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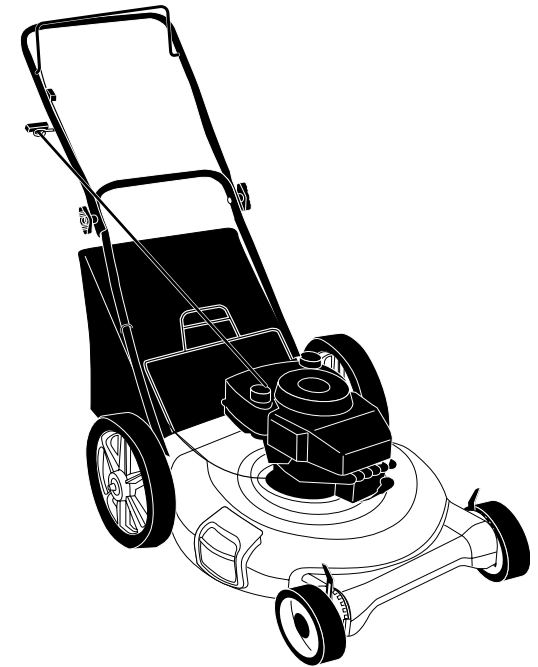
Owner's Manual

CRAFTSMAN®

6 HORSEPOWER 21" MULTI-CUT ROTARY LAWN MOWER

Model No.
944.360462

- **Safety**
- **Assembly**
- **Operation**
- **Maintenance**
- **Repair Parts**



CAUTION:

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

Sears Canada, Inc., Toronto, Ontario M5B 2B8

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WARRANTY

LIMITED TWO YEAR WARRANTY ON CRAFTSMAN POWER MOWER

For two years from date of purchase Sears Canada, Inc. will repair or replace at Sears option free of charge parts which are defective as a result of material or workmanship.

COMMERCIAL OR RENTAL USE:

Warranty on Power Mower (Gas) will be ninety (90) days from date of purchase if used for commercial or rental purposes.

This Warranty does **NOT** cover:

- Pre-delivery set-up.
- 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 Centre/Department in Canada. This warranty applies only while this product is in use in Canada.

This warranty is in addition to any statutory warranty and does not exclude or limit legal rights you may have but shall run concurrently with applicable provincial legislation. Furthermore, some provinces do NOT allow limitation on how long an implied warranty will last so the above limitations may not apply to you.

SEARS CANADA, INC., TORONTO, ONTARIO M5B 2B8

SAFETY RULES

Safety standards require operator presence controls to minimize the risk of injury. Your unit is equipped with such controls. Do not attempt to defeat the function of the operator presence controls under any circumstances.

TRAINING:

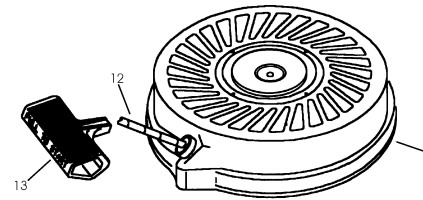
- Read this operator's manual carefully. Become familiar with the controls and know how to operate your mower properly. Learn how to quickly stop mower.
- Do not allow children to use your mower. Never allow adults to use mower without proper instructions.
- Keep the area of operation clear of all persons, especially small children and pets.
- Use mower only as the manufacturer

intended and as described in this manual.

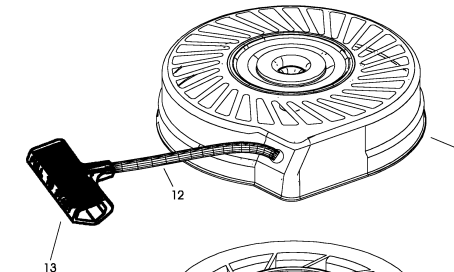
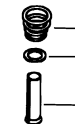
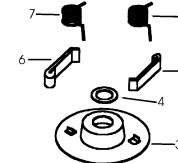
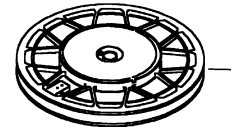
- Do not operate mower if it has been dropped or damaged in any manner. Always have damage repaired before using your mower.
- Do not use accessory attachments that are not recommended by the manufacturer. Use of such attachments may be hazardous.
- The blade turns when the engine is running.

PREPARATION:

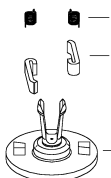
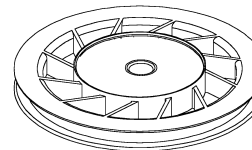
- Always thoroughly check the area to be mowed and clear it of all stones, sticks, wires, bones, and other foreign objects. These objects will be thrown by the blade and can cause severe injury.
- Always wear safety glasses or eye shields when starting and while using your mower.

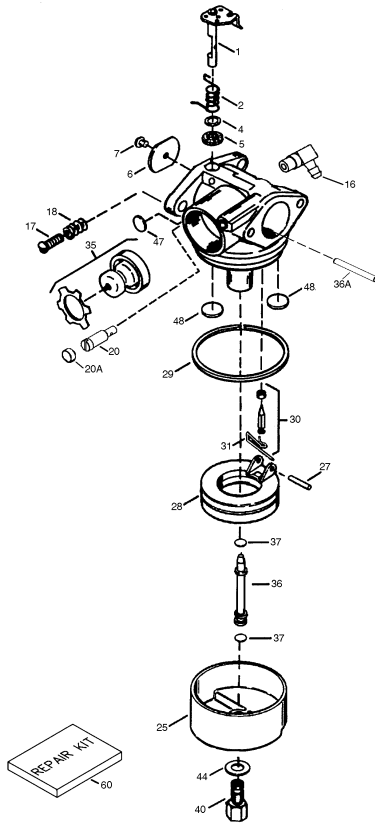


KEY PART NO.	PART NO.	DESCRIPTION
—	590694	Recoil Starter
1	590599A	Spring Pin (Incl. 4)
2	590600	Washer
3	590696	Retainer
4	590601	Washer
5	590697	Brake Spring
6	590698	Starter Dog
7	590699	Dog Spring
8	590700	Pulley & Rewind Spring Ass'y.
11	590695	Starter Housing Ass'y. (40 degree grommet)
12	590535	Starter Rope (98" X 9/64" dia.)
13	590701	Starter Handle



