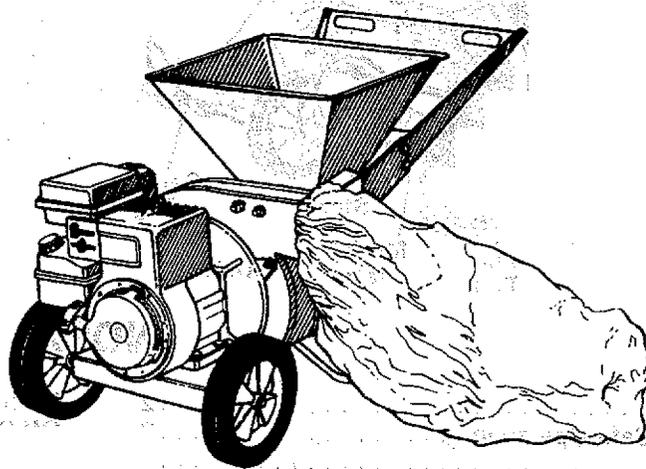


# SEARS

OWNERS  
MANUAL

MODEL NO.  
247.796893



## WARNING

Carefully read and follow Safety Rules, Precautions and Operating Instructions. Failure to do so can result in serious personal injury.

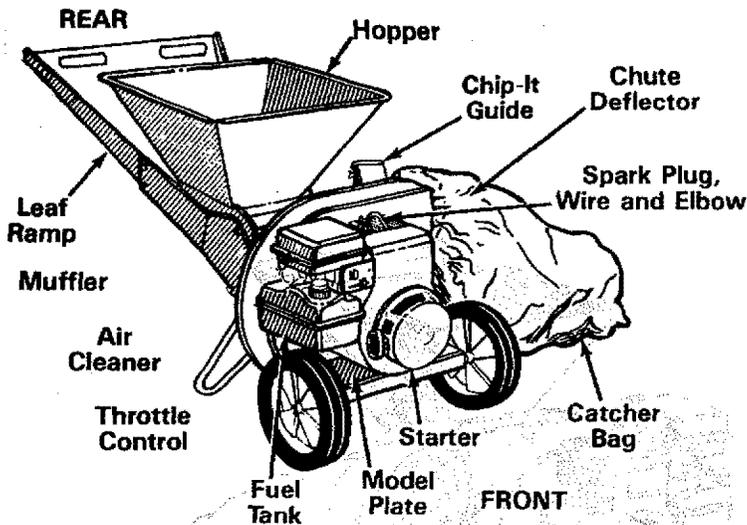
# SEARS / CRAFTSMAN®

## 5 H.P. CHIPPER-SHREDDER

- Assembly
  - Operation
  - Maintenance
  - Repair Parts
- Always wear eye protection during operation

Sold by Sears, Roebuck and Co., Chicago, Ill. 60684 U.S.A.

Part No. 770-5875E 8/89



MODEL NUMBER \_\_\_\_\_  
 SERIAL NUMBER \_\_\_\_\_

THE MODEL AND SERIAL NUMBERS WILL BE FOUND ON THE MODEL PLATE ATTACHED TO THE FRAME. SEE ILLUSTRATION AT LEFT.

YOU SHOULD RECORD BOTH MODEL AND SERIAL NUMBERS AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

 Instructions given with this symbol are for personal safety. Be sure to follow them.

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### MAINTENANCE AGREEMENT

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

### LIMITED ONE YEAR WARRANTY ON CRAFTSMAN GAS CHIPPER-SHREDDER

For one year from the date of purchase, when this Craftsman Chipper-Shredder 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 Chipper-Shredder is used for commercial or rental purpose, this warranty applies for only 30 days from the date of purchase.

This warranty does not cover:

- Expendable items which become worn during normal use, such as blades, blade guides, blade adapters, air cleaners, spark plugs and catcher bags;
- Repairs necessary because of operator abuse or negligence, including bent crankshafts.

WARRANTY SERVICE IS AVAILABLE BY RETURNING THE CRAFTSMAN CHIPPER-SHREDDER TO THE NEAREST SERVICE CENTER/DEPARTMENT 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., Dept. 731CR-W, Sears Tower, Chicago, IL 60684

### NOTE

This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler (see page 19) is available at your Sears Authorized Service Center.



## WARNING

To reduce the potential for any injury, comply with the following safety instructions. Failure to comply with the instructions may result in personal injury.

# RULES FOR SAFE OPERATION

## TRAINING

1. Read this owner's manual carefully in its entirety before attempting to assemble or operate this machine. Be completely familiar with the controls and the proper use of this machine before operating it. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. Children must never be allowed to operate this equipment.
3. No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions.
4. This equipment should never be operated in the vicinity of children, pets or other persons.
5. Never run your machine in an enclosed area as the exhaust from the engine contains carbon monoxide, which is an odorless, tasteless and deadly poisonous gas.
6. Never allow your hands or any part of your body or clothing inside the feeding chamber, discharge chute, or near any moving part while the machine or engine is running.
7. If it is necessary for any reason to inspect or repair the feeding chamber or any part of the machine where a moving part can come in contact with your body or clothing, stop the machine, allow it to cool, and disconnect the spark plug wire from the spark plug before attempting such inspection or repair.

## PREPARATION

1. Wear safety glasses provided with your unit while operating the chipper-shredder to prevent injury from any chips which may be ejected out of the openings.
2. Wear proper apparel. Avoid wearing loose fitting clothing. Wear gloves when handling material.
3. **HANDLE FUEL WITH CARE** as gasoline is an extremely flammable fuel.
  - A. Check the fuel before starting the engine. Do not fill the fuel tank indoors, while the engine is running, or while the engine is still hot. Turn the unit off and let the engine cool before refueling.
  - B. Fuel your chipper-shredder in a clean area. Do not smoke while refueling.
  - C. Fuel tank cap must be secure at all times except during refueling.
  - D. Avoid spilling gasoline or oil. Wipe the unit clean of any spilled fuel or oil.
  - E. Store fuel and oil in approved containers, away from heat or open flame, and out of reach of children.
4. This machine should be operated only upon a level earthen surface.
5. Assure that all screws, nuts and bolts and other fasteners are properly secured.

## OPERATION

1. When feeding shreddable material into this equipment, be extremely careful that pieces of metal,

rocks, bottles, cans or other foreign objects are not included.

2. If the cutting mechanism strikes any foreign object or if your machine should start making an unusual noise or vibration, immediately stop the engine and disconnect the spark plug wire from the spark plug. Allow the machine to stop and take the following steps:
  - A. Inspect for damage.
  - B. Replace or repair any damaged parts.
  - C. Check for any loose parts and tighten to assure continued safe operation.
3. The engine must be kept clean of debris and other accumulations.
4. Do not allow an accumulation of processed material to build up in the discharge area as this will prevent proper discharge and can result in kick-back from feed opening.
5. Never allow your hands or any other part of your body or clothing inside the feeding chamber, discharge chute or near any moving part while the engine is running.
6. Keep all guards and deflectors in place and in good working condition to assure continued safe operation.
7. Always stand clear of the discharge area when operating this machine.
8. Keep your face and body back from the feed opening to avoid accidental bounce back of any material.
9. Do not over-reach. Keep proper balance and footing at all times.
10. The engine governor settings on your machine must not be altered, changed, or tampered with. The governor controls the maximum safe operating speeds and protects the engine and all moving parts from damage caused by overspeed.
11. Do not transport machine while engine is running.
12. Do not operate engine if air cleaner or cover directly over carburetor air intake is removed, except for adjustment. Removal of such parts could create a fire hazard.

## MAINTENANCE AND STORAGE

1. When this equipment is stopped for servicing, inspection, storage or to change an accessory, make sure the spark plug wire is disconnected from the spark plug. The machine should be allowed to cool down before making such inspection, adjustments, service, etc. Maintain your machine with care and keep it clean for the best and continued safe operation.
2. Do not use flammable solutions to clean the air filter.
3. When not in use, your machine should be stored out of the reach of children. Keep where gasoline fumes will not reach an open flame or spark. For long periods of storage, the gasoline should be drained and disposed in a safe manner. Always allow the machine to cool before storing in any enclosure.

