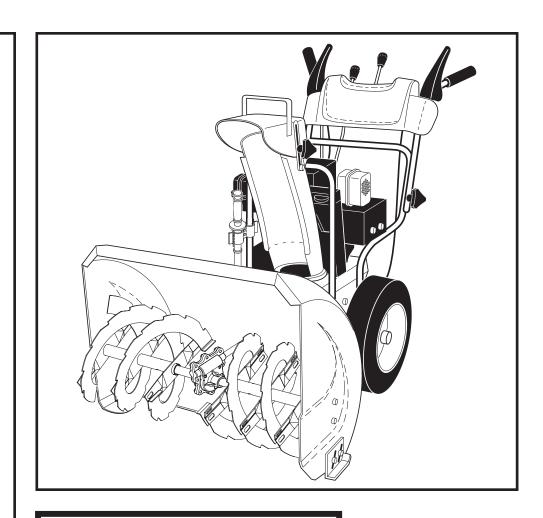


MODEL NO. 944.527493

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



# **CRAFTZMAN®**

10.5 HP 27" TWO-STAGE POWER-PROPELLED SNOW THROWER

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

# IMPORTANT Safe Operation Practices for Walk-Behind Snow Throwers

This snow thrower is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury.



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



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



WARNING: This snow thrower is for use on sidewalks, driveways and other ground level surfaces. Caution should be exercised while using on sloping surfaces. Do not use snow thrower on surfaces above ground level such as roofs of residences, garages, porches or other such structures or buildings.

#### Training

- Read, understand and follow all instructions on the machine and in the manual(s) before operating this unit. Be thoroughly familiar with the controls and the proper use of the equipment. Know how to stop the unit and disengage the controls quickly.
- Never allow children to operate the equipment. Never allow adults to operate the equipment without proper instruction.
- 3. Keep the area of operation clear of all persons, particularly small children.
- Exercise caution to avoid slipping or falling, especially when operating the snow thrower in reverse.

#### **Preparation**

- Thoroughly inspect the area where the equipment is to be used and remove all doormats, sleds, boards, wires, and other foreign objects.
- Disengage all clutches and shift into neutral before starting the engine (motor).
- Do not operate the equipment without wearing adequate winter garments. Avoid loose fitting clothing that can get caught in moving parts. Wear footwear that will improve footing on slippery surfaces.
- 4. Handle fuel with care; it is highly flammable
  - (a) Use an approved fuel container.
  - (b) Never add fuel to a running engine or hot engine.
  - (c) Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.
  - (d) Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground, away from your vehicle, before filling.
  - (e) When practical, remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment on a trailer with a portable container, rather than from a gasoline dispenser nozzle.



WARNING: Snow throwers have exposed rotating parts, which can cause severe injury from contact, or from material thrown from the discharge chute. Keep the area of operation clear of all persons, small children and pets at all times including startup.



CAUTION: Muffler and other engine parts become extremely hot during operation and remain hot after engine has stopped. To avoid severe burns on contact, stay away from these areas.



WARNING: Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- (f) Keep the nozzle in contact with the rim of the fuel tank or container opening at all times, until refueling is complete. Do not use a nozzle lock-open device.
- (g) Replace gasoline cap securely and wipe up spilled fuel.
- (h) If fuel is spilled on clothing, change clothing immediately.
- Use extension cords and receptacles as specified by the manufacturer for all units with electric drive motors or electric starting motors.
- Adjust the collector housing height to clear gravel or crushed rock surface.
- Never attempt to make any adjustments while the engine (motor) is running (except when specifically recommended by manufacturer).
- 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.

#### Operation

- 1. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
- Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic.
- After striking a foreign object, stop the engine (motor), remove the wire from the spark plug, disconnect the cord on electric motors, thoroughly inspect the snow thrower for any damage, and repair the damage before restarting and operating the snow thrower.
- 4. If the unit should start to vibrate abnormally, stop the engine (motor) and check immediately for the cause. Vibration is generally a warning of trouble.
- Stop the engine (motor) whenever you leave the operating position, before unclogging the collector/impeller housing or discharge chute, and when making any repairs, adjustments or inspections.

- 6. When cleaning, repairing or inspecting the snow thrower, stop the engine and make certain the collector/impeller and all moving parts have stopped. Disconnect the spark plug wire and keep the wire away from the plug to prevent someone from accidentally starting the engine.
- Do not run the engine indoors, except when starting the engine and for transporting the snow thrower in or out of the building. Open the outside doors; exhaust fumes are dangerous.
- Exercise extreme caution when operating on slopes.
- Never operate the snow thrower without proper guards, and other safety protective devices in place and working.
- Never direct the discharge toward people or areas where property damage can occur. Keep children and others away.
- Do not overload the 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 operating in reverse.
- Disengage power to the collector/impeller when snow thrower is transported or not in use.
- Use only attachments and accessories approved by the manufacturer of the snow thrower (such as wheel weights, counterweights, or cabs).
- 15. 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.
- 16. Never touch a hot engine or muffler.

#### **Clearing a Clogged Discharge Chute**

Hand contact with the rotating impeller inside the discharge chute is the most common cause of injury associated with snow throwers. Never use your hand to clean out the discharge chute. To clear the chute:

- SHUT THE ENGINE OFF!
- Wait 10 seconds to be sure the impeller blades have stopped rotating.
- 3. Always use a clean-out tool, not your hands.

#### Maintenance and Storage

- Check shear bolts and other bolts at frequent intervals for proper tightness to be sure 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, or clothes dryers. Allow the engine to cool before storing in any enclosure.
- Always refer to operator's manual for important details if the snow thrower is to be stored for an extended period.
- Maintain or replace safety and instruction labels, as necessary.
- 5. Run the machine a few minutes after throwing snow to prevent freeze-up of the collector/impeller.

## **TABLE OF CONTENTS**

SAFETY RULES2-3	MAINT
WARRANTY 4	MAINT
PRODUCT SPECIFICATIONS 4	SERVIC
CUSTOMER RESPONSIBILITIES 4	STORA
ASSEMBLY / PRE-OPERATION 5-7	TROUE
OPERATION 8-13	REPAIR

MAINTENANCE	14-15
MAINTENANCE SCHEDULE	14
SERVICE AND ADJUSTMENTS	16-18
STORAGE	18-19
TROUBLESHOOTING	19
REPAIR PARTS	20-35

#### LIMITED TWO (2) YEAR WARRANTY ON CRAFTSMAN SNOW THROWER

For two (2) years from date of purchase Sears Canada, Inc. will repair or replace, at Sears option, free of charge parts which are defective as a result of material or workmanship.

#### **COMMERCIAL OR RENTAL USE:**

Warranty on Snow Thrower will be 90 days from date of purchase if used for commercial or rental purposes.

#### This Warranty does **NOT** cover:

- 1. Pre-delivery set-up.
- 2. Expendable items which become worn during normal use, such as belts, spark plugs, air cleaners, and shear pins, as well damage to the engine resulting from operating snow thrower with insufficient oil.
- 3. Repairs necessary because of operator abuse or negligence, including the failure to operate and maintain the equipment according to the instructions contained in the Owner's Manual.
- 4. Tire replacement or repair caused by punctures from outside objects, such as nails, thorns, stumps or glass.

Warranty service is available by returning the Craftsman Snow Thrower to the nearest Sears Service Centre/Department in Canada. This warranty applies only while this product is in use in Canada.

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

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

**CONGRATULATIONS** on your purchase of a new snow thrower. It has been designed, engineered and manufactured to give best possible dependability and performance.

Should you experience any problem you cannot easily remedy, please contact your nearest authorized service center. We have competent, well-trained technicians and the proper tools to service or repair this unit.

Please read and retain this manual. The instructions will enable you to assemble and maintain your snow thrower properly. Always observe the "SAFETY RULES".

SERIAL NUMBER:	
DATE OF PURCHASE:	

THE MODEL AND SERIAL NUMBERS WILL BE FOUND ON A DECALATTACHED TO THE REAR OF THE SNOW THROWER HOUSING.

YOU SHOULD RECORD BOTH SERIAL NUMBER AND DATE OF PURCHASE AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

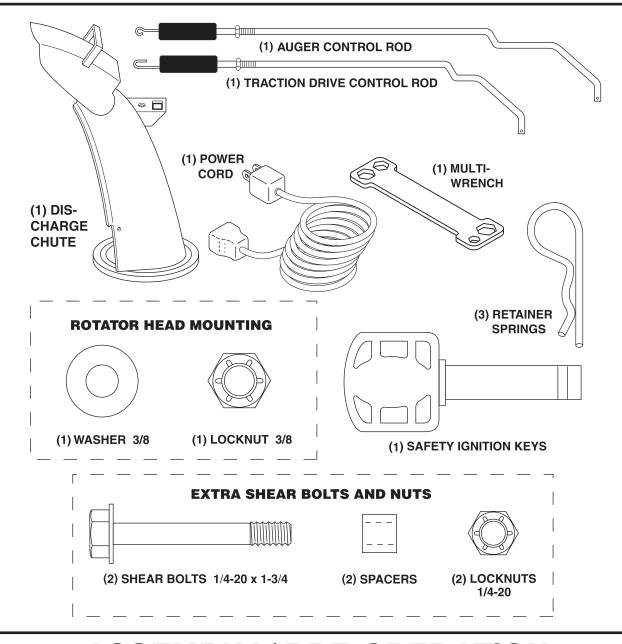
#### PRODUCT SPECIFICATIONS

Gasoline Capaci and Type:	4.0 Quarts (3,79 Liters) Unleaded Regular only
Oil Type (API SG-SL):	SAE 30 (above 40°F) SAE 5W-30 or 10W-30 (0° to +40°F) SAE 0W-30 (below 0°F)
Oil Capacity:	21 Ounces (0,6 Liters)
Spark Plug: Gap:	Champion RJ19LM 0.030" (0,762 mm)

#### **CUSTOMER RESPONSIBILITIES**

- Read and observe the safety rules.
- Follow a regular schedule in maintaining, caring for and using your snow thrower.
- Follow the instructions under "Maintenance" and "Storage" sections of this owner's manual.

## PARTS PACKED SEPARATELY IN CARTON



## **ASSEMBLY / PRE-OPERATION**

Read these instructions and this manual in its entirety before you attempt to assemble or operate your new snow thrower. Reading the entire manual will familiarize you with the unit, which will assist you in assembly, operation and maintenance of the product.

Your new snow thrower has been assembled at the factory with the exception of those parts left unassembled for shipping purposes. All parts such as nuts, washers, bolts, etc., necessary to complete the assembly have been placed in the parts bag. To ensure safe and proper operation of your snow thrower, all parts and hardware you assemble must be tightened securely. Use the correct tools as necessary to ensure proper tightness.

#### REMOVE SNOW THROWER FROM CARTON

 Remove all accessible loose parts and parts boxes from carton.

- Cut down all four corners of carton and lay panels flat.
- 3. Remove the two (2) screws securing the auger housing to the pallet.
- Remove all packing materials except plastic tie holding speed control rod to lower handle.
- 5. Remove the two (2) plastic ties securing the upper handle to the pallet.
- 6. Remove snow thrower from carton and check carton thoroughly for additional loose parts.

## HOW TO SET UP YOUR SNOW THROWER

TOOL BOX (See Fig. 8)

A toolbox is provided on your snow thrower. The toolbox is located on top of the belt cover. Store the extra shear bolts, nuts and multi-wrench provided in parts bag in the toolbox.