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





KEY PART NO.	NO.	DESCRIPTION
—	640262	Carburetor (Incl. 184 of Engine Parts List)
1	631615	Throttle Shaft & Lever Assembly
2	631767	Throttle Return Spring
4	631184 *	Dust Seal Washer
5	631183 *	Dust Seal (Throttle)
6	640070	Throttle Shutter
7	650506 *	Shutter Screw
16	631807	Fuel Fitting
17	651025	Throttle Crack Screw/Idle Speed Screw
18	630766	Tension Spring
20	640018	Idle Restrictor Screw
20A	640200	Idle Restrictor Scrw Cap (Black)
25	631867	Float Bowl
27	631024 *	Float Shaft
28	632019	Float
29	631028 *	Float Bowl "O" Ring
30	631021 *	Inlet Needle, Seat, & Clip (Incl. 31)
31	631022	Spring Clip
35	640259	Primer Bulb/Retainer Ring
36	640080	Main Nozzle Tube
36A	632766	Carburetor Tube
37	632547 *	"O" Ring, Main Nozzle Tube
40	640175	High Speed Bowl Nut
44	27110A *	Bowl Nut Washer
47	630748 *	Welch Plug, Idle Mixture Well
48	631027 *	Welch Plug, Atmospheric Vent
60	632760B	Repair kit (Incl. Items Marked *)

- Dress properly. Do not operate mower when barefoot or wearing open sandals. Wear only solid shoes with good traction when mowing.
- Check fuel tank before starting engine. Do not fill gas tank indoors, when the engine is running or when the engine is hot. Allow the engine to cool for several minutes before filling the gas tank. Clean off any spilled gasoline before starting the engine.
- Always make wheel height adjustments before starting your mower. Never attempt to do this while the engine is running.
- Mow only in daylight or good artificial light.

OPERATION:

- Keep your eyes and mind on your mower and the area being cut. Do not let other interests distract you.
- Do not mow wet or slippery grass. Never run while operating your mower. Always be sure of your footing — keep a firm hold on the handles and walk.
- Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
- Always stop the engine whenever you leave or are not using your mower, or before crossing driveways, walks, roads, and any gravel-covered areas.
- Never direct discharge of material toward bystanders nor allow anyone near the mower while you are operating it.
- Before cleaning, inspecting, or repairing your mower, stop the engine and make absolutely sure the blade and all moving parts have stopped. Then disconnect the spark plug wire and keep it away from the spark plug to prevent accidental starting.
- Do not continue to run your mower if you hit a foreign object. Follow the procedure outlined above, then repair any damage before restarting and operating your mower.
- Do not change the governor settings or overspeed the engine. Engine damage or personal injury may result.
- Do not operate your mower if it vibrates abnormally. Excessive vibration is an indication of damage; stop the engine, safely check for the cause of vibration and repair as required.

- Do not run the engine indoors. Exhaust fumes are dangerous.
- Never cut grass by pulling the mower towards you. Mow across the face of slopes, never up and down or you might lose your footing. Do not mow excessively steep slopes. Use caution when operating the mower on uneven terrain or when changing directions — maintain good footing.
- Never operate your mower without proper guards, plates, grass catcher or other safety devices in place.

MAINTENANCE AND STORAGE:

- Check the blade and the engine mounting bolts often to be sure they are tightened properly.
- Check all bolts, nuts and screws at frequent intervals for proper tightness to be sure mower is in safe working condition.
- Keep all safety devices in place and working.
- To reduce fire hazard, keep the engine free of grass, leaves or excessive grease and oil.
- Check grass catcher often for deterioration and wear and replace worn bags. Use only replacement bags that are recommended by and comply with specifications of the manufacturer of your mower.
- Always keep a sharp blade on your mower.
- Allow engine to cool before storing in any enclosure.
- Never store mower with fuel in the tank inside a building where fumes may reach an open flame or an ignition source such as a hot water heater, space heater, clothes dryer, etc.

⚠ Look for this symbol to point out important safety precautions. It means CAUTION!!! BECOME ALERT!!! YOUR SAFETY IS INVOLVED.

⚠ CAUTION: Always disconnect spark plug wire and place wire where it cannot contact spark plug in order to prevent accidental starting when setting up, transporting, adjusting or making repairs.

ASSEMBLY

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

IMPORTANT: This lawn mower is shipped WITHOUT OIL OR GASOLINE in the engine. Your new lawn mower has been assembled at the factory with the exception of those parts left unassembled for shipping purposes. All parts such as nuts, washers, bolts, etc., necessary to complete the assembly have been placed in the parts bag. To ensure safe and proper operation of your lawn mower, all parts and hardware you assemble must be tightened securely. Use the correct tools as necessary to ensure proper tightness.

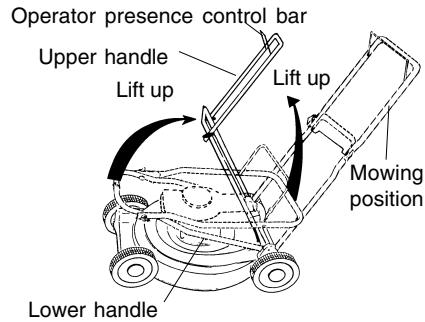
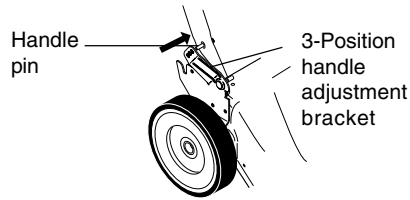
TO REMOVE LAWN MOWER FROM CARTON

- Remove loose parts included with mower.
- Cut down two end corners of carton and lay end panel down flat.
- Remove all packing materials except padding between upper and lower handle and padding holding operator presence control bar to upper handle.
- Roll lawn mower out of carton and check carton thoroughly for additional loose parts.

HOW TO SET UP YOUR LAWN MOWER TO UNFOLD HANDLE

IMPORTANT: Unfold handles carefully so as not to pinch or damage control cables.

- Raise lower handle section to operating position and squeeze the bottom ends of lower handle towards each other until the pin in handle can be inserted into one of the three height adjustment holes.
- Remove protective padding, raise upper handle section into place on lower handle and tighten both handle knobs.
- Remove any packing material from around control bar.
- Your handles may be adjusted for your mowing comfort. Refer to Service and Adjustments section of this manual.

