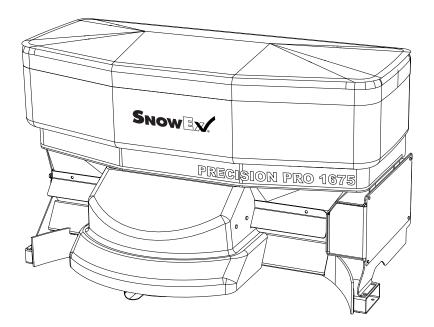
# **Owner's Manual**

**This Manual Must Be Read Before Operating The Equipment** 





SP-1675

Serial No. X4-100000 and higher

SP-1975 Serial No. X5-100000 and higher



**CUSTOMER COPY** 

Madison Heights, Michigan 48071 800-SALTERS www.snowexproducts.com

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Have a question or need assistance? **SnowEx Customer Care** (800) SALTERS

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### Introduction

Snow Ex.

This manual is intended to help you to get to know your Precision Pro Spreader and how to operate it safely, correctly and economically. If you observe these instructions, you will prevent hazards, reduce repair costs and breakdown times, and increase the reliability and service life of the machine.

The manual must be read and used by every person who will be working with or on the machine for:

- Operation (including preparation, repair during operation, & clean-up)
- Repairs (maintenance, inspection, overhaul), and/or
- Transport.

All regulations for safety and proper working practice must be observed in addition to this manual and any applicable regulations for the prevention of accidents. Should you lose your Owner's Manual or would like extra copies, they can be purchased from your SnowEx dealer.



#### THIS SIGN SHOULD ALERT YOU:

This Safety Alert Symbol is used to pinpoint characteristics that, if not carefully followed, can create a safety hazard. When you see this symbol in this manual or on the machine itself, be alert! Your personal safety and the safety of others is involved.

Defined below are the Safety Alert Messages.



#### DANGER

Information that, if not carefully followed, can cause death.



#### WARNING

Information that, if not carefully followed, can cause serious personal injury or death.



#### CAUTION

Information that, if not carefully followed, can cause minor injury or damage to equipment.



#### **IMPORTANT**

This symbol is used to call out information that is important to follow carefully.

#### **IMPORTANT EQUIPMENT INFORMATION**

Record important machine information here for quick reference. This information can be found on the Serial Number Plate located on the auger motor enclosure; and the Serial Number label on the Controller.

Model	
Spreader Serial #	
Control Serial #	
Date Purchased	
Dealer where purchased	

See separate Warranty Information Sheet for your warranty coverage.



### Safety



Before attempting any procedure in this book, the safety information in this manual must be read and understood by all personnel who have any part in the installation, preparation, transport, service, repair or use of this equipment.

For your protection, safety and information decals have been placed on the spreader to remind the operator of safety precautions and particular hazards.

<b>DANGER</b>	Never exceed the Gross Vehicle Weight Rating. Failure to do so will result in unpredictable and unsafe vehicle handling.
	Never attempt to remove the spreader from a vehicle with material in it.
	Always have someone to help you remove or install spreader. Use lifting devices such as a forklift or crane where possible to prevent injury to yourself and others, and damage to the equipment.
	Never operate equipment when under the influence of alcohol, drugs, or medications. These substances alter your judgement and slow your reactions.
	Always keep hands, feet, clothing, jewelry, and hair away from moving parts. These items will catch and be pulled in by moving parts, causing serious personal injury.
	Always shut off vehicle before attempting to attach, detach, or service the spreader. Be sure vehicle is prop- erly braked, chocked, and on level ground.
	Use caution when driving and drive at a sensible speed, where braking distances are safe and safe handling characteristics are maintained.
WARNING	Before working with the spreader, secure all loose clothing and hair. Clothing and hair could get caught in moving parts.
	Always wear safety glasses with side protection when servicing spreader or near where salt/ice melter is being spread.
	Never allow children to operate or climb/play on or around equipment.
	Always make sure people are clear of where you will be using equipment. Always check areas to be spread to ensure no hazardous conditions or substances are in the area.
	Inspect the spreader before and after operating for defects. Parts that are broken, missing or worn out must be replaced before operating.
	Do not modify the spreader without written permission from SnowEx. Modifying the spreader or its mount can affect performance and safety.
	Remember most accidents are preventable and caused by human error. Exercise care and observe precau- tions to prevent injury to yourself and others.
	Never use wet materials or materials with foreign debris with the spreader. The spreader is designed to spread dry, clean, free-flowing material.
	Never leave material in hopper between storms, or when storing. Ice melters are hygroscopic and will attract moisture and harden up.
	Empty the spreader and clean it after each use to prevent ice melter from building up and covering metal parts, causing corrosion.

