

## 0209H SNOW BLOWER

### Main technical parameters:

Model	0209H84	0209H72
Total length (in)	44	44
Total width (in)	86	74
Total height (Low throw standard) (in)	67	67
Total height (High throw Optional) (in)	136	136
Transport height (in)	63 (Low) /84 (High)	63 (Low) /84 (High)
Operating weight (include quick hitch) (lbs)	1221 (Low) /1322 (High)	1146 (Low) /1257 (High)
Operation method	Electro-hydraulic control	Electro-hydraulic control
Rotation angle (°)	270(Low)/200 (High)	270 (Low) /200 (High)
Maximum loading height (high throwing option) (m)	3.3	3.3
Max throwing distance (ft)	40	40
Hydraulic flow (Gpm)	31-39	31-39
Allow Max. pressure (Mpa)	2900	2900
Suit to machine (High hydraulic flow)	Skid steer loader	Skid steer loader

# Hydraulic automatic control valve: It will reflect to changes of pressure or flow and will open/close the valve. Automatic Control Valves do not require an external power source, the fluid pressure is enough for opening and closing the valve.

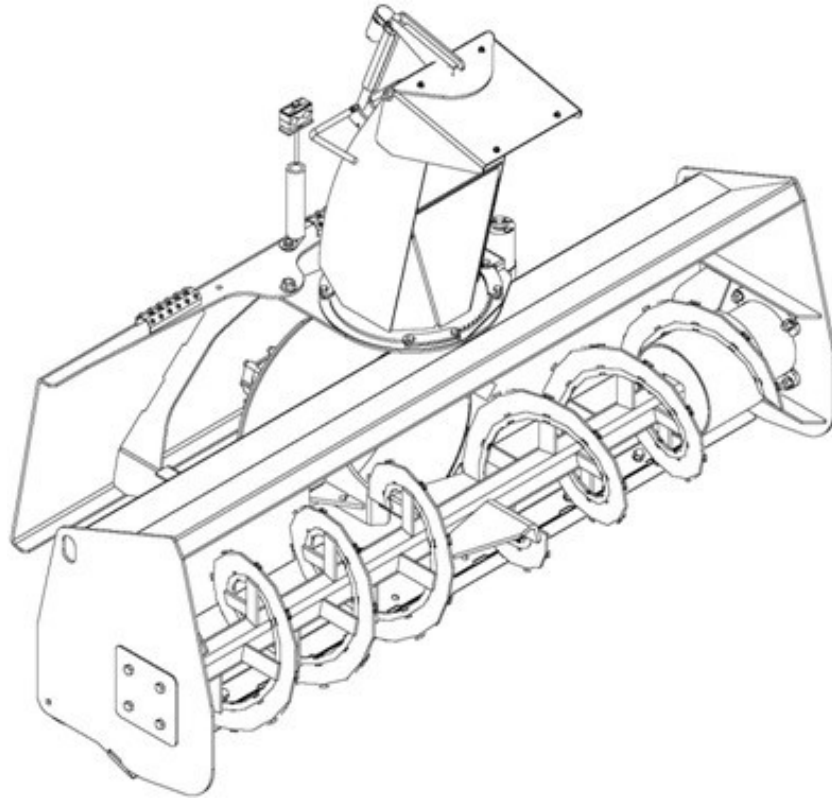


dual-motor, dual-connection, which means when throwing motor has stuck due to excessive snow intake, The speed of the intake motor will be lower down to reduce the amount of snow entering at meantime.



---

# SNOW BLOWER MANUAL



## PREFACE

### GENERAL INFORMATION

This product was carefully designed and manufactured to give you many years of dependable service. Only minor maintenance (such as cleaning and lubricating) is required to keep it in top working condition. Be sure to observe all maintenance procedures and safety precautions in this manual and on any safety decals located on the product and on any equipment on which the attachment is mounted.

**WARNING! Never let anyone operate this unit without reading the “Safety Precautions” and “Operating Instructions” sections of this manual. Always choose hard, level ground to park the vehicle on and set the brake so the unit cannot roll.**

Unless noted otherwise, right and left sides are determined from the operator’s control position when facing the attachment.

**NOTE: The illustrations and data used in this manual were current (according to the information available to us) at the time of printing, however, we reserve the right to redesign and change the attachment as may be necessary without notification.**

### BEFORE OPERATION

The primary responsibility for safety with equipment falls to the operator. Make sure the equipment is operated only by trained individuals that have read and understand this manual. If there is any portion of this manual or function you do not understand, contact your local authorized dealer or manufacturer to obtain further assistance. Keep this manual available for reference. Provide this manual to any new owners and/or operator’s

### SAFETY ALERT SYMBOL

This is the “Safety Alert Symbol” used by this industry. This symbol is used to warn of possible injury. Be sure to read all warnings carefully. They are included for your safety and the safety of others working with you.

