## **Owner's Manual**

# CRAFTSMAN°

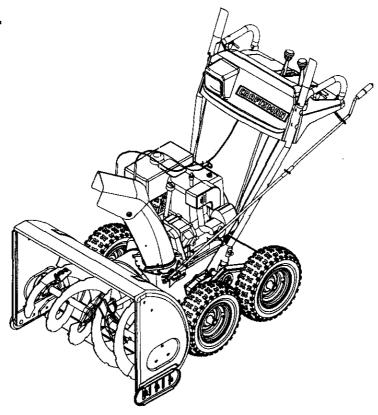
28" Two-Stage Steerable

4-Wheel Drive

**Snow Thrower** 

Model No.

247.888540



CAUTION: Before using this product, read this manual and follow all safety rules and operating instructions.

- Safety
- Assembly
- Operation
- Service
- Maintenance
- Español

Sears, Roebuck and Co., Hoffman Estates, IL 60179, U.S.A.

Visit our Sears website: www.sears.com/craftsman

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# **WARRANTY INFORMATION**

## Two -Year Warranty on Craftsman Snow Thrower

For two years from the date of purchase, when this Craftsman Snow Thrower 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 snow thrower is used for commercial or rental purposes, 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 skid shoes, shave plate and spark plugs.

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 SNOW THROWER TO THE NEAREST SEARS SERVICE CENTER/DEPARTMENT IN THE UNITED STATES.

#### This warranty applies only while this product is in use in the United States.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

Sears, Roebuck and Co., D/817WA, Hoffman Estates, IL 60179

#### **PRODUCT SPECIFICATIONS**

ĺ	Horsepower:9
	Engine Oil SAE 5W30 oil
١	Fuel Capacity: 1 gallon
	Spark Plug: RJ-19LM
	Engine:143.999005

#### **MODEL NUMBER**

Model Number Serial Number	247.888540
	mber and date of purchase and or future reference.

## SAFE OPERATION PRACTICES



This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate your snow thrower. Failure to comply with these instructions may result in personal injury. When you see this symbol—heed its warning.

Your snow thrower was built to be operated according to the rules for safe operation in this



manual. As with any type of power equipment, carelessness or error on the part of the **DANGER:** operator can result in serious injury. If you violate any of these rules, you may cause serious injury to yourself or others.



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 is available through your nearest Sears Authorized Service Center (See the REPAIR PARTS section of this manual.)

The engine exhaust from this product contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

#### **TRAINING**

- Read this owner's guide 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.
- Never allow children under 14 years old to operate a snow thrower. Children 14 years old and over should only operate a snow thrower under close parental supervision. Only persons well acquainted with these rules of safe operation should be allowed to use your snow thrower.
- No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions.
- Keep the area of operation clear of all persons, especially small children and pets.
- Exercise caution to avoid slipping or falling, especially when operating in reverse.

#### **PREPARATION**

- Thoroughly inspect the area where the equipment is to be used and remove all door mats, sleds, boards, wires and other foreign objects.
- Do not operate equipment without wearing adequate outer garments for winter. Do not wear jewelry, long scarfs or other loose clothing which could become entangled in moving parts. Wear footwear which will improve footing on slippery surfaces.
- Before working with gasoline, extinguish all cigarettes and other sources of ignition. Check the fuel before starting the engine. Gasoline is an extremely flammable fuel. Do not fill the gasoline tank indoors, while the engine is running, or until engine has been allowed to cool at least two minutes. Replace

- gasoline cap securely and wipe off any spilled gasoline before starting the engine as it may cause a fire or explosion.
- Use a grounded three wire plug-in for all units with electric drive motors or electric starting motors.
- Adjust collector housing height to clear gravel or crushed rock surface.
- Never attempt to make any adjustments while engine is running (except where specifically recommended by manufacturer).
- Let engine and machine adjust to outdoor temperature before starting to clear snow.
- Always wear safety glasses or eye shields during operation or while performing an adjustment or repair, to protect eyes from foreign objects that may be thrown from the machine in any direction.

#### **OPERATION**

- Do not put hands or feet near or under rotating parts.
   Keep clear of discharge opening and auger at all times.
- Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic.
- Do not carry passengers.
- After striking a foreign object, stop the engine, remove wire from the spark plug and thoroughly inspect the snow thrower for any damage. Repair the damage before restarting and operating the snow thrower.
- If the snow thrower starts to vibrate abnormally, stop the engine and check immediately for the cause.
   Vibration is generally a warning of trouble.
- Stop the engine whenever you leave the operating position, before unclogging the collector/impeller housing or discharge guide and before making any repairs, adjustments, or inspections. Never place your

- hand in the discharge or collector openings. Use a stick or wooden broom handle to unclog the discharge opening.
- Take all possible precautions when leaving the unit unattended. Disengage the collector/impeller, stop the engine and remove the key.
- When cleaning, repairing, or inspecting, make certain collector/impeller and all moving parts have stopped.
   Disconnect spark plug wire and keep away from plug to prevent accidental starting.
- Do not run the engine indoors, except when starting it and/or transporting the snow thrower in or out of building. Open doors before starting the engine in that case. Exhaust fumes are dangerous.
- Do not clear snow across the face of slopes. Exercise extreme caution when changing direction on slopes.
   Do not attempt to clear steep slopes.
- Never operate the snow thrower without guards, plates or other safety protection devices in place.
- Never operate the snow thrower near glass enclosure, automobiles, window wells, drop off, etc., without proper adjustments of snow thrower discharge angle. Keep-children and pets away.
- Do not overload machine capacity by attempting to clear snow at too fast a rate. Never operate the machine at high transport speeds on slippery surfaces. Look behind and use care when backing.
- Never direct discharge at bystanders or allow anyone in front of unit while throwing snow.
- Disengage power to collector/impeller of the snow thrower when transporting it or when the unit is not in use.
- Use only attachments and accessories (such as wheel weights, counter weights, cabs, etc.) approved by the snow thrower manufacturer.
- Never operate the snow thrower without good visibility or light. Always be sure of your footing and keep a firm hold on the handles. Walk, never run.

 Muffler and engine become hot and can cause severe burn injury. Do not touch the muffler or the engine while starting or operating the snow thrower.

#### MAINTENANCE AND STORAGE

- Check shear bolts, engine mounting bolts, etc., at frequent intervals for proper tightness, thus ensuring that the equipment is in safe working condition.
- Never store the machine with fuel in the fuel tank inside a building where ignition sources are present, such as hot water heaters, space heaters, clothes dryers and the like. Allow engine to cool before storing in any enclosure.
- Always refer to owner's guide instructions for important details if the snow thrower is to be stored for an extended period.
- Run machine a few minutes after throwing snow to prevent freeze-up of the collector/impeller.
- Check clutch controls periodically to verify that these engage and disengage properly and readjust if necessary. Refer to Service and Adjustments section page of this owner's guide.

#### YOUR RESPONSIBILITY

- Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.
- We do not recommend the use of pressure washers or garden hose to clean your unit. They may cause damage to electric components, spindles, pulleys, bearings or the engine. The use of water will result in shortened life and reduce serviceability.

Following are representations of some of the safety labels on your Craftsman snowthrower. Please follow the instruction on these labels and maintain safety while using or servicing the equipment. explanation of engine labels is given on Page 12.

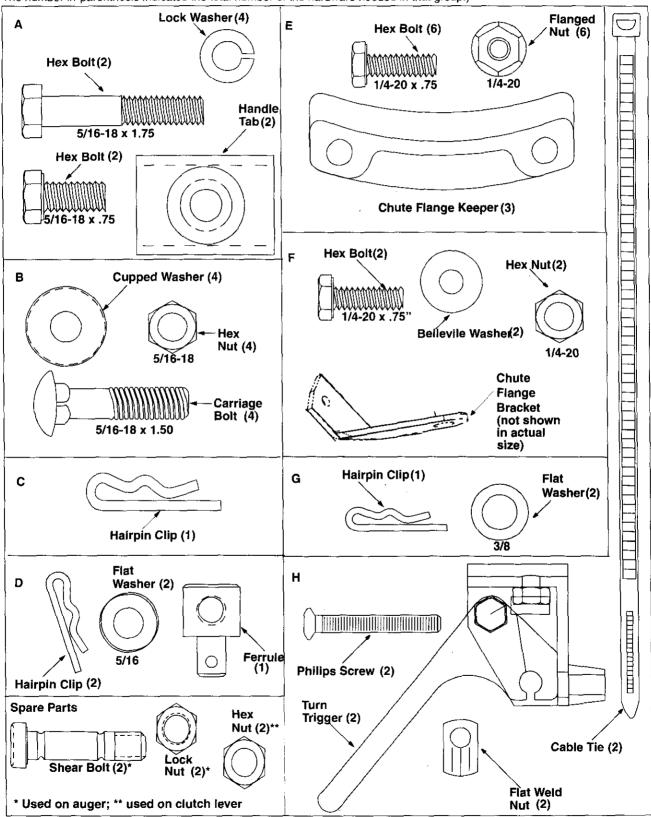






# **HARDWARE PACK**

Lay the hardware pieces from the hardware pack on the figure here and you will have automatically sorted these according to the steps of the assembly procedure described later. (Only one unit of each hardware has been shown per group. The number in parenthesis indicates the total number of the hardware needed in that group.)



## **ASSEMBLY**

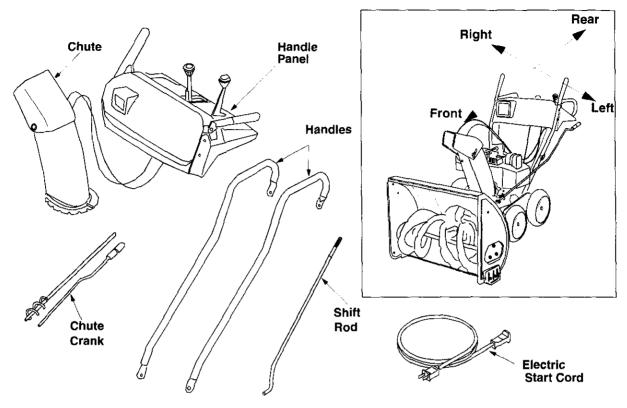


Figure 1

**IMPORTANT:** This unit is shipped with engine oil in the engine, but without gasoline. After assembly, see OPERATION section of this manual for fuel selection and fill-up.

**NOTE:** To determine right and left hand sides of your snow thrower, stand behind the unit in the operating position. See Figure 1 inset.

Your snow thrower has been assembled at the factory except the handles and the handle panel, the discharge chute assembly, the chute crank assembly and the shift rod. These parts are shipped loose in the carton.

## **Removing From Carton**

- Cut the corners of the carton and lay the sides flat on the ground. Remove all packing inserts.
- Remove all loose parts. For a complete list of the loose parts, refer to the following section.
- Move the snow thrower out of the carton.
- Make certain all parts and literature have been removed before discarding the carton.

#### **Loose Parts**

(See Figure 1.)

- a. Handle Panel and Chute Assembly
- b. Right Hand & Left Hand Handles

- c. Electric Start Cord
- d. Two-piece Chute Crank Assembly
- e. Shift Rod
- f. Hardware Pack

Assembly Tips: For easier assembly purposes, remove the chute from the carton and lay it on top of the engine. Do not unwrap the chute till you have installed the handle panel and the clutch cables.

## **Tools Required**

- 1. 1/2", 7/16", 3/8" wrenches or a set of adjustable wrenches
- 2. Set of pliers
- 3. Set of philips head screw drivers
- 4. Funnel to fill up gasoline



WARNING: Make certain the spark plug wire is disconnected and moved away from the spark plug before assembling the snow thrower.

## Attaching Handle Assembly

Stretch out control cables and place on the floor.
Place the right handle in position with the flat
side against the snow thrower. You can identify
the right handle by the traction drive control label
on it and the left handle by the auger clutch
control label on it.

 Secure bottom hole in the handle to the snow thrower using 5/16 x .75" hex bolt and lock washer from the hardware pack (group A on page 5). Do not tighten at this time. See Figure 2.