# **ASSEMBLY / PRE-OPERATION**

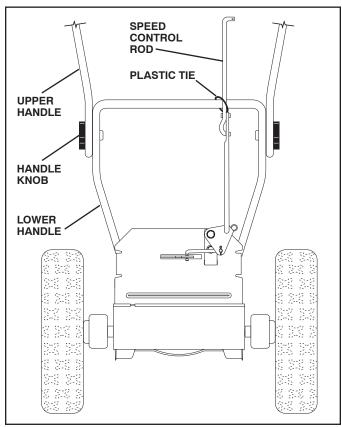
**NOTE:** The multi-wrench may be used for assembly of the chute rotator head to snow thrower and making adjustments to the skid plates.

#### **UNFOLD UPPER HANDLE**

1. Raise upper handle to the operating position and tighten handle knobs securely.

#### **INSTALL SPEED CONTROL ROD (See Figs. 1 and 2)**

- 1. Remove plastic tie securing rod to lower handle.
- Insert rod into speed control bracket and secure with retainer spring.



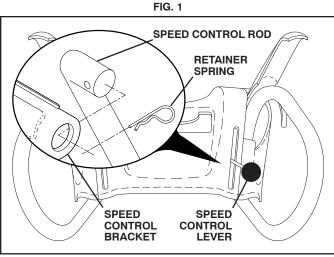


FIG. 2

## INSTALL TRACTION DRIVE CONTROL ROD (See Figs. 3 and 4)

The traction drive control rod has the long loop on the end of the spring as shown.

- 1. Slide rubber sleeve up rod and hook end of spring into pivot bracket with loop opening down as shown.
- With top end of rod positioned under left side of control panel, push rod down and insert top end of rod into hole in drive control bracket. Secure with retainer spring.

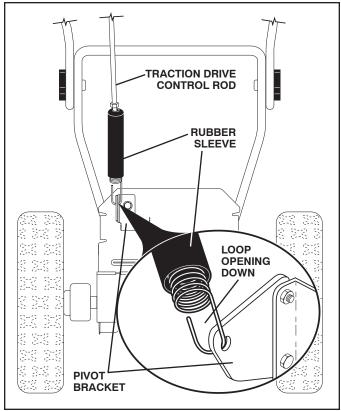


FIG. 3

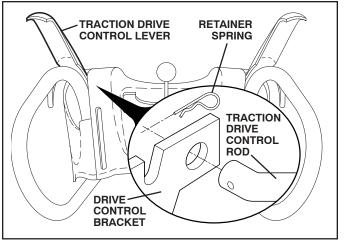


FIG. 4

## **ASSEMBLY / PRE-OPERATION**

#### **INSTALL AUGER CONTROL ROD (See Figs. 5 and 6)**

The auger control rod has the short loop on the end of the spring as shown.

- 1. Slide rubber sleeve up rod and hook end of spring into control arm with loop opening up as shown.
- With top end of rod positioned under right side of control panel, push down on rod and insert end of rod into hole in auger control bracket. Secure with retainer

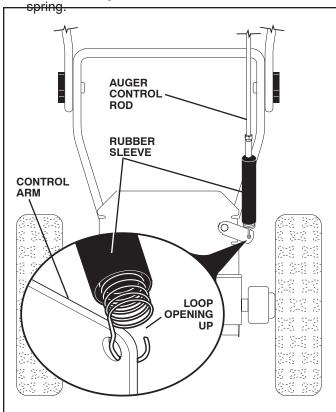


FIG. 5

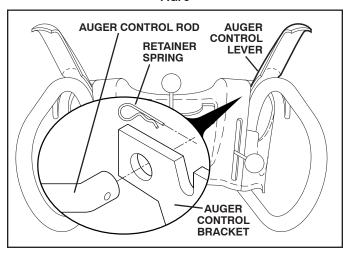


FIG. 6

## INSTALL DISCHARGE CHUTE / CHUTE ROTATER HEAD (See Fig. 7)

**NOTE:** The multi-wrench provided in your parts bag may be used to install the chute rotater head.

- Place discharge chute assembly on top of chute base with discharge opening toward front of snow thrower.
- Position chute rotater head over chute bracket. If necessary, rotate chute assembly to align square and pin on underside of chute rotater head with holes in chute bracket.
- With chute rotater head and chute bracket aligned, position chute rotater head on pin and threaded stud of mounting bracket.
- 4. Install 3/8 washer and locknut on threaded stud and tighten securely.

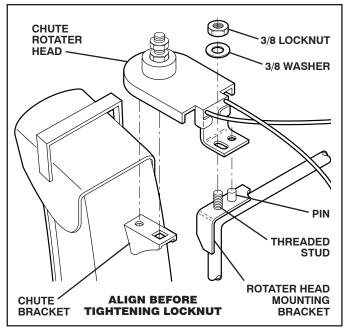


FIG. 7

#### **CHECK TIRE PRESSURE**

The tires on your snow thrower were overinflated at the factory for shipping purposes. Correct and equal tire pressure is important for best snow throwing performance.

• Reduce tire pressure to 14-17 PSI (19-24.5 N-m).

#### KNOW YOUR SNOW THROWER

READ THIS OWNER'S MANUAL AND ALL SAFETY RULES BEFORE OPERATING YOUR SNOW THROWER. Compare the illustrations with your snow thrower to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.

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







ENGINE OFF









OR WARNING



FAST

Τ

**SLOW** 

**CHOKE** 

**PRIMER** 

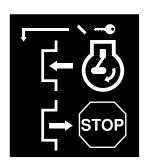


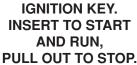






READ AND FOLLOW ALL SAFETY INFORMATION AND INSTRUCTIONS BEFORE USE OF THIS PRODUCT. KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE.





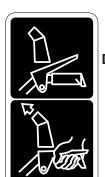






#### **A DANGER**

BLOCKAGES MUST NOT BE CLEARED OUT UNTIL THE ENGINE IS SHUT OFF, AND THE CLEAN OUT TOOL MUST BE USED. NEVER USE YOUR HAND TO CLEAN OUT THE CHUTE.



SNOW DISCHARGE

**DISENGAGED** 





## A DANGER



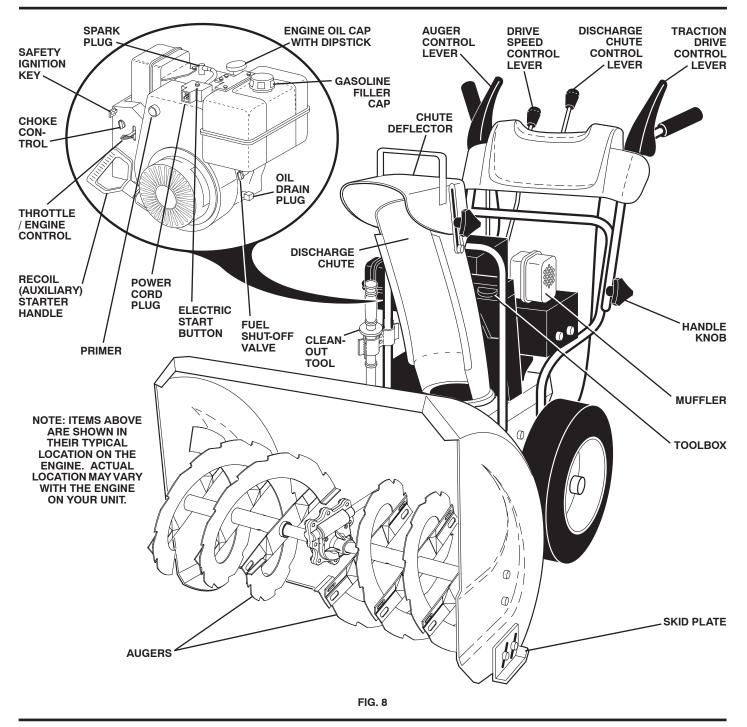
- READ AND FOLLOW OWNER'S MANUAL.
   NEVER ALLOW CHILDREN TO OPERATE
- SNOWTHROWERS.
   KEEP ALL SHIELDS AND GUARDS IN
- KEEP ALL SHIELDS AND GUARDS I PLACE WHILE OPERATING.



 SHUT OFF ENGINE AND REMAIN BEHIND HANDLES UNTIL ALL MOVING PARTS HAVE STOPPED BEFORE UNCLOGGING OR SERVICING UNIT.



 TO AVOID THROWN OBJECT INJURIES NEVER DIRECT DISCHARGE AT BYSTANDERS. USE EXTRA CAUTION WHEN OPERATING ON GRAVEL SURFACES.



#### **MEETS A.N.S.I. SAFETY REQUIREMENTS**

Our snow throwers conform to the standards of the American National Standards Institute.

**Toolbox -** used to store spare shear bolts, locknuts and wrench.

**Safety ignition key -** must be inserted for the engine to start and run. Remove when snow thrower is not in use.

Electric start button - used for starting the engine.

**Recoil (auxiliary) starter handle -** used for starting the engine.

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

Choke control - used for starting a cold engine.

**Throttle/engine control -** used to select either FAST or SLOW engine speed and to STOP the engine.

**Traction drive control lever -** used to engage power-propelled forward or reverse motion of snow thrower.

**Auger control lever -** used to engage auger motion (throw snow).

**Discharge chute control lever -** used to change the direction the snow is thrown.

**Skid plate -** used to adjust height of scraper bar from the ground.



The operation of any snow thrower can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your snow thrower or performing any adjust-

ments or repairs. We recommend standard safety glasses or a wide vision safety mask worn over spectacles.

#### **HOW TO USE YOUR SNOW THROWER**

**Know how** to operate all controls before adding fuel or attempting to start the engine.

#### **STOPPING**

#### TRACTION DRIVE

 Release traction drive control lever to stop the forward or reverse movement of the snow thrower.

#### **AUGER**

Release the auger control lever to stop throwing snow.
 ENGINE

- 1. Move throttle control to "STOP" position.
- 2. Remove (do not turn) safety ignition key to prevent unauthorized use.

NOTE: Never use choke to stop engine.

#### TO USE FUEL SHUT-OFF VALVE (See Fig. 9)

The fuel shut-off valve is located beneath the fuel tank on the engine. Always operate the snow thrower with the fuel shut-off valve in the OPEN position.

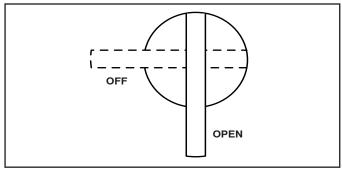


FIG. 9

#### TO USE THROTTLE CONTROL (See Fig. 10)

The throttle control is located on the engine. Always operate the snow thrower with the engine at full throttle. Full throttle offers the best snow thrower performance.

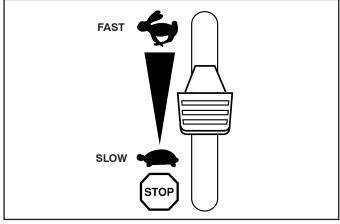


FIG. 10

#### TO USE CHOKE CONTROL (See Fig. 11)

The choke control is located on the engine. Use the choke control whenever you are starting a cold engine. Do not use to start a warm engine.

 To engage choke, turn knob clockwise. Slowly turn knob counterclockwise to disengage.

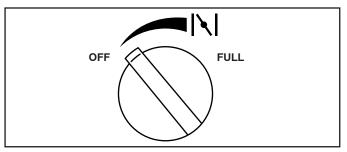


FIG. 11

#### TO CONTROL SNOW DISCHARGE (See Figs. 12 & 13)



WARNING: Snow throwers have exposed rotating parts, which can cause severe injury from contact, or from material thrown from the discharge chute. Keep the area of operation clear of all persons, small children and pets at all times including startup.



10

WARNING: If the discharge chute or auger become clogged, shut-off engine and wait for all moving parts to stop. Use the clean-out tool, NOT YOUR HANDS, to unclog the chute and/or auger.

The DIRECTION in which snow is to be thrown is controlled by the discharge chute control lever.

 To change the discharge chute position, press downward on discharge chute control lever and move lever left or right until chute is in desired position. Be sure lever springs back and locks into desired position.