### SERVICE

Use only manufacturer replacement parts. Substitute parts may not meet the required standards. Record the model and serial number of your unit on the cover of this manual. The parts department needs this information to insure that you receive the correct parts.

---

## SOUND AND VIBRATION

“Sound pressure levels and vibration data for this attachment are influenced by many different parameters; some items are listed below (not inclusive):

- prime mover type, age, condition, with or without cab enclosure and configuration
- operator training, behavior, stress level
- job site organization, working material condition, environment

Based on the uncertainty of the prime mover, operator, and job site, it is impossible to get precise machine and operator sound pressure levels, or vibration levels for this attachment.”

## SAFETY STATEMENTS



**THIS SYMBOL BY ITSELF OR WITH A WARNING WORD THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY OR THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.**



**DANGER THIS SIGNAL WORD IS USED WHERE SERIOUS INJURY OR DEATH WILL RESULT IF THE INSTRUCTIONS ARE NOT FOLLOWED PROPERLY.**



**WARNING THIS SIGNAL WORD IS USED WHERE SERIOUS INJURY OR DEATH COULD RESULT IF THE INSTRUCTIONS ARE NOT FOLLOWED PROPERLY.**



**CAUTION THIS SIGNAL WORD IS USED WHERE MINOR INJURY COULD RESULT IF THE INSTRUCTIONS ARE NOT FOLLOWED PROPERLY.**

**NOTICE NOTICE INDICATES A PROPERTY DAMAGE MESSAGE.**

## GENERAL SAFETY PRECAUTIONS

### **WARNING! READ MANUAL PRIOR TO INSTALLATION**



Improper installation, operation, or maintenance of this equipment could result in serious injury or death. Operators and maintenance personnel should read this manual, as well as all manuals related to this equipment and the prime mover thoroughly before beginning installation, operation, or maintenance. **FOLLOW ALL SAFETY INSTRUCTIONS IN THIS MANUAL AND THE PRIME MOVER'S MANUAL(S).**



---

## READ AND UNDERSTAND ALL SAFETY STATEMENTS

Read all safety decals and safety statements in all manuals prior to operating or working on this equipment. Know and obey all OSHA regulations, local laws, and other professional guidelines for your operation. Know and follow good work practices when assembling, maintaining, repairing, mounting, removing, or operating this equipment.



### KNOW YOUR EQUIPMENT

Know your equipment's capabilities, dimensions and operations before operating. Visually inspect your equipment before you start, and never operate equipment that is not in proper working order with all safety devices intact. Check all hardware to ensure it is tight. Make certain that all locking pins, latches, and connection devices are properly installed and secured. Remove and replace any damaged, fatigued, or excessively worn parts. Make certain all safety decals are in place and are legible. Keep decals clean, and replace them if they become worn and hard to read.

## GENERAL SAFETY PRECAUTIONS

### WARNING! PROTECT AGAINST FLYING DEBRIS



Always wear proper safety glasses, goggles or a face shield when driving pins in or out, or when any operation causes dust, flying debris, or any other hazardous material.

### WARNING! LOWER OR SUPPORT RAISED EQUIPMENT



Do not work under raised booms without supporting them. Do not use support material made of concrete blocks, logs, buckets, barrels or any other material that could suddenly collapse or shift positions. Make sure support material is solid, not decayed, warped, twisted, or tapered. Lower booms to ground level or onto blocks.

Lower booms and attachments to the ground before leaving the cab or operator's station.

### WARNING! USE CARE WITH HYDRAULIC FLUID PRESSURE



Hydraulic fluid under pressure can penetrate the skin and cause serious injury or death. Hydraulic leaks under pressure may not be visible. Before connecting or disconnecting hydraulic hoses, read your prime movers operator's manual for detailed instructions on connecting and disconnecting hydraulic hoses or fittings.

- Keep unprotected body parts, such as face, eyes, and arms as far away as possible from a suspected leak. Flesh injected with hydraulic fluid may develop gangrene or other permanent disabilities.
- If injured by injected fluid, see a doctor at once. If your doctor is not familiar with this type of injury, ask him to research immediately to determine proper treatment.
- Wear safety glasses, protective clothing, and use a sound piece of cardboard or

---

wood when searching for hydraulic leaks. **DO NOT USE YOUR HANDS!**  
**SEE ILLUSTRATION.**

## GENERAL SAFETY PRECAUTIONS

### WARNING! DO NOT MODIFY MACHINE OR ATTACHMENTS



Modifications may weaken the integrity of the attachment and may impair the function, safety, life, and performance of the attachment. When making repairs, use only the manufacturer's genuine parts, following authorized instructions. Other parts may be substandard in fit and quality. Never modify any ROPS (Roll Over Protection Structure) or FOPS (Falling Object Protective Structure) equipment or device. Any modifications must be authorized in writing by the manufacturer.

