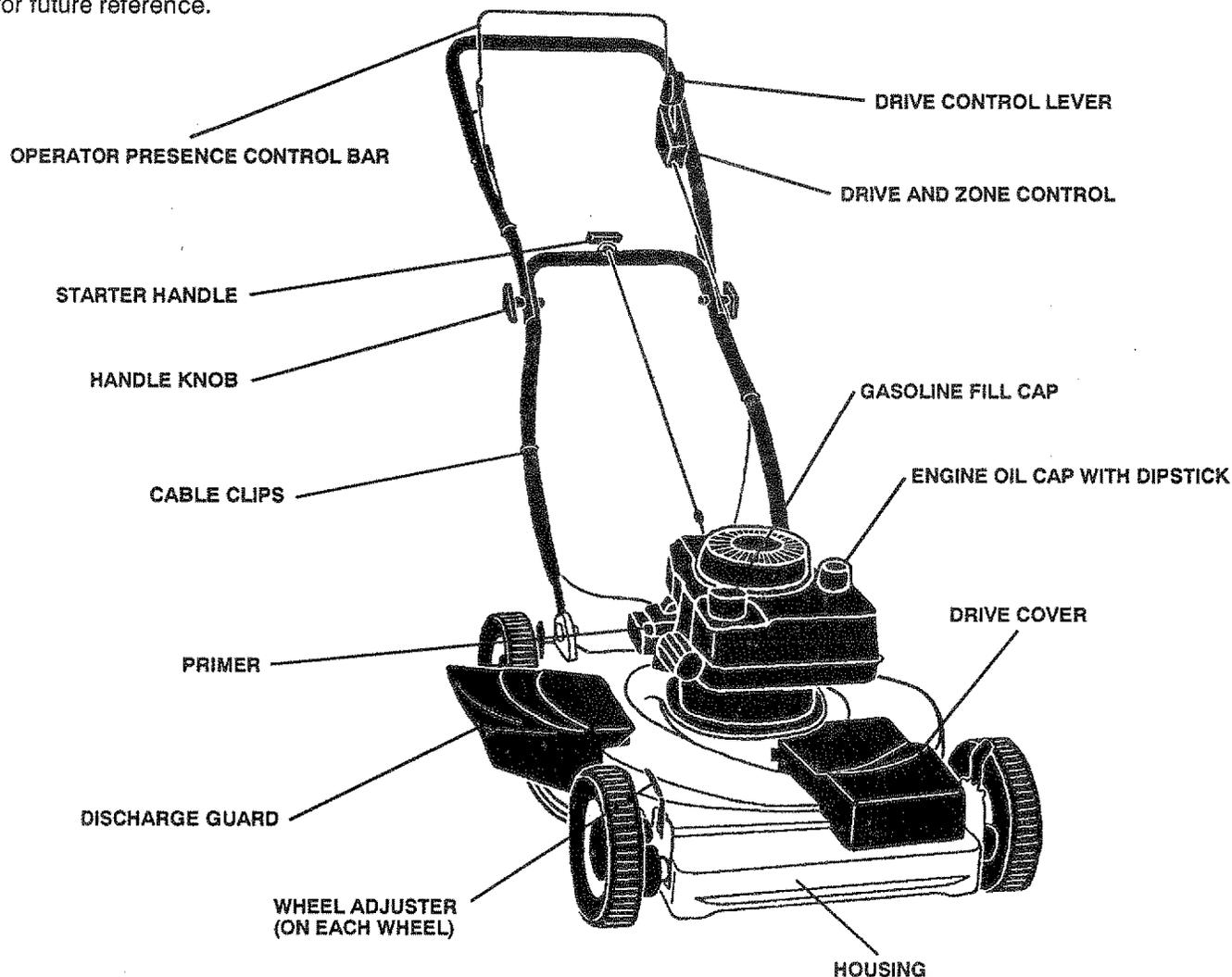


FIG. 2

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 - 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 LEVER - used to engage power-propelled forward motion of lawn mower.

OPERATION

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



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.

DRIVE CONTROL (See Fig. 3)

- Self-propelling is controlled by holding the operator presence control bar down to the handle and pushing the drive control lever forward until it clicks; then release the lever.
- Forward motion will stop when the operator presence control bar is released. To stop forward motion without stopping engine, release the operator presence control bar slightly until the drive control disengages. Hold operator presence control bar down to handle to continue mowing without self-propelling.
- To keep drive control engaged when turning corners, push down on handle and lift front wheels off ground while turning lawn mower.

TO ADJUST CUTTING HEIGHT (See Fig. 4)

- 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.

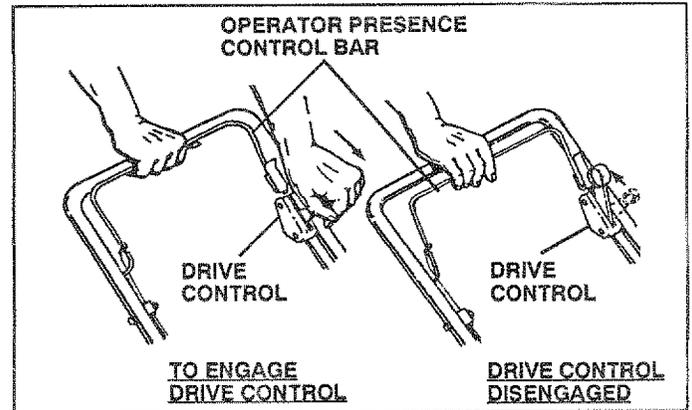


FIG. 3

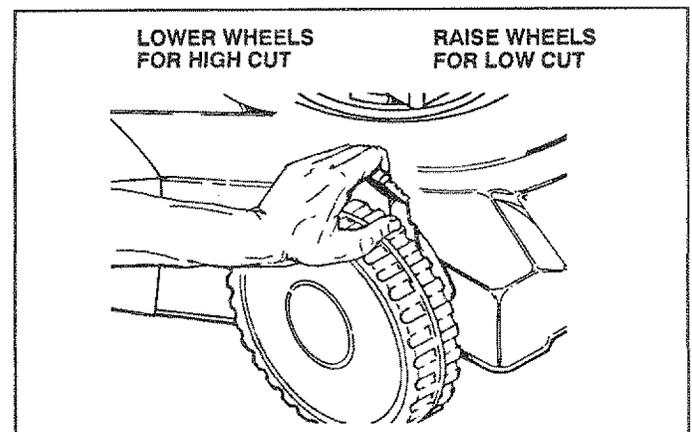


FIG. 4

OPERATION

BEFORE STARTING ENGINE

OIL (See Fig. 5)

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

- Remove engine oil cap 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 (See Fig. 5)

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

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.

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.