# CONTENTS OF HARDWARE PACK

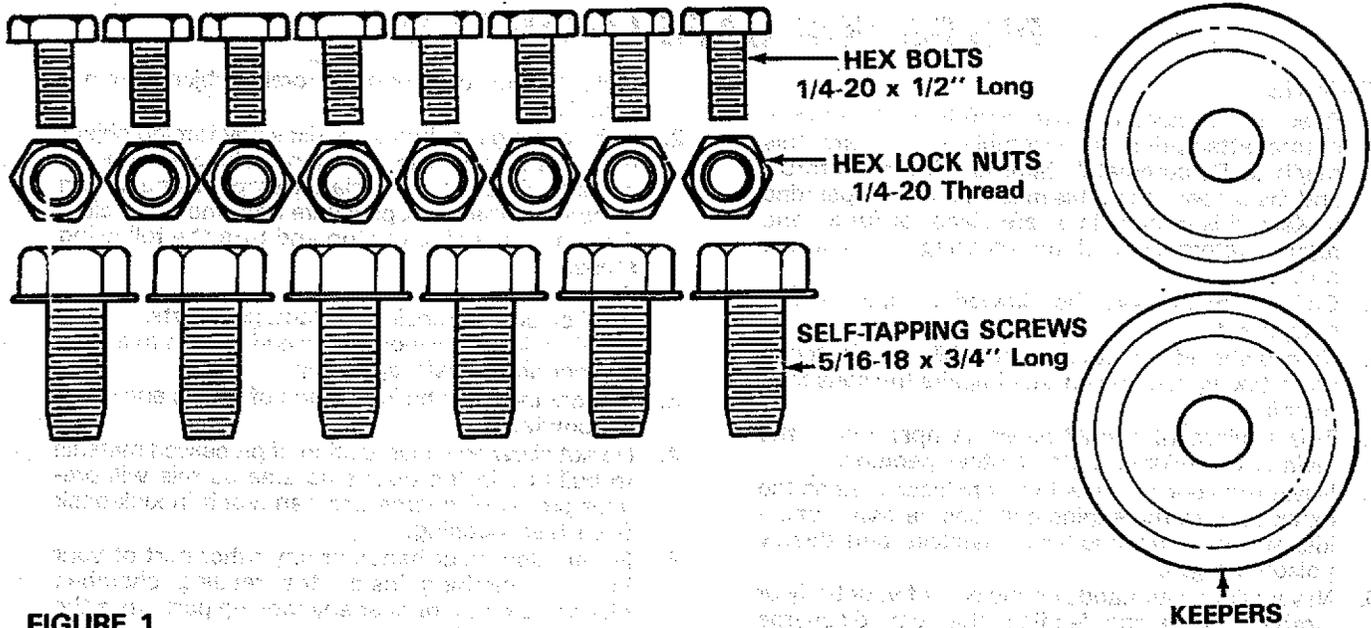


FIGURE 1

## ASSEMBLY INSTRUCTIONS

### NOTE

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see operation section of this manual for proper fuel and engine oil recommendations.

### NOTE

The right and left side of your chipper-shredder is determined from behind the unit.

### UNPACKING

Remove the chipper-shredder and loose parts from the carton. Make certain all parts and literature have been removed before the carton is discarded.

### Parts in Carton:

- Chipper-Shredder
- Chute Deflector
- Hopper
- Upper Leaf Ramp Section
- Catcher Bag
- Hardware Pack
- Safety Glasses

### Tools Required for Assembly:

- (2) 7/16'' Open End of Box Wrenches\*
- (1) 1/2'' Socket Wrench

\* An Adjustable Wrench may be used in place of one of the wrenches.

### CHUTE DEFLECTOR INSTALLATION

1. Place the chute deflector in position on the discharge opening (on the left side of the chipper-shredder). See figure 2.
2. Secure chute deflector to discharge opening with four hex bolts (1/2'' long) and 1/4'' hex lock nuts. Heads of the hex bolts are inside the discharge opening. Hex nuts go on the outside.
3. Tighten all four nuts and bolts securely.

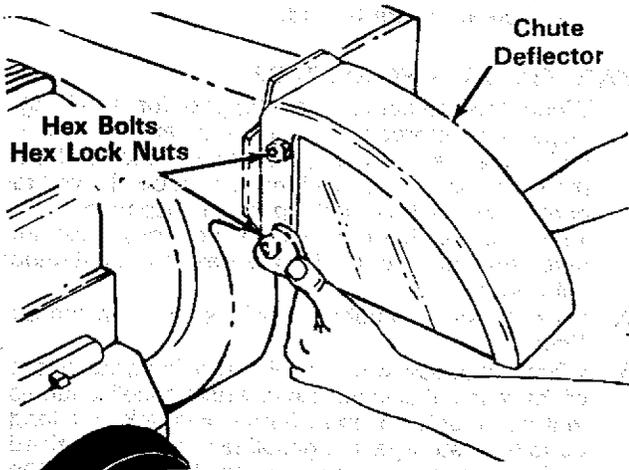
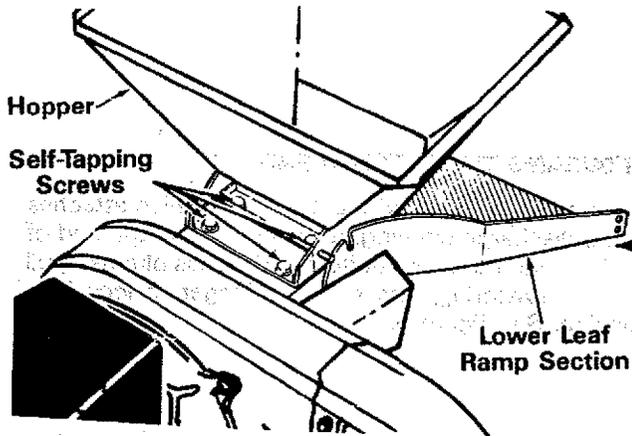


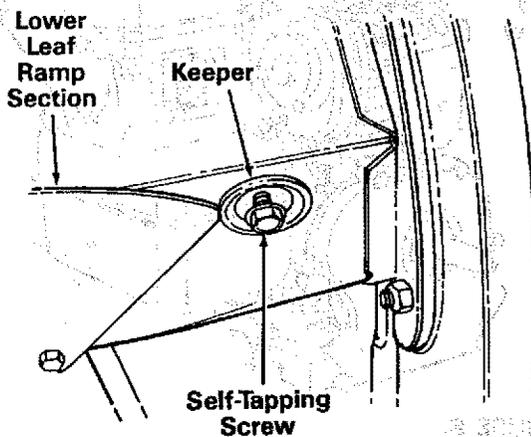
FIGURE 2



### INSTALLATION OF HOPPER AND UPPER LEAF RAMP

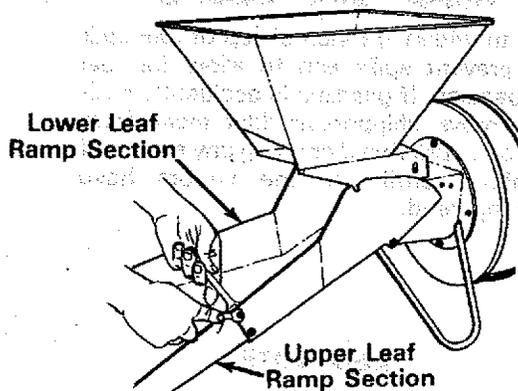
1. The lower leaf ramp section on the chipper-shredder is placed in an upright position for shipping purposes. Lower this section.
2. Place the hopper in position on the shredder. See figure 3. Start all four self-tapping screws, then tighten securely using a 1/2" socket wrench.

FIGURE 3



3. Assemble the keepers to the sides of the unit with two self-tapping screws, using a 1/2" socket wrench. Tighten securely.

FIGURE 4



4. Place upper leaf ramp section inside the lower leaf ramp section. Secure with four hex bolts (1/2" long) and 1/4" hex lock nuts. Tighten securely. See figure 5.

FIGURE 5

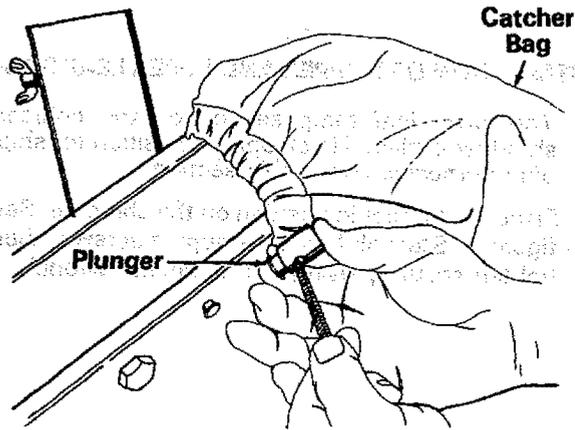


FIGURE 6.

### ATTACHING THE CATCHER BAG

Your unit is equipped with a nylon bag which attaches to the discharge opening. If desired, place the end of the bag over the chute deflector. Depress plunger, pull on the drawstring, and release plunger to lock it in position. See figure 6.