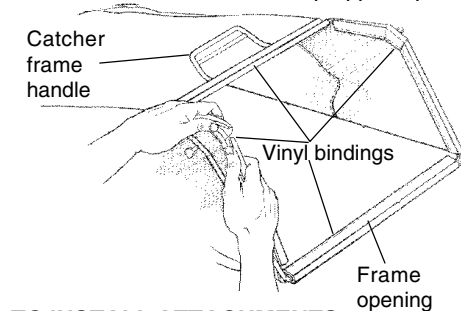


TO ASSEMBLE GRASS CATCHER

- Put grass catcher frame into grass bag with rigid part of bag on the bottom. Make sure the frame handle is outside of the bag top.
- Slip vinyl bindings over frame.

NOTE: If vinyl bindings are too stiff, hold them in warm water for a few minutes. If bag gets wet, let it dry before using.

CAUTION: Do not run your lawn mower without mulcher plug in place or approved clipping deflector or grass catcher in place. Never attempt to operate the lawn mower with the rear door removed or propped open.



TO INSTALL ATTACHMENTS

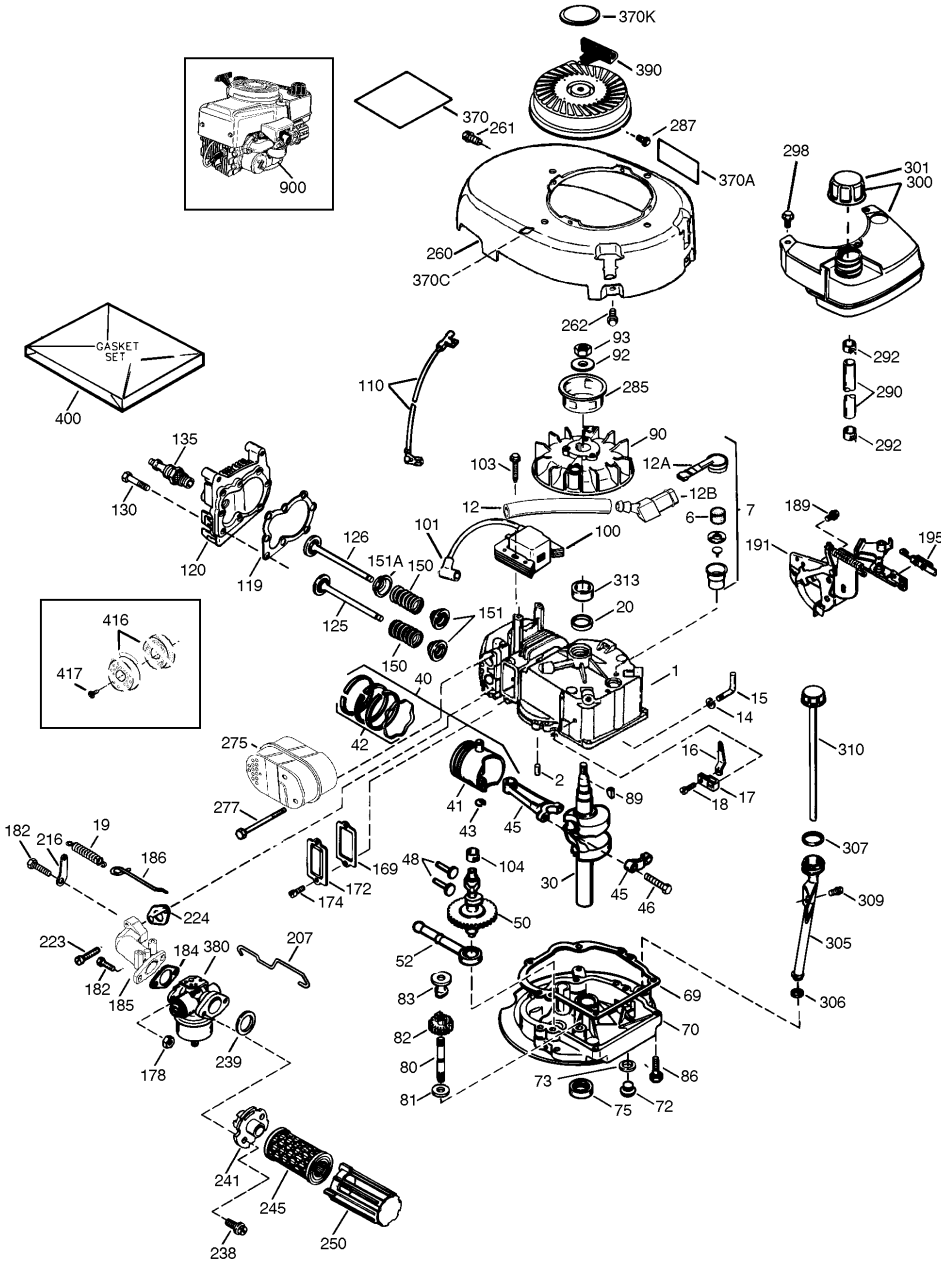
Your lawn mower was shipped ready to be used as a mulcher. To convert to bagging or discharging, see "TO CONVERT MOWER" in the OPERATION section of this manual.