### WARNING! SAFELY MAINTAIN AND REPAIR EQUIPMENT



• Do not wear loose clothing, or any accessories that can catch in moving parts. If you have long hair, cover or secure it so that it does not become entangled in the equipment.

- Work on a level surface in a well-lit area.
- Use properly grounded electrical outlets and tools.
- Use the correct tool for the job at hand. Make sure they are in good condition for the task required.
- Wear the protective equipment specified by the tool manufacturer.

### WARNING! SAFELY OPERATE EQUIPMENT



Do not operate equipment until you are completely trained by a qualified operator in how to use the controls, know its capabilities, dimensions, and all safety requirements.

See your machine's manual for these instructions.

- Keep all step plates, grab bars, pedals, and controls free of dirt, grease, debris, and oil.
- Never allow anyone to be around the equipment when it is operating.
- Do not allow riders on the attachment or the prime mover.
- Do not operate the equipment from anywhere other than the correct operators position.
- Never leave equipment unattended with the engine running or with this attachment in a raised position.
- Do not alter or remove any safety feature from the prime mover or this attachment.
- Know your work site safety rules as well as traffic rules and flow. When in doubt on any safety issue, contact your supervisor or safety coordinator for an explanation.



---

## EQUIPMENT SAFETY PRECAUTIONS

### WARNING! REMOVE PAINT BEFORE WELDING OR HEATING.



Hazardous fumes/dust can be generated when paint is heated by welding, soldering or using a torch. Do all work outside or in a well ventilated area and dispose of paint and solvent properly. Remove paint before welding or heating.

When sanding or grinding paint, avoid breathing the dust. Wear an approved respirator. If you use solvent or paint stripper, remove stripper with soap and water before welding. Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse at least 15 minutes before welding or heating.

### WARNING! END OF LIFE DISPOSAL.



At the completion of the useful life of the unit, drain all fluids and dismantle by separating the different materials (rubber, steel, plastic, etc.). Follow all federal, state and local regulations for recycling and disposal of the fluid and components.

### WARNING! KNOW WHERE UTILITIES ARE



Observe overhead electrical and other utility lines. Be sure equipment will clear them. When digging, call your local utilities for location of buried utility lines, gas, water, and sewer, as well as any other hazard you may encounter.

### DANGER! ROTATING OBJECTS



- Never allow anyone to reach into, kick into, or otherwise come in contact with a rotating auger or with a non-rotating clogged auger. The auger can crush and/or dismember. Keep everyone clear of the auger until the prime mover engine is off and the hydraulic pressure has been relieved.
- Never allow anyone to reach into the chute, force objects (i.e. bars, poles, etc.) down the chute, kick into the fan, or otherwise come in contact with a rotating fan or with a non-rotating clogged fan. The fan can throw objects at a lethal speed and can dismember. Keep everyone clear of the fan until the prime mover engine is off and the hydraulic pressure has been relieved.