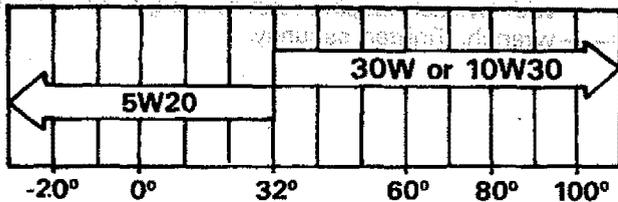
## OPERATION

### GAS AND OIL FILL UP

#### NOTE

ENGINE IS SHIPPED WITHOUT OIL. FILL CRANKCASE WITH OIL BEFORE STARTING. BE VERY CAREFUL NOT TO ALLOW DIRT TO ENTER THE ENGINE WHEN CHECKING OR ADDING OIL OR FUEL.

#### Recommended SAE Viscosity Grades



TEMPERATURE RANGE EXPECTED BEFORE NEXT OIL CHANGE. ALL OILS MUST MEET A.P.I. SERVICE CLASSIFICATION SD, SE, OR SF.

1. Fill engine with oil.
  - a. Remove engine oil fill plug. See figure 7.
  - b. With chipper-shredder level, fill engine with oil to point of overflowing. Capacity is 1-1/4 pints.
  - c. Tilt chipper-shredder forward on its wheels, then re-level.
  - d. Check oil level. Refill to point of over-flowing if necessary. Replace oil fill plug.

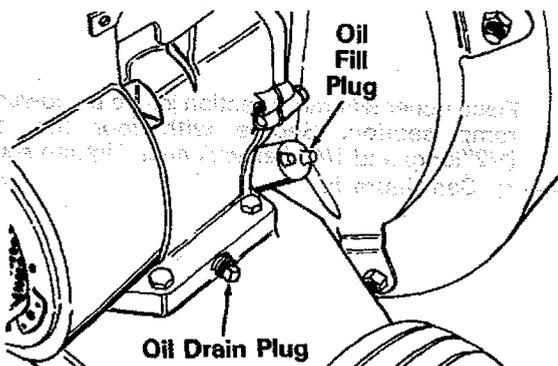


FIGURE 7.

2. Fill fuel tank. See figure 8. Use fresh, clean, unleaded automotive gasoline. Capacity is 3 quarts.

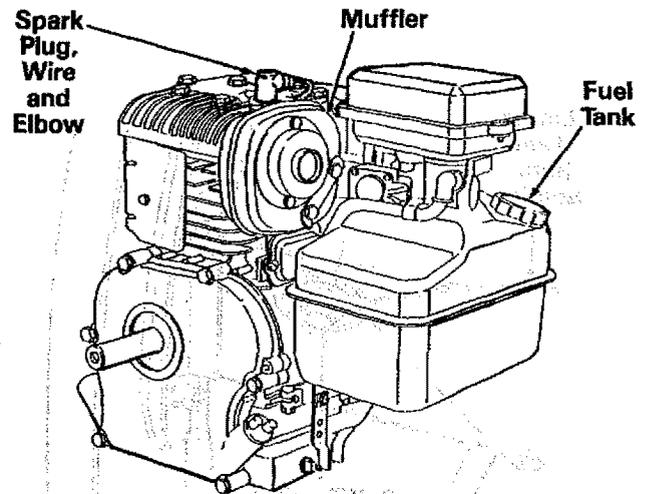


FIGURE 8.



### WARNING

Fill to within 1/2 inch of top of fuel tank to prevent spills and to allow for fuel expansion. If gasoline is accidentally spilled, move chipper-shredder away from area of spill. Avoid creating any source of ignition until gasoline vapors have disappeared.

#### NOTE

USE CLEAN OIL AND FUEL. STORE IN APPROVED, CLEAN, COVERED CONTAINERS. USE CLEAN FILL FUNNELS.

**Caution:** 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 section of this manual for additional information.

Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.

### TO START ENGINE

1. Attach spark plug wire and boot to spark plug.
2. Place choke lever in CHOKE position. See figure 9.

#### NOTE

A warm engine may not require choking.

3. Place the throttle control lever in FAST position.
4. Grasp starter handle (see figure 9) and pull rope slowly until engine reaches start of compression cycle (rope will pull slightly harder at this point). Let the rope rewind slowly.

#### NOTE

A noise will be heard when finding the start of the compression cycle. This noise is caused by the flails and fingers which are part of the shredding mechanism falling into place, and should be expected.

5. Pull rope with a rapid, continuous, full arm stroke. Keep a firm grip on starter handle. Let rope rewind slowly. Do not let starter handle snap back against starter.
6. Repeat preceding instructions 4 and 5 until engine fires.
7. After engine starts, move throttle control lever on engine to IDLE position for a few minutes warm up. Move choke lever gradually to RUN position. Then move throttle control lever to FAST position for shredding-chipping operations.

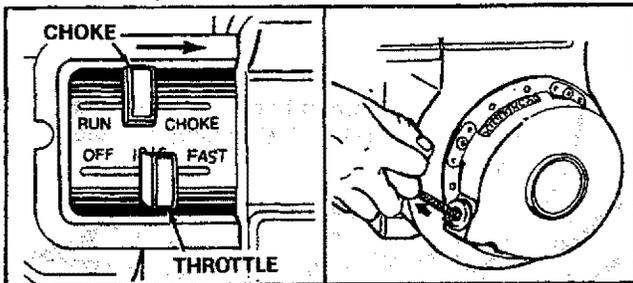


FIGURE 9.

### TO STOP ENGINE

1. Move throttle control lever to OFF position. See figure 9.
2. Disconnect spark plug wire from spark plug to prevent accidental starting while equipment is unattended.

### HOW TO USE YOUR CHIPPER-SHREDDER

Your shredder is designed for safe, efficient operation. KEEP HANDS AND FEET AWAY FROM ALL OPENINGS.



### WARNING

Wear the safety glasses provided with your unit while operating the chipper-shredder to prevent injury from any chips which may be ejected out of the openings. Make certain chip-it guide is closed when not in use.

Wear gloves when handling material. Feed material into the chipper-shredder at a steady rate. It is possible to feed too fast. Experiment with feeding rates to determine what rate provides the best results without stalling the engine or plugging the discharge chute.

The discharge chute will direct the shredded material into a pile, a container or the bag provided with your shredder.



### WARNING

The chipper-shredder discharges material with considerable velocity. Keep away from the area around the discharge chute. Always stop the engine and disconnect the spark plug wire when removing or attaching the bag, when changing containers or when removing the shredded material.

If it becomes necessary to push materials into the chipper-shredder, use a small diameter stick, NOT YOUR HANDS. The stick should be small enough that it will be ground up if it gets into the impeller assembly.



### WARNING

Do not deposit material larger than 1/2" diameter in the hopper or upper guide extension. Any material heavier than 1/2" should be fed into the chip-it guide.

Leaves and smaller branches can be fed into the hopper with the leaf ramp raised as shown in figures 10 and 11.

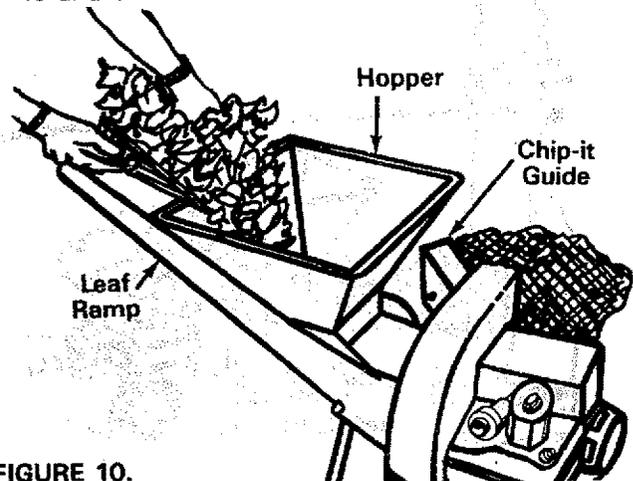
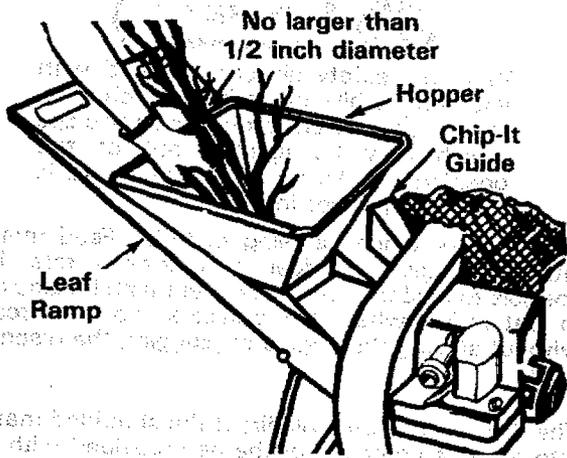
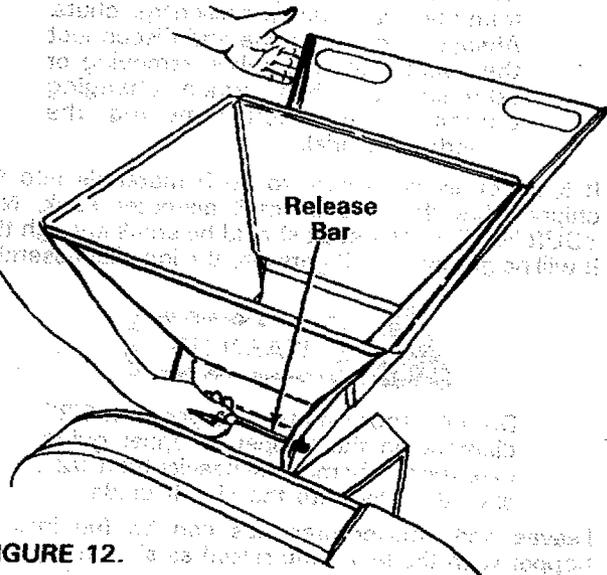


FIGURE 10.