CRAFTSMAN 4-CYCLE ENGINE

MODEL NO. 143.006000

KEY PART NO.	NO.	DESCRIPTION	KEY PART NO.	NO.	DESCRIPTION
1	37266	Cylinder (Incl. 2,20 & 150)	150	31672	Valve Spring
2	26727	Dowel Pin	151	31673	Valve Spring Cap
6	33734	Breather Element	151A	40017	Intake Valve Seal
7	36557	Breather Ass'y. (Incl. 6 & 12A)	169	36783	* Valve Cover Gasket
			172	36784	Valve Cover
12	36775	Breather Tube	174	30200	Screw, 10-24 x 9/16"
12A	36558	Breather Cover & Tube (Incl. 12B)	178	29752	Nut & Lock Washer, 1/4-28
			182	6201	Screw, 1/4-28 x 7/8"
12B	36694	Breather Tube Elbow	184	26756	* Carburetor To Intake Pipe Gasket
14	28277	Washer			Intake Pipe
15	30589	Governor Rod (Incl. 14)	185	36785	Governor Link
16	34839A	Governor Lever	186	32653	Screw, 1/4-20 x 3/8"
17	31335	Governor Lever Clamp	189	650839	S.E. Brake Bracket (Incl. 195)
18	651018	Screw, Torx T-15, 8-32 x 19/64"	191	36559A	Terminal
			195	610973	Throttle Link
19	36281	Extension Spring	207	34336	R.P.M. Adjusting Lever
20	32600	Oil Seal	216	33086	Screw, 1/4-20 x 1"
30	36776	Crankshaft	223	650451	* Intake Pipe Gasket
40	40004	Piston, Pin & Ring Set (Std.)	224	36786	Screw, 10-32 x 49/64"
			238	650932	* Air Cleaner Gasket
41	36070	Piston, Pin & Ring Set (.010" OS)	239	34338	Air Cleaner Collar
			241	35797	Air Cleaner Filter
			245	35066	Air Cleaner Cover
			250	35065	Blower Housing
			260	36980	Screw, 10-24 x 9/16"
42	40006	Ring Set (Std.)	261	30200	Screw, 1/4-20 x 1/2"
			262	650831	Muffler
43	20381	Ring Set (.010" OS)	275	36790A	Screw, 1/4-20 x 2-5/16"
45	36777	Piston Pin Retaining Ring (Incl. 46)	285	35000A	Starter Cup
			287	650926	Screw, 8-32 x 21/64"
46	32610A	Connecting Rod Bolt	290	29774	Fuel Line
48	27241	Valve Lifter	292	26460	Fuel Line Clamp
50	36778	Camshaft (Exhaust MCR) (Inc. Ref. 104)	298	28763	Screw, 10-32 x 35/64"
			300	36916	Fuel Tank (Incl. 292 & 301)
52	29914	Oil Pump Ass'y.	301	36246	Fuel Cap
69	35261	* Mounting Flange Gasket	305	35647	Oil Fill Tube
70	34311E	Mounting Flange (Incl. 72 thru 83,306)	306	36996	* "O"-Ring
			307	35499	"O"-Ring
72	30572	Oil Drain Plug (Incl. 73)	309	650562	Screw, 10-32 x 1/2"
73	28833	Drain Plug Gasket	310	35648	Dipstick
75	27897	Oil Seal	313	34080	Spacer
80	30574A	Governor Shaft	370	37269	6.0 H.P. Craftsman Decal
81	30590A	Washer	370A	36261	Lubrication Decal
82	30591	Governor Gear Ass'y. (Incl. 81)	370C	37318	Primer Decal
			370K	36695	Starter Decal
83	30588A	Governor Spool	370R	37317	Warning Decal
86	650488	Screw, 1/4-20 x 1-1/4"	380	640262	Carburetor (Incl. 184)
89	611004	Flywheel Key	390	590737	Rewind Starter
90	611112	Flywheel	400	36792B	Gasket Set (Incl. Items Marked*)
92	650815	Belleville Washer			Spark Arrestor Kit (Incl. 417)(Optional)
93	650816	Flywheel Nut	416	36085	Screw, 10-32 x 1/2" (Optional)
100	34443B	Solid State Ignition	900	---	Replacement Engine NONE
101	610118	Spark Plug Cover	900	---	Replacement S/B 750796C, order from 71-999
103	651007	Screw, Torx T-15, 10-24 x 15/16"			RPM High 2900 to 3200
104	37480	Cam Bushing			
110	37047	Ground Wire			
119	36787	* Cylinder Head Gasket			
120	36825	Cylinder Head			
125	37288	Exhaust Valve (Std.) (Incl. 151)			
126	37289	Intake Valve (Std.) (Incl. 151)			
130	6021A	Screw, 5/16-18 x 1-1/2"			
135	35395	Resistor Spark Plug (RJ19LM)			

NOTE: This engine could have been built with 590694 starter.
NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm

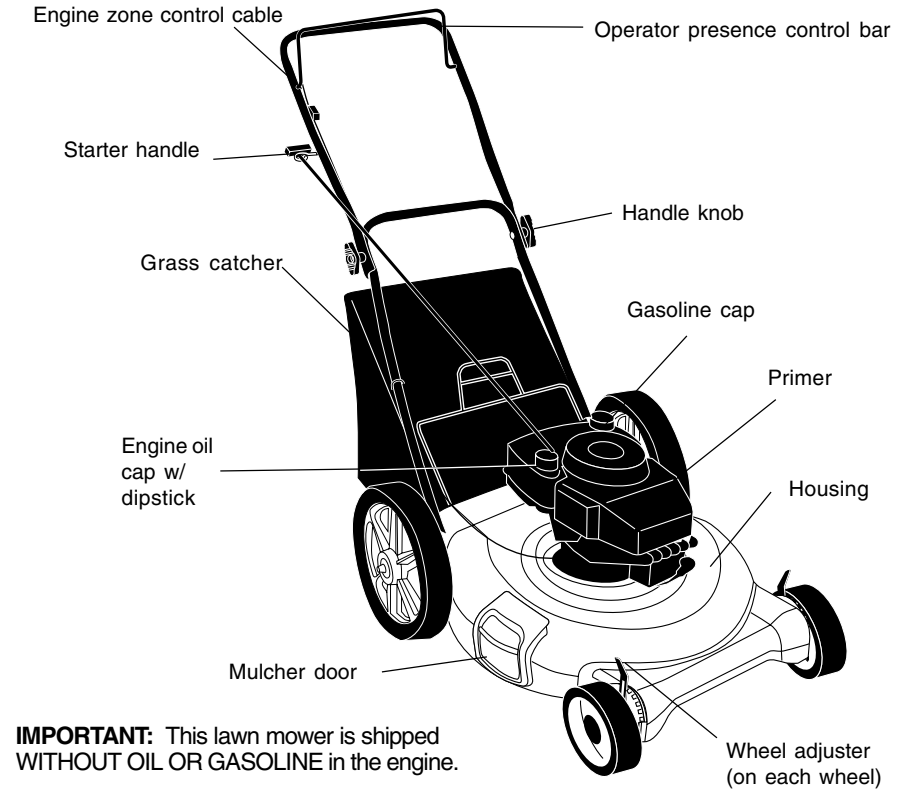
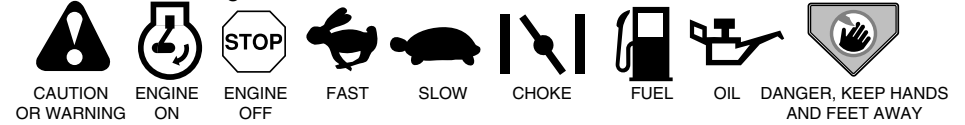


OPERATION

KNOW YOUR LAWN MOWER

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

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



IMPORTANT: This lawn mower is shipped WITHOUT OIL OR GASOLINE in the engine.