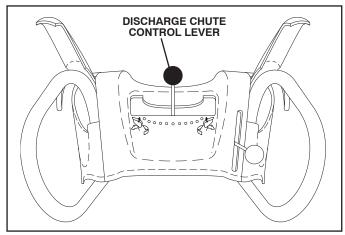


FIG. 12

The DISTANCE that snow is thrown is controlled by the position of the chute deflector. Set the deflector low to throw snow a short distance; set the deflector higher to throw snow farther.

To change the deflector position, loosen knob, move deflector to desired position and tighten knob securely.

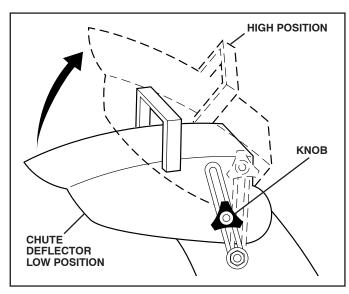


FIG. 13

#### TO THROW SNOW (See Fig. 14)

The auger rotation is controlled by the auger control lever located on the right side handle.

- Squeeze auger control lever to handle to engage the auger and throw snow.
- Release the auger control lever to stop throwing snow.

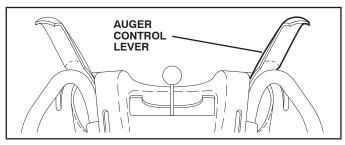


FIG. 14

#### **USING THE CLEAN-OUT TOOL (See Fig. 15)**

In certain snow conditions, the discharge chute may become clogged with ice and snow. Use the clean-out tool to dislodge this blockage.

When cleaning, repairing, or inspecting, make certain all controls are disengaged and the auger/impeller and all moving parts have stopped. Disconnect the spark plug wire and keep the wire away from the spark plug to prevent accidental starting.

- Release the auger control lever and shut off the engine.
- Remove the clean-out tool from it's mounting clip. Grasp the tool firmly by the handle and push and twist the tool into the discharge chute to dislodge the blockage.

After the packed snow has been dislodged, return the cleanout tool to it's mounting clip by pushing it into the clip.

- Make sure the discharge chute is pointed in a safe direction (no vehicles, buildings, people, or other objects are in the direction of discharge) before restarting the engine.
- Restart the engine, then squeeze the auger control lever to the handle to clear snow from the auger housing and the discharge chute.

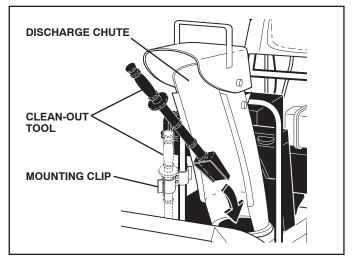


FIG. 15

#### TO MOVE FORWARD AND BACKWARD (See Fig. 16)

SELF-PROPELLING, forward and reverse movement of the snow thrower, is controlled by the traction drive control lever located on the left side handle.

- Squeeze traction drive control lever to handle to engage the drive system.
- Release traction drive control lever to stop the forward or reverse movement of the snow thrower.

SPEED and DIRECTION are controlled by the drive speed control lever.

 Press downward on the speed control lever and move lever to desired position BEFORE engaging the traction drive control lever. Be sure lever springs back and locks into desired position.

CAUTION: Do not move speed control lever when traction drive control lever is engaged. Damage to the snow thrower can result.

 Slower speeds are for heavier snow and faster speeds are for light snow and transporting the snow thrower. It is recommended that you use a slower speed until you are familiar with the operation of the snow thrower.

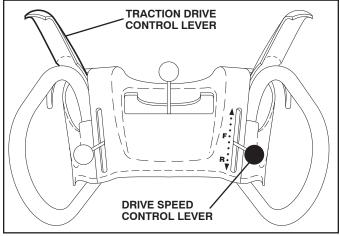


FIG. 16

#### TO ADJUST SKID PLATES (See Fig. 17)

**NOTE:** The wrench provided in your parts bag may be used to adjust the skid plates.

Skid plates are located on each side of the auger housing and adjust the clearance between the scraper bar and the ground surface. Adjust skid plates evenly to proper height for current surface conditions. For removal of snow in normal conditions, such as a paved driveway or sidewalk, place skid plates in the highest position (lowest scraper clearance) to give a 1/8" clearance between the scraper bar and the ground. Use a middle position if the surface to be cleared is uneven.

**NOTE:** It is not recommended to operate the snow thrower over gravel or rocky surfaces. Objects such as gravel, rocks or other debris, can easily be picked up and thrown by the impeller, which can cause serious personal injury, property damage or damage to the snow thrower.

- If snow thrower must be operated over gravel surface, use extra caution and be sure skid plates are adjusted to lowest (highest scraper clearance) position.
- 1. Shut off engine and wait for all moving parts to stop.
- 2. Adjust skid plates by loosening the hex nuts, then moving skid plate to desired position. Be sure both plates are adjusted evenly. Tighten securely.

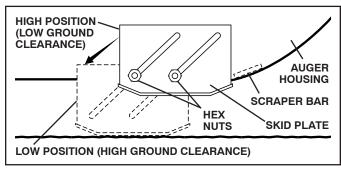


FIG. 17

#### **SCRAPER BAR**

The scraper bar is not adjustable, but is reversible. After considerable use it may become worn. When it has worn almost to the edge of the housing, it can be reversed, providing additional service before requiring replacement. Replace a damaged or worn scraper bar.

#### **BEFORE STARTING THE ENGINE**

#### CHECK ENGINE OIL LEVEL (See Fig. 18)

The engine on your snow thrower has been shipped, from the factory, already filled with oil.

- 1. Check engine oil with snow thrower on level ground.
- Remove oil fill cap/dipstick and wipe clean, reinsert the dipstick and screw tight, wait for a few seconds, remove and read oil level. If necessary, add oil until "FULL" mark on dipstick is reached. Do not overfill.
- To change engine oil, see "TO CHANGE ENGINE OIL" in the Maintenance section of this manual.

#### ADD GASOLINE (See Fig. 18)

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



WARNING: Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame.

CAUTION: Alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Drain the gas tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. See Storage Instructions for additional information. Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.

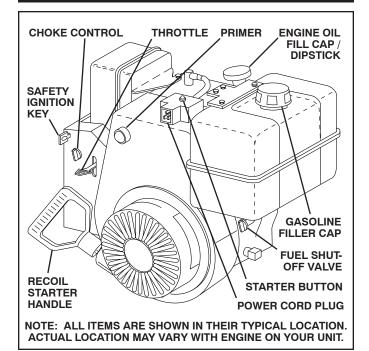


FIG. 18

#### TO START ENGINE

Be sure fuel shut-off valve is in the OPEN position.

Your snow thrower engine is equipped with both a 120 Volt A.C. electric starter and a recoil starter. The electric starter is equipped with a three-wire power cord and plug and is designed to operate on 120 Volt A.C. household current.

Be sure your house is a 120 Volt A.C. three-wire grounded system. If you are uncertain, consult a licensed electrician.



WARNING: Do not use the electric starter if your house is not a 120 Volt A.C. three-wire grounded system. Serious personal injury or damage to your snow thrower could result.

#### **COLD START - ELECTRIC STARTER**

- Insert safety ignition key (packed separately in parts bag) into ignition slot until it clicks. DO NOT turn the key. Keep the extra safety ignition key in a safe place.
- 2. Place throttle control in FAST position.
- Rotate choke control to FULL position.
- Connect the power cord to the engine.
- Plug the other end of the power cord into a three-hole grounded 120 Volt A.C. receptacle.
- Push the primer three (3) times.
- 7. Push starter button until engine starts.

**IMPORTANT**: Do not crank engine more than five continuous seconds between each time you try to start. Wait 5 to 10 seconds between each attempt.

- 8. When the engine starts, release the starter button and slowly move the choke control to the "OFF" position.
- Disconnect the power cord from the receptacle first, then from the engine.

Allow the engine to warm up for a few minutes. Engine will not develop full power until it has reached normal operating temperature.

#### WARM START - ELECTRIC STARTER

Follow the steps above, keeping the choke control in the OFF position.

#### **COLD START - RECOIL STARTER**

- Insert safety ignition key (packed separately in parts bag) into ignition slot until it clicks. DO NOT turn the key. Keep the extra safety ignition key in a safe place.
- Place throttle control in FAST position.
- 3. Rotate choke control to FULL position.
- Push the primer four (4) times if the temperature is below 15°F, or two (2) times if temperature is between 15° and 50°F. If temperature is above 50°F, priming is not necessary.

**NOTE**: Over priming may cause flooding, preventing the engine from starting. If you do flood the engine, wait a few minutes before attempting to start and DO NOT push the primer.

- 5. Pull recoil starter handle quickly. Do not allow starter rope to snap back.
- When the engine starts, release the recoil starter handle and slowly move the choke control to the OFF position.

Allow the engine to warm up for a few minutes. Engine will not develop full power until it has reached normal operating temperature.

#### WARM START - RECOIL STARTER

Follow the steps above, keeping the choke in the OFF position. DO NOT push the primer.

#### **BEFORE STOPPING**

Run the engine for a few minutes to help dry off any moisture on the engine.

#### IF RECOIL STARTER HAS FROZEN

If the recoil starter has frozen and will not turn the engine, proceed as follows:

- 1. Grasp the recoil starter handle and slowly pull as much rope out of the starter as possible.
- Release the recoil starter handle and let it snap back against the starter.

If the engine still fails to start, repeat the above steps or use the electric starter.

#### **SNOW THROWING TIPS**

- Always operate the snow thrower with the engine at full throttle. Full throttle offers the best performance.
- Go slower in deep, freezing or heavy wet snow. Use the drive speed control, NOT the throttle, to adjust speed.
- It is easier and more efficient to remove snow immediately after it falls.
- The best time to remove snow is the early morning. At this time the snow is usually dry and has not been exposed to the direct sun and warming temperatures.
- Slightly overlap each successive path to ensure all snow will be removed.
- Throw snow downwind whenever possible.
- Adjust the skid plates to proper height for current snow conditions. See "TO ADJUST SKID PLATES" in this section of this manual.
- For extremely heavy snow, reduce the width of snow removal by overlapping previous path and moving slowly.
- Keep engine clean and clear of snow during use. This will help air flow and extend engine life.
- After snow-throwing is completed, allow engine to run for a few minutes to melt snow and ice off the engine.
- Clean the entire snow thrower thoroughly after each use and wipe dry so it is ready for next use.



WARNING: Do not operate snow thrower if weather conditions impair visibility. Throwing snow during a heavy, windy snowstorm can blind you and be hazardous to the safe operation of the snow thrower.

## **MAINTENANCE**

FIL AS	IAINTENANCE SCH LL IN DATES S YOU COMPLETE EGULAR SERVICE	EDU	JLE BEFOR	E EACH LA	SE SE CHUSE PAYEVER PREVER	OURS NYSEA VERY	50HOI 50HOI VERY PERY	IRS 100 HO 100 PE	URS STOP SI	ERVI DAT	CE
ŦH	Check for Loose Fasteners	~					<b>/</b>				
R	Clean / Inspect Snow Thrower		<b>/</b>				<b>/</b>				
Ψ	Check / Replace V-Belts				<b>/</b>						
W E R	Lubrication Chart			<b>/</b>			<b>/</b>				
E	Check Engine Oil Level	<b>V</b>									
N	Change Engine Oil			<b>V</b>							
G	Inspect Muffler				<b>V</b>						
Ň	Check / Replace Spark Plug					<b>/</b>					
E	Empty Fuel Tank						<b>/</b>				

#### 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 snow thrower as instructed in this manual. Some adjustments will need to be made periodically to properly maintain your snow thrower. All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

- Once a year, you should replace the spark plug and check belts for wear. A new spark plug will help your engine run better and last longer.
- Follow the maintenance schedule in this manual.