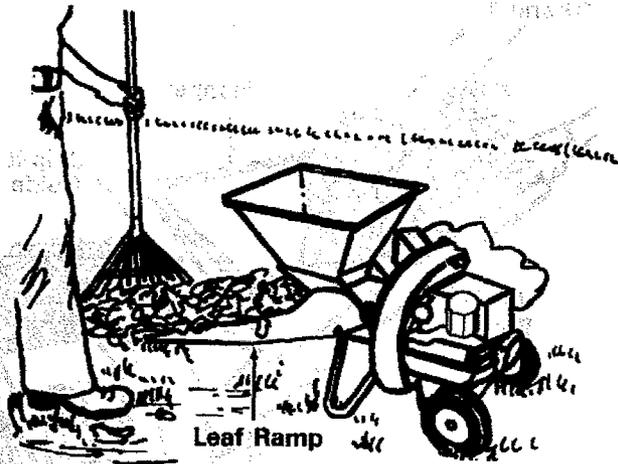


**FIGURE 11.**

Leaves and small twigs can be raked into the chipper-shredder with the leaf ramp lowered. To place in this position, hold the edge of the leaf ramp, pull up on the release bar and gently lower the leaf ramp to the ground: See figures 12 and 13.

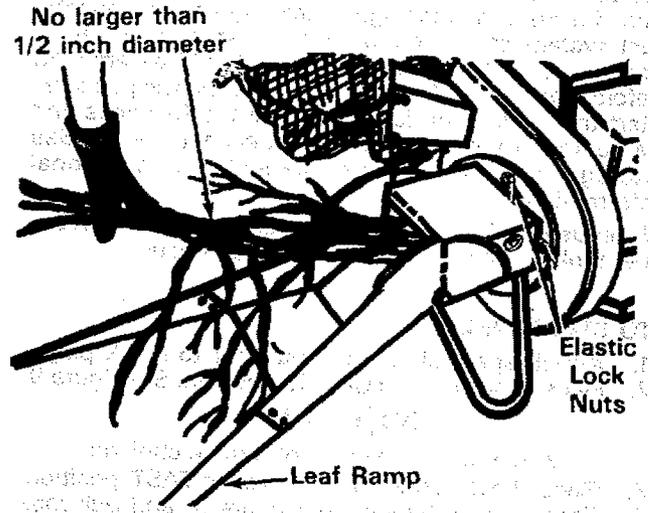


**FIGURE 12.**



**FIGURE 13.**

Small branches can also be fed into the leaf ramp. See figure 14.



**FIGURE 14.**

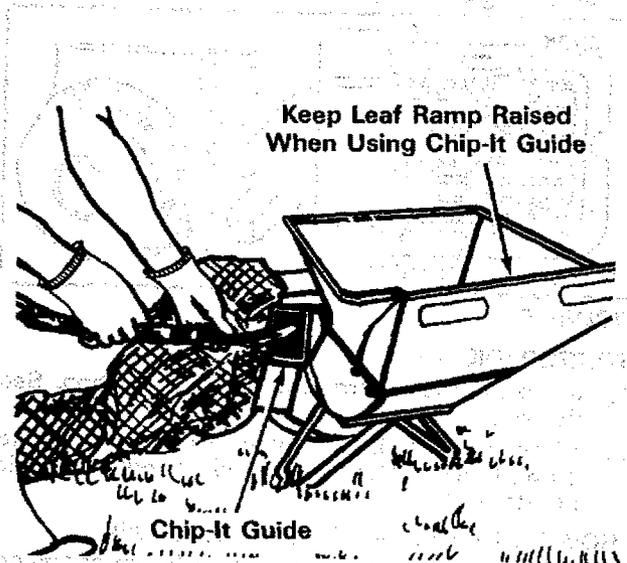
**NOTE**

Bulky material, such as stalks or heavy branches (anything over 1/2" diameter, up to 2" diameter), should be fed into the chip-it guide. See figure 15. Do not force or jam material into the chip-it guide. Make certain leaf ramp is raised as shown in figure 15 when using the chip-it guide.



**WARNING**

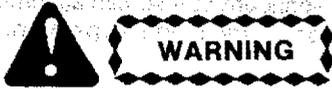
Make certain chip-it guide door is closed when not in use.



**FIGURE 15.**

# ADJUSTMENTS

## CARBURETOR ADJUSTMENT



If any adjustments are made to the engine while the engine is running (e.g. carburetor), keep clear of all moving parts. Be careful of heated surfaces and muffler.

Minor carburetor adjustment may be required to compensate for differences in fuel, temperature, altitude or load.



A DIRTY AIR CLEANER WILL CAUSE ENGINE TO RUN ROUGH. BE CERTAIN AIR CLEANER IS CLEAN AND ATTACHED TO THE CARBURETOR BEFORE ADJUSTING CARBURETOR. DO NOT MAKE UNNECESSARY ADJUSTMENTS. FACTORY SETTINGS ARE SATISFACTORY FOR MOST APPLICATIONS AND CONDITIONS.

Never attempt to change maximum engine speed. It is pre-set at the factory and should be changed only by a qualified service technician who has the necessary equipment.

The carburetor may need re-adjusting if engine lacks power or does not idle properly. If adjustments are needed, proceed as follows.

### To Adjust Carburetor:

1. Close needle valve (See figure 16) clockwise (↻) finger tight only. Forcing may cause damage. Then open 1-1/2 turns counterclockwise (↺).
2. Start engine and allow to warm for five minutes.

3. With throttle in RUN position, close needle valve clockwise (↻) until engine starts to lose speed (lean mixture). Then slowly open needle valve counterclockwise (↺) until engine JUST BEGINS to run unevenly. This mixture should be rich enough for best performance under load.
4. Place throttle control in IDLE position:
  - a. If engine idles, no further adjustment is necessary.
  - b. If engine idles too fast, turn idle speed adjusting screw counterclockwise (↺) until slower speed is obtained.
  - c. If engine dies, turn idle speed adjusting screw 1/4 turn clockwise (↻). Place throttle control in FAST position and restart engine.
  - d. Move throttle control to IDLE position. If engine does not idle, repeat step c.
5. Test the engine by operating the chipper-shredder. If engine tends to stall or die out, it usually indicates that the mixture is slightly lean and it may be necessary to open (↺) the needle valve slightly to provide a richer mixture. This richer mixture may cause a slight unevenness in idling.

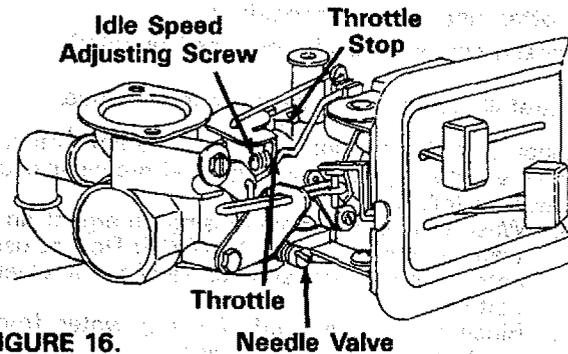


FIGURE 16. Needle Valve

## MAINTENANCE



Disconnect spark plug wire and ground it against the engine before performing any repairs or maintenance.

### ENGINE LUBRICATION

Your four cycle engine will normally consume some oil; therefore check engine oil level regularly - approximately every five hours of operation and before each usage. Stop engine and wait several minutes before checking oil level. With engine level, the oil must be even with the oil fill (refer to figure 7). Change engine oil after the first two hours of operation, and every twenty-five hours thereafter.

1. Drain oil while engine is warm.
  - a. Remove oil drain plug. Refer to figure 7.
  - b. Tip the chipper-shredder forward, and catch oil in a suitable container.
  - c. When engine is drained of all oil, replace drain plug securely.
2. Refill with fresh oil. Above 32°, use oil labeled SAE 30W or 10W30. Below 32°, use oil labeled 5W20. Capacity is 1-1/4 pints. Refer to "Gas and Oil Fill-Up" on page 6.
3. Replace oil fill plug.