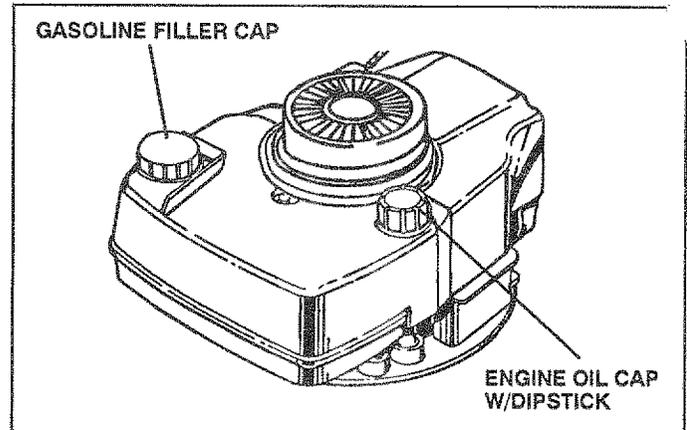


FIG. 5

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 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

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. 6)

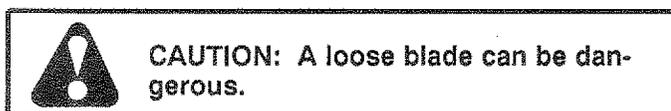
- Turn lawn mower on its side. Make sure air filter and carburetor are up.
- Use a wood block between blade and mower housing to prevent blade from turning when removing blade bolt.
- Protect your hands with gloves and/or wrap blade with heavy cloth.
- Remove blade bolt by turning counter-clockwise. 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. 6)

- Position the blade adapter on the engine crankshaft. Be sure key in adapter and keyway in crankshaft 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 word TOP (stamped on the blade) is 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.



Use only 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 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.

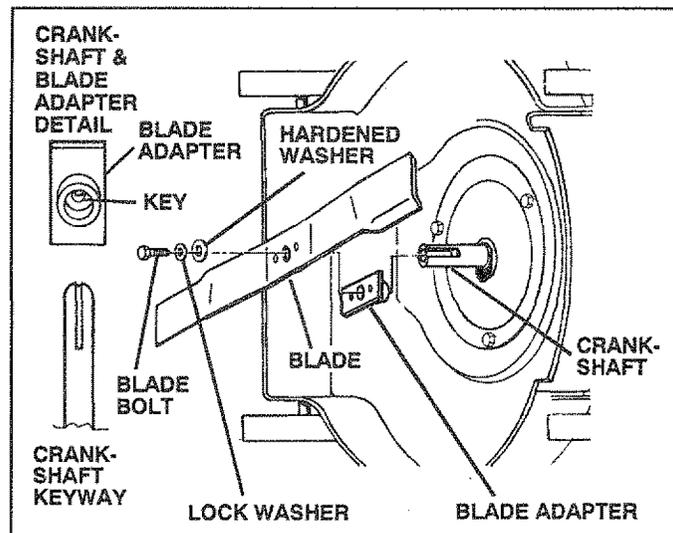


FIG. 6

GEAR CASE

- To keep your drive system working properly, the gear case and area around the drive should be kept clean and free of trash build-up. Clean under the drive cover twice a season.
- The gear case is filled with lubricant to the proper level at the factory. The only time the lubricant needs attention is if service has been performed on the gear case.
- If lubricant is required, use only Texaco Starplex Premium Grease, part no. 750355. Do not substitute.

DRIVE WHEELS

Check front drive wheels each time before you mow to be sure they move freely.

The wheels not turning freely means trash, grass cuttings, etc. are in the drive wheel area and must be cleaned to free drive wheels.

If necessary to clean the drive wheels, check both front wheels.

- Remove hubcaps, hairpin cotters and washers.
- Remove wheels from wheel adjusters.
- Remove any trash or grass cuttings from inside the dust cover, pinion and/or drive wheel gear teeth.
- Put wheels back in place.
- If after cleaning, the drive wheels do not turn freely, contact your nearest Sears Service Center.

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.

MAINTENANCE

ENGINE LUBRICATION

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. Add SAE 30 motor oil or equivalent. Tighten oil plug securely each time you check the oil level.

TO CHANGE ENGINE OIL (See Fig. 7)

- 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 SAE 30 or 10W 30 oil. Fill only to the "FULL" line on the dipstick. DO NOT OVERFILL.
- Replace engine oil cap.

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. 8)

- Remove the air filter by turning counterclockwise to the stop and pull away from collar.
- Remove filter from inside of cover.
- Clean the inside of the cover and the collar to remove any dirt accumulation.
- Insert new filter into cover.
- Put air filter cover and filter into collar aligning the tab with the slot.
- Push in on cover and turn clockwise to tighten.

MUFFLER

Inspect and replace corroded muffler as it could create 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.

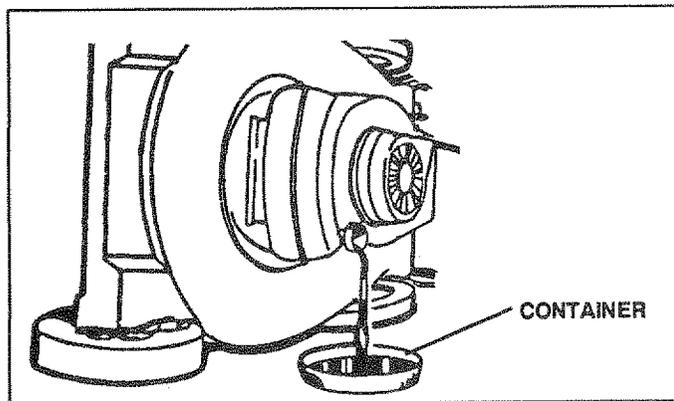


FIG. 7

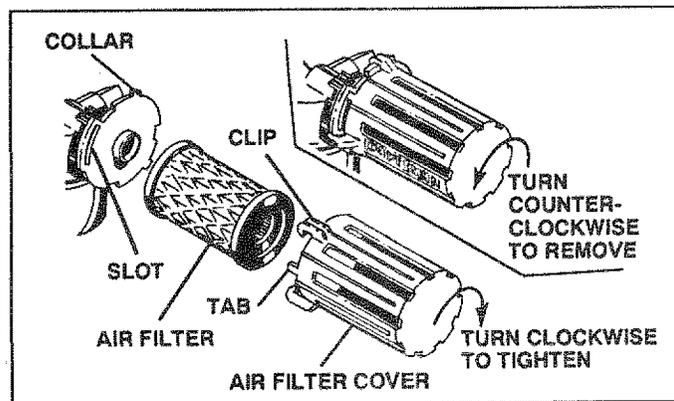


FIG. 8

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 shortening engine life.

CLEAN UNDER DRIVE COVER

Clean under drive cover at least twice a season. Scrape underside of cover with putty knife or similar tool to remove any build-up of trash or grass on underside of drive cover.

SERVICE AND ADJUSTMENTS



CAUTION: BEFORE PERFORMING ANY SERVICE OR ADJUSTMENTS:

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

LAWN MOWER

TO ADJUST CUTTING HEIGHT

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

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.

TO REMOVE/REPLACE DRIVE BELT

(See Fig. 9)

- Remove drive cover. Remove belt by pushing down on gear case pulley.
- Turn lawn mower on its side with carburetor and fuel cap up.
- Loosen hex head screw and move belt snubber away from pulley.
- Remove belt from engine pulley on crankshaft and carefully slip belt off over blade.
- CAUTION: Sharp edges of blade can cut belt.
- Install new belt by reversing above steps.
- Move belt snubber back in place and tighten hex head screw.

NOTE: Belt snubber clears belt by approx. 1/32 inch when installed.

- Always use factory approved belt to assure fit and long life.

TO ADJUST DRIVE CONTROL CABLE

(See Fig. 10)

A drive control cable that needs adjustment will keep your lawn mower from self-propelling properly and can also cause gear case components to wear out sooner.