MEETS CPSC SAFETY REQUIREMENTS

Sears rotary walk-behind power lawn mowers conform to the safety standards of the American National Standards Institute and the U.S. Consumer Product Safety Commission. The blade turns when the engine is running.

Operator presence control bar - must be held down to the handle to start the engine. Release to stop the engine.

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

Starter handle - used for starting the engine.



The operation of any lawn mower can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your lawn mower or performing any adjustments or repairs. We recommend a wide vision safety mask over spectacles or standard safety glasses.

HOW TO USE YOUR LAWN MOWER ENGINE SPEED

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

ENGINE ZONE CONTROL

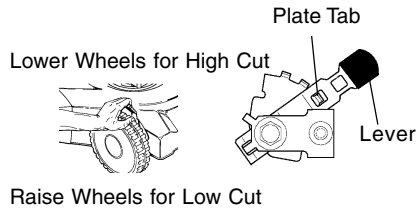
CAUTION: Federal regulations require an engine control to be installed on this lawn mower in order to minimize the risk of blade contact injury. Do not under any circumstances attempt to defeat the function of the operator control. The blade turns when the engine is running.

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

TO ADJUST CUTTING HEIGHT

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

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

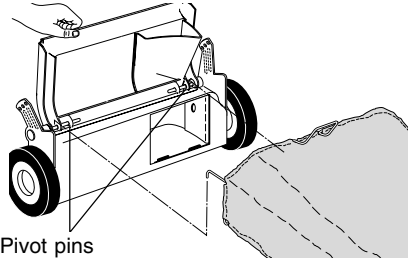


TO CONVERT MOWER

Your lawn mower was shipped ready to be used as a mulcher. To convert to bagging or discharging:

REAR BAGGING

- Lift rear door of the lawn mower and place the grass catcher frame hooks onto the door pivot pins.
- To convert to mulching or discharging operation, remove grass catcher and close rear door.



Pivot pins

SIDE DISCHARGING

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

SIMPLE STEPS TO REMEMBER WHEN CONVERTING YOUR LAWN MOWER

FOR MULCHING -

- Rear door closed.
- Mulcher door closed.

FOR REAR BAGGING -

- Grass catcher installed.
- Mulcher door closed.

FOR SIDE DISCHARGING -

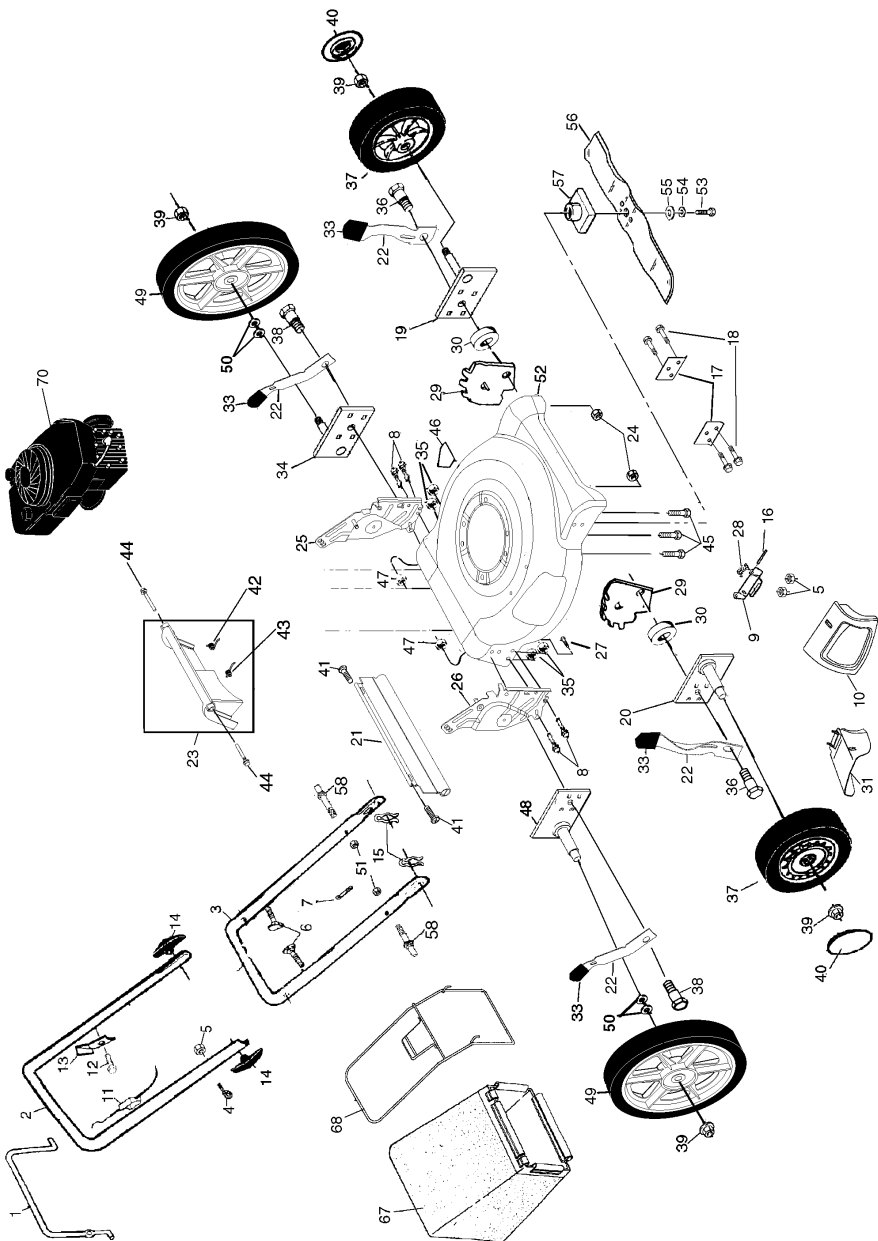
- Rear door closed.
- Side discharge deflector installed.

CAUTION: Do not run your lawn mower without rear door closed or approved grass catcher in place. Never attempt to operate the lawn mower with the rear door removed or propped open.