**NOTE:** Use only Original Equipment Manufacturer (OEM) parts to service this unit. Failure to do so can cause the unit to malfunction and pose a risk of injury to the operator.

#### **BEFORE EACH USE**

- 1. Check engine oil level.
- 2. Check for loose fasteners.
- 3. Check controls to be sure they are functioning properly.

#### LUBRICATION

Keep your snow thrower well lubricated (See "LUBRICATION CHART").

#### SNOW THROWER

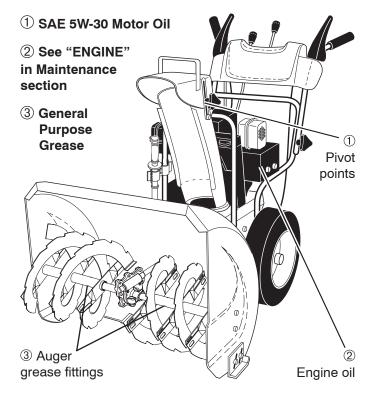
Always observe the safety rules when performing any maintenance.

#### **TIRES**

- Maintain proper air pressure in both tires (14–17 P.S.I. / 19-24.5 N-m).
- Keep tires free of gasoline and oil, which can harm rubber.

**NOTE:** To seal tire punctures and prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion.

#### **LUBRICATION CHART**



#### **V-BELTS**

Check V-belts for deterioration and wear after every 50 hours of operation and replace if necessary. The belts are not adjustable. Replace belts if they begin to slip from wear. (See "TO REMOVE BELT COVER" in the Service and Adjustments section of this manual).

The V-belts on your snow thrower are of special construction and should be replaced by original equipment manufacturer (OEM) belts available from your nearest dealer. Using other than OEM belts can cause personal injury or damage to the snow thrower.

14

## **MAINTENANCE**

#### **AUGER GEAR CASE**

- The gear case was filled with lubricant to the proper level at the factory. The only time the lubricant needs attention is if service has been performed on the gear case
- If lubricant is required, use only Ronex ED #1 grease.

#### TRACTION DRIVE SYSTEM

DO NOT lubricate the drive components inside the snow thrower. The sprockets, hex shafts, drive disc and friction wheel require no lubrication. The bearings and bushings are lifetime lubricated and require no maintenance.

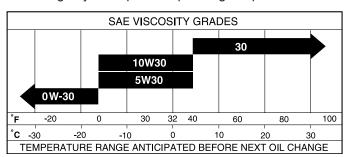
CAUTION: Any lubricating of the above components can cause contamination of the friction wheel and damage to the drive system of your snow thrower.

#### **ENGINE**

See engine manual.

#### LUBRICATION

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



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

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

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

#### TO CHANGE ENGINE OIL

Determine temperature range anticipated before next oil change. All oil must meet API service classification SG-SL.

Be sure snow thrower is on level surface.

- · Oil will drain more freely when warm.
- Catch oil in a suitable container.

**NOTE:** The left side wheel may be removed from snow thrower for easier access to the oil drain plug and placement of a suitable container. The unit tilted, resting on the frame with the left wheel removed, will help drain any oil trapped inside the engine. (See "TO REMOVE WHEELS" in the Service and Adjustments section of this manual).

- Remove safety ignition key and disconnect spark plug wire from spark plug. Place wire where it cannot come in contact with spark plug.
- 2. Clean area around drain plug.
- 3. Remove drain plug and drain oil in a suitable container.
- Install drain plug and tighten securely.
- 5. Wipe off any spilled oil from snow thrower and engine.
- Install left wheel (if removed for draining oil). Be sure to install klick pin into proper hole in wheel axle (See "TO REMOVE WHEELS" in the Service and Adjustments section of this manual).
- Remove oil fill cap/dipstick. Be careful not to allow dirt to enter the engine.
- Refill engine with oil through oil dipstick tube. Pour slowly. Do not overfill. For approximate capacity see "PRODUCT SPECIFICATIONS" section of this manual.
- Use gauge on oil fill cap/dipstick for checking level. Be sure dipstick cap is tightened securely for accurate reading. Keep oil at "FULL" line on dipstick.
- 10. Wipe off any spilled oil.

#### **MUFFLER**

Inspect and replace corroded muffler as it could create a fire hazard and/or damage.

#### SPARK PLUG

Replace spark plug at the beginning of each season or after every 100 hours of operation, whichever occurs first. Spark plug type and gap setting are shown in the "PRODUCT SPECIFICATIONS" section of this manual.

#### **CLEANING**

**IMPORTANT:** For best performance, keep snow thrower housing free of any dirt or trash. Clean the outside of your snow thrower after each use.



WARNING: Remove safety ignition key and disconnect spark plug wire from spark plug. Place wire where it cannot come in contact with spark plug.

- Keep finished surfaces/wheels free of gasoline, oil, etc.
- We do not recommend using a garden hose to clean your snow thrower unless the electrical system, muffler and carburetor are covered to keep water out. Water in engine can result in shortened engine life.

## SERVICE AND ADJUSTMENTS

WARNING: To avoid serious injury, before performing any service or adjustments:

Be sure throttle is in STOP position.

2. Remove safety ignition key.

3. Make sure the augers and all moving parts have completely stopped.

Disconnect spark plug wire from spark plug and place wire where it cannot contact plug.

#### **SNOW THROWER**

#### TO ADJUST SNOW THROWER HEIGHT

See "TO ADJUST SKID PLATES" and "SCRAPER BAR" in the Operation section of this manual.

#### CHUTE DEFLECTOR

The chute deflector, attached to the top of the discharge chute, is provided to direct discharging snow away from the operator. If the deflector becomes damaged, it should be replaced.



WARNING: To avoid serious injury, never operate your snow thrower with the deflector removed or damaged.

 To change direction and/or distance snow is discharged, see "TO CONTROL SNOW DISCHARGE" in the Operation section of this manual.

#### SHEAR BOLTS (See Fig. 19)

#### AUGER SHEAR BOLTS

Both right and left-hand augers are secured to the auger shaft with a shoulder/shear bolt and hex nut. Should a foreign object or ice become lodged in the augers, the shear bolts are designed to break, preventing damage to any other components. If one or both augers do not turn when auger control lever is engaged, check to see if one or both of the bolts have sheared. To replace the shear bolts:

- Disengage all controls and move throttle control to STOP position. Wait for all moving parts to stop.
- 2. Remove safety ignition key and disconnect spark plug wire from spark plug. Place wire where it cannot come in contact with spark plug.
- Align hole in auger hub with hole in auger shaft and install a new 1/4-20 x 2" shoulder/shear bolt and spacer. Install 1/4-20 lock nut and tighten securely.

CAUTION: Do not substitute. Use only original equipment shear bolts as supplied with your snow thrower.

 Insert safety ignition key and reconnect spark plug wire to spark plug.

#### IMPELLER SHEAR BOLTS

The impeller is secured to the impeller shaft with two (2) capscrew/shear bolts and hex nuts. Should a foreign object or ice become lodged in the impeller, the capscrews are designed to break, preventing damage to any other components. If impeller does not turn when auger control lever is engaged, check to see if the capscrews have sheared. To replace the capscrew/shear bolts:

- 1. Disengage all controls and move throttle control to STOP position. Wait for all moving parts to stop.
- Remove safety ignition key and disconnect spark plug wire from spark plug. Place wire where it cannot come in contact with spark plug.

3. Align holes in impeller hub with holes in impeller shaft and install two (2) new 1/4-20 x 1-5/8" capscrew/shear bolts. Install 1/4-20 locknuts and tighten securely.

CAUTION: Do not substitute. Use only original equipment capscrew/shear bolts as supplied with your snow thrower.

4. Insert safety ignition key and reconnect spark plug wire to spark plug.

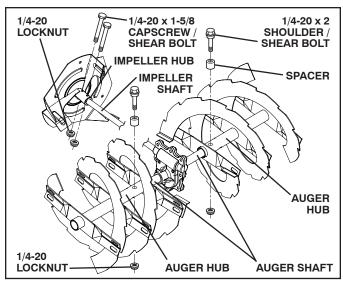


FIG. 19

#### TO REMOVE BELT COVER (See Fig. 20)

- Remove the two screws securing belt cover to frame.
- 2. Remove belt cover.

Replace belt cover by installing cover and screws and tighten securely

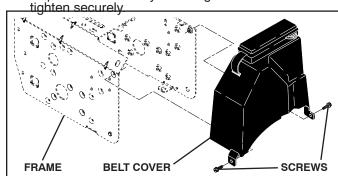


FIG. 20

## SERVICE AND ADJUSTMENTS

#### TO REPLACE BELTS (See Fig. 21)

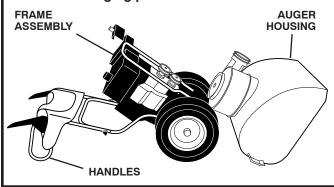
The auger and traction drive belts are not adjustable. If the belts are damaged or begin to slip from wear, they should be replaced. It is recommended that the belt(s) be replaced by a Sears service centre/department.

**NOTE:** It is recommended that both the auger and traction drive belt be replaced at the same time.

The V-belts on your snow thrower are of special construction and should be replaced by original equipment manufacturer (OEM) belts available from your nearest Sears service centre/department. Using other than OEM belts can cause personal injury or damage to the snow thrower.

A

WARNING: Belt replacement requires separation of the snow thrower. While separating the auger housing from the frame assembly, it is important that an assistant stand in the operating position and hold the snow thrower handles. Serious personal injury and/or damage to the unit could occur if the snow thrower should fall during the belt changing process.



- REMOVE GASOLINE FROM FUEL TANK Drain gasoline from fuel tank into a suitable container, outdoors, away from fire or flame. Wipe up any spilled gasoline.
- REMOVE DISCHARGE CHUTE Loosen locknut securing chute rotator head to mounting bracket only enough to allow chute rotator head to be raised and discharge chute to be removed from snow thrower.
- REMOVE BELT COVER See "TO REMOVE BELT COVER" in this section of this manual.
- REMOVE ENGINE PULLEY Remove bolt, lockwasher and flat washer securing pulley to engine crankshaft. Remove outside (auger) pulley only from crankshaft.
- 5. SEPARATE SNOW THROWER With your assistant standing in the operating position holding the handles, remove the two (2) bolts holding the auger housing and frame together.



WARNING: As the last bolt is removed, have your assistant carefully lower the handles down to the ground.

- REMOVE HAIRPIN FROM CLUTCH ROD and remove clutch rod from swing plate. Tip swing plate forward.
- 7. REMOVE AUGER BELT from around pulley.

 RELIEVE TENSION ON TRACTION DRIVE BELT IDLER and remove traction drive belt from around pulleys.

**HINT:** Insert a 3/8" drive ratchet (in the "ON" position) into the square hole in idler arm and rotate ratchet clockwise to relieve tension.

- With tension relieved on idler, install new traction drive belt around pulleys and inside belt keepers.
- 10. Install clutch rod in swing plate; secure with hairpin.
- 11. Place auger belt around and inside the groove of auger pulley only.
- 12. While your assistant slowly raises handles to rejoin the auger housing and frame assembly, pull up on the auger belt and squeeze sides together above pulley so belt is fully seated in groove of pulley.
- 13. Bring snow thrower completely together and check carefully for proper routing of belts. If auger belt has become dislodged from the pulley (by catching the idler arm bracket while bringing snow thrower together), separate the snow thrower and repeat step 12. Belt must be fully seated in pulley groove when bringing the snow thrower together.
- 14. Install the two (2) hex bolts and tighten securely.
- 15. INSTALL ENGINE PULLEY Place belt in pulley groove and slide pulley on crankshaft. Install flat washer, lockwasher and bolt and tighten securely (41-47 N-m torque). Make sure belt is inside belt keeper.
- 16. INSTALL BELT COVER and two (2) screws. Tighten securely.
- 17. INSTALL DISCHARGE CHUTE See "INSTALL DISCHARGE CHUTE / CHUTE ROTATER HEAD" in the Assembly / Pre-Operation section of this manual.