- Remove drive cover.
- Loosen cable clamp screw "A" and nuts "B" and "C".
- Hold down operator presence control bar to handle and engage drive control.
- Move shifter arm to drive position while rotating front wheels to be sure jaw clutch is engaged. Pull threaded sleeve with pliers. Do not pull on control cable.
- Tighten nut "C" until sleeve is snug.
- Tighten screw "A" and nut "B".
- Push lawn mower back and forth to be sure gear case is engaged.
- Replace drive cover.
- Release operator presence control bar.

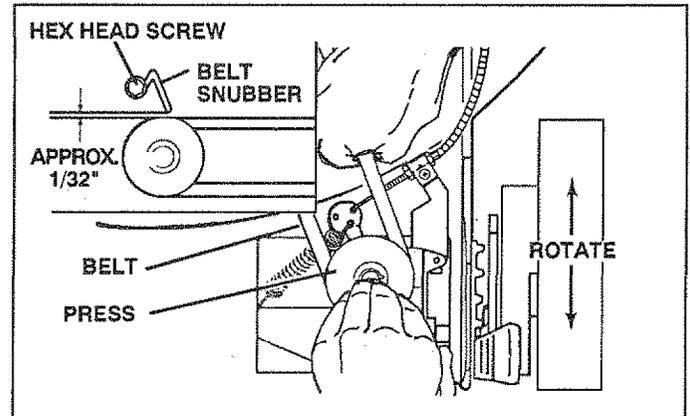


FIG. 9

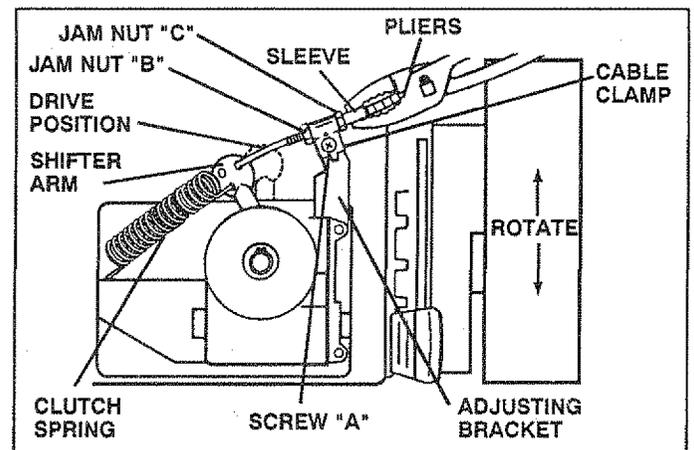


FIG. 10

SERVICE AND ADJUSTMENTS

TO ADJUST HANDLE (See Figs. 11 Thru 13)

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. 11B).
- 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. 13).
- 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. 12A).
- To change from medium low to low position, only the lower handle section will have to be turned over (See Fig. 12B).

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 Sears Service Center for repair and adjustment.

CARBURETOR

Your carburetor has been preset at the factory and is not adjustable.

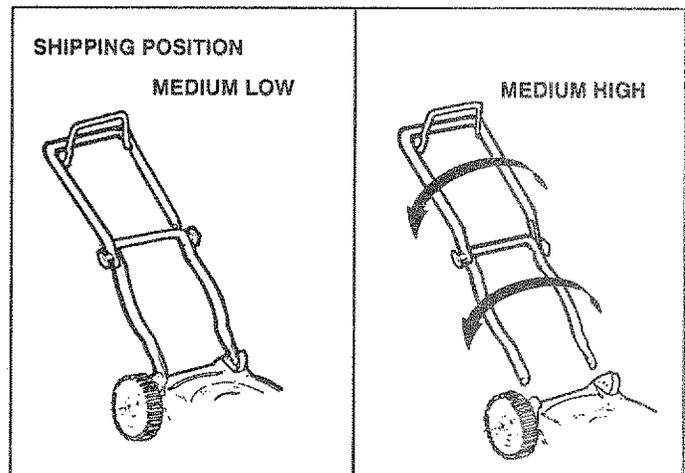


FIG. 11A

FIG. 11B

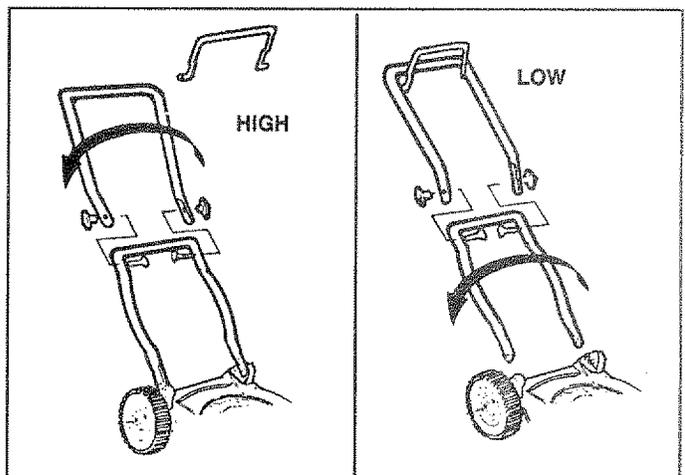


FIG. 12A

FIG. 12B

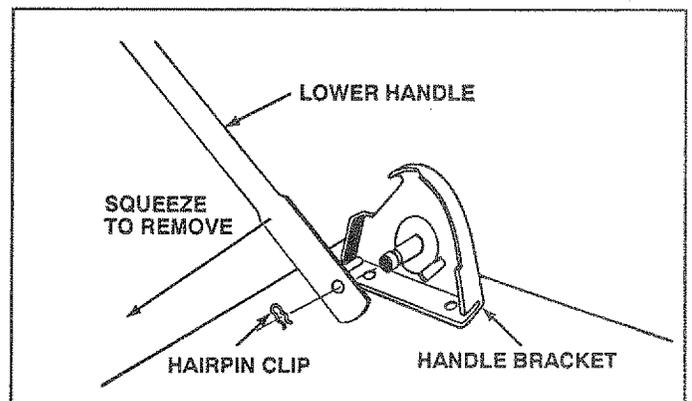


FIG. 13

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. Give blade and underside of housing a good coat of grease or rust preventative. Store in a clean, dry area.

- Clean entire lawn mower (See "CLEANING" 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 (See Fig. 14)

- You can fold your lawn mower handle for storage.
- 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.

IMPORTANT: WHEN FOLDING THE HANDLE FOR STORAGE OR TRANSPORTATION, BE SURE TO FOLD THE HANDLE AS SHOWN IN FIG. 14. IF YOU FOLD THE UPPER HANDLE SECTION THE WRONG WAY, 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.