### AIR CLEANER

The air cleaner prevents damaging dirt, dust, etc., from entering the carburetor and being forced into the engine and is important to engine life and performance.

**Never run your engine without air cleaner completely assembled.**

#### To Service Air Cleaner:

Clean cartridge at three month intervals or every 25 hours, whichever occurs first. See figure 17. Service more often under dusty conditions.

1. Loosen screws and tilt cover as illustrated.
2. Carefully remove pre-cleaner and cartridge.
3. Clean cartridge by tapping gently on a flat surface. If very dirty, replace cartridge and pre-cleaner or clean as follows:
  - a. Wash in a low or non-sudsing detergent and warm water solution. **CAUTION:** Do not use petroleum solvents such as kerosene to clean cartridge.
  - b. Rinse thoroughly with flowing water from inside out until water is clear.
  - c. Allow cartridge to stand and air dry thoroughly before using. **DO NOT OIL CARTRIDGE OR PRE-CLEANER. DO NOT USE PRESSURIZED AIR TO CLEAN OR DRY CARTRIDGE.**

4. Install cartridge and pre-cleaner. Then close cover and fasten screws securely.

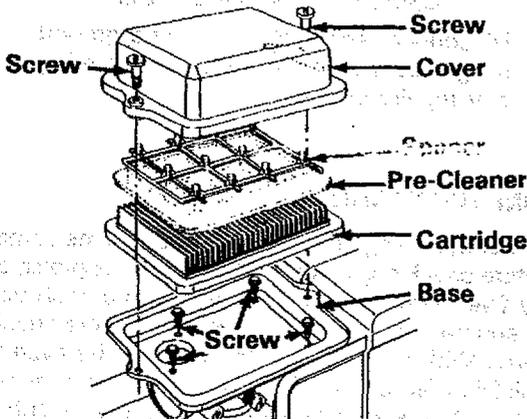


FIGURE 17.

### MUFFLER

Do not operate the chipper-shredder without a muffler or tamper with the exhaust system. Damaged mufflers or spark arresters could create a fire hazard. Inspect periodically, and replace if necessary. If your engine is equipped with a spark arrester screen assembly, remove every 50 hours for cleaning and inspection. Replace if damaged.

### CLEAN ENGINE

Clean engine periodically. Remove dirt and debris with a cloth or brush. Cleaning with a forceful spray of water is not recommended as water could contaminate the fuel system.

Yearly or every 50 hours, whichever occurs first, remove the blower housing and clean the areas shown in figure 18 to avoid overspeeding, overheating and engine damage. Clean more often if necessary.



Periodically clean muffler area to remove all grass, dirt and combustible debris.

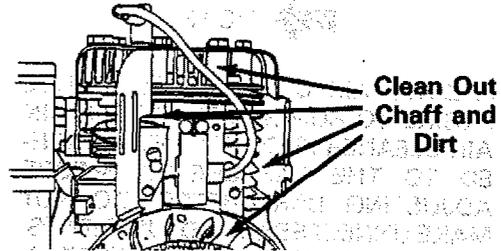


FIGURE 18.

### SPARK PLUG

The spark plug should be cleaned and the gap reset to .030" at least once a season or every 50 hours of operation. Spark plug replacement is recommended at the start of each season. Refer to engine parts list for correct spark plug type.

**NOTE:** Do not blast clean spark plug. Spark plug should be cleaned by scraping or wire brushing and washing with a commercial solvent.

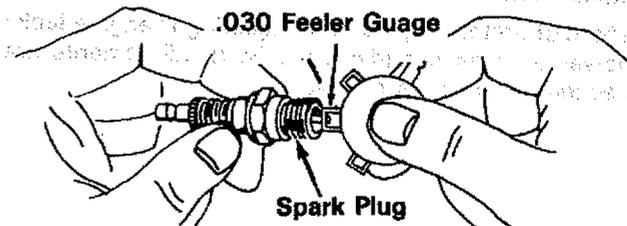


FIGURE 19.

### LUBRICATION

**Wheels** - The wheels require no lubrication.

**Flails and Fingers** - If the unit is disassembled for any reason, lubricate the flails and fingers with a light oil (engine oil may be used).

## CUTTING BLADE

The cutting blade may be removed for grinding or replacement as follows.

1. Lower the leaf ramp.
2. Block up the housing. See figure 20.
3. Remove the four elastic lock nuts from the back of the housing using a 1/2" wrench. Refer to figure 14. Separate the shredder into two halves.
4. Remove the back-up plate. See figure 20.

### NOTE

When reassembling, make certain the opening on the back up plate is toward the bottom of the unit. The back up plate may be reversed to provide a new cutting edge.

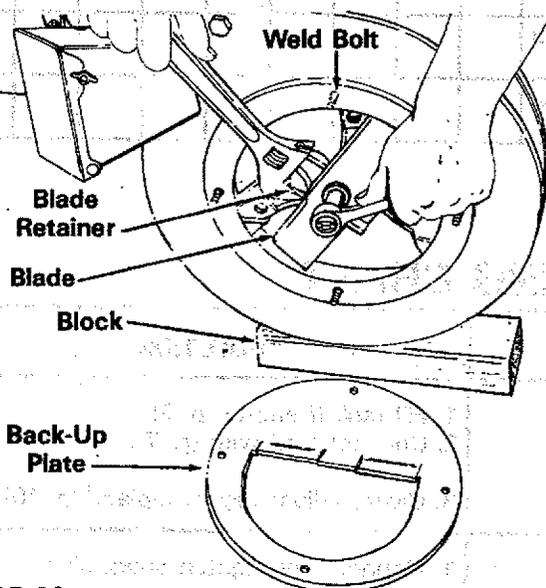
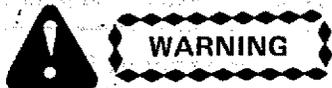


FIGURE 20.

5. Hold the blade retainer on the impeller assembly with an adjustable wrench to keep the blade from turning as shown in figure 20.
6. Remove the blade by removing the center bolt, lock washer and flat washer.

### NOTE

Use caution when removing the blade to avoid contacting the weld bolts protruding from the housing.



The blade is reversible and can be assembled to the crankshaft with either side showing.

When sharpening the blade, follow the original angle of grind as a guide. It is extremely important that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds and may cause damage to the unit.

The blade can be tested by balancing it on a round shaft screwdriver or nail. Remove metal from the heavy side until it balanced evenly. See figure 21.

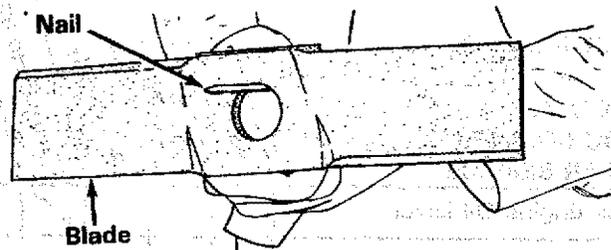


FIGURE 21.

When reassembling the blade, tighten to between 375 and 450 inch pounds, or lacking torque wrench, tighten securely.

## FLAILS AND FINGERS

The flails and fingers may be reversed when they become dull. It is suggested that this procedure be performed by your nearest Sears Service Department.

## OFF-SEASON STORAGE

It is important to prevent gun deposits from forming in essential fuel system parts such as the carburetor, fuel hose or fuel 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.

To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Follow these instructions.

1. Drain the fuel tank. Start the engine, and let it run until the fuel lines and carburetor are empty.



DO NOT DRAIN FUEL WHILE SMOKING, OR IF NEAR AN OPEN FIRE.

2. Drain all the oil from the crankcase (this should be done after the engine has been operated and is still warm) and refill crankcase with fresh oil.
3. Protect the inside of the engine for storage as follows.  
Remove spark plug, pour approximately 1/2 ounce (approximately one tablespoon) of engine oil into cylinder and crank slowly to distribute oil. Replace spark plug.
4. Clean the engine and the entire chipper-shredder thoroughly.

### NOTE

When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment, especially all moving parts.