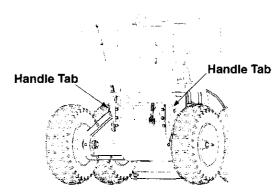


Figure 2

- Place a handle tab, included in the hardware pack (group A on page 5), over the upper hole in handle so that the contour of the handle tab matches that of the handle. See Figure 2.
- Secure handle tab to the snow thrower using hex bolt (5/16 x1.75" long) and lock washer from the same group in the hardware pack. Do not tighten at this time.
- Attach the left handle in the same manner. Do not tighten at this time.
- Place the handle panel in position between the handles so the ends of the curved part of the handles go through the slots in the handle panel.
   See Figure 3.

Assembly Tips: For easier assembly, slide left side of the handle panel in first, place the right side next. Once the handle panel is in position, push the auger control lever down to lock the panel into position.

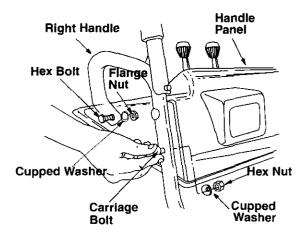


Figure 3

- While placing the handle panel, make sure to route chute and chute cable between the handles underneath the panel keeping the cable on top of the engine. Align the holes in the handle with the holes on two sides of the handle panel. See Figure 3.
- Attach the handle panel to the handle with two carriage bolts, cupped washers (cupped side against the handle panel) and hex nuts on each side. Align the contour of the carriage bolt head with the handle. See Figure 3. You will find these fasteners in the hardware pack (group B on page 5). Repeat on other side.
- Align the hole on the curved part of the right handle with the corresponding hole on the right side of handle panel making sure that this end of the handle is firmly placed in the slot on the handle panel. See Figure 3.
- Insert a hex bolt, cupped washer and flange nut from Group F of the hardware pack through these holes as shown in Figure 3. Tighten to secure. Do not attach the left side now.

## Attaching Chute

 Place the chute assembly over the chute opening with the chute facing front of the unit.

**NOTE:** Make sure that the chute cables are straightened while assembling the chute.

 Place the chute flange keeper (flat side down) beneath lip of chute assembly as shown in Figure 4. You will find the chute flange keepers in group E of the hardware pack.

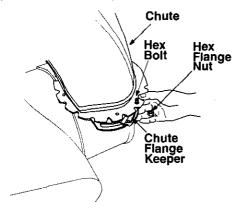
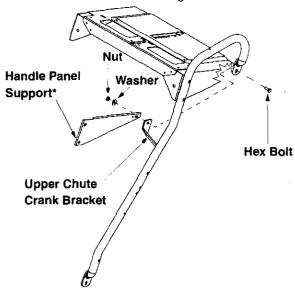


Figure 4

- Insert hex bolt (1/4-20 x .75") and flange nut from group E up through chute flange keeper and chute assembly as shown in Figure 4. Do not tighten at this time. Rotate chute to install all the flange keepers.
- After assembling all three chute flange keepers, tighten, then back off 1/4 turn to allow easier movement of the chute. Use (2) 7/16" wrenches.

## **Attaching Chute Crank**

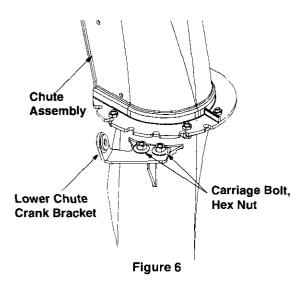
- On the left side of the handle panel, place the upper chute crank bracket on to the inside of the handle panel support. See Figure 5. You will find this bracket and associated hardware in group F of hardware pack.
- Insert hex bolt through the upper chute crank bracket, handle panel support, and upper left handle. Secure the bracket using cupped washer and hex nut. Make sure that the cupped side of the washer is set against the handle.



\* This part is already attached inside the handle panel

#### Figure 5

 You may have to loosen the carriage bolts and hex lock nuts which secure the lower chute crank bracket to the extension on the left side of the chute assembly. See Figure 6.



 Place one 3/8 ID flat washer (from group G of the hardware pack) on the end of the chute crank, then insert the end of the chute crank into the eye hole in the plastic bushing in the lower chute crank bracket. See Figure 7.

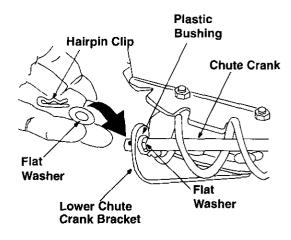


Figure 7

- Place the other 3/8 ID flat washer (from the same group of hardware) on the end of the chute crank and insert hairpin clip into hole at the end of the chute crank. See Figure 7.
- Adjust the chute bracket so that the spiral on the chute crank fully engages the teeth on the chute assembly.

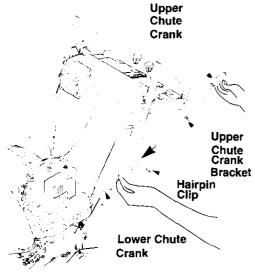


Figure 8

- Slide the upper chute crank through the plastic bushing in the upper chute crank bracket and then into the lower chute crank. See Figure 8. Align the holes on the two pieces of the chute crank, and secure with hairpin clip from group C of the hardware pack.
- Fully rotate the chute, using the chute crank, to make sure that it moves freely.

- Using a wrench, tighten the hex bolt and the hex nut on the upper chute crank bracket.
- Slip the cables that run from the handle panel to the chute into the cable guide located on top of the engine. See Figure 9.

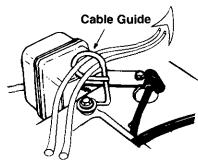


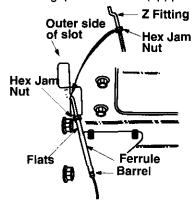
Figure 9

Tighten all loose hardware on the handle assembly in the following order — first the four hex bolts at the bottom of the handle, then the carriage bolts and lastly the hex bolts on the rear of the handle panel. Tighten the carriage bolts on the lower chute crank bracket.

## **Attaching Clutch Cables**

The clutch control cables are attached to the snow thrower. For shipping purposes, if the cables are attached to the top of the engine with cable ties, cut the cable ties now. The Z ends of the clutch cables are hooked into the clutch grips on each handle.

- Ensure there is a hex jam nut threaded all the way up the threaded portion of the Z fitting; extras are supplied in the hardware pack. See Figure 10.
- Place the clutch grip in the raised (up) position.



(Viewed from the underside of the handle panel)

#### Figure 10

- Swing the left auger cable up making sure the cable is routed correctly in the cable roller guides located at the lower rear of the unit.
- Hold the end of the cable at the barrel so the ferrule turns freely without twisting the cable.

- Thread the ferrule on to the Z fitting. You may have to pull on the cable slightly to relieve tension. Keep the ferrule turning without twisting the cable.
- You will reach correct adjustment when there is minimal slack in the cable but it is not tight. Hold the flats on the ferrule with pliers and tighten the jam nut against the ferrule. CAUTION: Cables will become loose if you do not tighten the jam nut.



**WARNING:** There must not be any tension on either clutch cable with the drive or auger clutch grip in the disengaged (up) position. These clutches are a safety feature. Do not override their function.

## **Attaching Shift Rod**

- Place the shift lever in the sixth (6) speed.
- Place the bent end of the shift rod into the hole in the shift arm assembly. See Figure 11. Secure with 5/16 flat washer and hairpin clip from group D of the hardware pack.
- Thread ferrule (included in group D) from the right side onto the other end of the shift rod till it lines up with the upper hole in the shift lever (beneath the handle panel). While aligning the ferrule, push down on the shift rod and the shift arm assembly as far as it will go.

**NOTE:** You may have to pull the shift lever out of the sixth speed position and move it towards the fifth speed position until the ferrule slides into the hole without force.

 Once the ferrule slides into the hole, turn it counter-clockwise one more full turn and insert it in the hole in the shift lever. For proper positioning of the ferrule and the associated hardware, see Figure 11.

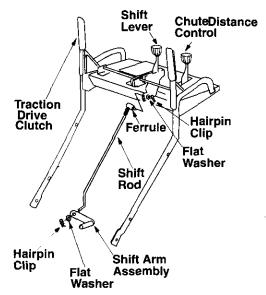


Figure 11

- Secure the ferrule to the shift lever with another 5/16 flat washer and hairpin clip from group D of the hardware pack. See Figure 11.
- Make certain to check for correct adjustment of the shift rod as instructed in the Adjustment section before operating the snow thrower.

## **Attaching Turn Triggers**

- Check and make sure that the right hand trigger cable is routed in front of the traction drive cable.
- Feed the trigger cable up through the outer side of the slot in the handle panel. See Figure 12. Do not feed the cable through the same side of the slot as the Z fitting.

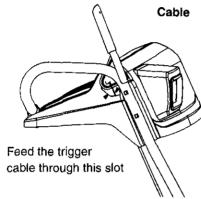


Figure 12

 Place the cable barrel fitting into the hole in the trigger. You can find the triggers and associated hardware in group H of the hardware pack. See Figure 13.

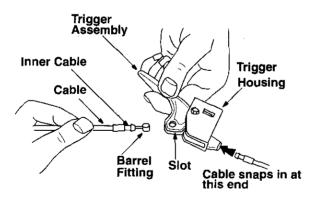


Figure 13

 Pull on the cable and rotate it around the bottom of the trigger, with the inner cable in the slot, until the cable end can be pushed into the trigger housing and snapped tight. See Figure 13.

**NOTE:** When the cable is installed correctly, you should not be able to pull the cable out of the trigger housing.

 Place the right turn trigger in position underneath the right handle. Secure with screw and weld nut from group H of the hardware pack. See Figure 14. Use a phillips screwdriver for tightening the screw. Repeat on left side. Be careful not to drop the weld nut before securing it in position.

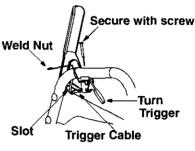


Figure 14

 Secure the right turn trigger cable to the right lower handle using cable tie provided in the hardware pack. Make sure not to wrap the drive cable. See Figure 15.

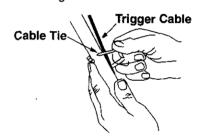


Figure 15

 Secure the left turn trigger cable to the lower handle using the other cable tie. Make sure to route the cable tie below the auger drive cable so that when the trigger cable is secured by the cable tie, the auger drive cable is left outside the cable tie. Trim excess ends from each cable tie.

**NOTE:** The right side cable tie must be used to keep cable from coming in contact with the moving shift arm from the transmission.

## Lamp Wiring

- Wrap the wire from the lamp down the right handle as shown in Figure 15.
- Plug wire into the alternator lead wire under the fuel tank. See Figure 16.

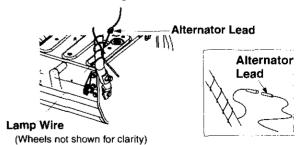


Figure 16

**IMPORTANT:** Assemble your snow thrower, then check the adjustments as instructed and make any final adjustments necessary before operating the unit. Failure to follow these instructions may cause damage to the snow thrower.

## **Final Adjustments**

### **Auger Control**

- To check the adjustment of the auger control, push forward the left hand clutch grip until the rubber bumper is compressed. There should be slack in the clutch cable.
- Release the clutch grip. The cable should be straight. Make certain you can depress the auger control grip against the left handle completely.
- If adjustment is necessary, loosen the hex jam nut and thread the cable in (for less slack) or out (for more slack).
- Recheck the adjustment. Tighten the jam nut against the cable when correct adjustment is reached.

#### Traction Drive Clutch and Shift Lever

- Tip the snow thrower forward so that it rests on the auger housing.
- Move the shift lever all the way forward to the sixth (6) position.
- With the traction drive lever released, spin the snow thrower wheels by hand. The wheels should turn; however, you may feel some resistance.
- Engage the traction drive clutch grip. The wheels should no longer turn.
- Now release the traction drive clutch grip, and spin the wheels again.
- Move the shift lever back to the fast reverse position, then all the way forward again. There should be no resistance in the shift lever, and the wheels should turn.
- If you face resistance when moving the shift lever or the snow thrower wheels stop when they should not, loosen the lock nut on the traction drive cable and unthread the cable one turn.
- If the wheels can still be turned when you engage the traction drive clutch grip, loosen the lock nut on the traction drive cable and thread the cable in one turn.
- Recheck the adjustment and repeat adjustment as necessary. Tighten jam nut to secure the cable when correct adjustment is reached.