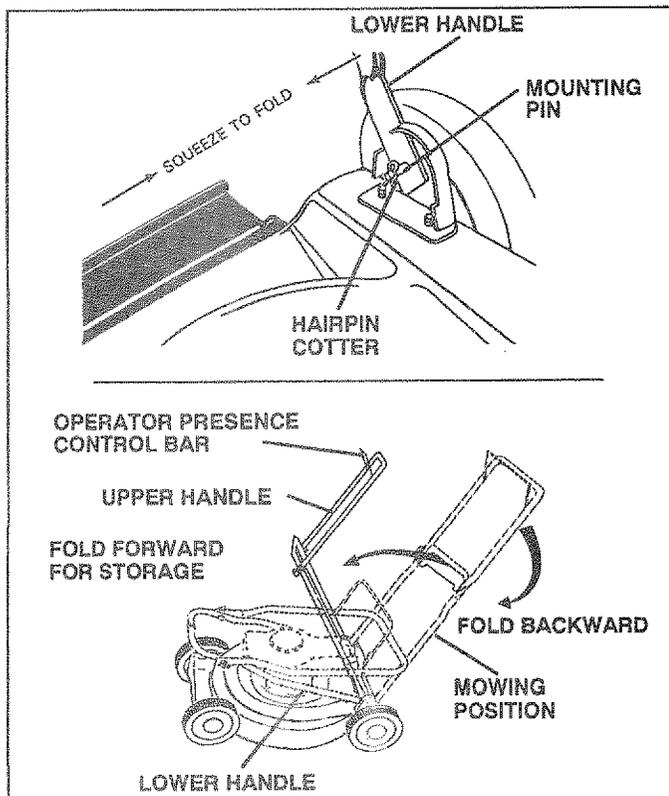


FIG. 14

ENGINE FUEL SYSTEM

IMPORTANT: IT IS IMPORTANT TO PREVENT GUM DEPOSITS FROM FORMING IN ESSENTIAL FUEL SYSTEM PARTS SUCH AS CARBURETOR, FUEL FILTER, FUEL HOSE, OR TANK DURING STORAGE. ALSO, EXPERIENCE INDICATES THAT ALCOHOL BLENDED FUELS (CALLED GASOHOL OR USING ETHANOL OR METHANOL) CAN ATTRACT MOISTURE WHICH LEADS TO SEPARATION AND FORMATION OF ACIDS DURING STORAGE. ACIDIC GAS CAN DAMAGE THE FUEL SYSTEM OF AN ENGINE WHILE IN STORAGE.

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

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

ENGINE OIL

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

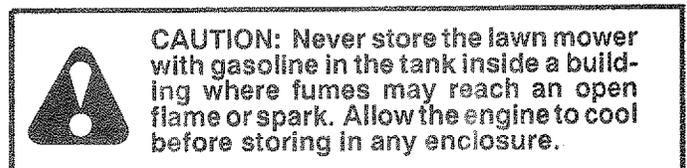
CYLINDER

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

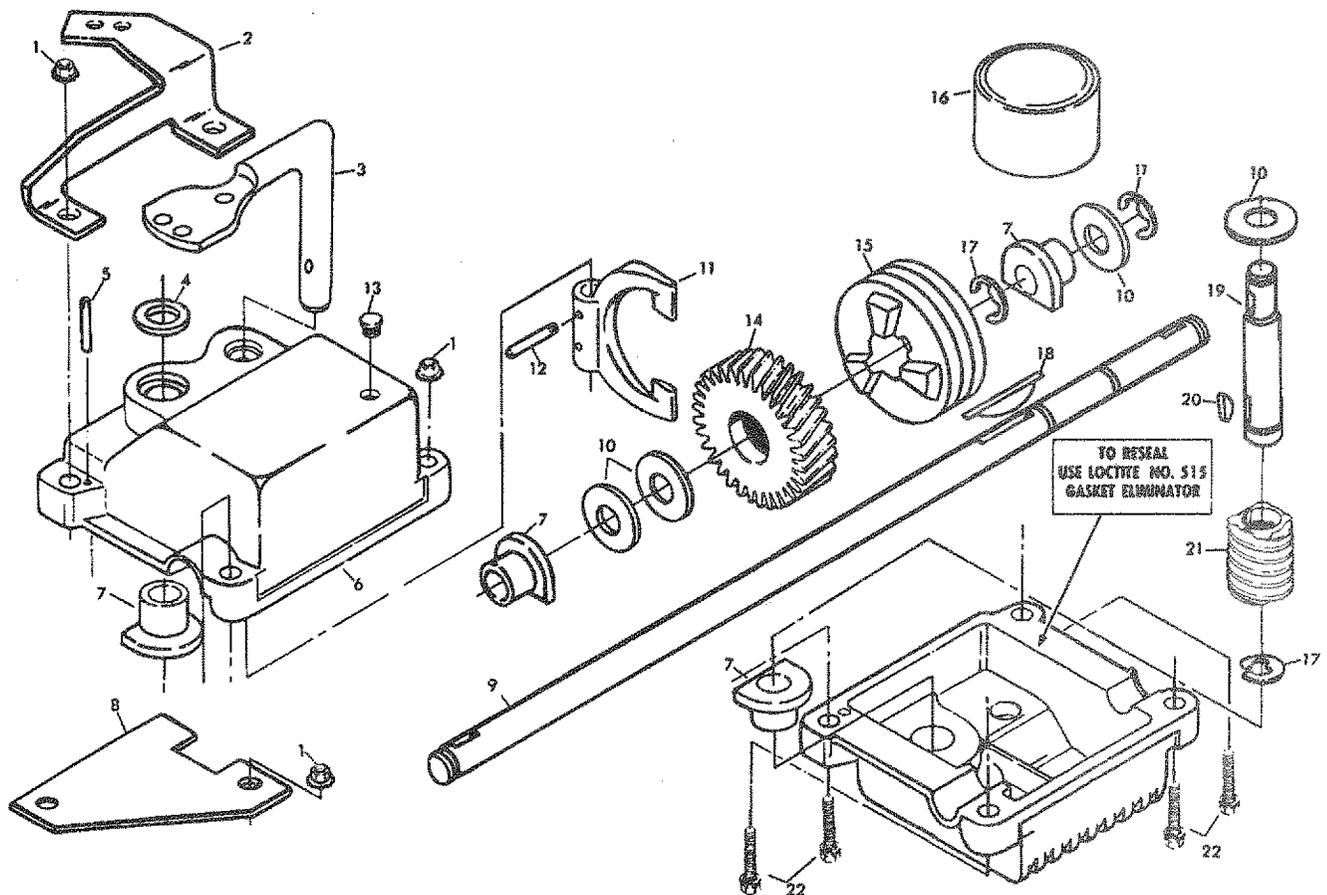
OTHER

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

IMPORTANT: NEVER COVER MOWER WHILE ENGINE AND EXHAUST ARE STILL WARM.