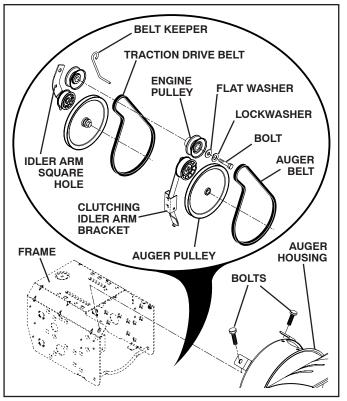


FIG. 21

## SERVICE AND ADJUSTMENTS

#### TO REMOVE WHEELS (See Fig. 22)

Remove the klik pin and remove wheel from axle.

**IMPORTANT:** When installing wheel, be sure to use the innermost hole in axle and the wheel hub hole. To disengage drive system from the wheels (for pushing or transporting the snow thrower), remove klik pin from wheel hub and insert pin into the outermost hole in axle only.

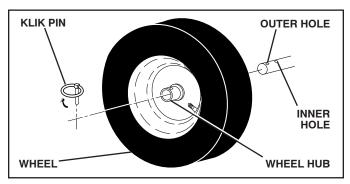


FIG. 22

**NOTE:** To seal punctures or prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion.

#### **ENGINE**

See engine manual.

#### **CARBURETOR**

Your carburetor is not adjustable. Engine performance should not be affected at altitudes up to 7,000 feet (2,134 meters). If your engine does not operate properly due to suspected carburetor problems, take your snow thrower to a Sears or other qualified service centre.

#### **ENGINE SPEED**

Never tamper with the engine governor, which is factory set for proper engine speed. Overspeeding the engine above the factory high speed setting can be dangerous and will void the warranty. If you think the engine-governed high speed needs adjusting, contact a Sears or other qualified service centre, which has proper equipment and experience to make any necessary adjustments.

## **STORAGE**

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



WARNING: Never store the snow thrower with gasoline in the tank inside a building where fumes may reach an open flame, spark or pilot light as on a furnace, water heater, clothes dryer or gas appliance. Allow the engine to cool before storing in any enclosure.

#### SNOW THROWER

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

- Clean entire snow thrower (See "CLEANING" in the Maintenance section of this manual).
- Inspect and replace belts, if necessary (See "TO RE-PLACE BELTS" in the Service and Adjustments section of this manual).
- Lubricate as shown in the Maintenance section of this manual.
- Be sure that all nuts, bolts, screws, and pins are securely fastened. Inspect moving parts for damage, breakage and wear. Replace if necessary.
- Touch up all rusted or chipped paint surfaces; sand lightly before painting.

#### **ENGINE**

See engine manual.

#### **FUEL SYSTEM**

**IMPORTANT**: It is important to prevent gum deposits from forming in essential fuel system parts such as carburetor, fuel hose, or tank during storage. Also, 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.

- Empty the fuel tank by starting the engine and letting it run until the fuel lines and carburetor are empty.
- Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.
- · Use fresh fuel next season.

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

#### **ENGINE OIL**

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

#### **CYLINDER**

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

## **STORAGE**

#### **OTHER**

- Remove safety ignition key; store it in a safe place.
- Do not store gasoline from one season to another.
- Replace your gasoline can if your can starts to rust.
   Rust and/or dirt in your gasoline will cause problems.
- If possible, store your snow thrower indoors and cover it to protect it from dust and dirt.
- Cover your snow thrower with a suitable protective cover that does not retain moisture. Do not use plastic. Plastic cannot breathe, which allows condensation to form and will cause your snow thrower to rust.

**IMPORTANT**: Never cover snow thrower while engine/exhaust area is still warm.

# **TROUBLESHOOTING**

See appropriate section in manual unless directed to a Sears service centre/department.

PROBLEM	CAUSE	CORRECTION
Does not start	<ol> <li>Fuel shut-off valve (if so equipped) in OFF position.</li> <li>Safety ignition switch OUT.</li> <li>Out of fuel.</li> <li>Throttle in STOP position.</li> <li>Choke in OFF position.</li> <li>Primer not depressed.</li> <li>Engine is flooded.</li> <li>Spark plug wire is disconnected.</li> <li>Bad spark plug.</li> <li>Stale fuel.</li> <li>Water in fuel.</li> </ol>	<ol> <li>Turn fuel shut-off valve to OPEN position.</li> <li>Push safety ignition switch IN.</li> <li>Fill fuel tank with fresh, clean gasoline.</li> <li>Move throttle to FAST position.</li> <li>Move to FULL position.</li> <li>Prime as instructed in the Operation section of this manual.</li> <li>Wait a few minutes before restarting, DO NOT prime.</li> <li>Connect wire to spark plug.</li> <li>Replace spark plug.</li> <li>Empty fuel tank &amp; carburetor, refill with fresh, clean gasoline.</li> <li>Empty fuel tank &amp; carburetor, refill with fresh, clean gasoline.</li> </ol>
Loss of power	<ol> <li>Spark plug wire loose.</li> <li>Throwing too much snow.</li> <li>Fuel tank cap is covered with ice or snow.</li> <li>Dirty or clogged muffler.</li> </ol>	<ol> <li>Reconnect spark plug wire.</li> <li>Reduce speed and width of swath.</li> <li>Remove ice and snow on and around fuel tank cap.</li> <li>Clean or replace muffler.</li> </ol>
Engine idles or runs roughly	<ol> <li>Choke is in FULL position.</li> <li>Blockage in fuel line.</li> <li>Stale fuel.</li> <li>Water in fuel.</li> <li>Carburetor is in need of adjustment or overhaul.</li> </ol>	<ol> <li>Move choke to OFF position.</li> <li>Clean fuel line.</li> <li>Empty fuel tank &amp; carburetor, refill with fresh, clean gasoline.</li> <li>Empty fuel tank &amp; carburetor, refill with fresh, clean gasoline.</li> <li>Contact a Sears service centre/department.</li> </ol>
Excessive vibration	Loose parts or damaged augers or impeller.	Tighten all fasteners. Replace damaged parts. If vibration remains, contact a Sears service centre/department.
Recoil starter is hard to pull	Frozen recoil starter.	See "IF RECOIL STARTER HAS FROZEN"     in the Operation section of this manual.
Loss of traction drive / slowing of drive speed	<ol> <li>Drive belt is worn.</li> <li>Drive belt is off of pulley.</li> <li>Friction drive wheel is worn.</li> </ol>	<ol> <li>Check / replace drive belt.</li> <li>Check / reinstall drive belt.</li> <li>Contact a Sears service centre/department.</li> </ol>
Loss of snow discharge or slowing of snow discharge	<ol> <li>Auger belt is off of pulley.</li> <li>Auger belt is worn.</li> <li>Clogged discharge chute.</li> <li>Augers / impeller jammed.</li> </ol>	<ol> <li>Check / reinstall auger belt.</li> <li>Check / replace auger belt.</li> <li>Clean snow chute.</li> <li>Remove debris or foreign object from augers / impeller.</li> </ol>

# **TROUBLESHOOTING**

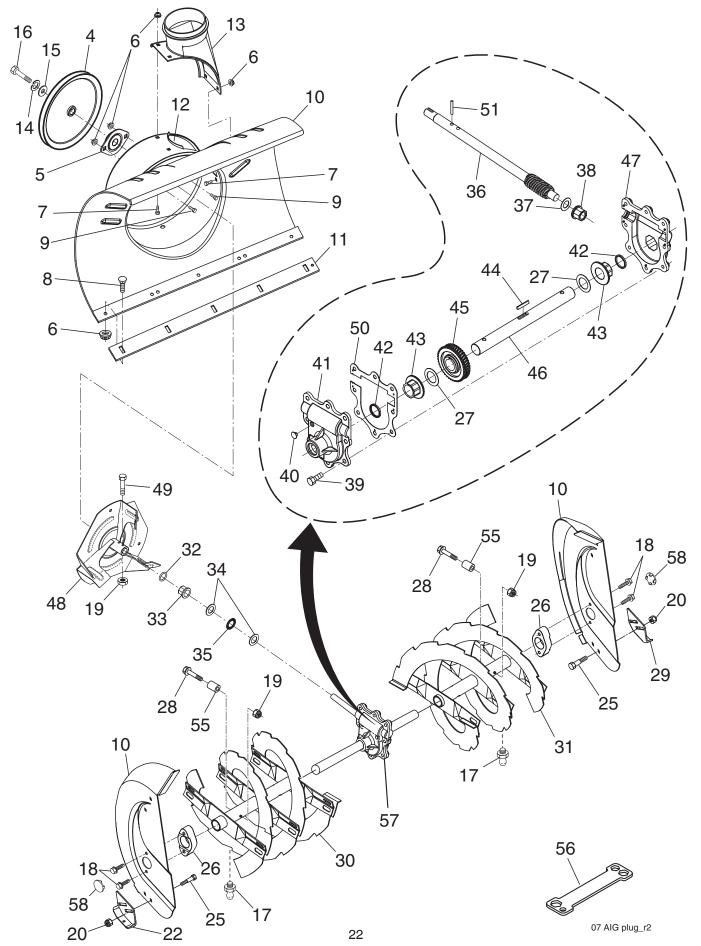
See appropriate section in manual unless directed to a Sears service centre/department.

PROBLEM	CAUSE	CORRECTION
Does not start	<ol> <li>Fuel shut-off valve (if so equipped) in OFF position.</li> <li>Safety ignition switch OUT.</li> <li>Out of fuel.</li> <li>Throttle in STOP position.</li> <li>Choke in OFF position.</li> <li>Primer not depressed.</li> <li>Engine is flooded.</li> <li>Spark plug wire is disconnected.</li> <li>Bad spark plug.</li> <li>Stale fuel.</li> <li>Water in fuel.</li> </ol>	<ol> <li>Turn fuel shut-off valve to OPEN position.</li> <li>Push safety ignition switch IN.</li> <li>Fill fuel tank with fresh, clean gasoline.</li> <li>Move throttle to FAST position.</li> <li>Move to FULL position.</li> <li>Prime as instructed in the Operation section of this manual.</li> <li>Wait a few minutes before restarting, DO NOT prime.</li> <li>Connect wire to spark plug.</li> <li>Replace spark plug.</li> <li>Empty fuel tank &amp; carburetor, refill with fresh, clean gasoline.</li> <li>Empty fuel tank &amp; carburetor, refill with fresh, clean gasoline.</li> </ol>
Loss of power	<ol> <li>Spark plug wire loose.</li> <li>Throwing too much snow.</li> <li>Fuel tank cap is covered with ice or snow.</li> <li>Dirty or clogged muffler.</li> </ol>	<ol> <li>Reconnect spark plug wire.</li> <li>Reduce speed and width of swath.</li> <li>Remove ice and snow on and around fuel tank cap.</li> <li>Clean or replace muffler.</li> </ol>
Engine idles or runs roughly	<ol> <li>Choke is in FULL position.</li> <li>Blockage in fuel line.</li> <li>Stale fuel.</li> <li>Water in fuel.</li> <li>Carburetor is in need of adjustment or overhaul.</li> </ol>	<ol> <li>Move choke to OFF position.</li> <li>Clean fuel line.</li> <li>Empty fuel tank &amp; carburetor, refill with fresh, clean gasoline.</li> <li>Empty fuel tank &amp; carburetor, refill with fresh, clean gasoline.</li> <li>Contact a Sears service centre/department.</li> </ol>
Excessive vibration	Loose parts or damaged augers or impeller.	Tighten all fasteners. Replace damaged parts. If vibration remains, contact a Sears service centre/department.
Recoil starter is hard to pull	Frozen recoil starter.	See "IF RECOIL STARTER HAS FROZEN"     in the Operation section of this manual.
Loss of traction drive / slowing of drive speed	<ol> <li>Drive belt is worn.</li> <li>Drive belt is off of pulley.</li> <li>Friction drive wheel is worn.</li> </ol>	<ol> <li>Check / replace drive belt.</li> <li>Check / reinstall drive belt.</li> <li>Contact a Sears service centre/department.</li> </ol>
Loss of snow discharge or slowing of snow discharge	<ol> <li>Auger belt is off of pulley.</li> <li>Auger belt is worn.</li> <li>Clogged discharge chute.</li> <li>Augers / impeller jammed.</li> </ol>	<ol> <li>Check / reinstall auger belt.</li> <li>Check / replace auger belt.</li> <li>Clean snow chute.</li> <li>Remove debris or foreign object from augers / impeller.</li> </ol>