**NOTE:** For more details, refer to the Adjustment section on page 20.

#### Skid Shoe

The space between the shave plate and the ground can be adjusted. For close snow removal, place skid shoes in the low position. Use middle or high position when area to be cleared is uneven.

**NOTE:** It is not recommended that you operate this snow thrower on gravel as loose gravel can be easily picked up and thrown by the auger causing an injury or damage to the snow thrower.

- If for some reason, you have to operate the snow thrower on gravel, keep the skid shoe in the highest position for maximum clearance between the ground and the shave plate.
- Adjust skid shoes by loosening the six hex nuts and carriage bolts and moving skid shoes to desired position.
- Make certain the entire bottom surface of skid shoe is against the ground to avoid uneven wear on the skid shoes.
- Tighten nuts and bolts securely.

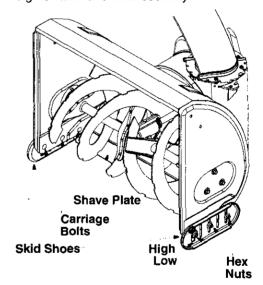


Figure 17

### Tire Pressure (Pneumatic Tires)

The tires are over-inflated for shipping purposes. Check tire pressure and reduce to 15 to 20 psi.

**NOTE:** If the tire pressure is not equal in both tires, the unit may pull to one side or the other.

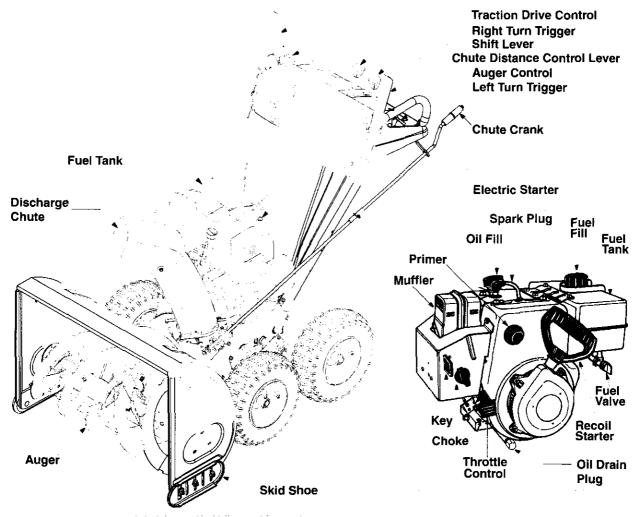
## **OPERATION**

## **Knowing Your Snow Thrower**



Read this owner's manual and safety rules before operating your snow thrower. Compare illustration below with your snow thrower to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.

The operation of any snow thrower can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always **wear safety glasses** for operating the snow thrower, or while performing any adjustments or repairs on it.



Following is an explanation of the symbols used in engine labels:



Figure 18

## **Meets ANSI Safety Standards**

Sears snow throwers conform to the safety standards B71.3 of the American National Standards Institute (ANSI).

## **Operating Controls**

(See Figure 18.)

#### Chute Crank

The chute crank is located on the left hand side of the snow thrower. To change the direction in which snow is thrown, turn chute crank as follows:

Turn *clockwise* to discharge to the left; Turn *counterclockwise* to discharge to the right.

#### **Throttle Control**

The throttle control is located on the engine. It regulates the speed of the engine.

#### Safety Ignition Switch

The ignition key must be inserted into the switch for the unit to start. Remove the ignition key when the snow thrower is not in use.

#### Left and Right Turn Trigger

The left and right turn triggers are located on the underside of the handles and are used to assist in steering your snow thrower. Squeeze the right turn trigger when turning right, squeeze the left turn trigger when turning left. Operate your snow thrower in open areas until you become familiar with these controls.

#### **Shift Lever**

The shift lever is located in the center of the handle panel. It may be moved into one of eight positions:

- a. Forward—one of six speeds; position one (1) is the slowest and position six (6) is the fastest
- b. Reverse—two reverse (R) speeds; R<sub>2</sub> is faster.

Use the shift lever to determine ground speed. Do not shift to different speed while the unit is moving.

#### **Auger Control**

The auger control is located on the left handle. Squeeze the auger control against the handle to engage the augers; release to disengage the augers. (Traction drive control must also be released.)

#### **Traction Drive Control**

The traction drive control is located on the right handle. Squeeze the traction drive control to engage the wheel drive; release to stop.

This same lever also locks the auger control so that you can turn the chute crank without interrupting the snow throwing process. If the auger control is engaged with the traction drive control engaged, you can release the auger control (on the left handle) and the augers will remain engaged. Release the traction drive control to stop both the augers and the wheel drive. (Auger control must also be released).

#### **Chute Distance Control Lever**

The distance that snow is thrown can be adjusted by adjusting the angle of the chute assembly. Push the chute distance control lever forward to move the upper chute down and decrease the distance. Pull the lever back toward the rear to move the upper chute up and increase the distance.

## Stopping Snow Thrower

- To stop the wheels, release the traction drive lever of the snow thrower.
- To stop throwing snow, release the auger drive lever
- To stop the engine, push the throttle control lever to OFF and pull out the ignition key. Do not turn key.

## **Before Starting Engine**

#### Fill Gas



**WARNING:** Gasoline is flammable and caution must be used when handling or storing it.

Do not fill fuel tank while the snow thrower is running, when it is hot or when it is in an enclosed area.

Keep your snow thrower away from any open flame or an electrical spark and do not smoke while filling the fuel tank.

Never fill the fuel tank completely. Fill the tank to within 1/4"-1/2" from the top to provide space for expansion of fuel.

Always fill the fuel tank outdoors and use a funnel or spout to prevent spilling.

Make sure to wipe off any spilled fuel before starting the engine.

- Store gasoline in a clean, approved container and keep the cap in place on the container.
- Make sure that the container from which you pour the gasoline is clean and free from rust or other foreign particles.
- Fill fuel tank with clean, fresh, unleaded grade automotive gasoline.
- At the end of the job, empty the fuel tank if the snow thrower is not going to be used for 30 days or longer. See storage instructions on page 25 of this manual.

**CAUTION:** Experience indicates that alcohol blended fuels (called gasohol) or those 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 more information.

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

## To Start Engine



WARNING: Be sure no one other than the operator is standing near the snow thrower while starting or operating. Do not operate this snow thrower unless the discharge chute assembly has been properly installed and is secured.

#### A. Electric Starter

For location of all the engine controls and settings referred to in this section, see Figure 18 inset.

Before starting, make sure that the engine has sufficient oil. The snow thrower engine is equipped with a 120 volt A.C. electric starter and recoil starter. The electric starter is equipped with a three-wire power cord and plug and is designed to operate on 120 volt AC household current. Follow all instructions carefully.

#### **Cold Start**

**NOTE:** If the unit shows any sign of motion (drive or augers) with the clutch grips disengaged, shut the engine off immediately. Readjust as instructed in the "Final Adjustments" section of the Assembly Instructions.



**WARNING:** The electric starter must be properly grounded at all times to avoid the possibility of electric shock which may be injurious to the operator.

 Determine whether your house wiring is a threewire grounded system. Ask a licensed electrician if you are not certain.



**WARNING:** If your house wiring system is not a three-wire grounded system, do not use this electric starter under any conditions.

- If your house wiring system is grounded and a three-hole receptacle is not available at the point the snow thrower starter will normally be used, one should be installed by a licensed electrician.
- When connecting the power cord, always connect cord to starter on engine first, then plug the other end into a three-hole grounded receptacle.
- When disconnecting the power cord, always unplug the end from the three-hole, grounded receptacle first.
- Attach spark plug wire to spark plug.
- Make sure that the auger drive and the traction drive levers are in the disengaged RELEASED position.
- Move throttle control lever to FAST position.
- Remove the keys from the plastic bag. Push key into the ignition slot. Make sure it snaps into place. Do not turn key. Keep the second key in a safe place.
- Rotate the choke knob to FULL choke position.
- Connect the power cord to the switch box on the engine.
- Plug the other end of the power cord into a three-hole, grounded 120 volt A.C. receptacle.



**WARNING:** Do **not** use primer while starting the engine with an electric starter.

Push down on the starter button until the engine starts. Do not crank for more than 10 seconds at a time. This electric starter is thermally protected. If overheated, it will stop automatically and can be restarted only when it has cooled to a safe temperature (a wait of about 5 to 10 minutes is required).



## **Starting Instructions At A Glance**

Snow Thrower	Spark Plug Wire	Drive Levers	Throttle Control	Ignition Key	Choke	Power Cord	Primer	Starter	After Starting
Electric Starter	Connect	Release	Move to FAST	Push to snap in	Move to FULL	Connect to source		Push button	Release button     Move Choke to     Off     Disconnect cord
Recoil Starter	Connect	Release	Move to FAST	Push to snap in	Move to FULL	_	Prime	Pull handle	Release handle     Move Choke to Off

- When the engine starts, release the starter button and slowly rotate the choke to OFF position. If the engine falters, rotate the choke to FULL and then gradually to OFF.
- Disconnect the power cord from the receptacle first and then from the switch box on the engine.
- Allow the engine to warm up for a few minutes because the engine will not develop full power until it reaches operating temperature.
- Operate the engine at full throttle (FAST) when throwing snow.

#### **Warm Start**

 If restarting a warm engine after a shut down, rotate choke to OFF instead of FULL and press the starter button.

#### B. Recoil Starter

Make sure that the engine has sufficient oil and the auger drive and the traction drive levers are released.

- Attach spark plug wire to spark plug.
- Move throttle control to FAST position.
- Push key into the ignition slot so that it snaps into place. Do not turn key. Remove plastic bag and keep the second key in a safe place.
- Rotate choke control to FULL choke position.
- Push the primer button while covering the vent hole. Remove your finger from the primer between primes. Do not prime if temperature is above 50° F; prime two times between 50° F and 15° F; and prime four times below 15° F.
- Pull the starter handle rapidly. Do not allow the handle to snap back, but allow it to rewind slowly while keeping a firm hold on the starter handle.
- As the engine warms up and begins to operate evenly, rotate the choke knob slowly to OFF position. If the engine falters, return to FULL choke, then slowly move to OFF choke position.
- Allow the engine to warm up for a few minutes because the engine will not develop full power until it reaches operating temperature. Operate engine at full throttle (FAST) when throwing snow.

#### **Warm Start**

 If restarting a warm engine after a temporary shut down, rotate choke to OFF instead of FULL and do not prime. Press the starter button.

#### Frozen Recoil Starter

- Pull as much rope out of the starter as possible.
- Release the starter handle and let it snap back against the starter.
- If the engine still fails to start, repeat the first two steps. If continued attempts do not free starter, follow the electric starter procedures to start.
- Avoid possible freezing of recoil starter and the engine controls.

## **Operating Snow Thrower**

#### To Engage Drive

- With the engine running near top speed, move shift lever to one of six FORWARD positions or two REVERSE positions. Select a speed appropriate for the snow conditions that exist. Use slower speeds until you are familiar with the operation of the snow thrower.
- Squeeze the traction drive clutch grip against the right handle and the snow thrower will move.
   Release it and the drive motion will stop.

#### To Engage Augers

- To engage the augers and start throwing snow, squeeze the left hand auger clutch grip against the left handle. Release to stop augers.
- While the auger control is engaged, squeeze the traction drive control to move, release to stop.
   Do not shift speeds while the drive is engaged.

**NOTE:** This same lever also locks the auger control so you can turn the chute crank without interrupting the snow throwing process.

- Release the auger control; the interlock mechanism should keep the auger control engaged until the traction drive control is released.
- Release the traction drive control to stop both the augers and the wheel drive.