GEAR CASE ASSEMBLY PART NUMBER 751001

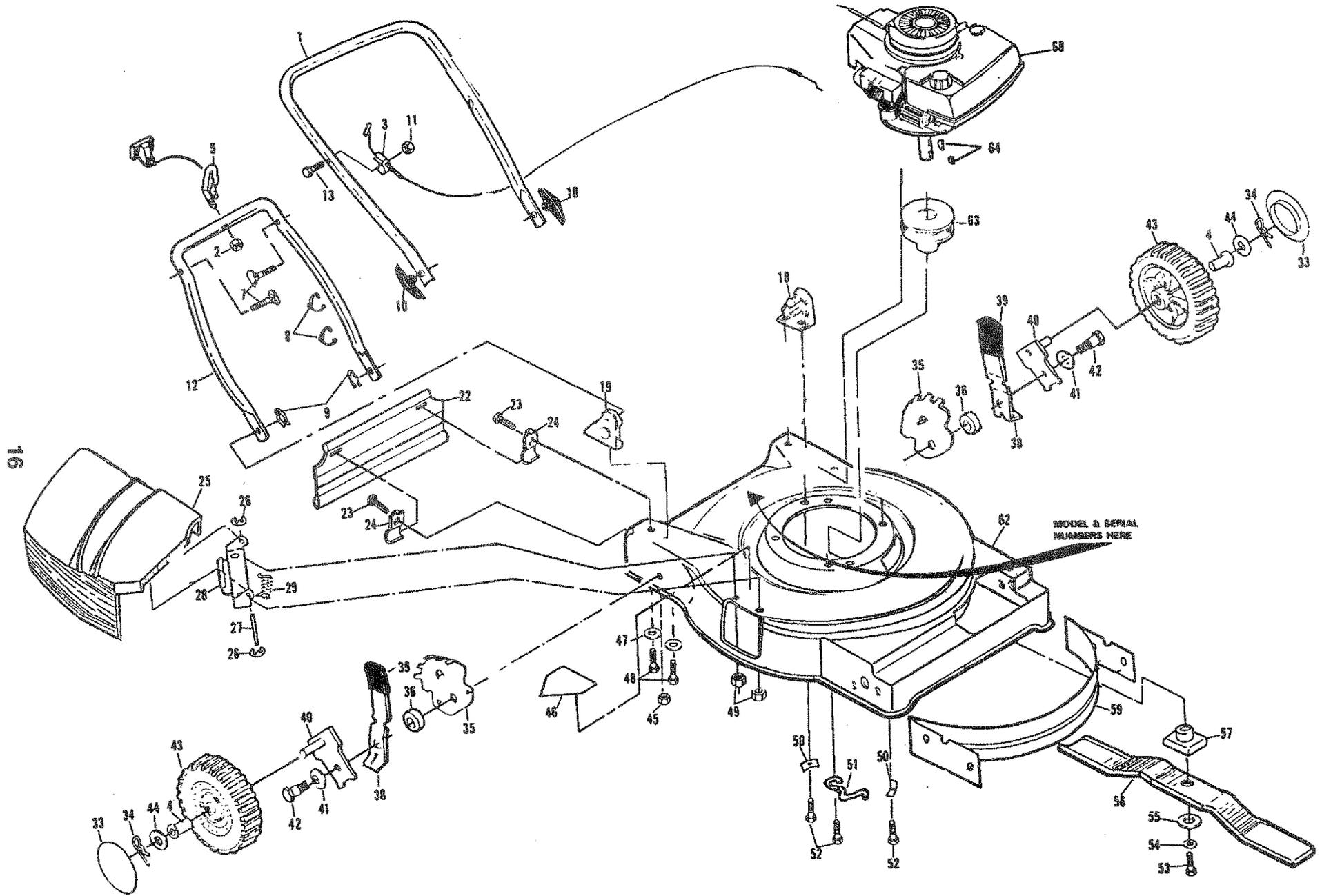


REF. PART NO. NO.	DESCRIPTION
1 53838	Keys Locknut 1/4-20
2 85178	Adjusting Bracket
3 88386	Shifter Assembly
4 57072	Seal
5 57388	Grooved Pin 1/8 x 1/2
6 48032	Gear Case Halves (Incl. Upper & Lower Halves) (Incl. Ref. 4, 5, 7)
7 77881	Bearing
8 77039	Spring Bracket
9 750430	Drive Shaft
10 57079	Hardened Washer
11 75144	Yoke Clutch
12 87822	Grooved Pin 1/8 x 3/4

REF. PART NO. NO.	DESCRIPTION
13 86447	Plug
14 83659	Helical Gear
15 750436	Jaw Clutch
16 750355	Grease
17 STD581050	E-Ring
18 850848	Hi-Pro Key
19 83720	Worm Shaft
20 65692	Woodruff Key #3
21 83680	Worm
22 STD522512	Hex Head Machine Screw 1/4-20 x 1-1/4