# **Operating Instructions**



### Loading Spreader/Operating the Controller

#### LOADING SPREADER

Do not overload vehicle. Use the chart below to calculate the weight of spreader and material to comply with Vehicle Weight Ratings.

Empty weight of spreaders:

SP-1675	205 lbs.
SP-1975	405 lbs.

Approximate capacity of spreaders:

SP-1675 6 cubic feet SP-1975 14 cubic feet

Approximate weight of full spreaders:

With Rock Salt	
SP-1675	

SP-1675715 lbs.SP-19751595 lbs.

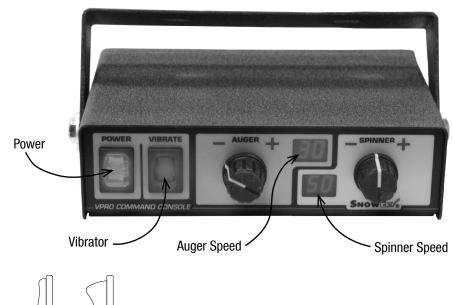
With Calcium Chloride Pellets

SP-1675	685 lbs.
SP-1975	1525 lbs.

MATERIAL	WEIGHTS
MATERIAL	WEIGHT PER CUBIC FT.
Rock Salt	80-90 lbs.
Calcium Chloride Pellets	75-85 lbs.

Leave the screen in the hopper when loading to prevent large chunks and large objects from entering the hopper and damaging the spreader.

#### **OPERATING THE CONTROLLER**



Turn the Spreader on with the POWER switch.

Adjust SPINNER and AUGER speeds with the two knobs. Speed will be displayed on the screens. Adjust to get your desired spread width and application rate – 'Spread Pattern.'

Use the Vibrator to loosen 'bridged' material and improve flow to the auger with the VIBRATE switch. The vibrator does not have to be on continuously.

Turn the spreader off with the POWER switch when you are done spreading, or need to pause. The spread pattern will not change as long as the knobs are left in the same position.

**OFF** 

# **Operating Instructions**



# Spreading Tips

The application rate, which is the amount of material spread on a given area, depends on three variables – Vehicle Speed, Spinner Speed and Auger Speed.

For consistency in spreading results, it is best to drive at a constant speed.

The Spinner Speed changes the spread width. This determines how much area the same material fed by the auger will cover.

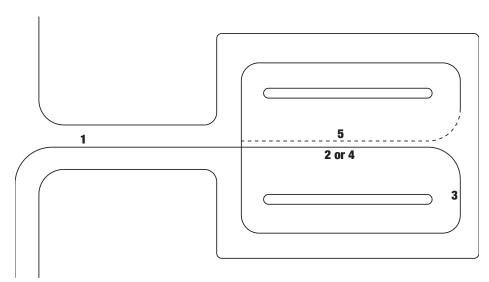
Auger Speed changes how much material is fed to the spinner. Changing this will change the amount of material being spread in the same area.

Wider Spread Patterns will spread the same material over a larger area, so the application rate will be decreased unless you increase your Auger Speed or drive slower. A Narrower Spread Pattern requires the opposite action: a slower Auger Speed or drive faster.

To maintain your application rate with a wider spread pattern, you can increase your auger speed, drive slower, or spread the area twice.

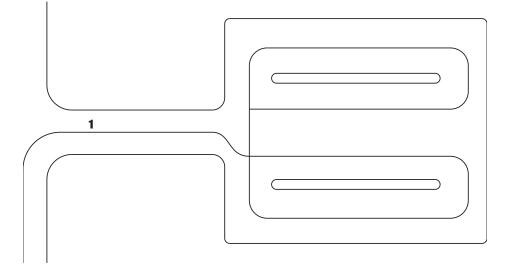
To maintain your application rate with a narrower spread pattern, you can decrease your auger speed or drive faster.

#### EXAMPLES:



#### Key

- 1 Constant Speed. Desired application rate is set.
- 2 Increase Spinner and Auger speeds to maintain application rate with a wider spread pattern.
- 3 Decrease Spinner and Auger speeds to maintain application rate with a narrower spread pattern.
- 4 Increase Spinner Speed and drive slower.
- 5 Increase Spread Width and spread second pass on the way out of the parking lot.



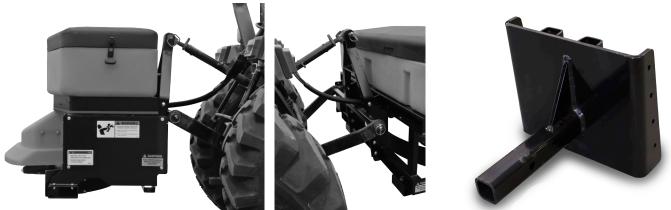
### **Operating Instructions** Attaching to Vehicle/Adjustable Material Baffles

#### **ATTACHING TO VEHICLE**

If you are using a TPR-020 insert the hitch into your receiver. Lock with Hitch Pin and Clip (included with TPR-020). Plug Spreader Harness into Vehicle Plug and you are ready to begin spreading.