5. Store in a clean, dry area.

## MAINTENANCE CHECK LIST

SERVICE RECORD  FILL IN DATES AS YOU COMPLETE REGULAR SERVICE		Page No.	1st 2 Hours	Frequently	Every 5 Hours	Every 25 Hours	Every 50 Hours	SERVICE DATES												
Check Engine Oil Level	9			✓																
Change Engine Oil	10	✓			✓															
Clean Engine	10		✓																	
Service Air Cleaner	10				✓															
Clean Engine Cylinder Fins	10					✓														
Clean or Replace Spark Plug	10					✓														

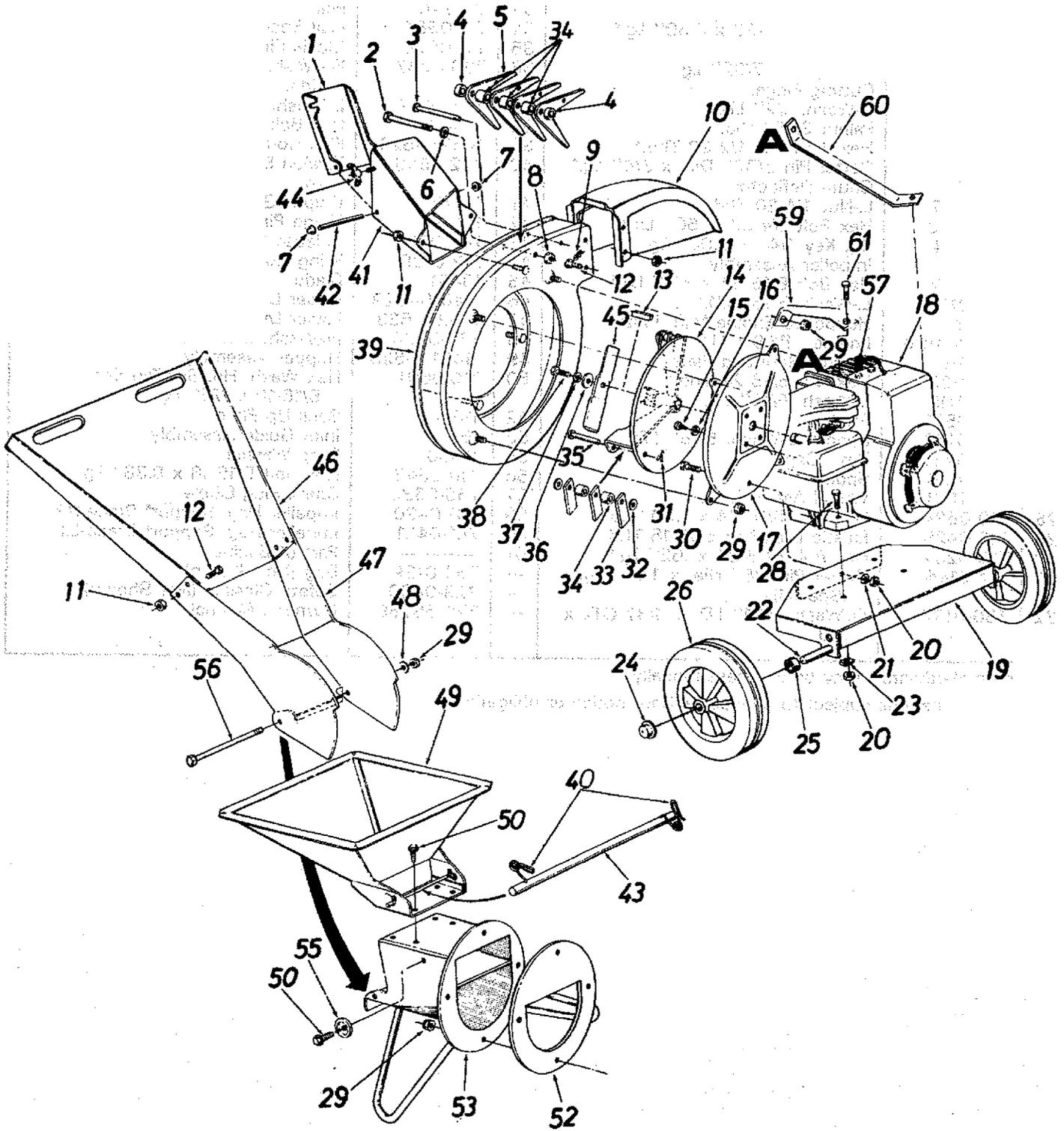
## TROUBLE SHOOTING CHART

SYMPTON	POSSIBLE CAUSE(S)	SOLUTION
Engine fails to start	<ol style="list-style-type: none"> <li>1. Check fuel tank for gas.</li> <li>2. Spark plug lead wire disconnected.</li> <li>3. Faulty spark plug.</li> </ol>	<ol style="list-style-type: none"> <li>1. Fill tank if empty (p. 6).</li> <li>2. Connect lead wire (p. 7).</li> <li>3. Clean, adjust gap or replace (p. 10).</li> </ol>
Hard starting or loss of power	<ol style="list-style-type: none"> <li>1. Spark plug wire loose.</li> <li>2. Dirty air cleaner.</li> </ol>	<ol style="list-style-type: none"> <li>1. Connect and tighten spark plug wire (p. 7).</li> <li>2. Clean air cleaner as described in maintenance section (p. 10).</li> </ol>
Engine overheats	<ol style="list-style-type: none"> <li>1. Carburetor not adjusted properly</li> <li>2. Air flow restricted.</li> <li>3. Engine oil level low.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust carburetor. See adjustment section (p. 9).</li> <li>2. Remove blower housing and clean as described in the maintenance section (p. 10).</li> <li>3. Fill crankcase with the proper oil (p. 6).</li> </ol>
Material not shredding	Blade and/or flails not sharp.	Sharpen or reverse blade and flails (p. 11).
Engine bogs down or stalls	<ol style="list-style-type: none"> <li>1. No fuel in fuel tank.</li> <li>2. Feeding material into the machine too quickly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Fill tank if empty (p. 6).</li> <li>2. Do not force material into the opening. Feed gradually (p. 7).</li> </ol>

NOTE: For repairs beyond the minor adjustments listed above, please contact your Sears Authorized Service Center.