### CAUTION! AVOID ELECTRICAL SHOCK

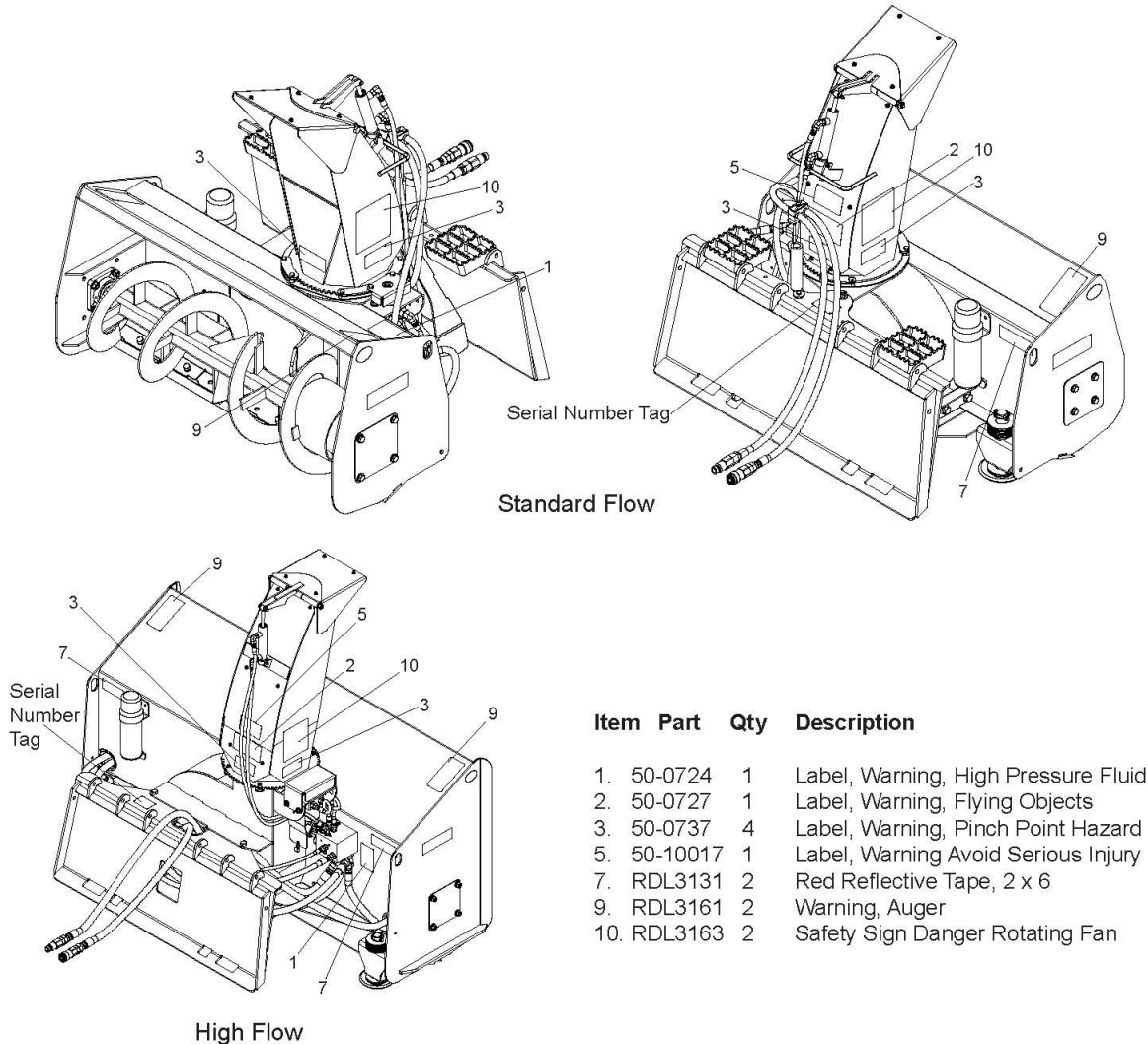


- To avoid electrical shock during the wiring harness installation, remove the ground cable from the battery of your prime mover.
- Be aware that turning off the prime mover key does not cut the power to the chute rotation motor or to the chute deflector actuator. With the switches for these devices being powered 100% of the time, care must be taken to not engage these switches:
  - accidentally at any time, especially when entering or leaving the prime mover operator's position, or
  - when others are working on or near the actuator, the deflector, the chute, or

any other part of this product that could cause personal injury if the switch or switches are engaged.

- Avoid pinch points and be aware of rotating parts when manually turning the fan or auger

## SAFETY DECAL LOCATIONS



### INSTRUCTIONS

- Keep all safety signs clean and legible.
- Replace all missing, illegible, or damaged safety signs.
- Replacement parts for parts with safety signs attached must also have safety signs attached.
- Safety signs are available, free of charge, from your dealer or from FFC.

### PLACEMENT OR REPLACEMENT OF SAFETY SIGNS

1. Clean the area of application with non-flammable solvent, and then wash the same area with soap and water.
2. Allow the surface to fully dry.
3. Remove the backing from the safety sign, exposing the adhesive surface.
4. Apply the safety sign to the position shown in the diagram above and smooth out any bubbles.

## SAFETY DECALS



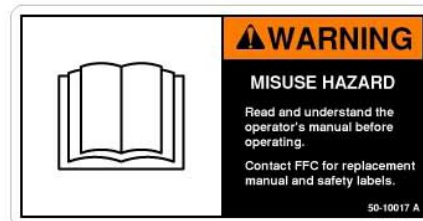
**1. 50-0724**  
**WARNING! HIGH PRESSURE FLUID**



**2. 50-0727**  
**WARNING! FLYING OBJECTS**



**3. 50-0737**  
**WARNING! PINCH POINT**



**5. 50-010017**  
**WARNING! READ MANUAL**



**7. RDL3131**  
**RED REFLECTIVE MARKER**



**9. RDL3161**  
**DANGER! ROTATING AUGER**



**10. RDL3163**  
**DANGER! ROTATING FAN**

## INSTALLATION & SET-UP

### **WARNING! READ MANUAL PRIOR TO INSTALLATION**



Improper installation, operation, or maintenance of this equipment could result in serious injury or death. Operators and maintenance personnel should read this manual, as well as all manuals related to this equipment and the prime mover thoroughly before beginning installation, operation, or maintenance. **FOLLOW ALL SAFETY INSTRUCTIONS IN THIS MANUAL AND THE PRIME MOVER'S MANUAL(S).**

1. Place this product on a firm, level surface that is large enough to safely accommodate this product, your prime mover and all workers involved in the mounting process.
2. Refer to the operator's manual(s) for your prime mover, loader, and quick-attach and follow the mounting instructions contained therein.
3. Carefully raise the loader and cycle the tilt cylinders to check clearances and to verify that all mounting procedures have been successfully completed.