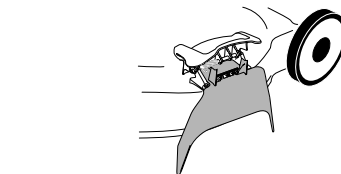
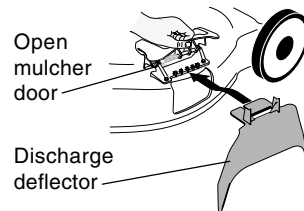
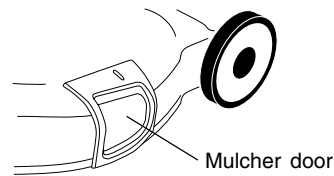
ROTARY LAWN MOWER MODEL NUMBER 944.360462

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	131696	Control Bar	33	87877	Selector Knob
2	166860X479	Upper Handle	34	167130X004	Axle Arm Assembly - LR
3	161105X479	Lower Handle	35	166785	Locknut 5/16-18
4	132001	Rope Guide	36	160828	Shoulder Bolt 5/16-18
5	63601	Locknut 1/4-20	37	151162	Wheel Assembly
6	131959	Handle Bolt	38	164362	Shoulder Bolt
7	66426	Wire Tie	39	83923	Flanged Locknut
8	74780512	Hex Bolt 5/16-18 x 3/4	40	77400	Hubcap
9	154132	Hinge Bracket	41	88652	Hinge Screw
10	165754	Mulcher Door	42	165766	Spring (LH)
11	156577	Engine Zone Control Cable	43	165767	Spring (RH)
12	750097	Hex Washer Head Screw #10-24 x 1/2	44	165912	Door Bolt
13	850733X004	Up-Stop Bracket	45	150406	Hex Head Thread Rolling Screw 3/8-16 x 1
14	136376	Handle Knob	46	107339X	Danger Decal
15	51793	Hairpin Cotter	47	63124	Nut
16	147286	Hinge Rod	48	167131X004	Axle Arm Assembly - RR
17	165946X479	Support Bracket	49	151161	Wheel
18	17600406	Screw	50	57143	Wave Washer
19	167132X004	Axle Arm Assembly - LF	51	73990500	Nut
20	167133X004	Axle Arm Assembly - RF	52	167712	Housing Assembly (Incl. Ref. #17, 18 & 46)
21	165858	Rear Skirt	53	851084	Hex Head Screw 3/8-24 x 1-3/8 Grd. 8
22	168360X004	Selector Spring	54	850263	Helical Lockwasher
23	166875	Rear Door Assembly Kit (Incl. Springs)	55	851074	Hardened Washer
24	751153	Locknut 5/16-18	56	165833	2 1/2" Blade
25	166236X479	Handle Bracket Assembly (Left)	57	851514	Blade Adapter
26	166243X479	Handle Bracket Assembly (Right)	58	161551	Adjustment Bolt
27	851856	Screw 1/4-20 x 3/8	67	167710	Grass Bag
28	152124	Hinge Spring	68	165755	Catcher Frame
29	160835X007	Wheel Adjusting Bracket - Front	70	-----	Engine - (See Breakdown)
30	19112222	Spacer	---	---	Craftsman 143.006000
31	165760	Clip on Discharge Guard	---	---	Warning Decal (Not Shown)
			---	---	Owner's Manual (English)
			---	---	Owner's Manual (French)

REPAIR PARTS

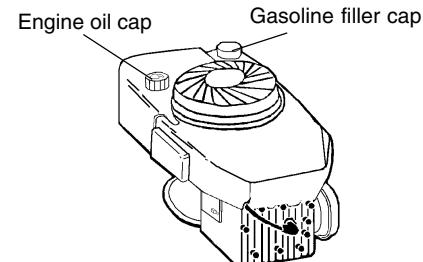


ROTARY LAWN MOWER MODEL NUMBER 944.360462



⚠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 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.

⚠CAUTION: Fill to bottom of gas tank filler neck. Do not overfill. Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame.



BEFORE STARTING ENGINE OIL

Your lawn mower is shipped without oil in the engine.

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

NOTE: Allow oil to settle down into engine for accurate dipstick reading.

- Engine holds 20 ozs. of oil. For type and grade of oil to use, see "ENGINE" in Maintenance section of this manual.
- Pour oil slowly. Do not over fill.
- Check oil level before each use. Add oil if needed. Fill to full line on dipstick.
- To read proper level, tighten engine oil cap each time.
- Reinstall engine oil cap and tighten.
- Change the oil after every 25 hours of operation or each season. You may need to change the oil more often under dusty, dirty conditions.

ADD GASOLINE

- Fill fuel tank. Use fresh, clean, regular unleaded gasoline with a minimum of 87 octane. Do not mix oil with gasoline. Purchase fuel in quantities that can be used within 30 days to assure fuel freshness.

TO START ENGINE

- To start a cold engine, push primer three (3) times before trying to start. Use a firm push. This step is not usually necessary when starting an engine which has already run for a few minutes.
- Hold operator presence control bar down to the handle and pull starter handle quickly. Do not allow starter rope to snap back.
- To stop engine, release operator presence control bar.

NOTE: In cooler weather it may be necessary to repeat priming steps. In warmer weather over priming may cause flooding and engine will not start. If you do flood engine, wait a few minutes before attempting to start and do not repeat priming steps.

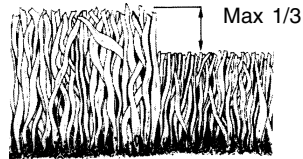
MOWING TIPS

- Under certain conditions, such as very tall grass, it may be necessary to raise the height of cut to reduce pushing effort and to keep from overloading the engine and leaving clumps of grass clippings. It may also be necessary to reduce ground speed and/or run the lawn mower over the area a second time.
- For extremely heavy cutting, reduce the width of cut by overlapping previously cut path and mow slowly.
- For better grass bagging and most cutting conditions, the engine speed should be set in the fast position.
- Pores in cloth grass catchers can become filled with dirt and dust with use and catchers will collect less grass. To prevent this, regularly hose catcher off with water and let dry before using.
- Keep top of engine around starter clear and clean of grass clippings and chaff. This will help engine air flow and extend engine life.

MULCHING MOWING TIPS

IMPORTANT: For best performance, keep mower housing free of built-up grass and trash. See “Cleaning” in Maintenance section of this manual.

