



Operator's Manual

SB350

Brine System





500 Venture Drive
Orrville, OH 44667
www.ventrac.com

To the Owner Contact Information and Product Identification

If you need to contact an authorized Ventrac dealer for information on servicing your product, always provide the product model and serial numbers.

Please fill in the following information for future reference. See the picture(s) below to find the location of the identification numbers. Record them in the spaces provided.

Dealer _____ Date of Purchase: _____

Dealer Address: _____

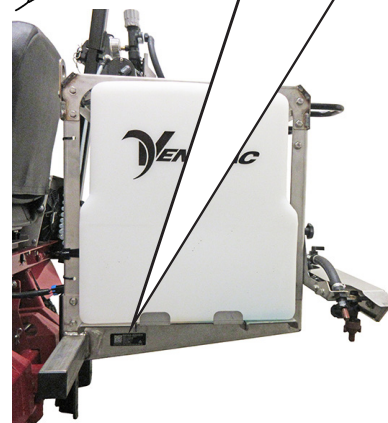
Dealer Phone Number: _____ Dealer Fax Number: _____

With your mobile device, you can scan the QR code on the serial number plate to access manuals, warranty, and other product information.



Model # _____

Serial # _____



Venture Products Inc. reserves the right to make changes in design or specifications without obligation to make like changes on previously manufactured products.

TABLE OF CONTENTS

INTRODUCTION	PAGE 4
Product Description	4
Why Do I Need an Operator’s Manual?	4
Using Your Manual	5
Manual Glossary	5
SAFETY	PAGE 6
General Safety Procedures	6
Training Required	6
Requirements for Personal Protective Equipment (PPE)	6
Operation Safety.	6
Keep Riders Off	8
Operating On Slopes	8
Truck Or Trailer Transport	8
Maintenance	9
Fuel Safety	10
Hydraulic Safety	10
Safety Decals.	12
OPERATIONAL CONTROLS	PAGE 14
Operational Control Locations	14
On/Off Control Valve (A)	14
Pressure Regulating Valve (B)	14
Spray Wand (C).	14
Spray Wand Valve (D)	14
Outer Spray Nozzle Valves (E)	14
Spray Wand (Hose Reel Kit) (F)	15
GENERAL OPERATION	PAGE 16
Daily Inspection	16
Attaching the Brine System	16
Removing the Brine System	16
Operating Procedure	16
Boom Height Setting	16
Spraying Width.	17
Pressure Regulation.	17
Travel Speed and Coverage Area Charts	17
SERVICE	PAGE 18
Cleaning and General Maintenance.	18
Cleaning the Strainer	18
Cleaning the Nozzles	18
Draining the Brine System	18
Flushing the Brine System	19
Treating the Brine System for Cold Storage	19
Storage Between Snow Events.	19
Seasonal Storage	19
SPECIFICATIONS	PAGE 20
Dimensions.	20
Features.	20

INTRODUCTION



Venture Products Inc. is pleased to provide you with your new Ventrac brine system! We hope that Ventrac equipment will provide you with a ONE Tractor Solution.

Accessories	Item Description	Part Number
	Hose Reel Kit	70.8261

Product Description

The SB350 brine system features a 132.5 liter (35 gallon) tank and rear mounted spray nozzles. The nozzles distribute brine in a 122 - 213.4 cm (48 - 84 inch) wide spray pattern. The spray wand can be used for accessing hard to reach areas. An optional hose reel kit with a 7.6 meter (25 foot) hose extends and premium spray wand extends the reach from the brine tank and winds up the hose for storage when not in use.

Why Do I Need an Operator's Manual?

This manual has been created to help you gain the important knowledge of what is needed to safely operate and maintain your machine, and to avoid injury and product damage. It is divided into chapters for convenient reference of the appropriate information.

You must read and understand the operator's manual for each piece of Ventrac equipment you own. Reading the operator's manual will help you become familiar with each specific piece of equipment. If this manual becomes damaged or unreadable, it should be replaced immediately. Contact your local Ventrac dealer for a replacement.