**WARNING:** To stop the auger, both levers must be released.

#### To Throw Snow

**CAUTION:** Check the area to be cleared for foreign objects. Remove, if any.

- Start the engine following Starting instructions.
- Rotate the discharge chute to the desired direction, away from bystanders and/or buildings. Move the chute distance control forward or backward to adjust the distance the snow is to be thrown.
- Select the speed according to snow condition.

**CAUTION:** Never move the shift lever without first releasing the drive clutch.

- Engage the auger control and traction drive control levers following instructions above.
- The interlock feature will allow you to remove your left hand from the auger control lever.
- When clearing the first pass through the snow, control the traction speed of the snow thrower according to the depth and condition of snow.
- To turn the unit left, squeeze left trigger; to turn right, squeeze right trigger.

- On each succeeding pass, readjust the chute deflector to the desired position and slightly overlap the previously cleared path.
- After the area is cleared, stop the snow thrower following instructions given below.

## **Before Stopping**

- Run engine for a few minutes to help dry off any moisture on engine.
- To avoid possible freeze-up of the starter, follow these steps:

#### **Recoil Starter**

 With the engine running, pull the starter rope with a rapid, continuous full arm stroke three or four times.

#### **Electric Starter**

- a. Connect power cord to switch box, then to 120 Volt AC receptacle.
- b. While the engine is running, push the starter button and spin the starter for several seconds.
- c. Disconnect power cord from the receptacle first, then from the snow thrower.

**NOTE:** The unusual sound from pulling the starter rope in the case of the recoil starter, or from spinning the starter in the case of the electric starter, will not harm the engine.

## To Stop The Snow Thrower

- To stop the wheel, release traction drive lever on the snow thrower.
- To stop throwing snow, release auger drive lever.
- To stop engine, push throttle control lever to OFF and pull out the key. Do not turn key.

- To avoid freeze-up of engine controls, follow these steps after the engine is stopped:
  - Wipe all snow and moisture from engine around the throttle control and the choke.
  - Move throttle control lever back and forth several times and leave in OFF position.
  - Move engine choke back and forth several times and leave in the FULL position.
  - d. Close fuel valve.

## **Operating Tips**

**NOTE:** Allow the engine to warm up for a few minutes as the engine will not develop full power until it reaches operating temperature.



**Warning:** The temperature of muffler and surrounding areas may exceed 150° F. Avoid these areas.

- For most efficient snow removal, remove snow immediately after it falls.
- Discharge snow downwind whenever possible.
   Slightly overlap each previous swath.
- Set the skid shoes 1/4" below the scraper bar for normal usage. The skid shoes may be adjusted upward for hard-packed snow.

**NOTE:** We not recommend that you operate this snow thrower on gravel as loose gravel can be easily picked up and thrown by the auger causing an injury or damage to the snow thrower.

- If for some reason, you have to operate the snow thrower on gravel, keep the skid shoe in the highest position for maximum clearance between the ground and the shave plate.
- Clean the snow thrower thoroughly after each use.

## **MAINTENANCE**

#### **General Recommendations**

- The warranty on this snow thrower does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain the snow thrower as instructed in this manual.
- Some adjustments will have to be made periodically to maintain your unit properly.
- Follow the maintenance schedule given below.
- Periodically check all fasteners and make sure these are tight.
- We do not recommend the use of pressure washers or garden hose to clean your unit. They may cause damage to electric components, spindles, pulleys, bearings or the engine. The use of water will result in shortened life and reduce serviceability.



**WARNING:** Always stop engine and **disconnect** the spark plug wire before performing any maintenance or adjustment on your snow thrower.

#### Lubrication

For a view of the lubrication points on the snow thrower, see Figure 19.

#### **Sprocket Shaft**

 Lubricate the sprocket shaft with grease at least once a season or every 25 hours of operation.

**IMPORTANT:** Keep all grease and oil off of the friction wheel and the drive plate.

#### **Shifting Mechanism**

 Lubricate the shifting mechanism and pivot points on the shift rod with engine oil at least once a season or after every 25 hours of operation.

#### **Traction Drive Control**

 Lubricate cams on the ends of the control rods, which interlock the traction drive and auger controls, at least once a season or every 25 hours of operation with grease. The cams can be accessed beneath the handle panel.

## **Customer Responsibilities**

	MAINTENANCE SCHEDULE Bede kee in the last last last last last last last last												
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	Lubricate pivot points				৶								
	Clean snow thrower		৶										
⊢	Clean shave plate		৶										
PRODUCT	Clean skid shoes	:	৶		:								
PRO	Check V-belts				৶								
	Check friction wheel rubber	:			4							i	
	Check engine oil	√											
ш	Change engine oil			<	4								1
ENGINE	Check spark plug						৶						
	Check muffler					4							
	Empty fuel system						4						

<sup>\*</sup> Fill in dates as you complete regular service

#### **Gear Case**

 The gear case is lubricated with grease at the factory and does not require checking. If disassembled for any reason, lubricate with two ounces of Shell Alvania grease.

#### **Wheel Chain Case**

 The wheel chain case is equipped with a grease fitting. A cold weather multi-purpose grease should be pumped (only two times) into chain case every 25 hours of operation. Exceeding this may cause grease to leak out of the chain case when warm.

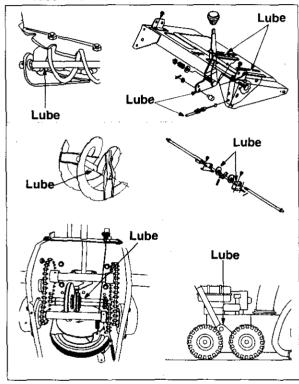


Figure 19: Lubrication Chart

#### Worm Gear

 Lubricate the worm gear on the chute crank once a season with a multi-purpose automotive grease.

NOTE: If you disassemble the snow thrower transmission, make sure to route the cable between the drive shaft and the gear shaft before reconnecting to support bracket for reassembly.

#### **Bearings**

- Once a season lubricate auger bearings and the bearings on the side of the frame with light oil.
- Oil or spray lubricant into bearings at wheels at least once a season. Remove wheels, clean and coat axles with multi-purpose automotive grease.

#### Auger Shaft

Lubricate auger shaft at least once a season.
 Also lubricate the auger bearings at least once a season. Remove shear bolts on auger shaft. Oil or spray lubricant inside shaft.

#### **Check V-belts**

Follow the instructions below to check the condition of the drive belts every 50 hours of operation.

- Remove the plastic belt cover on the front of the engine by removing two self-tapping screws.
- Visually inspect for frayed, cracked, or excessively worn out belts.

#### **Check Friction Wheel**

Follow the instructions below to check the condition of the friction wheel rubber every 25 hours of operation.

 Remove the six self-tapping screws from the frame cover underneath the snow thrower. See Figure 20.

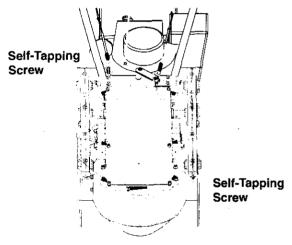


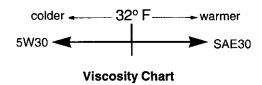
Figure 20

- Visually inspect the friction wheel rubber for excessive wear, cracks, or loose fit on the friction wheel drive hub.
- Also engage traction drive control and check if the friction wheel is making contact with the friction plate.
- If it does not make contact, adjust the traction drive cable following instructions and recheck the friction wheel.
- Replace friction wheel rubber if necessary.
   Refer to instructions on page 23.

## **Engine Maintenance**

#### **Engine Oil**

Only use high quality detergent oil rated with API service classification SF, SG or SH. Select the oil's SAE viscosity grade according to the 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 snow thrower's engine oil level more frequently to avoid possible engine damage from running low on oil.

Refer to the viscosity chart for proper selection of engine oil.

#### **Checking Oil Level**

- Before operating the snow thrower, check the oil level.
- With engine on level ground, the oil must be to FULL mark on dipstick.
- Stop engine and wait several minutes before checking oil level. Remove oil fill cap and dipstick.
- Wipe dipstick clean, insert it into oil fill hole and tighten securely.
- Remove dipstick and check. If oil is not up to the FULL mark on dipstick, add oil.

#### **Changing Oil**

Change engine oil after first two hours of operation and every 25 hours thereafter.

In order to change the oil, you will have to first drain the spent engine oil from the engine and then refill with fresh oil.

- Drain oil while engine is warm. Remove oil drain cap located at bottom of the recoil starter of the engine. Catch oil in a suitable container.
- When engine is drained of all oil, replace drain plug securely.
- Remove the dipstick from the oil fill. For location of the oil fill, see Figure 18. Pour fresh oil slowly through the plug. Replace dipstick.
- Check and make sure that the level of oil is up to the FULL mark on the dipstick.



WARNING: Temperature of muffler and nearby areas may exceed 150° F(65°C). Avoid these areas.

#### Spark Plug

- Clean area around the spark plug base.
- Remove and inspect the spark plug.
- Replace the spark plug if electrodes are pitted, burned, or the porcelain is cracked. See Figure 21.
- Clean the spark plug and reset the gap to 0.030" at least once a season or every 50 hours of operation. See Figure 21.
- Spark plug replacement is recommended at the start of each season. Refer to engine parts list for correct spark plug type.

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

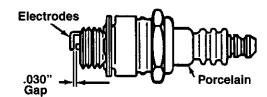


Figure 21

## **SERVICE & ADJUSTMENTS**



**WARNING:** Always stop the engine, disconnect spark plug wire and move it away from the spark plug before performing any adjustments or repairs.

**Never** attempt to clean the chute or make any adjustments while the engine is running.

## **Adjustments**

**WARNING:** Never attempt to clean chute or make any adjustments while engine is running.

#### **Chute Assembly**

The distance that snow is thrown can be adjusted by adjusting the angle of the chute assembly. Refer to the Controls section of this manual.

 The remote chute control cables have been preadjusted at the factory. Move the remote chute lever on the control panel back and forward to adjust angle of the chute asssembly.

#### Skid Shoe

The space between the shave plate and the ground can be adjusted. For close snow removal, place skid shoes in the low position. Use middle or high position when area to be cleared is uneven.

- Adjust skid shoes by loosening the six hex nuts and carriage bolts and two washers and moving skid shoes to desired position.
- Make certain the entire bottom surface of skid shoe is against the ground to avoid uneven wear on the skid shoes.
- Retighten nuts and bolts securely.

**NOTE:** It is not recommended that you operate this snow thrower on gravel as loose gravel can be easily picked up and thrown by the auger causing an injury or damage to the snow thrower.

 If for some reason, you have to operate the snow thrower on gravel, keep the skid shoe in the highest position for maximum clearance between the ground and the shave plate.

#### **Traction Drive Clutch**

Refer to the Final Adjustment section of the Set-Up Instructions to adjust the traction drive clutch. To check the adjustment, proceed as follows:

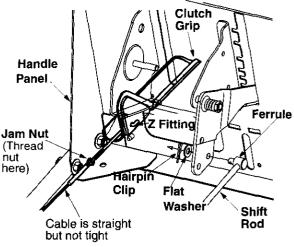
- With the snow thrower tipped forward (be certain to drain the gasoline or place plastic film under the gas cap if the snow thrower has already been operated), remove the frame cover underneath the snow thrower by removing six self-tapping screws.
- With the traction drive clutch released, there must be clearance between the friction wheel

- and the drive plate in all positions of the shift lever.
- With the traction drive clutch engaged, the friction wheel must contact the drive plate (shown in Figure 31).
- If adjustment is necessary, loosen the jam nut on the traction drive cable and thread the cable in or out as necessary. See Figure 22. Tighten the jam nut to secure the cable when correct adjustment is reached. Reassemble the frame cover.

**NOTE**: If you placed plastic under the gas cap, be certain to remove it.

#### **Auger Clutch**

To adjust the auger clutch, refer to Final Adjustment section of Set-Up Instructions.



(Viewed from under the handle panel)

Figure 22

#### Shift Rod

To adjust the shift rod, proceed as follows.

- Remove the hairpin clip and flat washer from the shift handle under the handle panel.
- Place shift lever in sixth (6) position or the fastest forward speed.
- Push shift arm assembly down as far as it will go.
- Rotate the ferrule up or down on the shift rod as necessary until the ferrule lines up with the upper hole in the shift lever. See Figure 22.
- Insert ferrule from the right side of the snowthrower into the upper hole in shift lever.
- Reinstall the hairpin clip and the washer.