To attach to your tractor's three-point hitch, simply back up to the spreader frame (requires F51196 on SP-1675). Lower the hitch until the lower arms are at the same height as the pins on the frame. Remove the linchpins from the Lift Pin. Slide the arms onto the Pins, and put the linchpin through the Lift Pin. Tie the top link to spreader frame with the Hitch Pin. Secure with Hitch Clip.

Plug in and begin spreading.



Adjust the top link so the Spreader is vertical.

#### View of Attachment Points.

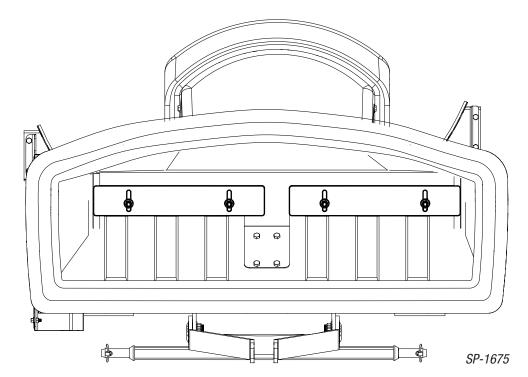
TPR-020 Hitch Adapter.

Snow

#### **ADJUSTABLE MATERIAL BAFFLES**

The Precision Pro is equipped with adjustable material baffles inside the hopper. These baffles restrict the flow of salt to the auger. Leave these baffles at the factory setting until you have run some material through the spreader at different combinations of Auger and Spinner Speeds. The Baffles may need adjusted when changing to a different spreading material.

Use an 1/2" wrench for the bolts holding the baffles in place. Loosen the bolt to move the baffle.

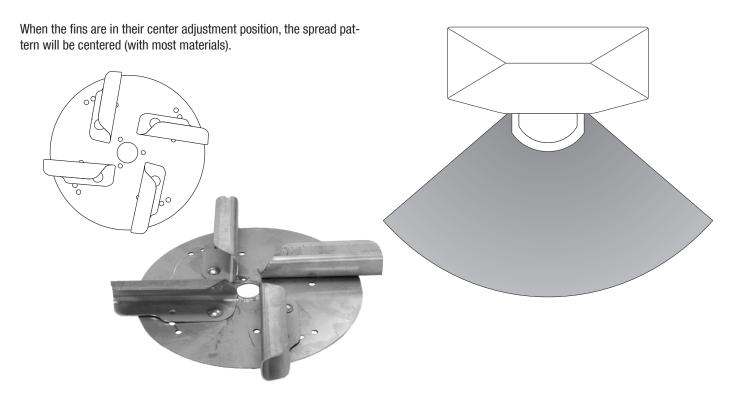


# **Operating Instructions**

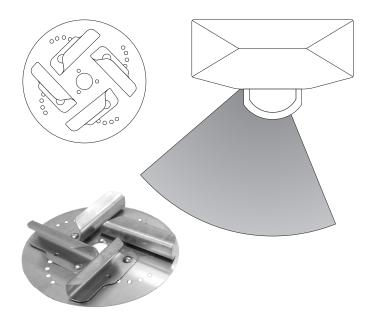


# Adjustable Spinner

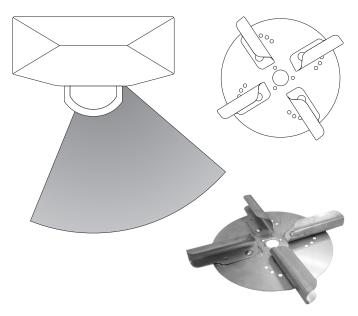
Your spreader is equipped with an adjustable spinner to assist you in more precise material application. The spinner plate gives the operator control of whether the material spreads to the right, left or is centered. Before operating the spreader, spread some material in a clear area where you can easily observe the spread pattern and how it changes with fin adjustment. Use the instructions below as a guide to get the spread pattern you desire. The position of the fins may need changed when using different materials or spinner speeds.



When looking down at the spinner, moving the fins clockwise will adjust the spread pattern toward the left side of the spreader.



When looking down at the spinner, moving the fins counterclockwise will adjust the spread pattern toward the right side of the spreader.



## **Maintenance Instructions**



### **Cleaning/Corrosion Prevention/Storage**

#### CLEANING

To protect your Precision Pro from corrosion and to increase its useful life, clean it after each storm. By cleaning after each storm, salt buildup will be less and the salt will be easier to remove. More importantly, it can prevent corrosion.

#### After each snow storm:

Run the spreader to empty the hopper. Either back up to your salt pile and spread into the pile; or put your spinner on the lowest setting and your auger on the highest setting until the hopper is empty (this way, the material will come out faster and the spinner will spread it in a smaller area) and clean up the salt into a bucket or Salt Box.