- The special mulching blade will recut the grass clippings many times and reduce them in size so that as they fall onto the lawn they will disperse into the grass and not be noticed. Also, the mulched grass will biodegrade quickly to provide nutrients for the lawn. Always mulch with your highest engine (blade) speed as this will provide the best recutting action of the blades.
- Avoid cutting your lawn when it is wet. Wet grass tends to form clumps and interferes with the mulching action. The best time to mow your lawn is the early afternoon. At this time the grass has dried and the newly cut area will not be exposed to the direct sun.
- For best results, adjust the lawn mower cutting height so that the lawn mower cuts off only the top one-third of the grass blades. If the lawn is overgrown it will be necessary to raise the height of cut to reduce pushing effort and to keep from overloading the engine and leaving clumps of mulched grass. For extremely heavy mulching, reduce your width of cut by overlapping previously cut path and mow slowly.



- Certain types of grass and grass conditions may require that an area be mulched a second time to completely hide the clippings. When doing a second cut, mow across or perpendicular to the first cut path.
- Change your cutting pattern from week to week. Mow north to south one week then change to east to west the next week. This will help prevent matting and graining of the lawn.

PRODUCT SPECIFICATIONS

SERIALNUMBER	
DATE OF PURCHASE	
GASOLINE CAPACITY/ TYPE:	1.5 QUARTS UNLEADED REGULAR
OIL TYPE (API-SF/SG/SH):	SAE 30 (ABOVE 32°F) SAE 5W-30 (BELOW 32°F)
OIL CAPACITY:	20 OZS.
SPARK PLUG (GAP: .030")	CHAMPION RJ19LM OR J19LM
VALVE CLEARANCE:	INTAKE: .004 - .008 EXHAUST: .004 - .008
SOLID STATE IGNITION AIR GAP:	.0125 IN.
BLADE BOLT TORQUE:	35-40 FT. LBS.
<ul style="list-style-type: none"> The model and serial numbers will be found on a decal attached to the rear of the lawn mower housing. Record both serial number and date of purchase in space provided above. 	

LAWNMOWER

Always observe safety rules when performing any maintenance.

TIRES

- Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.
- Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.

BLADE CARE

For best results, mower blade must be kept sharp. Replace bent or damaged blades.

TO REMOVE BLADE

- Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with spark plug.
- Turn lawn mower on its side. Make sure air filter and carburetor are up.
- Use a wood block between blade and mower housing to prevent blade from turning when removing blade bolt.
- Protect your hands with gloves and/or wrap blade with heavy cloth.
- Remove blade bolt by turning counter-clockwise.
- Remove blade and attaching hardware (bolt, lock washer and hardened washer).

NOTE: Remove the blade adapter and check the key inside hub of blade adapter. The key must be in good condition to work properly. Replace adapter if damaged.

TO REPLACE BLADE

- Position the blade adapter on the engine crankshaft. Be sure key in adapter and crankshaft keyway are aligned.
- Position blade on the blade adapter aligning the two (2) holes in the blade with the raised lugs on the adapter.
- Be sure the trailing edge of blade (opposite sharp edge) is up toward the engine.
- Install the blade bolt with the lock washer and hardened washer into blade adapter and crankshaft.
- Use block of wood between blade and lawn mower housing and tighten the blade bolt, turning clockwise.
- The recommended tightening torque is 35-40 ft. lbs.

TROUBLESHOOTING CHART

PROBLEM	CAUSE	CORRECTION
Does not start	<ol style="list-style-type: none"> Dirty air filter. Out of fuel. Stale fuel. Water in fuel. Spark plug wire is disconnected. Bad spark plug. Loose blade or broken blade adapter. Control bar in released position. Control bar defective. 	<ol style="list-style-type: none"> Clean/replace air filter. Fill fuel tank. Drain tank and refill with fresh clean fuel. Drain fuel tank and carburetor and refill tank with fresh gasoline. Connect wire to plug. Replace spark plug. Tighten blade bolt or replace blade adapter. Depress control bar to handle. Replace control bar.
Loss of power	<ol style="list-style-type: none"> Rear of lawn mower housing or cutting blade dragging in heavy grass. Cutting too much grass. Dirty air filter. Buildup of grass, leaves, and trash under mower. Too much oil in engine. Walking speed too fast. 	<ol style="list-style-type: none"> Set to "Higher Cut" position. Set to "Higher Cut" position. Clean/replace air filter. Clean underside of mower housing. Check oil level. Cut at slower walking speed.
Poor cut – uneven	<ol style="list-style-type: none"> Worn, bent or loose blade. Wheel heights uneven. Buildup of grass, leaves and trash under mower. 	<ol style="list-style-type: none"> Replace blade. Tighten blade bolt. Set all wheels at same height Clean underside of mower housing.

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

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

ENGINE OIL

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

CYLINDER

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

OTHER

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

IMPORTANT: Never cover mower while engine and exhaust areas are still warm.

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

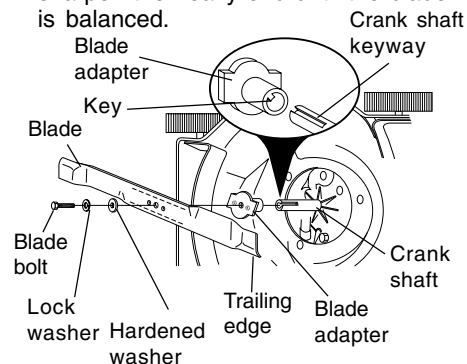
IMPORTANT: Blade bolt is grade 8 heat treated.

TO SHARPEN BLADE

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

Care should be taken to keep the blade balanced. An unbalanced blade will cause eventual damage to lawn mower or engine.

- The blade can be sharpened with a file or on a grinding wheel. Do not attempt to sharpen while on the mower.
- To check blade balance, drive a nail into a beam or wall. Leave about one inch of the straight nail exposed. Place center hole of blade over the head of the nail. If blade is balanced, it should remain in a horizontal position. If either end of the blade moves downward, sharpen the heavy end until the blade is balanced.



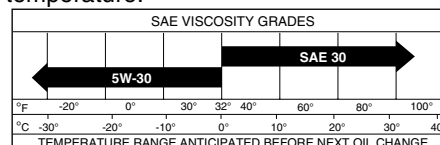
GRASS CATCHER

- The grass catcher may be hosed with water, but must be dry when used.
- Check your grass catcher often for damage or deterioration. Through normal use it will wear. If catcher needs replacing, replace only with a manufacturer approved replacement catcher. Give the lawn mower model number when ordering.

ENGINE

LUBRICATION

Use only high quality detergent oil rated with API service classification SF, SG or SH. Select the oil's SAE viscosity grade according to your expected operating temperature.