#### **REPAIR PARTS**

### **SNOW THROWER - - MODEL NUMBER 944.527493**

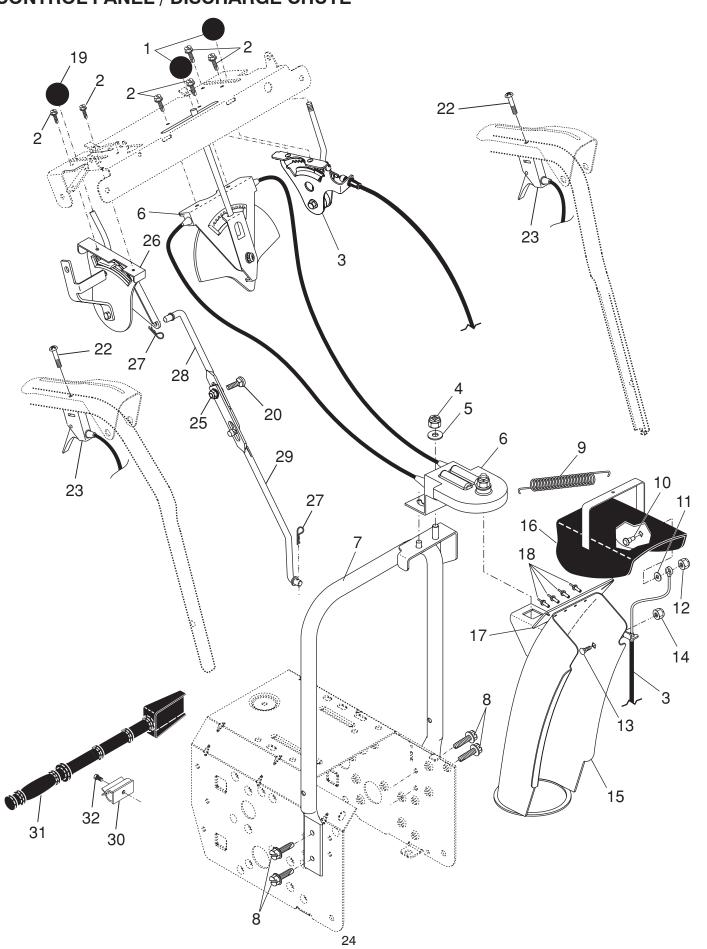
## **AUGER HOUSING / IMPELLER ASSEMBLY**



# **REPAIR PARTS** SNOW THROWER - - MODEL NUMBER **944.527493**AUGER HOUSING / IMPELLER ASSEMBLY

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
4	191079	Pulley, Impeller	31	405976X479	Auger Assembly, LH
5	188909	Bearing Assembly, Flange	32	407768	O-Ring
6	155377	Nut, Hex Flange 5/16-18	33	407769	Bushing, Flange 3/4
7	180355	Bolt, Flat Head, Carriage 5/16-18 x 5/8	34	174681	Washer, Thrust 3/4
8	72270505	Bolt, Carriage 5/16-18	35	174684	Bearing, Thrust 3/4
9	163183	Bolt, Hex Head	36	407757	Shaft, Impeller
10	404929X613	Housing, Auger	37	174683	Washer, Thrust 5/8
11	404932X479	Bar, Scraper	38	407758	Bushing, Flange 5/8
12	178675X008	Bracket, Corner Discharge	39	407767	Screw, Hex Head 5/16-18 x 3/4
13	175322	Base, Discharge Chute	40	407760	Plug, Case
14	10040500	Washer, Lock 5/16	41	407761	Housing, Gearbox, RH
15	19111507	Washer, Flat	42	407770	Seal, Oil
16	74940516	Screw, Hex Head 5/16-18 x 3/4	43	407762	Bushing, Flange, 1"
17	405637	Fitting, Grease	44	189282	Key, Square 1/4 x 1/4 x 7/8
18	179582	Screw, Hex Head 5/16 x 1	45	407763	Gear, Worm
19	73800400	Nut, Hex Lock 1/4-20	46	407764	Shaft, Auger
20	155377	Nut, Hex, Flangelock 5/16-18	47	407765	Housing, Gearbox, LH
22	178777X479	Skid Plate, RH	48	175321X479	Impeller Assembly
25	72270506	Bolt, Carriage 5/16-18 x 3/4	49	74780426	Screw, Hex Head 1/4-20 x 1-5/8
26	174658	Bearing, Auger	50	407766	Gasket, Gearbox
27	174697	Washer, Thrust, 1"	51	7836M	Pin, Roll 3/16 x 1-1/8
28	198636	Bolt, Shear	55	198638	Spacer
29	174762X479	Skid Plate, LH	56	180684	Multi-Wrench
30	405977X479	Auger Assembly, RH	57	196710	Gearbox Assembly
			58	411939	Plug

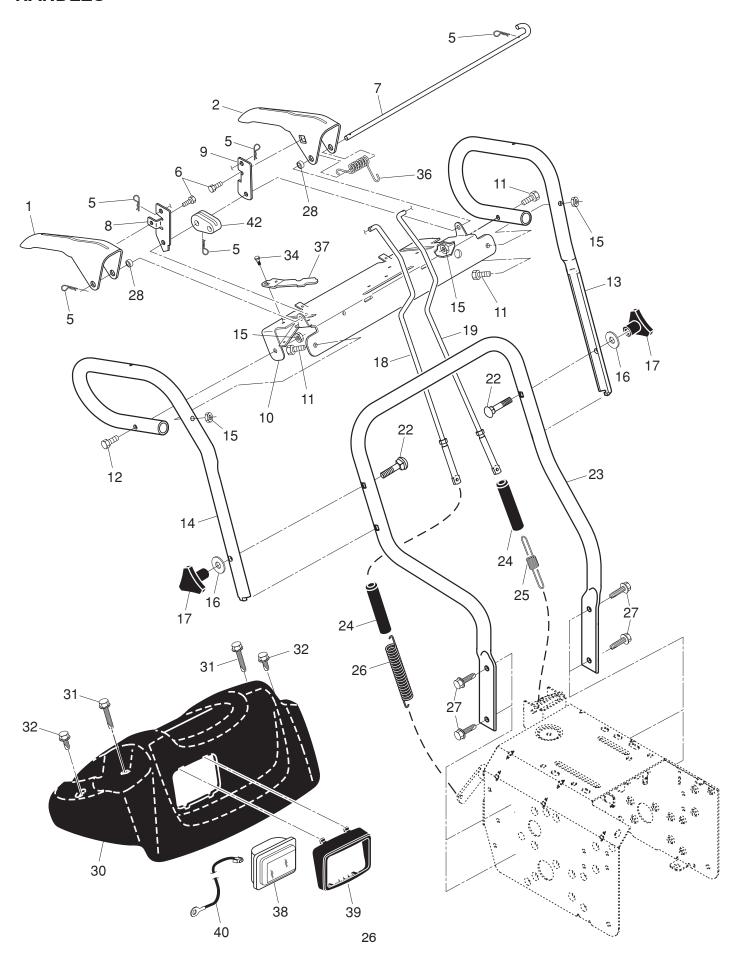
# **REPAIR PARTS** SNOW THROWER - - MODEL NUMBER **944.527493**CONTROL PANEL / DISCHARGE CHUTE



# **REPAIR PARTS** SNOW THROWER - - MODEL NUMBER **944.527493**CONTROL PANEL / DISCHARGE CHUTE

KEY NO.	PART NO.	DESCRIPTION	
1	414280	Knob, Lever	
2	17501010	Screw #10-24 x 5/8	
3	198475	Control Assembly, Deflector	
4	73800600	Nut, Lock 3/8-16	
5	19131316	Washer, Flat 3/8	
6	404974	Control Assembly, Chute Rotater	
7	405784X479	Support, Pivot	
8	150078	Screw, Hex Head 5/16-18 x 3/4	
9	184505	Spring, Deflector	
10	179829	Bolt, Shoulder	
11	179246	Washer, Friction, Nylon	
12	191730	Nut, Lock 1/4-20	
13	72250505	Bolt, Carriage 5/16-18	
14	751153	Nut, Lock 5/16-18	
	404770X613	Chute Assembly	
16	178633X613	Deflector Assembly	
17	179145	Seal, Deflector	
18		Rivet, Blind	
19	414281	Knob, Speed Control Lever	
20	72270506	Bolt, Carriage 5/16-18 x 3/4	
22	74041024	Screw #10-24 x 1-1/2	
23	188303	Control Assembly, Power Steering	
25	155377	Nut, Lock 5/16-18	
26		Lever Assembly, Speed Control	
27	169675	Retainer, Hairpin	
28	180445	Rod, Upper, Speed Control	
29	187716	Rod, Lower, Speed Control	
30		Clamp, Mounting, Clean-Out Tool	
31	192199	Tool, Clean-Out	
32	194189	Screw	