When using a Ventrac attachment, be sure to read and follow the safety and operating instructions of both the power unit and the attachment being used to ensure the safest operation possible.

The information in this manual provides the operator with the safest procedures to operate the machine while getting the maximum use out of the unit. Failure to follow the safety precautions listed in this manual may result in personal injury and/or damage to the equipment.

INTRODUCTION

Using Your Manual

This manual identifies potential hazards and safety concerns to help you, as well as others, avoid personal injury and/or damage to the equipment.

Safety should always be the first priority when working on or operating equipment. Accidents are more likely to occur when proper operating procedures are not followed or inexperienced operators are involved.

SYMBOL DEFINITIONS



This symbol identifies potential health and safety hazards. It marks safety precautions. Your safety and the safety of others is involved.

There are three signal words that describe the level of safety concern: Danger, Warning, and Caution.

SIGNAL WORD DEFINITIONS

DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme cases.

WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury and/or property damage. It may also be used to alert against unsafe practices.

This manual also uses two words to highlight information. **ATTENTION** calls attention to special mechanical information to prevent equipment damage and/or best practices for equipment service and care.

NOTE emphasizes general information that is worthy of special attention.

NOTE: Right-Hand and Left-Hand orientations may be referred to at different places throughout this manual. Right-Hand and Left-Hand is determined as if facing forward from the operator station.

Manual Glossary

- Power Unit** A Ventrac tractor or other Ventrac engine powered device that may be operated by itself or with an attachment or accessory.
- Attachment** A piece of Ventrac equipment that requires a Power Unit for operation.
- Accessory** A device that attaches to a Power Unit or Attachment to extend its capabilities.
- Machine** Describes any "Attachment" or "Accessory" that is used in conjunction with a power unit.

SAFETY



General Safety Procedures for Ventrac Power Units, Attachments, & Accessories



Training Required

- The owner of this machine is solely responsible for properly training the operators.
- The owner/operator is solely responsible for the operation of this machine and for the prevention of accidents or injuries occurring to him/herself, other people, or property.
- Do not allow operation or service by children or untrained personnel. Local regulations may restrict the age of the operator.
- Before operating this machine, read the operator's manual and understand its contents.
- If the operator of the machine cannot understand this manual, then it is the responsibility of this machine's owner to fully explain the material within this manual to the operator.
- Learn and understand the use of all the controls.
- Know how to stop the power unit and the attachments quickly in the event of an emergency.

Requirements for Personal Protective Equipment (PPE)

- The owner is responsible for ensuring that all the operators use the proper PPE while operating the machine. Whenever you use the machine, use the following PPE:
- Certified eye protection and hearing protection.
- Closed toe, slip resistant footwear.
- Long pants or trousers.
- A dust mask for dusty conditions.
- Additional PPE may be required. Refer to the product safety procedures for any additional requirements.

Operation Safety

- Secure long hair and loose clothing. Do not wear jewelry.
- Inspect the machine before operation. Repair or replace any damaged, worn, or missing parts. Be sure the guards and shields are in proper working condition and are secured in place. Make any necessary adjustments before operating the machine.
- Some pictures in this manual may show shields or covers opened or removed in order to clearly illustrate the instructions. Under no circumstance should the machine be operated without these devices in place.
- Alterations or modifications to this machine can reduce safety and could cause damage to the machine. Do not alter the safety devices or operate with the shields or covers removed.
- Before each use, verify that all the controls function properly and inspect all the safety devices. Do not operate if the controls or safety devices are not in proper working condition.
- Check the parking brake function before operating. Repair or adjust the parking brake if necessary.
- Observe and follow all of the safety decals.
- All the controls are to be operated from the operator's station only.
- Always wear a seat belt if the machine has a roll cage/bar installed and in the upright position.
- Ensure the attachment or accessory is locked or fastened securely to the power unit before operating.
- Ensure that all bystanders are clear of the power unit and the attachment before operating. Stop the machine if someone enters your work area.