NOTE: Although multi-viscosity oils (5W30, 10W30 etc.) improve starting in cold weather, these multi-viscosity oils will result in increased oil consumption when used above 32°F. Check your engine oil level more frequently to avoid possible engine damage from running low on oil.

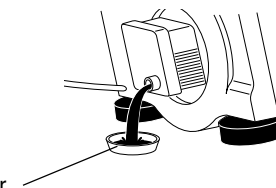
Change the oil after every 25 hours of operation or at least once a year if the lawn mower is not used for 25 hours in one year.

Check the crankcase oil level before starting the engine and after each five (5) hours of continuous use. Tighten oil plug securely each time you check the oil level.

TO CHANGE ENGINE OIL

NOTE: Before tipping lawn mower to drain oil, drain fuel tank by running engine until fuel tank is empty.

- Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with spark plug.
- Remove engine oil cap; lay aside on a clean surface.
- Tip lawn mower on its side as shown and drain oil into a suitable container. Rock lawn mower back and forth to remove any oil trapped inside of engine.
- Wipe off any spilled oil on lawn mower and on side of engine.
- Fill engine with oil. Fill only to the "FULL" line on the dipstick. DO NOT overfill.
- Replace engine oil cap.
- Reconnect spark plug wire to spark plug.



Container

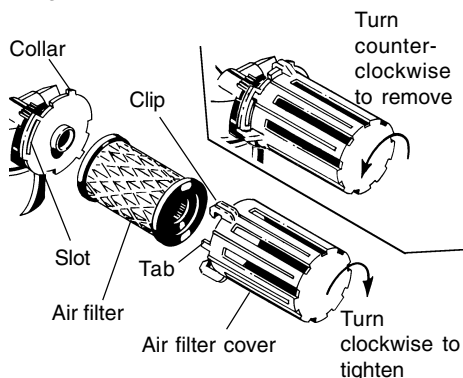
AIR FILTER

Your engine will not run properly and may be damaged by using a dirty air filter. Replace the air filter every year, more often if you mow in very dusty, dirty conditions. Do not wash air filter.

TO CHANGE AIR FILTER

- Remove the air filter by turning counter-clockwise to the stop and pull away from collar.
- Remove filter from inside of cover.
- Clean the inside of the cover and the collar to remove any dirt accumulation.

- Insert new filter into cover.
- Put air filter cover and filter into collar aligning the tab with the slot.
- Push in on cover and turn 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.

CLEANING

IMPORTANT: For best performance, keep mower housing free of built-up grass and trash. Clean the underside of your mower after each use.

CAUTION: Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with the spark plug.

- Turn lawn mower on its side. Make sure air filter and carburetor are up. Clean the underside of your lawn mower by scraping to remove build-up of grass and trash.
- Clean engine often to keep trash from accumulating. A clogged engine runs hotter and shortens engine life.
- Keep finished surfaces and wheels free of all gasoline, oil, etc.
- We do not recommend using a garden hose to clean lawn mower unless the electrical system, muffler, air filter and carburetor are covered to keep water out. Water in engine can result in shortened engine life.

SERVICE AND ADJUSTMENTS

CAUTION: Before performing any service and adjustments:

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

LAWNMOWER

TO ADJUST CUTTING HEIGHT

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

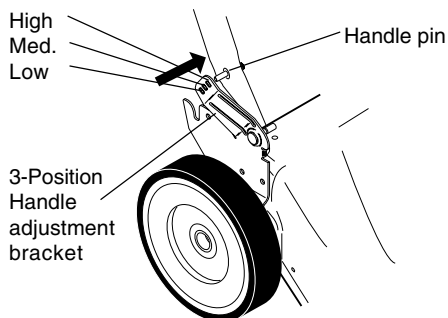
REAR DEFLECTOR

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

TO ADJUST HANDLE

The handle on your lawn mower has three (3) height positions - adjust to height that suits you.

- Squeeze the bottom ends of lower handle towards each other until the pin in handle can be inserted into one of the three height adjustment holes.



ENGINE SPEED

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

CARBURETOR

Your carburetor has a non-adjustable fixed main jet for mixture control. If your engine does not operate properly due to suspected carburetor problems, take your lawn mower to an authorized service center for repair and/or adjustment.

IMPORTANT: Never tamper with the engine governor, which is factory set for proper engine speed. Overspeeding the engine above the factory high speed setting can be dangerous. If you think the engine-governed high speed needs adjusting, contact your nearest authorized service center, which has proper equipment and experience to make any necessary adjustments.

STORAGE

Immediately prepare your lawn mower for storage at the end of the season or if the unit will not be used for 30 days or more.

LAWNMOWER

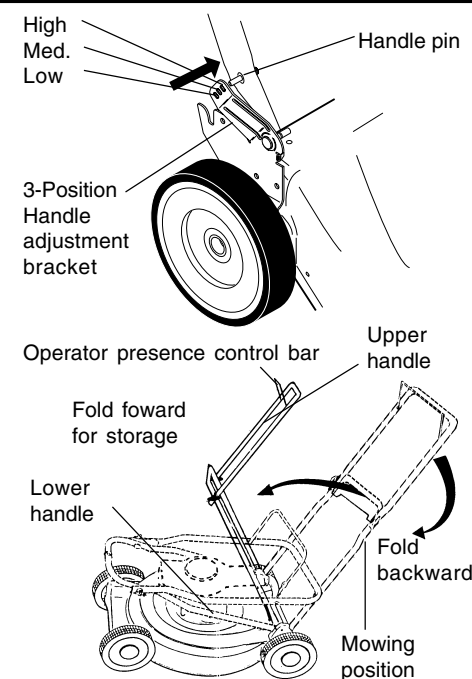
When lawn mower is to be stored for a period of time, clean it thoroughly, remove all dirt, grease, leaves, etc. Store in a clean, dry area.

- Clean entire lawn mower (See "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

- You can fold your lawn mower handle for storage.
- Loosen the two (2) handle knobs on sides of the upper handle and allow handle to fold down to the rear.
- Squeeze the bottom ends of lower handle toward each other until pins in handle clear the brackets and pivot entire handle assembly forward and allow it to rest on mower.
- When setting up your handle from the storage position, the lower handle will require manually locking into the mowing position.

IMPORTANT: When folding the handle for storage or transportation, be sure to fold the handle as shown or you may damage the control cables.



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.