REPAIR PARTS

CRAFTSMAN 22" ROTARY LAWN MOWER - MODEL NO. 917.378170



REPAIR PARTS

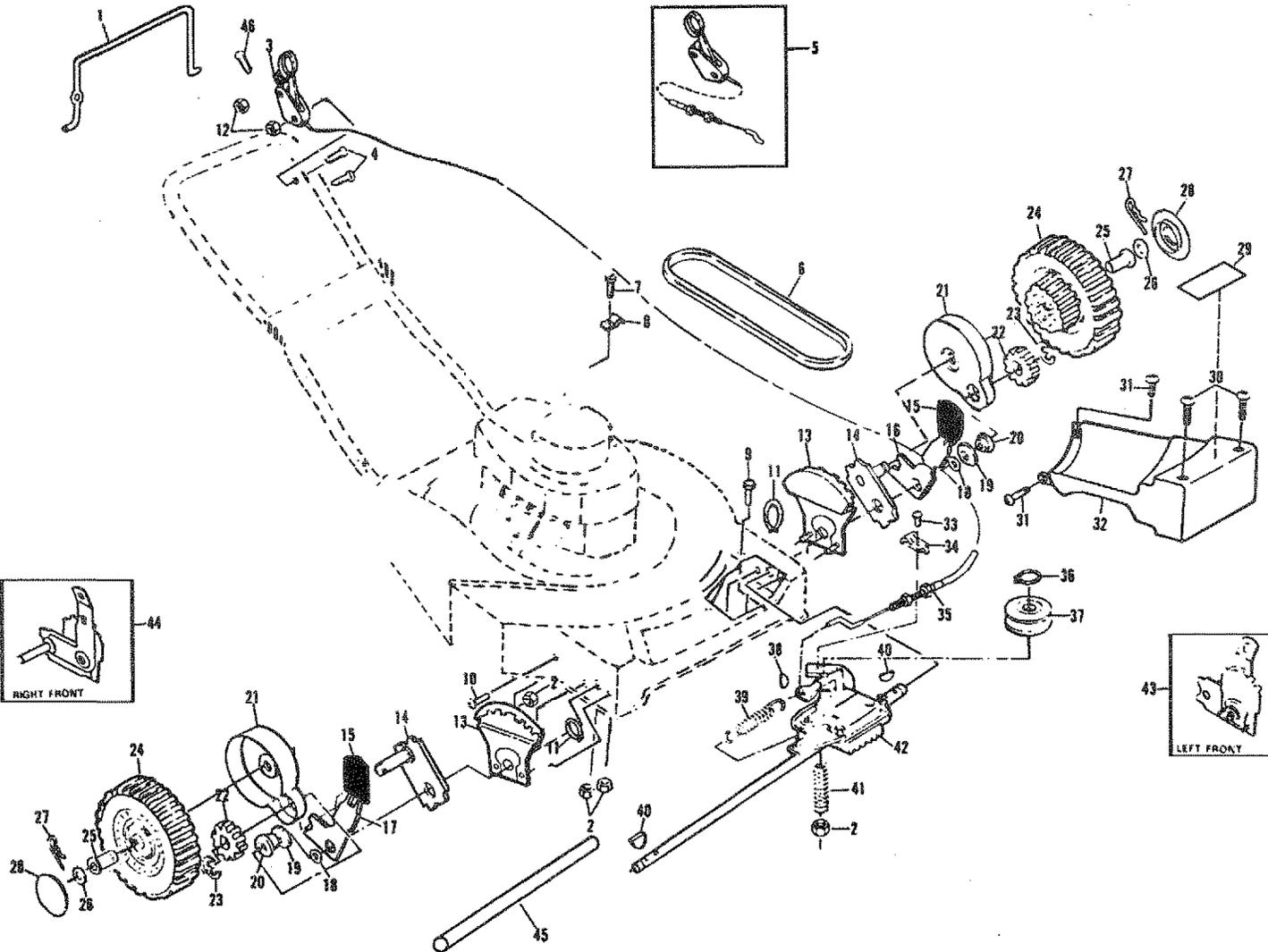
CRAFTSMAN 22" ROTARY LAWN MOWER - MODEL NO. 917.378170

KEY PART NO.	PART NO.	DESCRIPTION	KEY PART NO.	PART NO.	DESCRIPTION
1	850991X479	Upper Handle	40	85021X004	Axle Arm Assembly
2	STD541425	Locknut	41	62335	Belleville Washer
3	851667	Remote Throttle Control	42	84921	Shoulder Bolt
4	86960	Wheel Bushing	43	87748	Wheel & Tire Assembly
5	103672X	Rope Guide	44	52160	Washer
7	58714	Handle Bolt	45	751592	Locknut 3/18-16
8	85827	Cable Clip	46	85463	Danger Decal
9	51793	Hairpin Cotter	47	59289	Flat Washer
10	63688	Handle Knob	48	55187	Thread Cutting Screw 5/16-18 x 3/4
11	STD541425	Locknut	49	STD541425	Locknut
12	84676X479	Lower Handle	50	851201X004	Washer
13	53109	Hex Head Bolt 1/4-20 x 1-1/2	51	851000	Belt Snubber
18	63645X417	Handle Bracket Assembly (Left)	52	850998	Hex Head Thread Rolling Screw 3/8- 16 x 1-1/8
19	63644X417	Handle Bracket Assembly (Right)	53	851084	Hex Head Screw 3/8-24 x 1-3/8 (Grd. 8)
22	128797	Rear Deflector	54	850263	Helical Lockwasher
23	750097	Hex Washer Head Screw #10-24 x 1/2	55	851074	Hardened Washer
24	87584X004	Deflector Bracket	56	850973	Blade 22"
25	750149	Discharge Guard	57	851514	Blade Adapter
26	STD581025	E-Ring	59	87587X479	Front Baffle
27	87590	Hinge Rod	60	88404X479	Rear Baffle (Not Shown)
28	87593	Housing Bracket	62	48192	Lawn Mower Housing (Incl. Ref. #46, 59 & 60)
29	87589	Torsion Spring	63	85543	Engine Pulley
33	77400	Hubcap	64	87677	Hi-Pro Key #HP 505
34	85179	Retainer Clip	68	132423	Engine - Craftsman Model No. 143.424072
35	850955	Wheel Adjusting Bracket		132421	Owner's Manual
36	84920	Spacer			
38	850855X004	Selector Spring			
39	87877	Selector Knob			

Available accessories not included with lawn mower:

<u>71</u>	33072	Grass Catcher
<u>71</u>	33623	Gas Can (2.5 gal.)
<u>71</u>	33500	Fuel Stabilizer
<u>71</u>	33300	SAE 30W Oil (20 oz.)
<u>71</u>	33201	Mulcher Kit
<u>71</u>	33722	High Wheel Kit