**IMPORTANT** Lubricate all grease fittings before connecting this product to your prime mover's hydraulic system. Refer to **HYDRAULIC SNOW BLOWER MAINTENANCE** and follow the instructions

### **ELECTRIC ACTUATOR AND WIRING HARNESS INSTALLATION**

**MATERIALS NEEDED:** Nylon cable ties

1. Park your prime mover on a level surface with this product properly attached.
2. Place your prime mover's transmission in "Park" and engage the parking brake.
3. Lower this product onto the level surface.
4. Shut off your prime mover's engine, remove the starter key, wait for all moving parts to come to a stop, and relieve all pressure in the hydraulic lines.
5. Remove the shipping material holding the top of the electric actuator to the chute and remove the bolt and nut from the deflector's actuator connection point. Secure the top of the actuator to the deflector using that bolt and nut.
  
6. Attach the control box to the left side screen of your prime mover's roll-over protective structure (ROPS). Use the magnet on back of the control box to secure the control box so that the box is flat against the screen, the toggle switches are on the top, and the wiring harness cables are

on the bottom.

**WARNING!** Failure to obey the following procedures could result in death or serious injury.



• Before doing any work on your prime mover's battery, read and understand all prime mover instructions and safety signs for your prime mover's electrical system. Pay special attention to hazard avoidance and remedial action related to explosive gas and acid.

## INSTALLATION & SET-UP

**CAUTION!** Failure to obey the following procedures may result in personal injury.



• To avoid electrical shock during the wiring harness installation, remove the ground cable from the battery of your prime mover.

7. Remove the ground cable from the negative (-) post of your prime mover's battery.
8. Remove the nut from the **POSITIVE** (+) cable clamp on the battery and slide the **RED** wire ring terminal from the 9" wiring harness cable over the positive (+) cable clamp bolt. Secure the ring terminal with the nut.
9. Remove the nut from the **NEGATIVE** (-) cable clamp on the ground cable and slide the **BLACK** wire ring terminal from the 6' wiring harness cable over the negative (-) cable clamp bolt.
10. Reinstall the ground cable on the negative post of the battery and secure the ring terminal and the ground cable with the nut removed in the previous step.
11. Secure the 9' wiring harness cable from the battery to the control box with your nylon cable ties.
12. Feed the 16' wiring harness cable:
  - a) back to the left-rear area of your prime mover,
  - b) past the loader arm's rear hinge point by following the hydraulic hoses where possible, and
  - c) down the loader arm following the hydraulic lines.
13. Use your nylon cable ties to secure the 16' cable's female connector to the hydraulic lines next to the auxiliary hydraulic quick couplers.
14. Straighten the 16' cable and use your cable ties to secure the cable to the hydraulic lines back to the loader arm hinge point.
15. Allow sufficient slack in the cable at the hinge point to provide for a full range of motion of the loader arms. Use your nylon cable ties to secure the cable to the loader frame below the hinge point and back to the control box.
16. Connect the male connector on the actuator cable to the female connector on the loader arm.

## HYDRAULIC SNOW BLOWER HYDRAULIC CONNECTION



### READ AND UNDERSTAND ALL SAFETY STATEMENTS

Read all safety decals and safety statements in all manuals before beginning any Snow Blower hydraulic connection. Know and obey all OSHA regulations, local laws, and other professional guidelines for your operation. Know and follow good work practices when

---

assembling, maintaining, repairing, mounting, removing, or operating this equipment.

1. Disconnect the hydraulic hose quick couplers from one another and attach the quick couplers to your prime mover as per the instructions in your prime mover's operator's manual.  
(Also see Hydraulic Hose Connections in the SERVICE section.)
2. Carefully raise the loader and cycle the tilt cylinders to check hose clearances and to check for any interference. Operate the chute and deflector on this product to make the same checks.
3. Cycle the hydraulic cylinder(s) on this product several times from fully retracted to fully extended until all air has been completely removed from the cylinder(s).

**WARNING!** Do not lock the auxiliary hydraulics of your prime mover in the "ON" position.



Failure to obey this warning could result in death or serious injury.

## INSTALLATION & SET-UP



### READ AND UNDERSTAND ALL SAFETY STATEMENTS

Read all safety decals and safety statements in all manuals before beginning any Snow Blower setup. Know and obey all OSHA regulations, local laws, and other professional guidelines for your operation. Know and follow good work practices when assembling, maintaining, repairing, mounting, removing, or operating this equipment.