SAFETY



General Safety Procedures for Ventrac Power Units, Attachments, & Accessories



- Always be alert to what is happening around you, but do not lose focus on the task you are performing. Always look in the direction the machine is moving.
- Look behind and down before backing up to be sure of a clear path.
- If you hit an object, stop and inspect the machine. Make any necessary repairs before operating the machine again.
- Stop operation immediately at any sign of equipment failure. An unusual noise can be a warning of equipment failure or a sign that maintenance is required. Make any necessary repairs before operating the machine again.
- If equipped with a high/low range feature, never shift between high and low range while on a slope. Always move the machine to level ground and engage the parking brake before shifting range.
- Do not leave the machine unattended while it is running.
- Always park the machine on level ground.
- Always shut off the engine when connecting the attachment drive belt to the power unit.
- Never leave the operator's station without lowering the attachment to the ground, engaging the parking brake, shutting off the engine, and removing the ignition key. Make sure all moving parts have come to a complete stop before dismounting.
- Never leave the machine unattended without lowering the attachment to the ground, engaging the parking brake, shutting off the engine, and removing the ignition key.
- Only operate in well-lit conditions.
- Do not operate when there is a risk of lightning.
- Never direct the discharge of any attachment in the direction of people, buildings, animals, vehicles, or other objects of value.
- Never discharge material against a wall or obstruction. The material may ricochet back toward the operator.
- Use extra caution when approaching blind corners, shrubs, trees, or other objects that may obscure your vision.
- Do not run the engine in a building without adequate ventilation.
- Do not touch the engine or the muffler while the engine is running or immediately after stopping the engine. These areas may be hot enough to cause a burn.
- Do not change the engine governor settings or over-speed the engine. Operating the engine at excessive speeds may increase the hazard of personal injury.
- To reduce the hazard of fire, keep the battery compartment, engine, and muffler areas free of grass, leaves, excessive grease, and other flammable materials.
- Clear the working area of objects that might be hit or thrown from the machine.
- Keep people and pets out of the working area.
- Know the work area well before operation. Do not operate where traction or stability is questionable.
- Reduce speed when you are operating over rough ground.
- Equipment can cause serious injury and/or death when improperly used. Before operating, know and understand the operation and safety of the power unit and the attachment being used.

SAFETY



General Safety Procedures for Ventrac Power Units, Attachments, & Accessories



- Do not operate the machine if you are not in good physical and mental health, if you will be distracted by personal devices, or if you are under the influence of any substance which might impair your decisions, dexterity, or judgment.
- Children are attracted to machine activity. Be aware of children and do not allow them in the work area. Turn off the machine if a child enters the work area.
- Power units, attachments, and accessories are not designed or intended for travel on public roadways. Never operate or travel on public roads or highways.
- Operate with safety lights when operating near roadways.
- Slow down and be careful of traffic when operating near or crossing roadways. Stop before crossing roads or sidewalks. Use care when approaching areas or objects that may obscure vision.

Keep Riders Off

- Only allow the operator on the power unit. Keep riders off.
- Never allow riders on any attachment or accessory.

Operating On Slopes

- Slopes can cause loss-of-control and tip-over accidents, which can result in severe injury or death. Be familiar with the emergency parking brake, along with the power unit controls and their functions.
- If the power unit is equipped with a fold down roll bar, it must be locked in the upright position when operating on any slope.
- Use low range (if equipped) when operating on slopes greater than 15 degrees.
- Do not stop or start suddenly when operating on slopes.
- Never shift between high and low range while on a slope. Always move the power unit to level ground and engage the parking brake before shifting range or placing the power unit in neutral.
- Variables such as wet surfaces and loose ground will reduce the degree of safety. Do not drive where the machine could lose traction or tip over.
- Keep alert for hidden hazards in the terrain.
- Stay away from drop-offs, ditches, and embankments.
- Sharp turns should be avoided when operating on slopes.
- Pulling loads on hills decreases safety. It is the responsibility of the owner/operator to determine loads that can safely be controlled on slopes.
- Transport the machine with the attachment lowered or close to the ground to improve stability.
- While operating on slopes, drive in an up and down direction whenever possible. If turning is necessary while driving across slopes, reduce your speed and turn slowly in the downhill direction.
- Ensure a sufficient supply of fuel for continuous operation. A minimum of one-half tank of fuel is recommended.