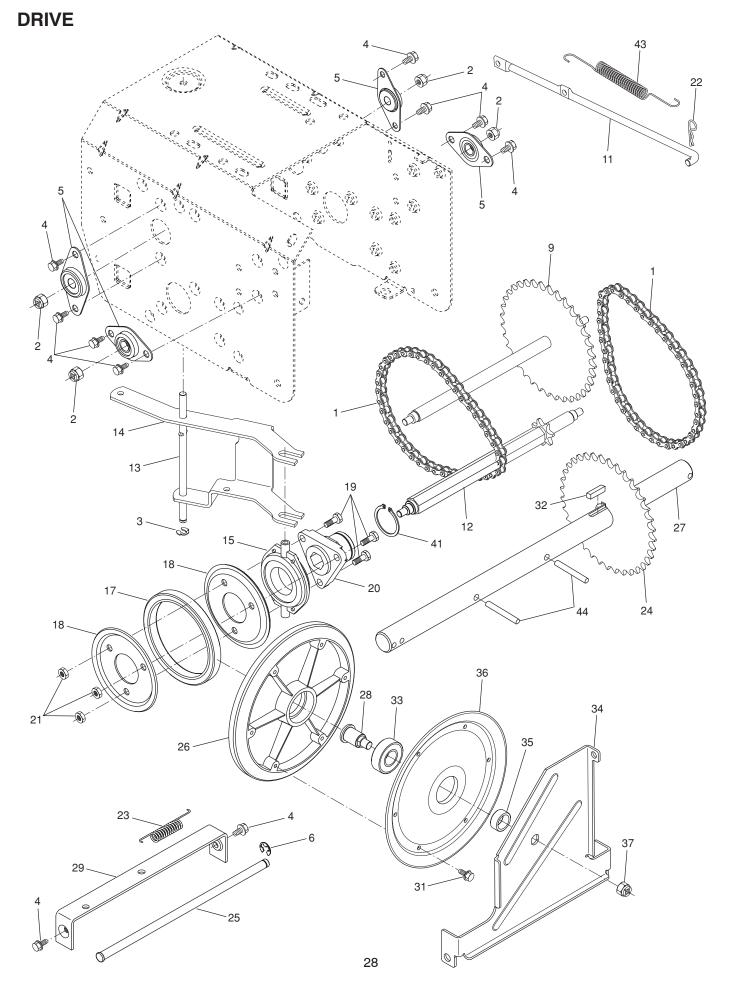
### **HANDLES**



# REPAIR PARTS HANDLES

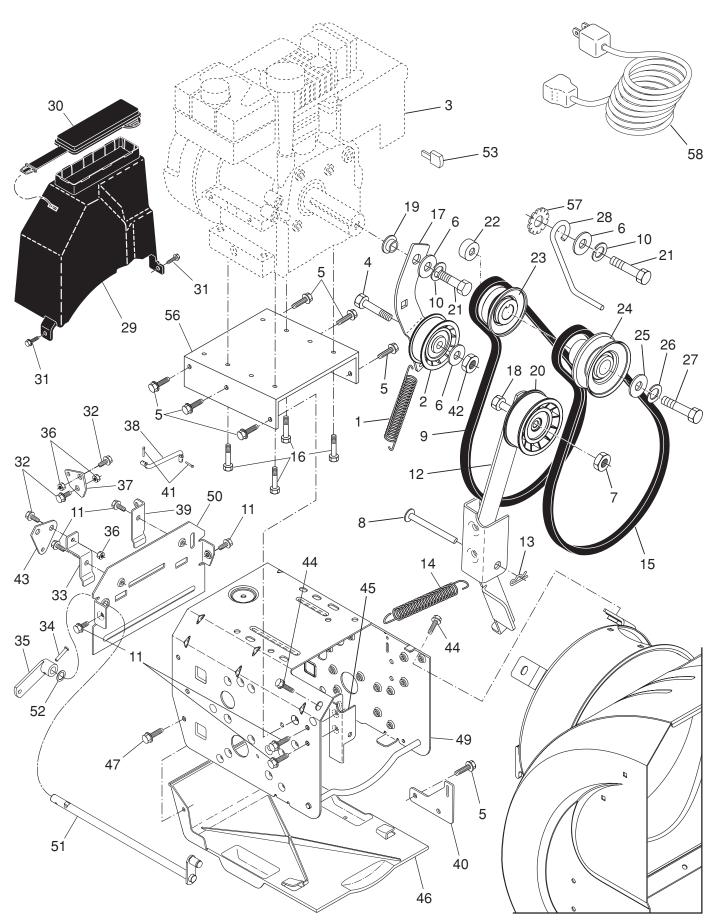
KEY NO.	PART NO.	DESCRIPTION
1	412682X479	Lever, Auger Control, RH
2	412681X479	Lever, Traction Drive Control, LH
5	169675	Retainer, Hairpin
6	17060408	Screw, Hex Head 1/4-20 x 3/4
7	412677	Bail, Interlock
8	196333X008	Arm, Impeller Rod
9	412679X008	Arm, Traction Rod
10	412683X479	Panel, Control
11	74780524	Screw, Hex Head 5/16-18 x 1-1/2
12	74780528	Screw, Hex Head 5/16-18 x 1-3/4
13	414519X479	Handle Tube, LH
14	414518X479	Handle Tube, RH
15	751153	Nut, Lock 5/16-18
16	19131316	Washer, Flat 3/8
17	178899	Knob, Handle
18	180480	Rod, Auger Control
19	405740	Rod, Traction Control
22	72120618	Bolt, Carriage 3/8-16 x 2-1/4
23	401940X479	Handle Tube, Lower
24	180447	Sleeve, Spring
25	180926	Spring, Traction Drive
26	178669	Spring, Auger Control
27	17000616	Screw, Hex Head 3/8-16 x 1
28	412680	Spacer
30	182906	Console, Panel
31	175262	Screw, Hex Head, Tapping #10-24 x 1-1/4
32 34	184471 17060410	Screw, Hex Head, Tapping #10-24 x 1/2 Screw
36	178831	
37	412675X004	Spring, Torsion Spring, Interlock
38	178666	Headlight, Halogen (Includes Bulb)
	401620	Bulb, Halogen
39	178668	Bezel, Headlight
40	405699	Harness, Headlight (Halogen)
40	414572	Cam, Interlock
42	4143/2	Cam, memock

#### **REPAIR PARTS**



KEY NO.	PART NO.	DESCRIPTION
1	401619	Chain, Drive
2	751153	Nut, Lock 5/16-18
3	402882	Clip, Retainer
4	17490508	Bolt, Hex Head 5/16-18 x 1/2
5	408981	Bearing, Flange
6	12000007	E-Ring, Retainer
9	402855	Sprocket & Shaft Assembly
11	402568	Rod, Clutch
	402187	Shaft, Hex
13	402310	Pivot Rod, Shifter
14	401732	Yoke, Shifter
15	175344	Trunnion Bearing Assembly
17	178613	Hub, Rubber Wheel
18	198176X479	Plate, Rubber Wheel
19		Screw, Hex Head 5/16-18 x 7/8
20		Ring, Rubber Wheel
21 22		Nut, Lock 5/16-18
23	169675 180135	Retainer, Hairpin
23 24	402691	Spring, Bias Sprocket, Axle Shaft
25	402652	Pivot Rod, Swing Plate
26	401820	Plate, Drive
	404307	Axle Shaft Assembly
28	402504	Shaft, Friction Pulley
29		Bracket, Shifter, Speed
31	17541008	Screw, Cap Head
32	189282	Key, Square
33	198791	Bearing, Ball
34	402394	Plate, Swing
35	402511	Spacer, Bearing
36	402393	Pulley, Friction
37	132010	Nut, Lock 5/16-18
41	12000012	Ring, Retaining
43	402878	Spring, Return
44	9465M	Pin, Roll

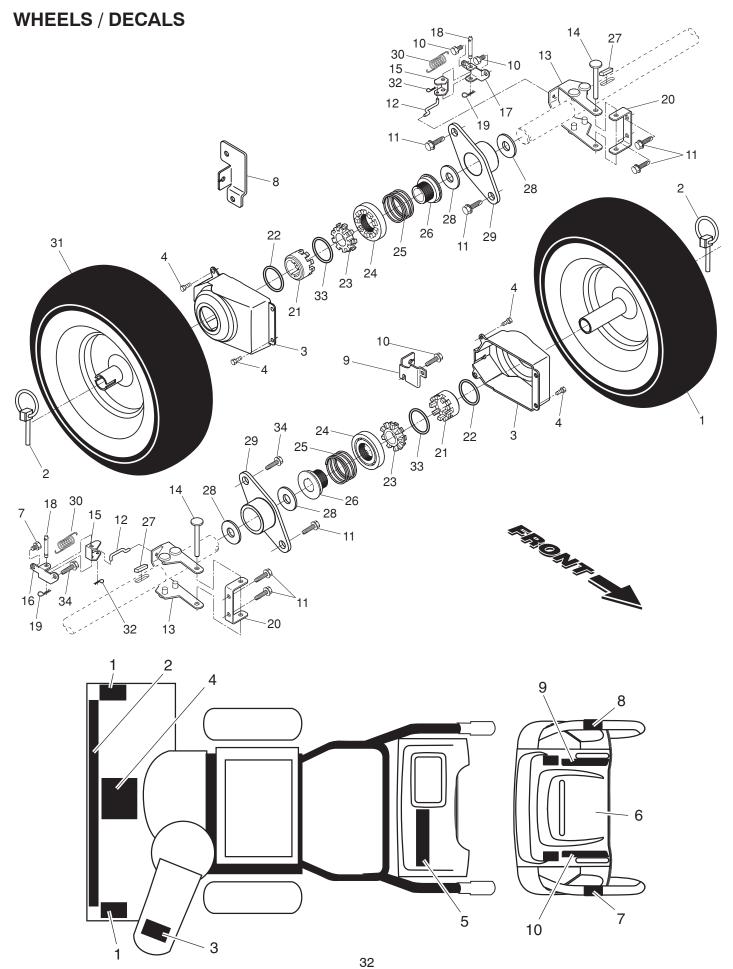
### **CHASSIS / ENGINE / PULLEYS**



# **REPAIR PARTS** SNOW THROWER - - MODEL NUMBER **944.527493** CHASSIS / ENGINE / PULLEYS

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	414557	Spring, Traction Idler	28	155452	Guide, Belt
2	180522	Pulley, Idler (2-1/4)	29	192213	Belt Cover Assembly
3		Engine, Tecumseh, Model Number			(Includes Toolbox Cover)
		LH358SA-159647A (See Breakdown)	30	178830	Cover, Toolbox
4	74780520	Screw, Hex Head 5/16-18 x 1-1/4	31	17490408	Screw, Hex Head 1/4-20 x 1/2
5	150078	Screw	32	402881	Bolt, Shoulder 5/16-18
6	59289	Washer, Flat	33	403096X004	Bellcrank Shifter
7	166785	Nut, Jam, Lock 5/16-18	34	198580	Clevis Pin
8	175330	Pin, Idler Pivot	35	405485	Arm, Auger Control
9	416954	V-Belt, Traction Drive	36	191730	Locknut, Hex
10	10040500	Washer, Lock 5/16	37	402856X004	Plate, Clutch
11	17490508	Screw, Hex Washer Head	38	187101	Link, Speed Control
		5/16-18 x 1/2	39	416717X004	Bracket, Clutch
12	410420	Impeller Arm Assembly	40	413429X479	Bracket, Traction
13	85179	Retainer, Hairpin	41	700279	Hairpin, Cotter 3/32 x 1/2
14	178828	Spring, Brake	42	73930500	Locknut, Hex
15	408007	V-Belt, Impeller Drive	43	403097X004	Plate, Shifter
16	150406	Screw, Hex Head 3/8-16 x 1-1/4	44	17000616	Screw, Hex Head
17	187786	Arm, Idler	45	175324X479	Pivot Bracket, Impeller Idler Arm
18	74780524	Screw, Hex Head 5/16-18 x 1-1/2	46	410877	Pan, Frame Bottom
19	175331	Bushing, Idler Pivot	47	184471	Screw
20	180523	Pulley, Idler (2-3/4)	49	409346X613	Frame Assembly
21	74610516	Screw, Hex Head 5/16-24 x 1	50	402685X613	Plate, Frame End
22	409475	Spacer, Engine Pulley	51	406109	Shaft, Auger Control
23	180478	Pulley, Engine, Traction Drive	52	57079	Washer, Hardened
24	179157	Pulley, Engine, Impeller Drive	53	35062	Key, Safety
25	400026	Washer, Flat 3/8	56	417014X613	Mounting Plate
26	850263	Washer, Lock 3/8	57	11050500	Washer, Lock, External Tooth
27	851084	Screw, Hex Head 3/8-24 x 1-3/8	58	198563	Power Cord