**CAUTION:** Check for correct adjustment before operating the snow thrower.

#### Carburetor



**WARNING:** 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 mufflers.

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

#### Service

#### **Augers**

The augers are secured to the spiral shaft with two shear bolts and hex lock nuts. See Figure 23. If you hit a foreign object or ice jam, the snow thrower is designed so that the bolts will shear. This type of boltt is used where vibration occurs.

If the augers do not turn, check to see if the bolts have sheared. Two replacement shear bolts (shown in Figure 23 inset) and hex lock nuts have been provided with the snow thrower. Since lock nuts cannot be threaded onto a bolt by hand, use a wrench. When replacing bolts, spray an oil lubricant into shaft before inserting new bolts.

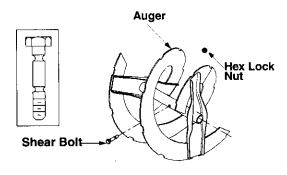


Figure 23

#### **Shave Plate and Skid Shoes**

The shave plate and skid shoes on the bottom of the snow thrower are subject to wear. They should be checked periodically and replaced when necessary.

- Remove the six carriage bolts, belleville washers and hex nuts which attach skid shoes to the snow thrower on two sides. See Figure 17.
- Reassemble new skid shoes with the six carriage bolts, belleville washers (cupped side goes against skid shoes) and hex nuts. Make certain the skid shoes are adjusted to be level.
- To remove shave plate, remove the skid shoe first. Next remove carriage bolts, belleville washers and hex nuts which attach shave plate to the snow thrower housing. For location of shave plate, see Figure 24.

 Reassemble new shave plate, making sure heads of the carriage bolts are to the inside of the housing. See Figure 24. Reinstall skid shoe. Tighten all hardware securely.

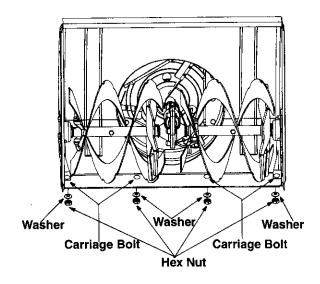


Figure 24

#### Replacing Belt



**WARNING:** Disconnect the spark plug wire from the spark plug and ground.

#### **Auger Belts**

 Remove the plastic belt cover on the front of the engine by removing the two self-tapping screws.
 See Figure 25.

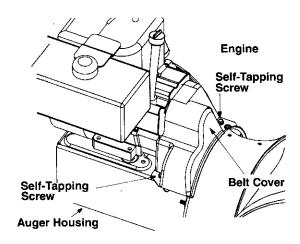


Figure 25

 Disconnect chute crank assembly at the discharge chute by removing the hairpin clip and the two flat washers. See Figure 26.

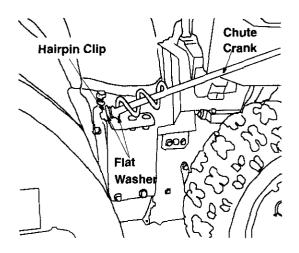


Figure 26

 Remove the six hex nuts and lock washers which attach the auger housing assembly to the frame assembly. See Figure 27.



WARNING: Do not attempt to change auger belt without the help of an assistant. It is very important that one person, standing at the operating position, firmly hold the snow thrower housing to prevent it from tipping while the other person replaces the belt. Failure to comply with this may result in injury.

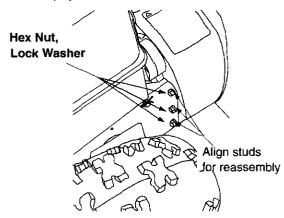


Figure 27

- Standing in the operating position, lift up on the handles and pull the frame assembly towards the rear. The frame and the housing will separate, and the rear auger belt will come off the pulley. Maintain control of the frame assembly while pulling it.
- Remove the two belts from the two engine pulleys. For location of the pulleys, see Figure 28.

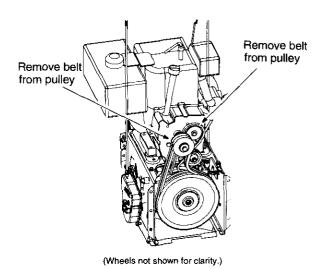


Figure 28

To remove the front auger drive belt, push the idler pulley to the left. See Figure 29. The belt brake should move outward. Lift the front auger drive belt from the front auger pulley.

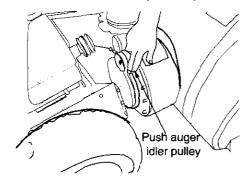


Figure 29

- Place new belts on the two auger pulleys making sure that the front auger belt is under the belt brake. Route belts under and to the left of the flat idler pulley. Hold the belts upward in this position.
- While lifting up on the handles, bring the frame assembly close to the auger housing, and place the two belts on the front and rear engine pulleys. See Figure 30.

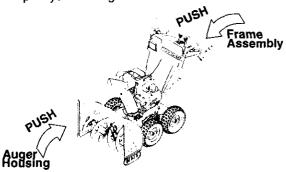


Figure 30

 Level the frame assembly and tip the auger housing forward to align studs with the corresponding holes on both sides of the frame assembly. See Figure 27. Push the frame assembly fully on to the studs.

NOTE: Use care to avoid pinching the control cable.

- From the frame assembly side, insert six lock washers and hex nuts on to the studs. These pieces of hardware were removed earlier. See Figure 27. Tighten the nuts securely.
- Reinstall the belt cover on front of the engine with the two self-tapping screws and flat washers.
- Reattach the chute crank to the chute assembly with the hairpin clip and flat washer.

NOTE: Make sure that the auger cable is routed in front of the belt.

#### **Drive Belt**

- Check drive belt every 50 hours of operation for wear and tear.
- Drain the gasoline from the snow thrower, or place a piece of plastic under the gas cap.
- Remove the plastic belt cover on the front of the engine by removing the two self-tapping screws.
- Tip the snow thrower up and forward, so that it rests on the housing.
- Remove six self-tapping screws from frame cover underneath the snow thrower. See Figure 20.
- Pull the idler pulley away from the drive belt and remove the belt from the engine pulley. You will find the idler pulley in front of the engine and under the belt cover that you removed earlier.
- Working from the underside of the frame, slip belt between the friction wheel and the friction wheel disc. See Figure 31. You may have to twist the belt flat in order to slide it through the clearance between the friction wheel and the friction wheel disc. Remove the belt.
- Install new belt. Reassemble following the instructions in reverse order.

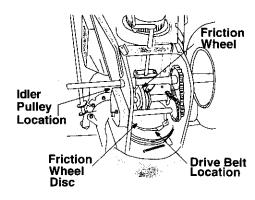


Figure 31

#### Changing Friction Wheel Rubber

- Check the rubber on the friction wheel after 25 hours of operation, and periodically thereafter.
   Replace the rubber if any signs of wear or cracking are found.
- Drain the gasoline from the snow thrower, or place a piece of plastic under the gas cap.
- Tip the snow thrower up and forward, so that it rests on the housing.
- Remove six screws from the frame cover underneath the snow thrower.
- Remove klick pin securing the left wheel, and remove the wheel from the axle.
- Remove the four screws securing the left drive cover to the frame. The drive cover is located behind the wheel chain case. Remove the drive cover from the side of the frame. See Figure 32.

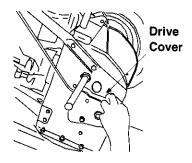


Figure 32

- Holding the friction wheel assembly, slide the hex shaft out of the left side of the unit. The spacer on the right side of the hex shaft will fall and the sprocket should remain hanging lose in the chain.
- Lift the friction wheel assembly out between the axle shaft and the drive shaft assemblies.
- Remove the six screws from both sides of the friction wheel assembly. Remove friction wheel rubber from between the friction wheel plate.
- Reassemble new friction wheel rubber to the friction wheel assembly, tightening the six screws in rotation and with equal force. See Figure 33. Assemble the rubber on the friction wheel equally for proper functioning.

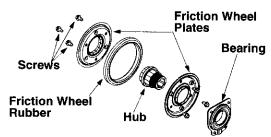
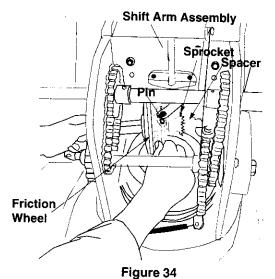


Figure 33

 Insert the pin from the shift arm assembly into the friction wheel assembly and hold assembly in position. See Figure 34.



- Slide the hex shaft through the left side of the housing and through the friction wheel
- Insert the hex shaft through the sprocket and the spacer. See Figure 35. Make certain that the chain engages both the large and the small sprocket.

assembly.

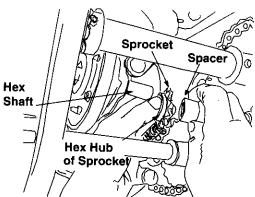


Figure 35

**NOTE:** If the sprocket fell from the snow thrower while removing the hex shaft, place the sprocket on the hex shaft. Position the hex hub of the sprocket toward the friction wheel when sliding the sprocket on to the hex shaft. See Figure 35

- Align the hex shaft with the right hand bearing and carefully guide the left hand bearing into the left side of the housing.
- Reassemble the drive cover with the four screws that were earlier removed.

**Note:** If you placed plastic under the gas cap, be certain to remove it.

#### Carburetor

If you think the carburetor needs to be adjusted, see your nearest authorized Sears Service Outlet. If your snow thrower is left unused for 30 days or longer, it needs to be prepared for storage. Also, at the end of the snow season, you should follow the same set of instructions and store the snow thrower properly for off-season. Proper storage ensures longer life of the snow thrower.



**WARNING:** 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.

# **OFF-SEASON STORAGE**

If the snow thrower will not be used for 30 days or longer, or at the end of the snow season when the last possibility of snow is gone, the equipment needs to be stored properly. Follow storage instructions below to ensure top performance from the snow thrower for many more years.

## **Preparing Engine**



**WARNING:** Never store snow thrower with fuel in tank indoors or in poorly ventilated areas, where fuel fumes may reach an open flame, spark or pilot light as on a furnace, water heater, clothes dryer or gas appliance.

It is important to prevent gum deposits from forming in essential fuel system parts of the engine such as the carburetor, fuel filter, fuel hose or tank during storage.

Also experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage.

To avoid engine problems, the fuel system *should be emptied* before storage for 30 days or longer. Follow these instructions to prepare your snow thrower for storage:

 Remove all gasoline from the carburetor and the fuel tank to prevent gum deposits from forming on these parts and harming the engine.

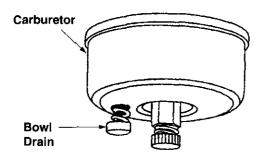


Figure 36



**WARNING:** Drain fuel into approved container outdoors, away from any open flame. Be certain engine is cool. Do not smoke.

Fuel left in engine during warm weather deteriorates and will cause serious starting problems.

- Run the engine until the fuel tank is empty and it stops due to lack of fuel.
- Drain carburetor by pressing upward on bowl drain, located below the carburetor cover. See Figure 36.



**WARNING:** Do not drain carburetor if using fuel stabilizer. Never use engine or carburetor cleaning products in the fuel tank or permanent damage may occur.

NOTE: Fuel stabilizer (such as STA-BIL) 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 mix ratio found on stabilizer container. Run engine at least 10 minutes after adding stabilizer to allow it to reach the carburetor. Do not drain carburetor if using fuel stabilizer.

 Remove the spark plug and pour one (1) ounce of engine oil through the spark plug hole into the cylinder. Cover spark plug hole with a rag and crank the engine several times to distribute the oil. Replace spark plug.

## **Preparing Snow Thrower**

- When storing the snow thrower 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 any chains, springs, bearings and cables.
- Remove all dirt from exterior of engine and equipment.
- We do not recommend the use of pressure washers or garden hose to clean your unit. They may cause damage to electric components, spindles, pulleys, bearings or the engine. The use of water will result in shortened life and reduce serviceability.
- Follow lubrication recommendations on page 17.
- Store in a clean, dry area.