### SKID SHOE ADJUSTMENT

Determine what type of surface is beneath the snow where your Hydraulic Snow Blower is being operated.

- If the surface is hard and smooth, like concrete or asphalt, the skid shoe placement as shipped from the factory (i.e. in their highest position) is correct.
- If the surface is soft or uneven, then a lower position should be used.

Changing the position of the skid shoes should be performed as follows:

1. Park your prime mover on a level surface with this product properly attached.
2. Place your prime mover's transmission in "Park" and engage the parking brake.
3. Lower this product's cutting edge onto wood or steel blocking that is adequate to safely hold the base of the skid shoes 2.5" to 3" off of the level surface OR tilt the snow blower forward (keeping the loader arms locked to the attachment mounting plate), holding the skid shoes 2.5" to 3" off the ground.
4. Shut off your prime mover's engine, remove the starter key, wait for all moving parts to come to a stop, and relieve all pressure in the hydraulic lines.

## OPERATION

### Intended Use

This snow blower has been designed and built to push loose snow . Use in any other way is considered contrary to the intended use. Compliance with and strict adherence to operation, service and repair conditions as specified by the manufacturer, are also essential elements



### **READ AND UNDERSTAND ALL SAFETY STATEMENTS**

Read all safety decals and safety statements in all manuals prior to operating or working on this equipment. Know and obey all OSHA regulations, local laws, and other professional guidelines for your operation. Know and follow good work practices when assembling, maintaining, repairing, mounting, removing, or operating this equipment.

### **DANGER! Failure to obey the following procedures WILL result in death or serious injury.**



- Never allow anyone to reach into, kick into, or otherwise come in contact with a rotating auger or with a non-rotating clogged auger. The auger can crush and/or dismember. Keep everyone clear of the auger until the prime mover engine is off and the hydraulic pressure has been relieved.
- Never allow anyone to reach into the chute, force objects (i.e. bars, poles, etc.) down the chute, kick into the fan, or otherwise come in contact with a rotating fan or with a non-rotating clogged fan. The fan can throw objects at a lethal speed and can dismember. Keep everyone clear of the fan until the prime mover engine is off and the hydraulic pressure has been relieved.

### **WARNING! Failure to obey the following procedures could result in death or serious injury.**



- Never place any object (i.e. bar, pole, stick, etc.) down the chute until the prime mover engine is off and the hydraulic pressure has been relieved.
- Do not operate this product until all others are clear of the entire discharge area. Foreign objects and pieces of ice are generally thrown farther than snow. High Flow Snow Blowers are capable of throwing material up to 45 feet.
  - Do not operate this product when blowing or thrown snow restricts visibility.
- Do not lock the auxiliary hydraulics in the "ON" position.
  - Never lift this product (a.) above the operator's eye level or (b.) to a height where visibility is obstructed, whichever is lower.

### **CAUTION! Failure to obey the following procedures may result in personal injury.**




- Be aware that turning off the power unit key does not cut the power to the winch or to the actuator. With the switches for these devices being powered 100% of the time, care must be taken to not engage these switches:



- 
- a) Accidentally at any time, especially when entering or leaving the prime mover operator's position, or
  - b) When others are working on or near the actuator, the deflector, the winch, the chute, or any other part of this product that could cause personal injury if the switches are engaged.

1. Try to remove snow as soon as possible after the snow falls; snow becomes more compact (and more difficult to throw) the longer it lies on the ground.
2. To maximize the snow moving capabilities, try to remove snow before the accumulation reaches 12".

**NOTICE**  **Placing the loader arm hydraulics in the float position decreases the prime mover's capability to provide the desired hydraulic flow and pressure to your snow blower's motors. Snow throwing performance will therefore be reduced.**

### **READ AND UNDERSTAND ALL SAFETY STATEMENTS**

Read all safety decals and safety statements in all manuals prior to operating or working on this equipment. Know and obey all OSHA regulations, local laws, and other professional guidelines for your operation. Know and follow good work practices when assembling, maintaining, repairing, mounting, removing, or operating this equipment.

3. Always rotate the chute and adjust the deflector so that the thrown snow is directed into open areas.

**IMPORTANT**

- Holding the toggle switches in the powered position after the actuator has reached the end of that device's cycle of movement, and/or
- Applying force on the deflector from any source, other than blown snow, that will cause the deflector to either compress or extend the deflector's actuator, and/or
- Using your Snow Blower as a snow "plow"

**CAN result in damage to this product and WILL void all FFC warranties.**

4. Never direct the discharge at buildings, automobiles, trees, or any other item that may be damaged by thrown snow.
5. When blowing snow, approach the snow with the wind at the operator's back whenever possible.
6. When clearing a large area, cut the first pass on the upwind side and work downwind.