Turn the spreader control off and unplug the spreader before cleaning. Use water to rinse all of the salt residue away. Pay special attention to tight areas, enclosures and hard-to reach areas where salt build-up is likely to be a problem. Rinse these areas thoroughly. Avoid directly rinsing openings in transmissions/motors, such as where a shaft might come out of the housing. Use a car wash brush to clean salt and dirt that is stuck. Consider using a salt-removal product or spraying your spreader with a cleaning solution before rinsing. Rinse all cleaning solutions off thoroughly with water.

Sweep puddles of water from surfaces of the spreader. Make sure to remove water from the bottom of the hopper so the auger isn't frozen when you use your spreader again.

When you are done cleaning, grease bearings; put dielectric grease on plugs. Spray metal parts with a corrosion prevention product or a light oil. Avoid getting oil on the plastic – this will cause the plastic to degrade.

#### **CORROSION PREVENTION**

Corrosion/Rusting is a chemical reaction caused by presence of moisture, salt, and metal. Preventing any one of these ingredients from coming in contact with any other ingredient will prevent corrosion.

Storing the spreader indoors, cleaning the spreader after each use and, lubricating bearings, and spraying oil on the metal will limit moisture coming into contact with metal and salt. Although it is easier to prevent contact with salt and exposed metal, using a water-displacing oil (e.g. WD-40) may be useful.

Cleaning your spreader and rinsing thoroughly after each use will help to prevent corrosion by removing the salt. Drying the spreader after cleaning will also help – a backpack blower can dry it very well.

Rocks and debris thrown up by tires of the vehicle are likely to chip paint or create small scratches that could rust. Exposed metal can be prevented by spraying a light oil on metal parts after each washing. This will also create a barrier between the spreader and the salt dust that will stick to the spreader frame, making it easier to clean.

By cleaning and drying your spreader after each use and spraying metal parts with a light oil after each cleaning, you will be able to prevent most corrosion.

#### STORAGE

How you store your spreader can have a lot to do with how long it lasts and how well it performs. Store your spreader in a sheltered area, preferably indoors. If you don't have the space, elevate it on wooden blocks outside and cover with a tarp. Before putting your spreader away, perform a very thorough cleaning, lubricate bearings, and spray oil on metal parts. Apply a protective plastic conditioner to the hopper and lid to protect them from the elements. Instead of oil on the frame, you can use a rust inhibitor spray (read the label before using to make sure it is not damaging to paint). Put Dielectric Grease on all plugs and connections prior to storage.

# Troubleshooting



	Material Flow	
Fault	Possible Cause	Remedy
Too much material	Auger Speed too high	Decrease Auger Speed
		Increase Spinner Speed
	Vibrator is on	Turn Vibrator off. Use intermittently.
	Adjustable Baffles open too much	Adjust Baffles
	Material is very fine	Use a more-coarse material
		Adjust Baffles
Not enough material	Auger Speed too low	Increase Auger Speed
		Decrease Spinner Speed
	Material is bridged in hopper	Use Vibrator
	Material Baffles closed too much	Adjust Baffles
No Material is Spreading	Control is off	Turn control on
	Material is bridged	Use Vibrator
	Foreign object in Hopper	Remove Object
	Hopper is Empty	Fill Hopper
	No Power to Auger Motor	Reset Circuit Breaker
		Put Dielectric Grease on all Connections
		Check Harnesses for damage
		Contact your dealer
	Controller	
Fault	Possible Cause	Remedy
OL	Jammed Material	Engage Auto-Reverse
	Auger Over-Full	Turn off vibrator (if on)
		Engage Auto-Reverse
		Adjust Baffles to restrict flow
	Foreign Object in Hopper	Remove Object
	Frozen Material	Shovel it out
	Material on Spinner at Start-Up	Use shovel or snow brush to clear material off spinner
EO	Spreader Harness Unplugged	Re-Connect/Dielectric Grease
	Spinner Drive Unplugged	Re-Connect/Dielectric Grease
	Motor Unplugged	Re-Connect/Dielectric Grease
	Cut in harness	check all harness, replace affected harness(es)
LB	Corroded Connection	Clean/Dielectric Grease
		Replace Connectors
	Loose Connection	Tighten/Dielectric Grease
		Replace
	Low Battery (less than 12 volts)	Charge Battery
		Test Battery, Replace if bad
		Test Alternator, Replace if bad
E1	Wires Crossed	Check Harnesses for bare wires
		Check for loose wires/connections
On/Off Switch Lights, No Display	Controller not connected	Check all connections at the back of Controller
No Display, On/Off Switch does not light up	No Power to Controller	Reset Breaker
_ ·		Check for Cuts in Battery Harness