# TROUBLE-SHOOTING

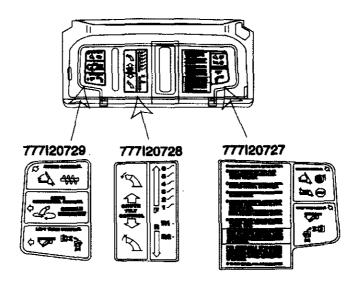
Trouble	Possible Cause(s)	Corrective Action			
Engine fails to start	Fuel tank empty, or stale fuel.	Fill tank with clean, fresh gasoline. Fuel will not last over thirty			
-	Blocked fuel line.	days unless a fuel stabilizer is used.			
·	Choke not in ON position	Clean fuel line.			
	Faulty spark plug.	Move switch to ON position			
	Key not in switch on engine.	Clean, adjust gap or replace.			
	Spark plug wire	Insert key.			
	disconnected.	Connect spark plug wire.			
	Primer button not depressed.	Refer to Starting instructions on page 14.			
	Fuel shut-off valve closed	Open fuel shut-off valve.			
	(if so equipped).				
	Throttle in Stop position	Move Throttle to RUN position.			
Engine runs erratic	Unit running on CHOKE.	Move choke lever to OFF position.			
_	Blocked fuel line or stale fuel.	Clean fuel line; fill tank with clean fresh gasoline. Fuel will not			
		last over thirty days unless a fuel stabilizer is used.			
	Water or dirt in fuel system.	Drain fuel tank. Refill with fresh fuel.			
	Carburetor out of adjustment.	Have carburetor adjusted by an authorized service dealer.			
Loss of power	Spark plug wire loose.	Connect and tighten spark plug wire.			
	Gas cap vent hole plugged.	Remove ice and snow from cap. Be certain vent hole is clear.			
	Exhaust port plugged.	Clean.			
Engine overheats	Carburetor not adjusted	Have carburetor adjusted by an authorized service dealer.			
	properly.				
<b>Excessive vibration</b>	Loose parts or damaged auger.	Stop engine immediately and disconnect spark plug wire.			
,		Tighten all bolts and nuts. Make all necessary repairs. If vibra-			
		tion continues, have unit serviced by an authorized service			
		dealer.			
Unit fails to propel	Incorrect adjustment of drive cable.	Adjust drive cable. Refer to Adjustment section of this manual.			
itself	Drive belt loose or damaged.	Replace drive belt. Refer to Belt Replacement in Maintenance			
		section of this manual.			
	Rubber on friction wheel worn off	Replace rubber following instructions on page 23.			
Unit fails to	Discharge chute clogged.	Stop engine immediately and disconnect spark plug wire.			
discharge snow	•	Clean discharge chute and inside of auger housing.			
	Foreign object lodged in auger.	Stop engine immediately and disconnect spark plug wire.			
		Remove object from auger.			
	Shear bolt sheared.	Replace shear bolt.			
	Incorrect adjustment of drive cable.	Adjust drive cable. Refer to Adjustment section of this manual.			
	Drive belt loose or damaged.	Replace drive belt. Refer to Belt Replacement in Maintenance			
		section of this manual.			

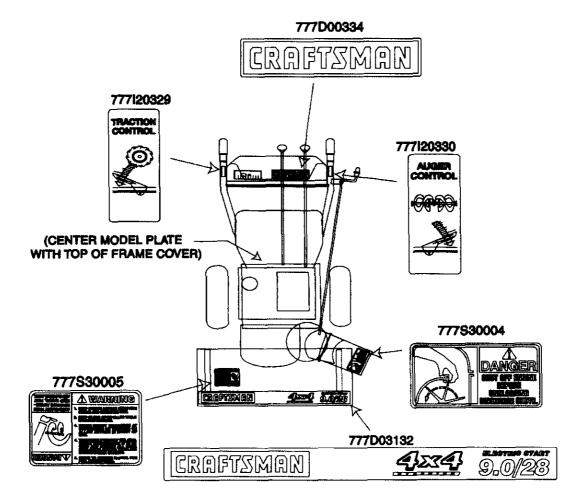


**NOTE:** For repairs beyond the minor adjustments listed above, please contact your nearest SEARS service center.

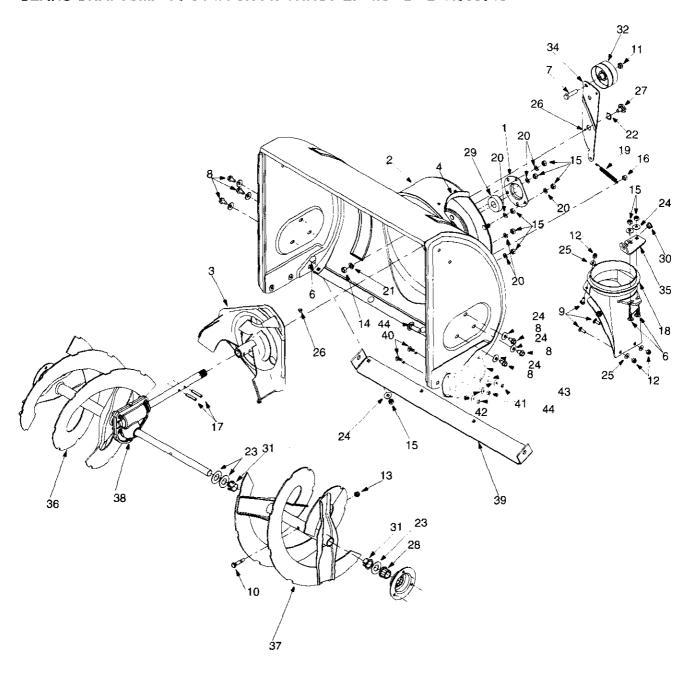
## **Snow Thrower Safety and Decorative Labels Map**

Please follow the map below to get correct part number and location of the labels when replacing any label on your snow thrower. It is very important to keep safety labels on the unit at all times, and follow the directions set forth in these labels for safe operation of the equipment.

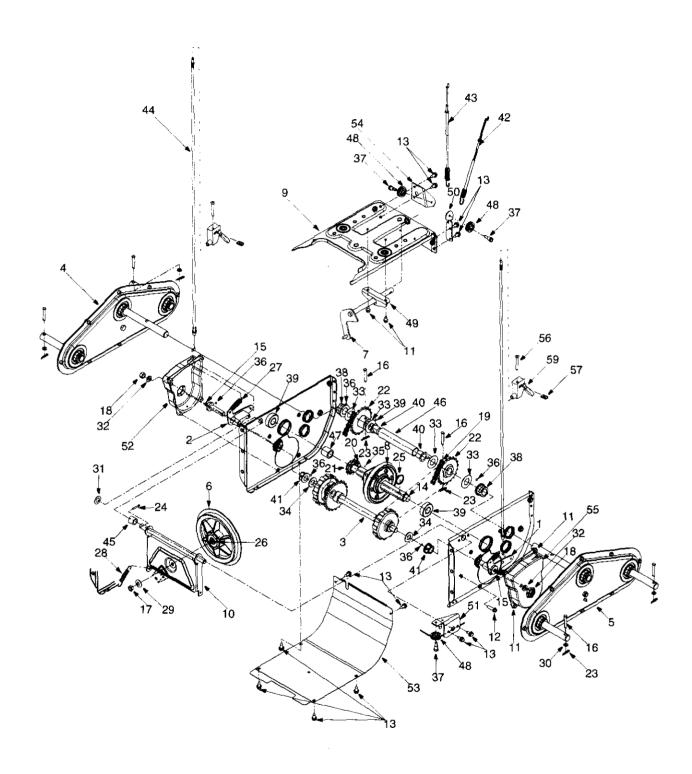




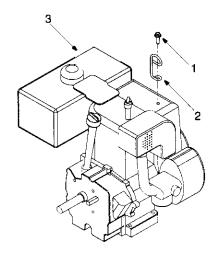
# REPAIR PARTS



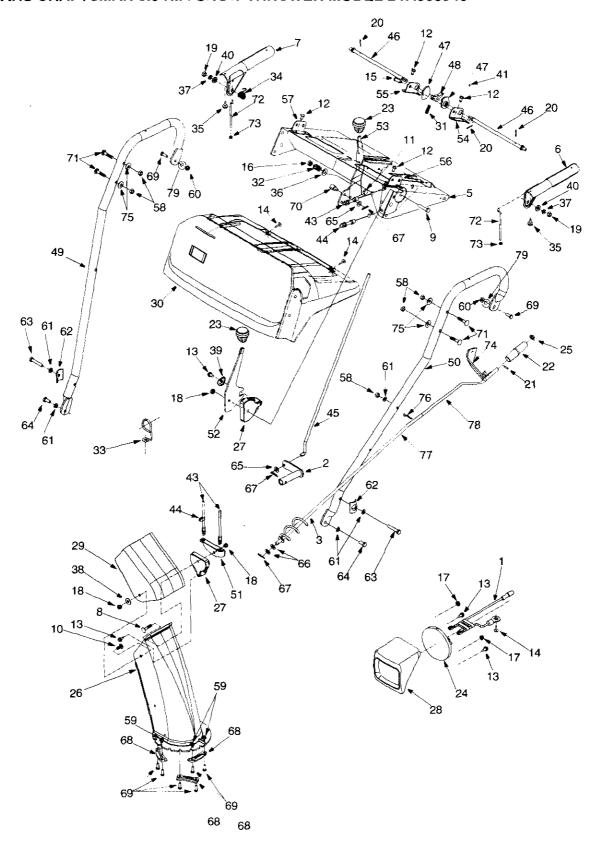
Key. No.	Part No.	Description	Key. No.	Part No.	Description
1.	05931	Bearing Housing	24.	736-0242	Belleville Washer
2.	684-0041C-0689	Auger Housing Assy. 28" Polo Green	<b>2</b> 5.	736-0463	Flat Washer
3.	684-0065	Impeller Assy. 12" dia.	26.	737-3007	Grease
4.	705-5226-0689	Chute Reinforcement: Polo Green	27.	738-0281	Shoulder Screw
6.	710-0451	Carriage Bolt 5/16-18 x .75" Gr.2	28.	741-0245	Hex Flange Bearing
7.	710-0459A	Hex Screw 3/8-24 x 1.5" Gr.5	29.	741-0309	Flange Ball Bearing
8.	710-0604	Hex Washer Head Self-Tapping	30.	741-0475	Bushing
		Screw 5/16-18 x .62"	31.	741-0493A	Flange Bushing
9.	710-0703	Carriage Screw 1/4-20 x .75"	32.	756-0178	Flat Idler
10.	710-0890A	Shear Bolt 5/16-18 x 1.5"	34.	784-5632A	Auger Idler Arm
11.	712-0116	Jam Nut 3/8-24	35,	784-5647	Chute Crank Bracket
12.	712-0324	Hex Lock Nut 1/4-20	36.	605-5196A-0637	Spiral Assembly: RH 28" Powder
13.	712-0429	Hex Lock Nut 5/16-18	Į.		Black
14.	712-0798	Hex Nut 3/8-16 Gr.2	37.	605-5197A-0637	Spiral Assembly: LH 28" Powder
15.	712-3010	Hex Nut 5/16-18 Gr.5	ļ		Black
16.	712-3068	Hex Patch Nut 5/16-18	38.	618-0122	Gear Assembly: Auger 28"
17.	715-0114	Spiral Pin	39.	784-5582A	Shave Plate: Auger 28"
18.	731-1379A	Chute Adapter	40.	710-0451	Carr. Bolt: 5/16-18 x 0.75
19.	732-0611	Extension Spring	41.	712-3010	Hex Nut: 5/16-18 Gr.5
20.	736-0119	Lock Washer	42.	736-0242	Belleville Washer
21.	736-0169	Lock Washer	43.	784-5038B-0689	Slide Shoe: Polo Green
22.	736-0174	Wave Washer	44.	710-0276	Carriage Screw: 5/16-18 x 1.0"
23.	736-0188	Flat Washer			<u> </u>