7. If an excessive amount of snow is being pushed in front of the auger housing, **SLOW DOWN!!** Allow the auger and fan enough time to properly collect and throw the snow.
8. If a foreign object becomes wedged in the auger, the auxiliary hydraulics on the prime mover may be reversed to reverse the auger. Reversing the auger rotation may remove the obstruction.
9. If a foreign object becomes wedged in the fan:
  - a) Move to a level surface, place your prime mover's transmission in "Park" and engage the parking brake.
  - b) Lower this product onto the level surface.
  - c) Shut off your prime mover's engine, remove the starter key, wait for all moving parts to come to a stop, and relieve all pressure in the hydraulic lines.
  - d) Disconnect the hydraulic fittings from your prime mover and reconnect those fittings to each other.

## Hydraulic Snow Blower Operation

**CAUTION! Failure to obey the following procedures may result in personal injury.**



• Avoid pinch points and be aware of rotating parts when manually turning fan or auger.

- e) The fan can then be manually turned in a reverse rotation, allowing the foreign object to be removed.
- f) Once the fan is free, reconnect the hydraulic fittings as per the instructions in the HYDRAULIC CONNECTION section of this manual.

## General Storage:

Storage:

- Clean the unit thoroughly, removing all snow, dirt and grease.
- Inspect for visible signs of wear, breakage or damage. Order any parts required and make the necessary repairs to avoid delays upon removal from storage.
- Tighten loose nuts, capscrews and hydraulic connections.
- Coat exposed portions of the cylinder rods with grease.
- Lubricate grease fittings.
- Seal hydraulic system from contaminants and secure all hydraulic hoses off the ground to help prevent damage.
- Store unit in a dry and protected place. Leaving the unit outside will materially shorten its life.

Additional Precautions for Long Term Storage:

- Touch up all unpainted surfaces with paint to avoid rust.
- Inflate tires to recommended tire pressure.

- Fill fuel tank and hydraulic oil tank to maximum.
- Check antifreeze properties and drain fluids as appropriate.

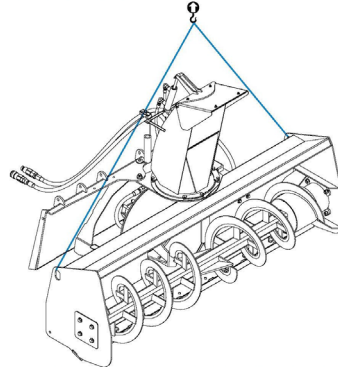
Removal from Storage:

- Remove cover.
- Wash unit and replace any damage and/or missing parts.
- Lubricate grease fittings.
- Check hydraulic hoses for damage and replace as necessary.


## OPERATION

### LIFT POINTS

Lifting points are identified by lifting decals where required. Lifting at other points is unsafe and can damage attachment. Do not attach lifting accessories around cylinders or in any way that may damage hoses or hydraulic components. See diagram:

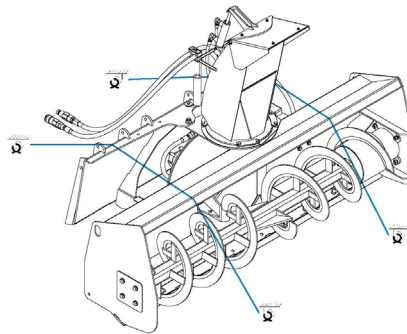


- Attach lifting accessories to unit at recommended lifting points.
- Bring lifting accessories together to a central lifting point.
- Lift gradually, maintaining the equilibrium of the unit.


**WARNING!**  **USE LIFTING ACCESSORIES (CHAINS, SLINGS, ROPES, SHACKLES AND ETC.) THAT ARE CAPABLE OF SUPPORTING THE SIZE AND WEIGHT OF YOUR ATTACHMENT. Secure all lifting accessories in such a way to prevent unintended disengagement. Failure to do so could result in the attachment falling and causing serious personal injury or death.**

### TIE DOWN POINTS

Tie down points are identified by tie down decals where required. Securing to trailer at other points is unsafe and can damage attachment. Do not attach tie down accessories around cylinders or in any way that may damage hoses or hydraulic components. See diagram:



- Attach tie down accessories to unit as recommended.
- Check unit stability before transporting.