#### **REPAIR PARTS**



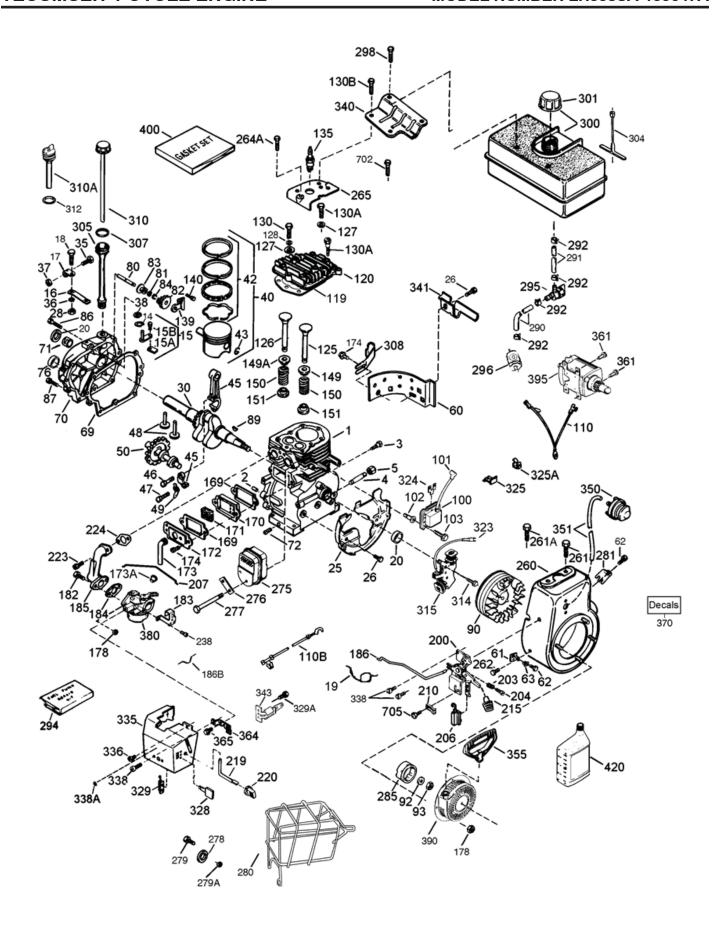
#### **REPAIR PARTS**

#### **SNOW THROWER - - MODEL NUMBER 944.527493**

### WHEELS / DECALS

KEY NO.	PART NO.	DESCRIPTION
NO.  1 2 3 4 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	NO.  196752X417 155443 405161 184471 17060410 410294 410293 17600406 17490508 405077 193506X479 182015 194944X008 194939X008 194943X008 181847 85179 179148X479 192126 182466 187622	Wheel Assembly, 16", Power Steering, LH Pin, Klik 1/4 Cover, Power Steering Screw, Hex Head #10-24 x 1/2 Screw Bracket, Steering Cable, RH Bracket, Steering Cable, LH Screw, Hex Head 1/4-20 x 3/8 Screw, Hex Head 5/16-18 x 1/2 Link, Steering Lever Yoke, Steering Pin, Steering Lever Bellcrank Bracket, LH Steering Bracket, RH Steering Pin, Steering Bellcrank Retainer, Hairpin Bracket, Steering Driver, Wheel Ring, Wire Retainer Lobe, Wheel
24 25 26 27 28 29 30 31 32 33 34	194941 179139 194940 189282 174697 179830 193885 196753X417 700279 12000045 146315	Slide, Clutch Spring, Clutch Slide Lobe, Axle Key, Square 1/4 x .875 Washer, Thrust (1") Bearing, Axle Spring, Return, Steering Latch Wheel Assembly, 16", Power Steering, RH Clip, Retainer Ring, Retaining Screw, Hex Head, Tapping 5/16-18 x 5/8
KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 9 10	181037 415444 181035 181042 183876 181033 415399 415398 415475 183730 418651 418652	Decal, Danger Decal, Craftsman, 10.5HP/27" Decal, Danger, Deflector Decal, Danger Decal, Craftsman Decal, Instruction Decal, Traction Lever Decal, Auger Lever Decal, Speed Control Decal, Remote Deflector Owner's Manual, English Owner's Manual, French

**NOTE:** All component dimensions given in U.S. inches. 1 inch = 25.4 mm **IMPORTANT:** Use only Original Equipment Manufacturer (O.E.M.) replacement parts. Failure to do so could be hazardous, damage your snow thrower and void your warranty.



KEY NO.	PART NO.	DESCRIPTION			PART NO.	DESCRIPTION
1	35371	Cylinder (Cast IronLiner) (3-5/16")		119	36451	Cylinder Head Gasket
		(Incl. 2, 20, 72, 72A & 72B)		120	36449	Cylinder Head
2	27652	Dowel Pin		125	27878A	Exhaust Valve (Std.)(Incl. 151)
3	650820	Screw, 1/4-20 x 1/2"		125	27880A	Exhaust Valve (1/32" OS) (Incl. 151)
4	30968	Oil Drain Extension (2-1/2")		126	34035	Intake Valve (Std.) (Incl. 151)
5	30969	Extension Cap, 1/4-18 NPT		127	650691	Flat washer
14	28277	Flat washer		128	650690	Belleville Washer
15	30699C	Governor Rod (Incl.15A & 15B)		130	6021A	Screw, 5/16-18 x 1-7/16"
15A	30700	Governor Yoke		130	650694A	Screw 5/16-18 x 2"
15B	650494	Screw, 6-40 x 5/16"		130A	651103	Screw, 5/16-18, 10-32X.6 Tap
16		Governor Lever		130C	651055	Screw, 5/16-18 x 39/64"
17	29916	Governor Lever Clamp		135	35395	Resistor Spark Plug (RJ19LM)
18	651028	Screw, T-15, 8-32 x 7/16"		139	33369	Governor Gear Bracket
19	34663	Speed Control Spring		140	650836	Screw, 10-24 x 1/2"
20	35319	Oil Seal		149	27882	Valve Spring Cap
25	37853	Blower Housing Baffle		149A	35862	Intake Valve Seal
26	650561	Screw 1/4-20 x 19/32"		150	27881	Valve Spring
28	30322	Lock Nut, 8-32		151	32581	Valve Spring Cap
30	36245	Crankshaft		169	27896A	Valve Cover Gasket
35	29826	Screw, 10-32 x 3/4"		170	28423	Breather Body
36	29918	Lock Washer #8		171	28424	Breather Element
37	29216	Lock Nut, 10-32		172	28425	Valve Cover
38	29642	Retaining Ring		173	35350	Breather Tube
40	35776A	Piston, Pin & Ring Set (Std) (Incl. 41,		174	650128	Screw, 10-24 x 1/2"
		42 & 43)		178	29752	Nut & Lock Washer 1/4-28
40	35777A	Piston, Pin & Ring Set (.010" OS)		182	30088A	Screw, 1/4-28 x 1"
		(Incl. 41, 42 & 43)		183	34587A	Choke bracket
42	35779	Ring Set (Std.)(3-5/16")		184	33263	Carburetor-to-Intake Pipe Gasket
42	35780	Ring Set (.010" OS)		185	33877	Intake Pipe
43	35772	Piston Pin Retaining Ring		186	34667	Governor Link
45		Connecting Rod Assembly (Incl. 47 & 49)		186B	36652	Choke Spring
47 48		Connecting Rod Bolt (1/4-20 X 1-5/16") Valve Lifter		200	34677	Manual Control Bracket (Incl. 203, 204
40 49	36896					& 206)
	35375	Oil Dipper			31342	Compression Spring
50		Camshaft (MCR)			651029	Screw, T-10, 5-40 x 7/16"
60	33273A	Blower Housing Extension		206	610973	Terminal
69 70	37342	Cylinder Cover (Incl. 20, 71, 80, 84		207	33878	Throttle Link
70	37847	Cylinder Cover (Incl. 20, 71, 80-84		211	28942	Screw, 10-32 x 3/8"
71 70	35377	Crankshaft Bushing		215	35440	Control Knob
72	27642	Oil Drain Plug (Sq. hd., 1/4-18)		219	34586	Choke Rod
80 81	37587 651080	Governor Shaft Washer		220	35438	Control Knob
	37588			223	650378	Screw, T-30, 5/16-18 x 1-3/32"
82		Governor Speel		224	27915A	Intake Pipe Gasket
83	30588A 29193	Governor Spool		238	28820	Screw, 10-32 x 1/2"
84		Retaining Ring		260	37961	Blower Housing
86	650833	Screw 1/4-20 x 1-3/16"		261	650788	Screw, 5/16-18 x 3/4"
87	650832	Screw, 1/4-20 X 1- 11/16"		262	651084	Screw, 5/16-18 x 9/16"
89	32589	Flywheel Key			650802	Screw, 1/4-20 x 5/8"
90	611094	Flywheel (3/5 Split) or (7-amp.), w/ring gear)		265 275	33272D 35056	Cylinder Head Cover Muffler
92	650880	Belleville Washer		276	31588	Locking Plate
93	650881	Flywheel Nut (5/8-18)		277	651002	Screw, 5/16-18 x 4-13/64"
100	35135A	Solid State Ignition (Incl. 101)		285	35985C	Starter Cup
101	611289	Spark Plug Cover		290	37962	Fuel Line (8.62" length)
102	651024	Solid State Mounting Stud		290	37963	Fuel Line (8.62 length)
103	651007	Screw, T-15, 10-24 x 15/16"		290 292	26460	Fuel Line Clamp
110	35187	O a serial NAC as	35	295	35857	Fuel Shut-Off Valve (Incl. 292)

KEY NO.	PART NO.	DESCRIPTION
298	650665	Screw, 1/4-15 x 3/4"
300	34156A	Fuel Tank (Incl. 292 & 301)(1 Gallon)
301	37844	Fuel Cap (Black)(1-1/2" I.D.)
305	36877	Oil Fill Tube
307	35499	O-Ring
308	35539	Fill Tube Clip
310	37869	Dipstick
314	650873	Screw, 1/4-20 x 3/4"
315	611104	Alternator Coil (3 Amp D.C., 5 Amp A.C.)
323	611118	Terminal
325	29443	Wire Clip
328	35062	Ignition Key (also available in Packaged Part #740077)
329A	651060	Screw, 8-32 x 23/64"
335	36547A	Carburetor Cover (Incl. 328)
336	650765	Screw, 10-32 x 1/2"
338	650821	Screw, 10-32 x 1/2"
	34154	Fuel Tank Bracket
341	34155	Fuel Tank Bracket (Lower)
	35079A	Key Switch Bracket (Incl. 329A)
350	570682A	Primer Assembly (also available in
		Packaged Part #740101)
351	32180C	Primer Line
355	590574	Starter Handle (Mitten Grip)
361	650990	Screw, T-30, 1/4-20 x 15/32"
364	37659	Carburetor Cover Bracket
365	650767	Screw, 8-32 x 27/64"
370	35077	Decal - Speed Control & Choke
370	36501	Decal - Primer - International Symbol
370		Warning Decal
370	36695	Decal - Tecumseh Logo for Top of Recoil Starter
370	37119	Warning Decal (Bilingual)
380	640349	Carburetor (Incl.184)
390	590749	Rewind Starter (Refer To Division 5,
		Section C, Page 43, For Bre
400	36452B	Gasket Set Incl. items marked *)
		(Incl. items marked *)
420	730226A	Sae 5W30 4-Cycle Éngine Oil (Quart) (Winter)
702	650727	Screw, 5/16-18 x 1-25/32"
999	730281	Winter Maintenance Kit

# Get it fixed, at your home or ours!

Just Call:

## 1-800-4-MY-HOME®

(1-800-469-4663)

24 hours a day, 7 days a week

For the repair of major brand appliances in your own home... no matter who made it, no matter who sold it!

For your nearest **Sears Parts and Service** location, to bring in products like vacuums, lawn equipment and electronics.

For **Sears Parts & Service**, to order the replacement parts, accessories and owner's manuals that you need to do-it-yourself.

www.sears.ca

To purchase or inquire about a Sears Maintenance Agreement, call:

1-800-361-6665

9 a.m. - 11 p.m. Mon. - Fri., EST, 9 a.m. - 4 p.m. Sat.

Pour service en français:

1-800-LE-FOYERMC

(1-800-533-6937)

www.sears.ca



02488

418651 12.01.07 TH Printed in the U.S.A.

<sup>® /</sup> TM Trademarks of Sears, Roebuck and Co. used under license by Sears Canada

<sup>&</sup>lt;sup>™</sup> Marque déposée / <sup>™</sup> Marque de commerce de Sears, Roebuck and Co. utilisée en vertu d'une licence de Sears Canada