Key. No.	Part No.	Description	Key. No.	Part No.	Description
1.	618-0043	Dogg Assembly: RH	29.	736-0105	Bell Washer
2.	618-0044	Dogg Assembly: LH	30.	736-0142	Flat Washer
3.	618-0303A	Shift Assembly: Steerable Drive	31.	736-0160	Flat Washer
4.	618-0420-0689	Chain Case Assembly: RH	32.	736-0169	Lock Washer
5.	618-0421-0689	Chain Case Assembly: LH	33.	736-0351	Flat Washer
6.	656-0012A	Friction Wheel Disc Assy.	34.	736-0626	Flat Washer
7.	684-0014B	Shift Rod Assembly	35.	737-0170	Lubricant: 6 in 1
8.	684-0042B	Bearing	36.	737-3007	Grease
9.	684-0130-0689	Transmission Frame Assembly	37.	738-0924	Shoulder Screw
10.	684-0131A	Support Bracket Assembly	38.	741-0598	Hex Flange Bearing
11.	710-0599	Hex Washer Hd. TT Screw	39.	741-0600	Ball Bearing
		1/4-20 x 0.5"	40.	741-0701	Flange Bushing
12.	710-0788	Hex Washer Hd. TT Screw	41.	741-1111	Hex Flange Bearing
		1/4-20 x 1.0"	42.	746-0897	Auger Clutch Cable
13.	710-1652	Hex Washer Hd. TT Screw	43.	746-0898	Drive Clutch Cable
		1/4-20 x .625"	44.	746-0956	Steering Cable
14.	711-1267	Drive Shaft	45.	748-0190	Spacer
15.	711-1268	Actuator Shaft	46.	750-1161	Support Tube: Axle
16.	711-1364	Pin	47.	750-1162	Spacer
17.	712-0711	Jam Nut 3/8-24 Gr.8	48.	756-0625	Roller Cable
18.	712-3017	Hex Nut: 3/8-16	49.	784-5590	Shift Bracket
19.	713-0131	Chain	50.	784-5687A	Auger Clutch Cable Guide Bracket
20.	713-0233	Chain	51.	784-5689A	Front Support Guide Bracket
21.	713-0413	Sprocket: 19T	52.	784-5730A-0689	Retaining Shaft RH: Actuator Drive
22.	713-0473	Sprocket	53.	784-5732-0689	Frame Cover
23.	714-0104	Cotter Pin	54.	784-5733-0689	Roller Bracket: Drive Cable
24.	714-0474	Cotter Pin	55.	784-5740-0689	Retaining Shaft LH: Actuator Drive
25.	716-0102	Snap Ring	56.	710-1233	Oval C-Sunk Machine Screw
26.	721-0263	Adhesive: Loctite	57.	712-0127	Weld Nut
27.	732-0209	Extension Spring	58.	725-0157	Cable Tie (not shown)
28.	732-0264	Extension Spring	59.	746-0950	Turn Trigger

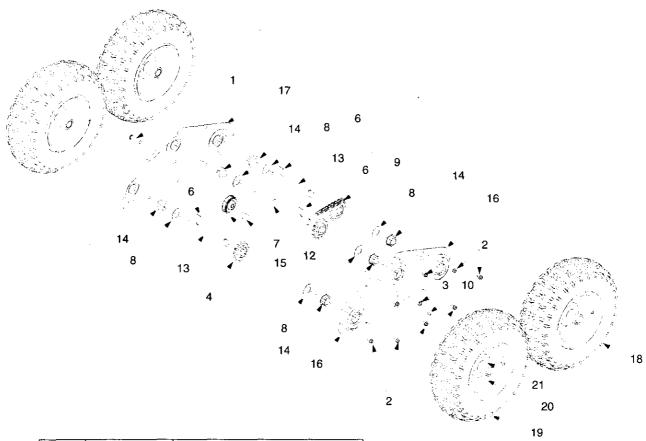


	Key. No.	Part No.	Description
r	1.	712-0324	Hex Lock Nut: 1/4-20
	2.	732-0705	Cable Guide
l	3.	_	Craftsman Engine
			model 143.999005

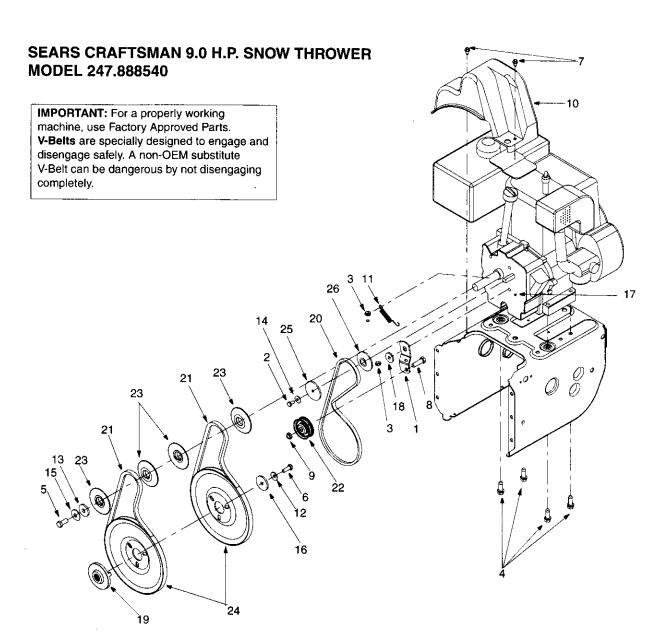


Key No.	Part No.	Description	Key No.	Part No.	Description
1	629-0058	Harness for Headlight	40	736-0509	Special Washer
2	684-0008A-	Shift Arm Assembly	41	737-0133	Grease
_	0637		42	746-0896	Chute Deflector Control Cable
3	684-0053A	Lower Chute Crank Assembly	43	746-0901	Chute Deflector Cable
4	684-0066	Hardware Pack*			w/ Clip
5	684-0102- 0689	Handle Panel Assembly w/ Tilt:	44	747-0798A	Shift Rod
6	684-0111	Polo Green	45	747-0877	Cam Rod
0	004-0111	Handle Assembly Engagement (L.H.) Red	46	748-0362	Cam Handle Lock
7	684-0112	Handle Assembly Engagement	- 47	748-0363	Pawl Handle lock
•	307 0112	(R.H.) Red	48	749-0908A-	Right Handle: Powder Black
8	710-0262	Carriage Bolt 5/16-18 x 1.50	40	0637	1-611
9	710-0442	Hex Bolt 5/16-18 x 1.5	49	749-0909- 0637	Left Handle: Powder Black
10	710-0451	Carriage Bolt 5/16-18 x.75	50	784-5594	Cable Bracket
11	710-0459	Hex Screw 3/8-24 x 1.5	51	784-5604	Chute Tilt Handle
12	710-0599	Hex Washer Hd. TT Screw	52	784-5619A	Shift Handle
		1/4-20 x 0.5"	53	784-5679	Handle Support Bracket (L.H.) 5/8
13	710-0896	Hex AB Tap Screw 1/4 x .62	54	784-5680	Handle Support Bracket (E.Fr.) 5/8
14	710-1003	Hex B-Tapp Screw # 10-16 x .62	55	784-5681	Handle Support Bracket (L.H.) 3/8
15	711-0653	Clevis Pin	56	784-5682	Handle Support Bracket (E.H.) 3/8
16	712-0116	Hex Ins. Lock Nut 3/8-24	57	712-3010	Hex Nut 5/16-18 Thd.
17	712-0415	Self-Threading Nut	58	712-3027	Hex Flange Locked Nut 1/4-20 Thd.
18	712-0429	Lock Nut 5/16-18	59	712-0287	Hex Nut 1/4-20
19	712-3010	Hex Nut	60	736-0119	Lock Washer 5/16
20	714-0507	Cotter Pin	61	784-5599	Handle Tab
21	715-0138	Roll Pin	62	710-3180	Hex Bolt 5/16-18 x 1.75 Gr.5
22	720-0201A	Chute Crank Knob	63	710-3008	Hex Bolt
23	720-0300	Shift Knob: Red	64	736-0275	Flat Washer 5/16
24	725-1300	Headlight	65	736-0185	Flat Washer 3/8 x .738 x .063
25	726-0100	Push Cap	66	714-0104	Hairpin Clip
26	731-1300A	Lower Chute	67	731-0851A	Chute Flange Keeper
27	731-1313B	Cable Guide	68	710-3015	Hex Bolt 1/4-20 x 0.75" Gr.5
28	731-1317	Headlight Bezel	69	711-0677	Ferrule
29	731-1320	Upper Chute	70	710-0262	Carriage Bolt 5/16-18 x 1.50
30	731-1773A	Handle Panel	71	746-0778	Z Fitting
31	732-0145	Compression Spring	72	712-0121	Hex Nut # 10-24
32	732-0193	Compression Spring	73	705-5266	Chute Crank Reinforcement Bracket
33	732-0705	Cable Control Wire	74	736-0242	Cupped Washer
34	732-0746	Torsion Spring	75	714-0101	Hairpin Clip
35	735-0199A	Rubber Bumper	76	750-0785	Spacer
36	736-0105	Bell Washer .380 x .880 x .062	77	747-0737	Upper Chute Crank
37	736-0119	Lock Washer 5/16 I.D.	78	736-0270	Bell Washer
38	736-0159	Washer 5/6 I.D.	79	715-0138	Roll Pin
39	736-0506	Special Washer			

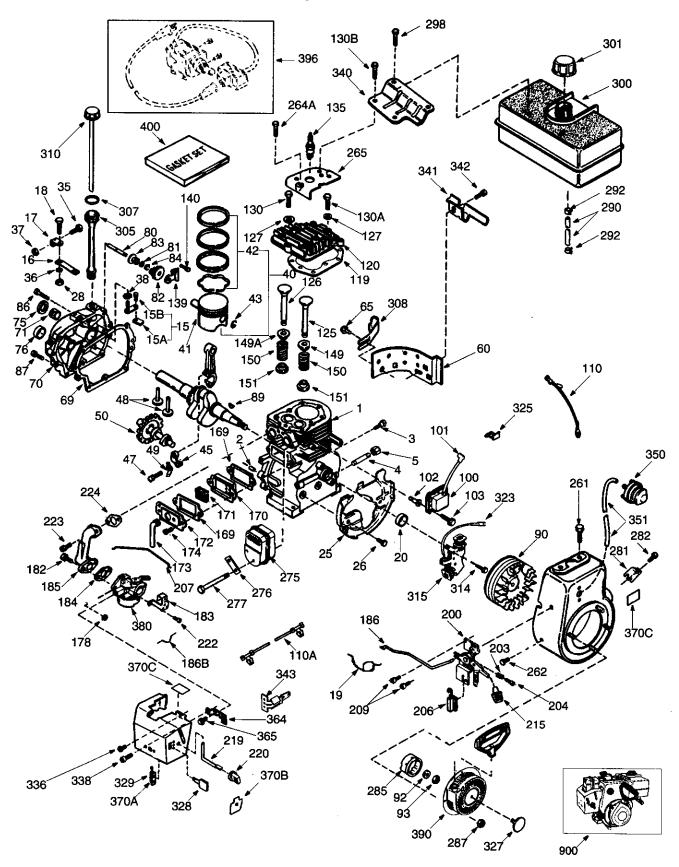
<sup>\*</sup> Includes references 58 through 75



Key No.	Part No.	Description
1.	710-0459A	Special Hex Screw: 3/8-24 x 1.5"
2.	710-0599	TT Screw: 1/4-20 x 0.5"
3.	712-0116	Jam Nut
4.	713-0491	Sprocket
5.	713-0492	Chain
6.	714-0161	Key
7.	736-0235	Flat Washer
8.	736-0351	Flat Washer
9.	737-0170	Lubricant: 6in 1
10.	737-3000	Lube Fitting
11.	737-3007	Grease (not shown)
12.	738-1135	Drive Axle
13.	738-1136	Wheel Axle
14.	741-0598	Hex Flange Bearing
15.	756-0313	Flat Idler
16.	784-0400-0689	Chain Case: Outer, Polo Green
17.	784-0401-0689	Chain Case: Inner, Polo Green
18.	634-0195	Complete Wheel Assembly: Oyster
		Grey (includes items 19-21)
19.	734-1732	Tire Assembly
20.	734-1735-0662	Rim Assembly: Oyster Grey
21.	741-0401	Bearing