Truck Or Trailer Transport

- Use care when loading or unloading the machine into a truck or trailer.
- Use full width ramps for loading the machine into a truck or trailer.

SAFETY



General Safety Procedures for Ventrac Power Units, Attachments, & Accessories



- The parking brake is not sufficient to lock the machine during transport. Always secure the power unit and/or attachment to the transporting vehicle securely using straps, chains, cables, or ropes. Both the front and rear straps should be directed down and outward from the machine.
- Shut off the fuel supply to the power unit during transport on a truck or trailer.
- If equipped, turn the battery disconnect switch to the Off position to shut off electrical power.

Maintenance

- Keep the safety decals legible. Remove all grease, dirt, and debris from the safety decals and instructional labels.
- If any decals are faded, illegible, or missing, contact your dealer promptly for replacements.
- When new components are installed, be sure that the current safety decals are affixed to the replacement components.
- If any component requires replacement, use only original Ventrac replacement parts.
- Always turn the battery disconnect to the Off position or disconnect the battery before performing any repairs. Disconnect the negative terminal first and the positive terminal last. Reconnect the positive terminal first and the negative terminal last.
- Keep all bolts, nuts, screws, and other fasteners properly tightened.
- Always lower the attachment to the ground, engage the parking brake, shut off the engine, and remove the ignition key. Make sure all moving parts have come to a complete stop before cleaning, inspecting, adjusting, or repairing.
- If the power unit, attachment, or accessory requires repairs or adjustments not instructed in the operator's manual, the power unit, attachment, or accessory must be taken to an authorized Ventrac dealer for service.
- Never perform maintenance on the power unit and/or attachment if someone is in the operator's station.
- Always use protective glasses when handling the battery.
- Check the fuel lines for tightness and wear on a regular basis. Tighten or repair them as needed.
- To reduce the hazard of fire, keep the battery compartment, engine, and muffler areas free of grass, leaves, and excess grease.
- Do not touch the engine, the muffler, or other exhaust components while the engine is running or immediately after stopping the engine. These areas may be hot enough to cause a burn.
- Allow the engine to cool before storing and do not store near an open flame.
- Do not change the engine governor settings or over-speed the engine. Operating engine at excessive speeds may increase the hazard of personal injury.
- Springs may contain stored energy. Use caution when disengaging or removing springs and/or spring loaded components.
- An obstruction or blockage in a drive system or moving/rotating parts may cause a buildup of stored energy. When the obstruction or blockage is removed, the drive system or moving/rotating parts may move suddenly. Do not attempt to remove an obstruction or blockage with your hands. Keep your hands, feet, and clothing away from all power-driven parts.