# Repair Parts

5 H.P. Chipper-Shredder—Model 247.796893



# Repair Parts

## 5 H.P. Chipper-Shredder—Model 247.796893

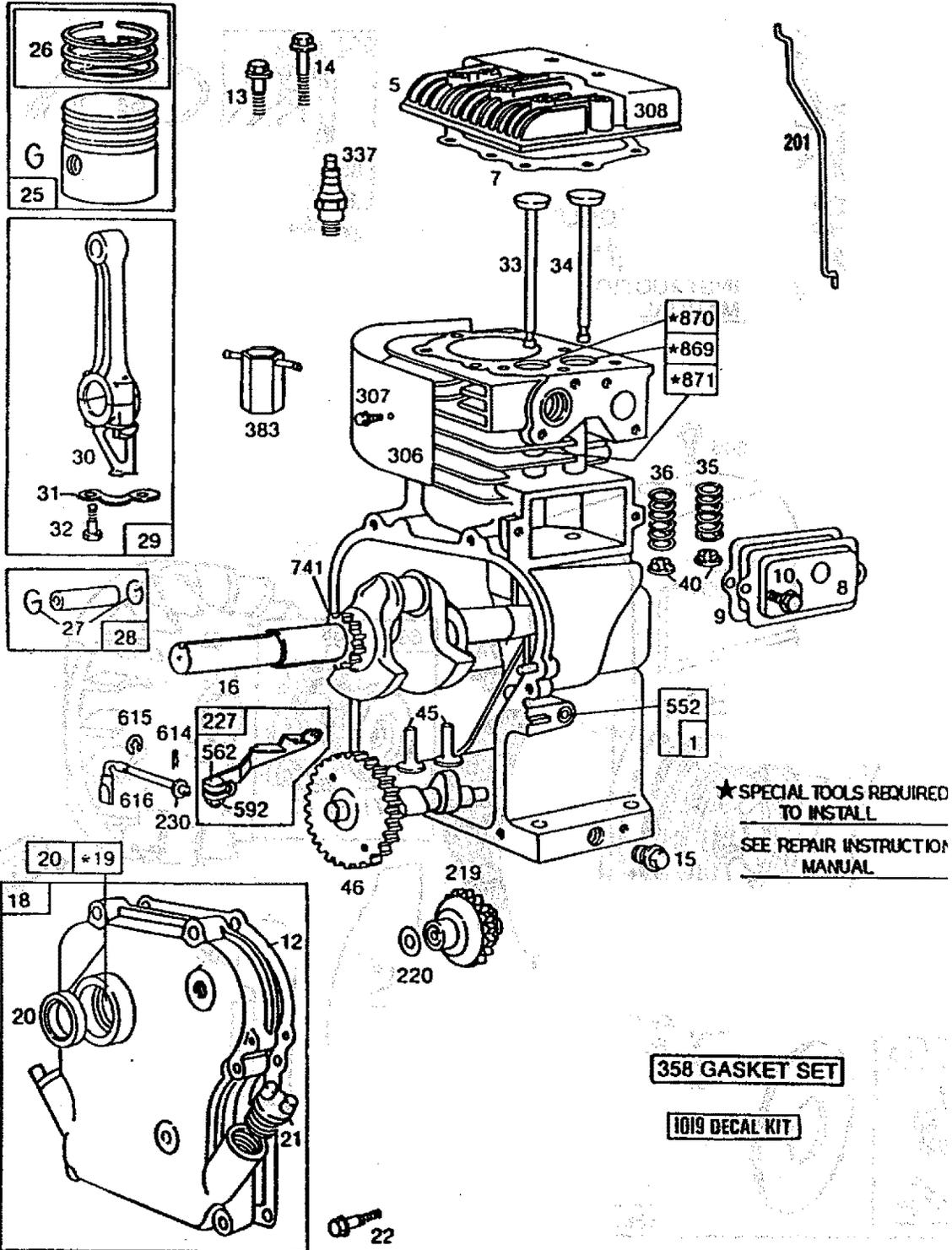
Key No.	Part No.	Description	Key No.	Part No.	Description
1	11476	Door Chip It	33	11459A	Flail
2	710-0465	Hex Bolt 1/2-20 x 4.50" Lg.*	34	711-0564	Flail Spacer 23/32" Lg.
3	711-0580	Clevis Pin	35	711-0578	Clevis Pin .50" Dia. x 3.0" Lg.
4	711-0579	Flail Spacer 7/32" Lg.	36	736-0237	Fl.-Wash. .406" I.D. x 1.25" O.D. Hdn.
5	11455	Cutting Finger	37	736-0217	L.-Wash. 3/8" I.D. H.D.
6	736-0921	L.-Wash. 1/2" I.D.*	38	710-0151	Hex Bolt 3/8-24 x 2.0" Lg. H.T.
7	726-0111	Palnut 3/16" Dia.	39	14575--629	Flail Housing Ass'y.-Comp.
8	712-0922	Hex Jam Nut 1/2-20 Thd.*	40	732-0546	Torsion Spring .062 Dia. x 1.06 Lg.
9	714-0507	Cotter Pin 3/32" Dia. x 3/4" Lg.*	41	11477	Chip-It Guide Ass'y.
10	16568	Chute Deflector	42	11478	Hinge Pin
11	712-0107	L.-Nut 1/4-20 Thd.	43	747-0531	Release Bar
12	710-0289	Hex Bolt 1/4-20 x .50" Lg.*	44	712-0109	Wing Nut Elastic 1/4-20 Thd.
13	714-0114	Sq. Key 1/4" x 2.00" Lg.	45	13431	Blade
14	13430	Impeller Assembly	46	11461B--629	Upper Leaf Ramp Section
15	710-0157	Hex Bolt 5/16-24 x 3/4" Lg.*	47	16524--629	Lower Leaf Ramp Section
16	736-0119	L.-Wash. 5/16" I.D.*	48	736-0264	Fl.-Wash. 5/16" I.D.
17	14573	Hopper to Engine Mtg. Plate	49	11481A--629	Hopper Assembly
18	130212-3112-01	Engine - B&S 5 H.P.	50	710-0601	Hex Wash. Hd. Self-Tap Scr. 5/16-18 x .75" Lg.
19	11464A	Engine Mounting Plate	52	11454	Back-Up Plate
20	712-0123	Hex Nut 5/16-24 Thd.*	53	16522	Inlet Guide Assembly
21	736-0119	L.-Wash. 5/16" I.D.*	55	11480	Stop Washer
22	738-0521	Shaft	56	710-0542	Hex Bolt 5/16-18 x 8.38" Lg.
23	736-0170	Special L.-Wash. 5/16" I.D.	57	735-0639	Spark Plug Elbow
24	726-0221	Push Cap	59	781-0420	Impeller Hsg. Support Brace-R.H.
25	711-0494	Spacer	60	781-0421	Impeller Hsg. Support Brace-L.H.
26	734-1173	Wheel Ass'y.-Comp.	61	-----	Part of Engine
28	710-0624	Hex Bolt 5/16-24 x 1.50" Lg.*	---	764-0199	Bag (Not Shown)
29	712-0429	Elastic Lock Nut 5/16-18 Thd.	---	723-0400	Safety Glasses (Not Shown)
30	710-0237	Hex Bolt 5/16-24 x .62" Lg.*	---	770-5875E	Owner's Manual
31	714-0144	Cotter Pin 1/8" Dia. x 1.00" Lg.* (Special)			
32	736-0192	Fl.-Wash. .531" I.D. x .937 O.D. x .09			

\*Common Hardware - May be purchased locally.

NOTE: Specifications subject to change without notice or obligation.