Key. No.	Part No.	Description	Key. No.	Part No.	Description
1.	05896A	Idler Bracket	13.	736-0247	Flat Washer
2.	710-0230	Hex Bolt 1/4-28 x 0.5" Gr.5	14.	736-0270	Bell Washer
3.	710-0627	Hex Screw w/ patch: 5/16-24 x 0.75"	15.	736-0331	Bell Washer
4.	710-0654A	Hex Washer HeadTT Sems Screw	16.	736-0505	Flat Washer
5.	710-0696	Hex Bolt 3/8-24 x .875" Gr.8	17.	737-3007	Grease .
6.	710-1245	Hex Screw w/ Patch: 5/16-24 x .875"	18.	748-0234	Shoulder Spacer
		Gr.5	19.	748-0360	Adapter Pulley
7.	710-1652	Hex Washer Head TT	20.	754-0346	V-Belt
8.	710-3005	Hex Screw: 3/8-16 x 1.0"	21.	754-0430A	Belt
9.	712-0181	Top Lock Jam Nut: 3/8-16	22.	756-0313	Flat Idler
10.	731-1324	Belt Cover	23.	756-0569	Pulley Half
11.	732-0710	Extension Spring	24.	756-0967	Auger Pulley
12.	736-0242	Bellevile Washer	25.	756-0986	Pulley Half
			26.	756-0987	Pulley Half

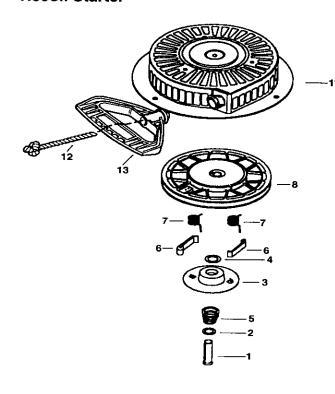


Key No.	Part No.	Description	Qty.	Key No.	Part No.	Description	Qty.
							<del>                                     </del>
1	35385	Cylinder	1	93	650881	Flywheel Nut	1
2	27652	Dowel Pin	2	100	35135	Solid State Ignition	1
3	650820	Screw	2	101	610118	Spark Plug Cover	1
4	-	Oil Drain Extension	1	102	651024	Solid State Mounting Stud	2
5	30969	Extension Cap	1	103	651007	Screw, Torx Ground Wire	2
15	30699C	Governor Rod	1	110	35187		1
15A	30700	Governor Yoke	1	110A	37047	Ground Wire	1
15B	650494	Screw	1	119	36448	Cylinder Head Gasket	1
16	33454	Governor Lever	1	120	36449	Cylinder Head	1
17	29916	Governor Lever Clamp	1	125	27878A	Exhaust Valve (Std.)	1
18	651028	Screw, Torx	1	125	27880A	Exhaust Valve (1/32" Os)	1
19	34663	Speed Control Spring	1	126	34035	Intake Valve(Std.)	1
20	35319	Oil Seal	1	126	34036	Intake Valve (1/32" Os)	1
25	36460	Blower Housing Baffle	1	127	650691	Washer	2
26	650561	Screw	2	130	6021A	Screw	7
28	30322	Lock Nut	1	130A	650727	Screw	2
30	35980A	Crankshaft	1	130B	651055	Screw	2
35	29826	Screw	1	135	35395	Resistor Spark Plug	1
36	29918	Lock Washer	1	139	33369	Governor Gear Bracket	1
37	29216	Lock Nut	1	140	650836	Screw	2
38	29642	Retaining Ring	1	149	27882	Valve Spring Cap	1
40	40011	Piston, Pin & Ring Set (Std.)	1	149A	35862	Valve Spring Cap	1
40	40012	Piston, Pin & Ring Set (.010" O	β) 1	150	27881	Valve Spring	2
41	40009	Piston, & Pin Ass'y.(Std.)	1	151	32581	Valve Spring Keeper	2
41	40010	Piston, & Pin Ass'y.(.010" OS)	1	169	27896A	Valve Cover Gasket	1
42	40013	Ring Set (Std.)	1	170	28423	Breather Body	1
42	40014	Ring Set (.010" OS)	1	171	28424	Breather Element	1
43	27888	Piston Pin Retaining Ring	2	172	28425	Valve Cover	1
45	36897	Connecting Rod Ass'y.	1	173	35350	Breather Tube	1
47	651033	Connecting Rod Bolt	2	174	650128	Screw	2
48	34034	Valve Lifter	2	178	29752	Nut & Lock Washer	2
49	36896	Oil Dipper	1	182	30088A	Screw	2
50	36655	Camshaft (MCR)	1	183	34587A	Choke Bracket	1
60	33273A	Blower Housing Extension	1	184	33263	Carburetor to Intake	1
65	650128	Screw	1		{	Pipe Gasket	
69	35262A	Cylinder Cover Gasket	1	185	33877	Intake Pipe	1
70	35445A	Cylinder Cover	1	186	34667	Governor Link	1
71	35377	Crankshaft Bushing	1	186B	36652	Choke Spring	1
75	35319	Oil Seal	1	200	34677	Control Bracket	1
76	28926	Camshaft Seal	1	203	31342	Compression Spring	1
80	31845	Governor Shaft	1	204	651029	Torx. Screw	1
81	30590A	Washer	1	206	610973	Terminal	1
82	35378	Governor Gear Asss'y.	1	207	33878	Throttle Link	1
83	30588A	Governor Spool	1	209	650821	Screw	2
84	29193	Retaining Ring	1	215	35440	Control Knob	1
86	650833	Screw	7	219	34586	Choke Rod	1
87	650832	Screw	1	220	35438	Choke Knob	1
89	32589	Flywheel Key	1	222	28820	Screw	2
90	611093	Flywheel (W/ Ring Gear)	1	223	650378	Screw, Torx	2
~~	650880	Belleville Washer	1	224	27915A	Intake Pipe Gasket	1
92	0000001	DOILOVING TRASITO	[ ]		1 2/3/3/	i intako i ipo daskot	•

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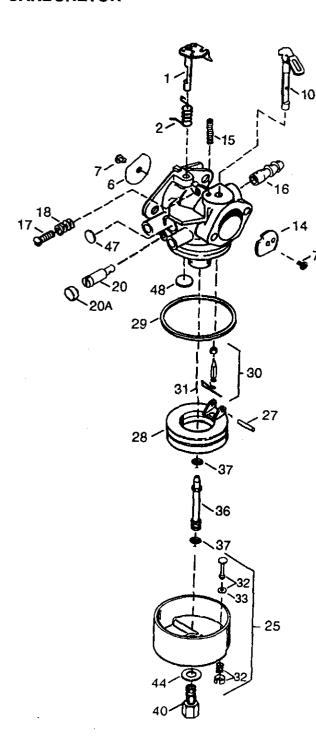
Key No.	Part No.	Description	Qty.	Key No.	Part No.	Description	Qty.
260	35447A	Blower Housing	1	327	35392	Starter Plug	1
261	650788	Screw	2	328	35593	Ignition Key	2
262	29747B	Screw, Torx	2	329	610973	Terminal	4
264A	650802	Screw	1	335	35057A	Carburetor Cover	
265	33272B	Cylinder Head Cover		336	650765	Screw	¦
275	35056	Muffler	i	338	28942	Screw	2
276	31588	Locking Plate		340	34154	Fuel Tank Bracket	1
277	651002	Screw	2	341	34155	Fuel Tank Bracket	'
281	33013	Starter Bubble Cover	1 1	342	650561	Screw	;
282	650760	Screw	1	343	35079	Key Switch Bracket	
285	35985B	Starter Cup	1 1	350	570682A	Primer Bulb	1
287	29752	Nut & Lock Washer	4	351	32180C	Primer Line	1
290	30705	Fuel Line	1	355	590574	Starter Handle	1
292	26460	Fuel Line Clamp	4	364	33377	Carburetor Cover Bracket	1
298	650665	Screw	2	365	650767	Screw	2
300	34156A	Fuel Tank	1 1	370A	36501	Primer Decal	1
301	35355	Fuel Cap .	1 1	370B	35077	Choke Decal	1
305	35554	Oil Fill Tube	1 1	370C	35878	Warning Decal	1
307	35499	"O" Ring	1	380	640052	Carburetor	1
308	35540	Fill Tube Clip	1	390	590749	Rewind Starter	1
310	36205	Dipstick	1	396	37000	Electric Starter Motor	1
314	650873	Screw	1 1	400	36450A	Gasket Set	1
315	611111	Alternator Coil	1 1	900		Replacement Engine—none	Ó
323B	611118	Terminal	1 1	900		Short Block 756325	
325	29443	Wire Clip	1			Order from 71-999	

## **Recoil Starter**



Key No.	Part No.	Description	Qty.
0	590733	Rewind Starter	1
1	590599A	Spring Pin (Incl. 4)	i
2	590600	Washer	í
3	590696	Retainer	1
4	590601	Washer	1
5 6	590697	Brake Spring	i
6	590698	Starter Dog	2
7	590699	Dog Spring	2 2
8	590709	Pulley & Rewind Spring Ass'y.	1
11	590734	Starter Housing Ass'y.	1
12	590535	Starter Rope (Length 98" x	
		9/64" Dia.)	1
13	590574	Mitten Grip Handle (Not Included With Starter)	1

## **CARBURETOR**



<b></b> _			
Key	Part		
No.	No.	Description	Qty.
0	640052	Carburetor (Incl. 184 of	
	010002	Engine Parts List)	1 1
1 1	631776A	Throttle Shaft & Lever Ass'y.	i
2	631970	Throttle Return Spring	lil
2 6 7	631778	Throttle Shutter	i
7	650506	Shutter Screw	1 1 2 1
10	632112	Choke Shaft & Lever Ass'y.	1 1
14	632174	Choke Shutter	1
15	630735	Choke Positioning Spring	1 1
16	632164	Fuel Fitting	1 1
17	650417	Throttle Crack Screw/Idle	
		Speed Screw	1
18	630766	Tension Spring	1
20	640016	Idle Restrictor Screw	1
20A	640053	Idle Restrictor Screw Cap	
25	631951	Float Bowl Ass'y. (Incl. 32 &	
	004004	33)	1
27	631024	Float Shaft Float	1     1
28 29	632019 631028	Float Bowl "O" Ring	
30	631026	Inlet Needle, Seat & Clip	,
30	031021	(Incl. 31)	1 1
31	631022	Spring Clip	1
32	27136A	Bowl Drain Ass'y.	i
33	27554	Drain Plunger Gasket	li
36	640005	Main Nozzle Tube	l i
37	632547	O Ring	2
40	640055	High Speed Bowl Nut	1 1 2 1
44	27110	Bowl Nut Washer	1
47	630748	Welch Plug, Idle Mix. Well	[ 1
48	631027	Welch Plug, Atmospheric	
	1	Vent	1 1
<del></del>	632760	Repair Kit	1
<u> </u>	1	l	1 _

#### In U.S.A. or Canada

## for in-home major brand repair service:

Call 24 hours a day, 7 days a week

**1-800-4-MY-HOME**<sup>SM</sup> (1-800-469-4663)

Para pedir servicio de reparación a domicillio — 1-800-676-5811

Au Canada pour tout le service ou les pièces — 1-800-469-4663

## For the repair or replacement parts you need:

Call 6 a.m. — 11 p.m. CST, 7 days a week

PartsDirect<sup>SM</sup>

**1-800-366-PART** (1-800-366-7278)

Para ordenar piezas con entrega a domicillio — 1-800-659-7084

## For the location of a Sears Service Center in your area:

Call 24 hours a day, 7 days a week 1-800-488-1222

To purchase or inquire about a Sears Maintenance Agreement:

Call 7 a.m. — 5 p.m. CST, Monday — Saturday 1-800-827-6655