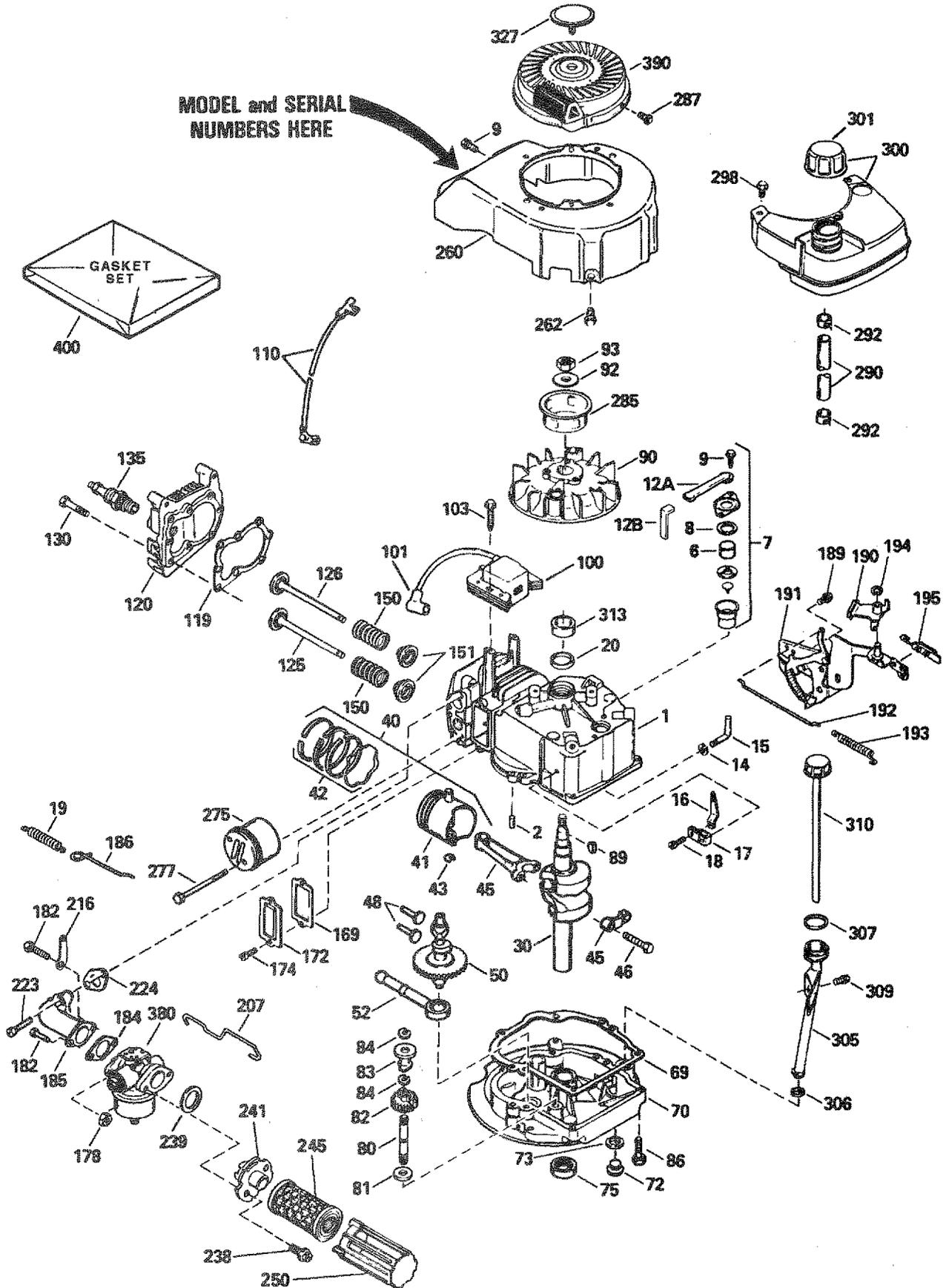
REPAIR PARTS
CRAFTSMAN 22" ROTARY LAWN MOWER - MODEL NO. 917.378170



REPAIR PARTS

CRAFTSMAN 22" ROTARY LAWN MOWER - MODEL NO. 917.378170

KEY PART NO.	PART NO.	DESCRIPTION	KEY PART NO.	PART NO.	DESCRIPTION
1	851509	Control Bar	24	87729	Wheel & Tire Assembly 8.00 x 1.75
2	STD541425	Locknut 1/4-20	25	86960	Wheel Bushing
3	48029	Control Head Kit	26	52160	Flat Washer
4	750029	Screw #10 x 20 x 2	27	85179	Retainer Clip
5	133049	Control Cable Assembly	28	77400	Hubcap
6	83691	V-Belt	29	132333	Drive Cover Decal
7	750097	Hex Washer Head Screw #10-24 x 1/2	30	87866	Pan Head Tapping Screw #10-24 x 2 3/4
8	87930	Clip Guide (Housing)	31	750097	Hex Washer Head Screw #10-24 x 1/2
9	54338	Hex Head Bolt 1/4-20 x 2-3/4	32	750293	Drive Cover
10	61528	Flat Head Machine Screw 1/4-20 x 3/4	33	750108	Hex Washer Head Screw #10-24 x 3/8
11	STD582087	Retaining Ring	34	83700	Cable Clamp
12	74189	Locknut #10-24	35	48269	Drive Control Cable Kit
13	850922	Wheel Adjusting Bracket	36	STD582043	Retaining Ring
14	88284X004	Axle Arm Assembly	37	83681	Drive Pulley
15	87877	Selector Knob	38	STD580009	Woodruff Key #213
16	851019X004	Selector Spring (Left)	39	75192	Spring
17	851021X004	Selector Spring (Right)	40	STD580014	Woodruff Key #3
18	851226	Washer	41	83632	Spring
19	86274	Belleville Washer	42	751001	Gear Case Assembly (Complete)
20	86273	Bearing Spacer	43	48175	Wheel Adjuster Assembly (Left)
21	76401	Dust Cover	44	48174	Wheel Adjuster Assembly (Right)
22	74507	Pinion	45	86012	Drive Shaft Cover
23	STD581050	E-Ring	46	851552	Pan Head Hi Lo Screw #10-16 x .63



CRAFTSMAN 4-CYCLE ENGINE

MODEL NUMBER 143.424072

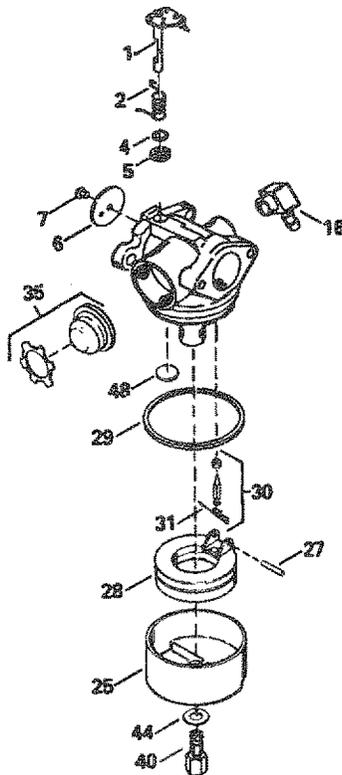
REF PART NO. NO.	DESCRIPTION	REF PART NO. NO.	DESCRIPTION
1 35010	Cylinder Assy. (Incl. Ref. #2 & 20)	130 6021A	Screw, Hex Flange 5/16-18 x 1-1/2
2 26727	Pin, Dowel	135 35395	Spark Plug, Resistor (Champion RJ-19LM or equivalent)
6 33734	Element, Breather	150 31672	Spring, Valve
7 34214A	Breather Assembly (Includes Reference #6, 8, 9, 12A and 12B)	151 31673	Cap, Lower Valve Spring
8 33735	* Gasket, Breather	169 27234A	* Gasket, Valve Spring Box
9 30200	Screw, Sems, Hex Washer Head, Self-Tapping #10-24 x 9/16	172 32755	Cover, Valve Spring Box
12A 33886	Tube, Breather	174 650128	Screw, Sems, Hex Hd. #10-24 x 1/2
12B 34695	Elbow, Breather Tube	178 29752	Nut & Lock Washer 1/4-28
14 28277	Washer, Flat	182 6201	Screw, Cap, Hex Hd. 1/4-28 x 7/8
15 30589	Rod, Governor (Includes Ref. #14)	184 26756	* Gasket, Carburetor
16 31383A	Lever, Governor	185 31384A	Pipe, Intake (Includes Ref. #224)
17 31335	Clamp, Governor Lever	186 32653	Link, Governor Spring
18 650548	Screw, Hex Wash. Hd. #8-32 x 5/16	189 650839	Screw, Sems, Hex Head, Powerlok 1/4-20 x 3/8
19 31361	Spring, Extension	190 35831	Lever, Brake
20 32600	Seal, Oil	191 35040B	Bracket, S.E. Brake (Includes #195)
30 35996	Crankshaft Assembly	192 34966	Link, Control
40 35544	Piston, Pin & Ring Assembly, Std.	193 34965	Spring, Extension
35545	Piston, Pin & Ring Assy. .010" over	194 32309	Ring, Retaining
35546	Piston, Pin & Ring Assy. .020" over (Assemblies Include #41, 42 and 43)	195 610973	Terminal Assembly
41 35541	Piston & Pin Assembly, Standard	207 34336	Link, Throttle
35542	Piston & Pin Assembly .010" over	216 33086	Lever, RPM Adjusting
35543	Piston & Pin Assembly .020" over (Assemblies Include Reference #43)	223 650451	Screw, Sems, Hex Head 1/4-20 x 1
42 35547	Ring Set, Piston, Standard	224 34690A	* Gasket, Intake Pipe
35548	Ring Set, Piston .010" oversize	238 650932	Screw, Hex Washer Head, Shoulder #10-32 x 49/64
35549	Ring Set, Piston .020" oversize	239 34338	* Gasket, Air Cleaner
43 20381	Ring, Piston Pin Retaining	241 35797	Collar, Air Cleaner
45 30963B	Rod Assy., Connecting (Incl. #46)	245 35066	Filter, Air Cleaner, Paper
46 32610A	Bolt, Connecting Rod	250 35065	Cover, Air Cleaner
48 27241	Valve, Lifter	260 35393	Housing, Blower
50 33148A	Camshaft, Compression Release	262 650831	Screw, Hex Washer Head, Powerlok Thread 1/4-20 x 15/32
52 29914	Pump Assembly, Oil	275 27181B	Muffler Assembly (Includes #277)
69 35261	* Gasket, Mounting Flange	277 650795	Screw, Hex Head 1/4-20 x 2-1/4
70 34311C	Flange, Mounting (Includes Reference #72, 73, 75 and 80)	285 35000	Hub, Starter
72 30572	Plug, Oil Drain (Includes Ref. #73)	287 650884	Screw, Hex Wash. Hd. #8-32 x 1/2
73 28833	* Gasket, Oil Drain Plug (Not Required With Plastic Oil Plug)	290 30705	Line, Fuel
75 27897	Seal, Oil	292 26460	Clamp, Fuel Line
80 30574	Shaft, Governor	298 28763	Screw, Hex Washer Head, Shakeproof #10-32 x 35/64
81 30590A	Washer, Flat	300 34369A	Tank Assembly, Fuel (Includes Reference Numbers 292 and 301)
82 30591	Gear Assy., Governor (Incl. No. 81)	301 35355	Cap, Fuel
83 30588A	Spool, Governor	305 35577	Tube, Oil Fill
84 29193	Ring, Retaining	306 34265	Gasket, Fill Tube
86 650488	Screw, Sems, Hex 1/4-20 x 1-1/4	307 35499	"O" Ring
89 611004	Key, Flywheel	309 650562	Screw, Hex Washer Head, Shakeproof #10-32 x 1/2
90 611112	Flywheel	310 35578	Dipstick, Oil-Fill
92 650815	Washer, Belleville	313 34080	Spacer, Flywheel Key
93 650816	Nut, Flywheel	327 35392	Plug, Starter
100 34443A	Solid State Assembly	380 632046A	Carburetor (Includes Ref. #184)
101 610118	Cover, Spark Plug	390 590686	Starter, Rewind
103 650814	Screw, Sems, Torx T-15, Hex Washer Head #10-24 x 1	400 33238D	Gasket Set (incl. items marked *)
110 34961	Wire, Ground		
119 33015A	* Gasket, Cylinder Head		RPM Setting: High Speed: 2900-3200
120 34342	Head, Cylinder		
125 29313C	Valve, Exhaust, Standard Size		* Indicates Parts Included in Gasket Set, Ref. #400
29315C	Valve, Exhaust, 1/32" oversize		
126 29314B	Valve, Intake, Standard Size		
29315C	Valve, Intake, 1/32" oversize (All Valves Include Reference #151)		