**WARNING!**  **VERIFY THAT ALL TIE DOWN ACCESSORIES (CHAINS, SLINGS, ROPES, SHACKLES AND ETC.) ARE CAPABLE OF MAINTAINING ATTACHMENT STABILITY DURING TRANSPORTING and are attached in such a way to prevent unintended disengagement or shifting of the unit. Failure to do so could result in serious personal injury or death.**

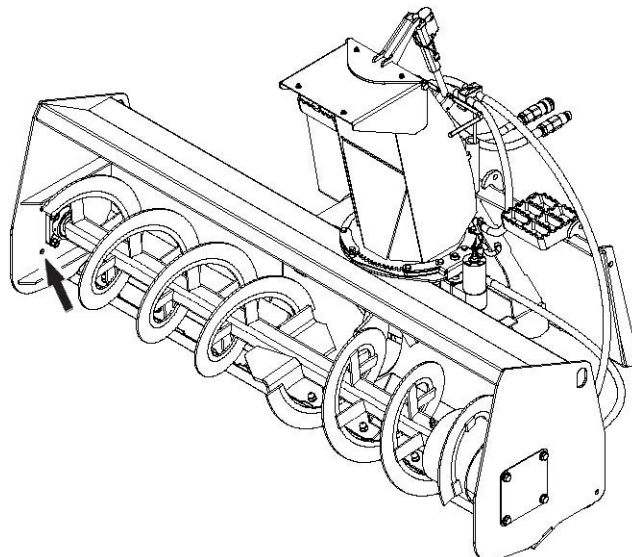
# MAINTENANCE



## READ AND UNDERSTAND ALL SAFETY STATEMENTS

Read all safety decals and safety statements in all manuals prior to operating or working on this equipment. Know and obey all OSHA regulations, local laws, and other professional guidelines for your operation. Know and follow good work practices when assembling, maintaining, repairing, mounting, removing, or operating this equipment.

Procedure	Before Use	Each	Every Hours	10
Check and tighten all hardware and fasteners	✓			
Tighten all hydraulic fittings and check for leaks	✓			
Check all safety decals that they are clean and legible	✓			
Replace any damaged and excessively worn parts	✓			
Make sure chute and deflector are not frozen	✓			
Grease all fittings as shown on parts illustration			✓	



## MAINTENANCE



### **READ AND UNDERSTAND ALL SAFETY STATEMENTS**

Read all safety decals and safety statements in all manuals prior to operating or working on this equipment. Know and obey all OSHA regulations, local laws, and other professional guidelines for your operation. Know and follow good work practices when assembling, maintaining, repairing, mounting, removing, or operating this equipment.

### REPLACING THE CUTTING EDGE

1. Park your prime mover on a level surface with this product properly attached.
2. Place your prime mover's transmission in "Park" and engage the parking brake.
3. Lower this product's skid shoes onto wood or steel blocking that is adequate to safely hold the base of the skid shoes 2.5" to 3" off the level surface.
4. Shut off your prime mover's engine, remove the starter key, wait for all moving parts to come to a stop, and relieve all pressure in the hydraulic lines.
5. Remove all the acorn nuts, lock washers, and bolts except the one on each end of the cutting edge.
6. On one end of the cutting edge, remove the remaining acorn nut and lower the cutting edge to the work surface. Repeat for other end.
7. Properly dispose of the old cutting edge and install a new cutting edge by reversing the procedures .

## TROUBLESHOOTING

Problem	Possible Cause	Possible Solution
Auger will not rotate	Hoses installed incorrectly	Switch quick coupler fittings
	Hydraulic valve on skid steer not engaged	See skid steer operator's manual for auxiliary operation procedure
	Worn, damaged, insufficient or inadequate pump	Repair or replace hydraulic pump
	Insufficient oil in system	Service the skid steer hydraulic reservoir, see skid steer operator's manual
	Hose ends not completely engaged	Check hose couplings and engage properly
Chute will not rotate/angle	Air in hydraulic lines	Cycle skid steer auxiliary system several times to remove air from lines
	Obstruction in hydraulic lines	Replace obstructed or damaged line
	Hydraulic valve on skid steer not engaged	See skid steer operator's manual for auxiliary hydraulic operation procedure
	Worn, damaged, insufficient or inadequate pump	Repair or replace hydraulic pump
	Insufficient oil in system	Service the skid steer hydraulic reservoir, see skid steer operator's manual
Oil leaks	Hose ends not completely engaged	Hose ends not completely engaged
	Air in hydraulic lines	Cycle skid steer auxiliary system several times to remove air from lines
	Obstruction in hydraulic lines	Replace obstructed or damaged line
	Electrical failure	See skid steer operator's manual
	Worn or damaged seal	Replace leaking seal
	Loose or damaged hoses	Replace damaged hoses and secure loose hoses
	Loose or damaged connections	Replace damaged hose connections and tighten loose fitting



BeyondTech Machinery. Co. Ltd.

+1(306) 351-0864

[beyond\\_tech.sales@hotmail.com](mailto:beyond_tech.sales@hotmail.com)

Unit-H 1681 McDonald St, Regina, SK