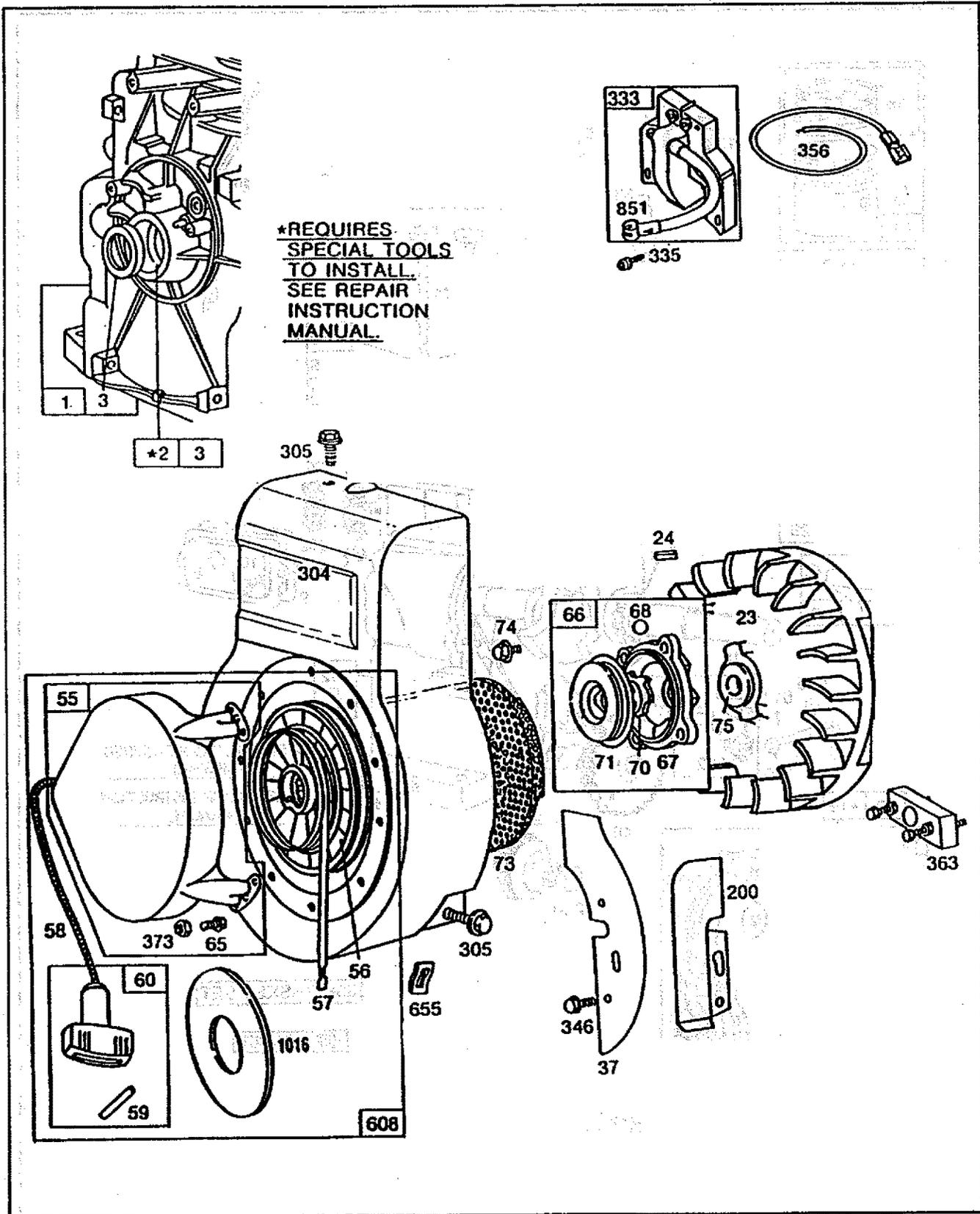
# Repair Parts

5 H.P. Chipper-Shredder—Model 247-796893  
 Engine—Model 130212 Type 3112-01



# Repair Parts

5 H.P. Chipper-Shredder—Model 247.796893  
 Engine—Model 130212 Type 3112-01





# Repair Parts

5 H.P. Chipper-Shredder—Model 247.796893  
 Engine—Model 130212 Type 3112-01

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	395990	Cylinder Assembly	37	222443	Guard—Flywheel
2	297565	Bushing—Cylinder <b>NOTE:</b> Requires special tools for installation.	40	93312	Retainer—Valve Spring
3	299819	Seal—Oil	45	260642	Tappet—Valve
5	211542	Head—Cylinder	46	212733	Gear—Cam
7	*270383	Gasket—Cylinder Head	52	*271937	Gasket—Carburetor Mounting (2)
8	294178	Breather—Valve Chamber	55	299431	Housing—Rewind Starter
9	*27549	Gasket—Valve Cover	56	295871	Pulley—Rewind Starter (Includes 63" long rope)
10	93394	Screw—Breather Mtg. Sem	57	490179	Spring—Rewind Starter
11	66578	Grommet—Breather Tube	58	66884	Rope—Rewind Starter—63" long
12	*270080	Gasket—Crankcase—.015" thick (Standard)	59	230228	Pin—Starter Grip
	*270125	Gasket—Crankcase—.005" thick	60	66728	Grip—Starter Rope
	*270126	Gasket—Crankcase—.009" thick	65	94128	Screw—Stamped Steel Housing Mtg. Sem
13	93368	Screw—Cylinder Head (2-3/32" long)	66	399671	Clutch Ass'y.—Rewind Starter
14	93369	Screw—Cylinder Head (2-15/32" long)	67	394897	Housing—Starter Clutch
15	91249	Plug—Pipe, 1/4" Std. Square Head <b>To Replace Crankshaft Gear Pin, Order Part No. 230978</b>	68	63770	Ball—Clutch
16	397098	Crankshaft	70	298799	Ratchet—Rewind Starter
18	298517	Cover Ass'y.—Crankcase	71	394506	Washer—Clutch Retainer (Rubber Coated)
19	297603	Bushing—Crankcase Cover <b>NOTE:</b> Requires Special tools for installation.	73	221923	Screen—Starter Pulley
20	298504	Oil Seal and Spacer	74	93490	Screw—Sem
21	66768	Plug—Oil Filter	75	220865	Washer—Spring
22	93032	Screw—Crankcase Cover Mounting Sem	90	490533	Carburetor Assembly
23	297229	Flywheel Assembly	95	93499	Screw—Throttle Valve to Shaft Sem
24	222698	Key—Flywheel	96	223793	Throttle—Carburetor
25	298904	Piston Ass'y.—Standard	97	490048	Shaft and Lever—Throttle
	298905	Piston Ass'y.—.010" O.S.	108	491177	Valve Group—Choke
	298906	Piston Ass'y.—.020" O.S.	118	231533	Valve—Needle
	298907	Piston Ass'y.—.030" O.S.	134	93357	Screw—Hex. Head
<b>PISTON RING SETS:</b>			137	220352	Plug—Welch
		<b>NOTE:</b> For Chrome Piston Ring Set—Standard Size— Order Part No. 299742.	137A	223789	Plug—Welch (Mixing Chamber)
26	298982	Ring Set—Standard Piston	137B	223472	Plug—Welch (Well)
	298983	Ring Set—.010" O.S. Piston	149	26336	Spring—Needle Valve
	298984	Ring Set—.020" O.S. Piston	152	260575	Spring—Throttle Adjustment
	298985	Ring Set—.030" O.S. Piston	153	490589	Screw Ass'y.
27	26026	Lock—Piston Pin	154	93527	Screw—Machine, Rd. Hd.—5-40 x 5/8"
28	298909	Pin Ass'y.—Piston—Standard	163	271935	Gasket—Air Cleaner Mounting
	298908	Pin Ass'y.—Piston—.005" O.S.	180	490554	Tank Assembly—Fuel
29	299430	Rod Ass'y.—Connecting <b>NOTE:</b> For Connecting Rod with .020" undersize Crankpin Bore—Order No. 390459.	181	490075	Cap—Fuel Tank
30	221890	Dipper—Connecting Rod	190	94094	Screw—Fuel Tank Mounting Sem
31	221876	Lock—Conn. Rod Screw	191	*271928	Gasket—Fuel Tank Mounting
32	92296	Screw—Connecting Rod	200	223886	Guide—Air
33	211119	Valve—Exhaust	201	262280	Link—Governor
34	261044	Valve—Intake	202	262270	Link—Throttle
35	260552	Spring—Intake Valve	203	280720	Crank—Bell
36	26478	Spring—Exhaust Valve	204	222962	Bushing—Governor Lever (Flat)
			205	231520	Screw—Shoulder
			208	262279	Rod—Control
			209	262283	Spring—Governor
			216	262359	Link—Choke
			219	391737	Gear—Governor
			220	221551	Washer—Thrust
			222	490649	Bracket—Control
			223	223455	Lever—Governor Control
			224	93491	Rivet—Governor Control Lever Mounting

# Repair Parts

5 H.P. Chipper-Shredder—Model 247.796893  
 Engine—Model 130212 Type 3112-01

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
227	490374	Lever Ass'y.—Governor	562	92613	Bolt—Governor Lever
230	222450	Washer—Governor Lever	592	231082	Nut—Hex.—10-24
256	223813	Bell Crank	608	390463	Starter Ass'y.—Rewind
298	261409	Locknut—Muffler	611	391813	Fuel Pipe and Clip Assembly
299	393368	Muffler—Exhaust	614	93306	Cotter—Hair Pin
304	490169	Housing—Blower	615	93307	Retainer—E-Ring
305	93158	Screw—Blower Housing Mounting	616	231077	Crank—Governor (1/4" Dia.)
306	221511	Shield—Cylinder	621	396847	Switch—Stop
307	93490	Screw—Cylinder Shield Mounting Sem	634	271853	Washer—Throttle Shaft (Foam)
308	221512	Cover—Cylinder Head	643	280737	Retainer—Foam Element
333	397358	Armature Assembly	643A	280726	Retainer—Air Filter
335	93414	Screw—Armature Mtg. Sem	655	222598	Anchor Spring
337	298809	Plug—Spark 1-1/2" High—37-42 M.M.	676	395700	Deflector—Exhaust
346	93705	Screw—Sem	679	270382	Washer Choke Shaft (Foam)
356	398808	Wire—Ground	680	221839	Washer Choke Shaft (Brass)
358	397145	Gasket Set	725	223867	Shield—Heat
363	19069	Flywheel Puller (Optional Accessory)	741	261696	Gear—Timing
373	92987	Nut—Hex.	779	262276	Link—Bell Crank
383	89838	Wrench—Spark Plug	851	221798	Cable Terminal—Ignition
392	262328	Spring—Fuel Pump Diaphragm	869	211787	Seat—Intake Valve (Standard)
394	270026	Diaphragm	870	211172	Seat—Exhaust Valve (Standard)
414	220982	Washer	871	231348	NOTE: For Options see Repair Manual. Guide—Exhaust Valve NOTE: 63709 Guide—Intake Valve See Repair Instruction Manual.
432	221377	Cap—Spring	916	280321	Gear Rack—Governor
433	93265	Pin—Diaphragm Cover	966	490074	Base—Air Cleaner
434	210959	Cover—Diaphragm	967	399959	Filter—Air
435	93141	Screw—Diaphragm Cover	968	223765	Cover Air Cleaner
467	280715	Knob—Control	969	490073	Screw—Cover Mtg.
526	93343	Screw—Tank Bracket Mounting Sem	971	94018	Screw—Air Cleaner
527	223786	Clamp—Breather Tube	987	398970	Seal—Throttle Shaft
528	231550	Tube—Breather	995	223815	Bracket—Link
529	67838	Grommet—Breather Tube	1012	490507	Link—Retainer
535	271933	Element—Air Cleaner	1016	490817	Spacer
542	93572	Screw	1019	491100	Decal (Label) Kit
552	231079	Bushing—Governor Crank (1/4" I.D.)			

\*Included in Gasket Set—  
 Part No. 397145.

**SPARK ARRESTING MUFFLER ASSEMBLY 392390**  
 (Optional Equipment)

Consists of the following:  
 392154 Screen (1 required)  
 223372 Deflector (1 required)  
 93705 Screw (4 required)

**SEARS**

**OWNERS  
MANUAL**

**MODEL NO.  
247.796893**

**HOW TO ORDER  
REPAIR PARTS**

**SEARS / CRAFTSMAN®**

**5 H.P.  
CHIPPER-SHREDDER**

**HOW TO ORDER REPAIR PARTS**

Each CHIPPER/SHREDDER has its own MODEL NUMBER.  
Each ENGINE has its own MODEL NUMBER.

The MODEL NUMBER for the ENGINE will be found on the ENGINE BLOWER HOUSING.

Always mention these MODEL NUMBERS when requesting service or Repair Parts for your CHIPPER/SHREDDER.

All parts listed herein may be ordered through any Sears Service Center/Departments and most Sears Stores.

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

- THE PART NUMBER
- THE PART DESCRIPTION
- THE MODEL NUMBER 247.796893
- THE NAME OF MERCHANDISE—CHIPPER-SHREDDER
- THE ENGINE MODEL NUMBER

Sears, Roebuck and Co., Chicago, Ill. 60684 U.S.A.