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

CRAFTSMAN 4-CYCLE ENGINE

MODEL NUMBER 143.424072

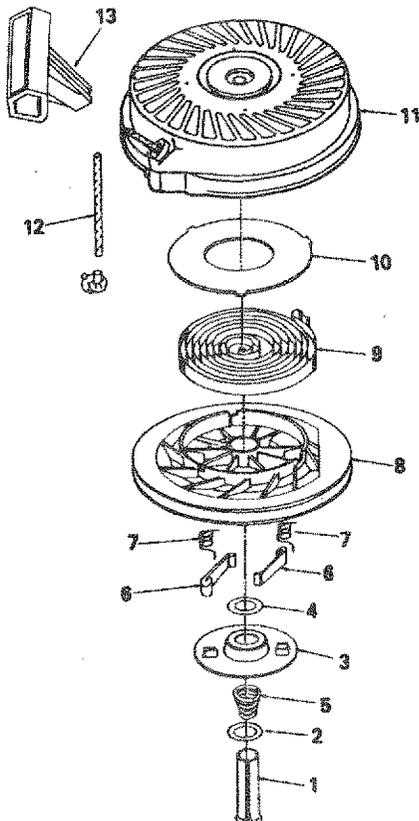
CARBURETOR NO. 632046A



REF PART NO.	PART NO.	DESCRIPTION
1	631615	Throttle Shaft and Lever Assembly
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 and Clip (Includes Reference Number 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

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

REWIND STARTER NO. 590686



REF PART NO.	PART NO.	DESCRIPTION
--	590686	Starter, Rewind
1	590599A	Pin, Spring (Includes Reference #4)
2	590600	Washer
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	590687	Housing Assembly, Starter, 40° Grommet
12	590535	Rope, Starter (98" long, 9/64" dia.)
13	590452	Handle, Starter

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

TROUBLESHOOTING POINTS

PROBLEM	CAUSE	CORRECTION
Does not start	<ol style="list-style-type: none"> 1. Dirty air filter. 2. Out of fuel. 3. Stale fuel. 4. Water in fuel. 5. Spark plug wire is disconnected. 6. Bad spark plug. 7. Loose blade or broken blade adapter. 8. Control bar in released position 9. Control bar defective 	<ol style="list-style-type: none"> 1. Clean/replace air filter. 2. Fill fuel tank. 3. Drain tank and refill with fresh clean fuel. 4. Drain fuel tank and carburetor and refill tank with fresh gasoline. 5. Connect wire to plug. 6. Replace spark plug. 7. Tighten blade bolt or replace blade adapter. 8. Depress control bar to handle. 9. Replace control bar.
Loss of power	<ol style="list-style-type: none"> 1. Rear of lawn mower housing/blade dragging in heavy grass. 2. Cutting too much grass. 3. Dirty air filter. 4. Buildup of grass, leaves and trash under mower. 5. Too much oil in engine. 6. Walking speed too fast. 	<ol style="list-style-type: none"> 1. Set in "Higher Cut" position. 2. Set in "Higher Cut" position. 3. Clean/replace air filter. 4. Clean underside of mower housing. 5. Check oil level. 6. Cut at slower walking speed.
Poor cut - uneven	<ol style="list-style-type: none"> 1. Worn, bent or loose blade. 2. Wheel heights uneven. 3. Low engine speed. 4. Buildup of grass, leaves, and trash under mower. 	<ol style="list-style-type: none"> 1. Replace blade. Tighten blade bolt. 2. Set all wheels at same height. 3. Set engine speed control in HIGH position. 4. Clean underside of mower housing.
Excessive vibration	<ol style="list-style-type: none"> 1. Worn, bent or loose blade. 2. Bent engine crankshaft. 	<ol style="list-style-type: none"> 1. Replace blade. Tighten blade bolt. 2. Contact Sears Service Department.
Starter rope hard to pull	<ol style="list-style-type: none"> 1. Engine flywheel brake is on when control bar is released. 2. Bent engine crankshaft 3. Blade adapter broken. 4. Blade dragging in grass. 	<ol style="list-style-type: none"> 1. Depress control bar to upper handle before pulling starter rope. 2. Contact Sears Service Department. 3. Replace blade adapter. 4. Move lawn mower to cut grass or to hard surface to start engine.
Loss of drive	<ol style="list-style-type: none"> 1. Drive wheels not turning with drive control engaged. 2. Belt not driving. 	<ol style="list-style-type: none"> 1. Adjust or replace drive control cable, if broken. 2. Put belt on pulleys or replace belts if broken.
Grass catcher not filling (if so equipped)	<ol style="list-style-type: none"> 1. Cutting height too low. 2. Lift on blade worn off. 3. Catcher not venting air. 	<ol style="list-style-type: none"> 1. Raise cutting height. 2. Replace blade. 3. Clean grass catcher.
Hard to push	<ol style="list-style-type: none"> 1. Grass is too high or wheel height is too low. 2. Rear of lawn mower housing/blade dragging in grass. 3. Grass catcher too full. 4. Handle height position not right for you. 	<ol style="list-style-type: none"> 1. Raise cutting height. 2. Raise rear of lawn mower housing one (1) setting higher. 3. Empty grass catcher. 4. Adjust handle height to suit.

SEARS

**OWNER'S
MANUAL**

**MODEL NO.
917.378170**

**HOW TO ORDER
REPAIR PARTS**

CRAFTSMAN®

**3.5 HORSEPOWER
22" SIDE DISCHARGE
POWER PROPELLED
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 here in 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 - 917.378170
- ENGINE - CRAFTSMAN -
MODEL NUMBER 143.424072
- 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.