SAFETY



General Safety Procedures for Ventrac Power Units, Attachments, & Accessories



Fuel Safety

- To avoid personal injury or property damage, use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive.
- Do not refuel the machine while smoking or at a location near flames or sparks.
- Always refuel the machine outdoors.
- Do not store the machine or fuel container indoors where the fumes or fuel can reach an open flame, spark, or pilot light.
- Only store fuel in an approved container. Keep out of the reach of children.
- Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place the containers on the ground away from your vehicle before filling.
- Remove the machine from the truck or trailer and refuel it on the ground. If this is not possible, refuel the machine using a portable container, rather than from a fuel dispenser nozzle.
- Never remove the fuel cap or add fuel with the engine running. Allow the engine to cool before refueling.
- Never remove the fuel cap while on a slope. Only remove the fuel cap when parked on a level surface.
- Replace the fuel tank cap and the container cap securely.
- Do not overfill the fuel tank. Only fill to the bottom of the fuel neck, do not fill the fuel neck full. Overfilling of the fuel tank could result in engine flooding, fuel leakage from the tank, and/or damage to the emissions control system.
- If fuel is spilled, do not attempt to start the engine. Move the power unit away from the fuel spill and avoid creating any source of ignition until the fuel vapors have dissipated.
- If the fuel tank must be drained, it should be drained outdoors into an approved container.
- Check the fuel lines for tightness and wear on a regular basis. Tighten or repair them as needed.
- The fuel system is equipped with a shut-off valve. Shut off the fuel when transporting the machine to and from the job, when parking the machine indoors, or when servicing the fuel system.

Hydraulic Safety

- Make sure the hydraulic connections are tight and all hydraulic hoses and tubes are in good condition. Repair any leaks and replace any damaged or deteriorated hoses or tubes before starting the machine.
- Hydraulic leaks can occur under high pressure. Hydraulic leaks require special care and attention.
- Use a piece of cardboard and a magnifying glass to locate suspected hydraulic leaks.
- Keep your body and hands away from pinhole leaks or nozzles that eject high pressure hydraulic fluid. Hydraulic fluid escaping under high pressure can penetrate the skin causing serious injury, leading to severe complications and/or secondary infections if left untreated. If hydraulic fluid is injected into the skin, seek immediate medical attention no matter how minor the injury appears.
- The hydraulic system may contain stored energy. Before performing maintenance or repairs on the hydraulic system, remove any attachments, engage the parking brake, disengage the weight transfer system (if equipped), shut off the engine, and remove the ignition key. To relieve pressure on the auxiliary hydraulic system, shut off the power unit engine and move the hydraulic control lever left and right before disconnecting the auxiliary hydraulic quick couplers.

SAFETY



SB350 Safety Procedures



- Do not operate a Ventrac machine with the SB350 brine system on slopes greater than 10 degrees. Operation on slopes greater than 10 degrees may result in loss of steering or front wheel traction.
- Do not operate a Ventrac machine with the SB350 brine system without a front attachment or front ballast with a minimum of 136 kg (300 pounds). Operating the machine with less than the minimum front ballast weight may result in loss of steering or front wheel traction.
- When using the brine system, the machine must have an attachment
- The brine tank frame must be properly secured to the machine before operating.
- Do not point the spray wand at people or animals.
- Do not use any products containing petroleum or petroleum by-products, as they can cause damage to the system components.
- Always turn off electrical power to the pump and shut off the power unit before performing maintenance or repairs on the brine system.
- Wear safety goggles or a face shield when servicing the brine system hoses, nozzles, or spray wand.
- When using a commercial deicing solution, follow the manufacturer's recommendations for personal protective equipment and first aid procedures.
- If you are making your own salt brine solution, wear safety goggles or a full face shield and gloves when mixing the brine solution and when filling the brine tank. Avoid contact with your eyes, skin, and clothing.
- Salt brine can cause irritation to the eyes. In case of eye contact, immediately flush the eyes with plenty of water for 10 minutes. Seek medical attention if irritation persists.
- Salt brine can cause irritation to the skin. In case of skin contact, wash with mild soap and water.
- Ingestion of salt brine may cause nausea, vomiting, diarrhea, tissue irritation, fever, etc. If a large amount of salt brine is ingested, drink large amounts of water or milk. If any symptoms develop, seek immediate medical attention.
- In case of an accidental release of brine solution, follow the manufacturer's recommendations for containment and cleanup when using a commercial deicing solution. If using your own salt brine solution, rinse away small spills with water. For larger spills, contain the liquid and vacuum up or absorb the liquid for proper disposal. Rinse the spill area with water.

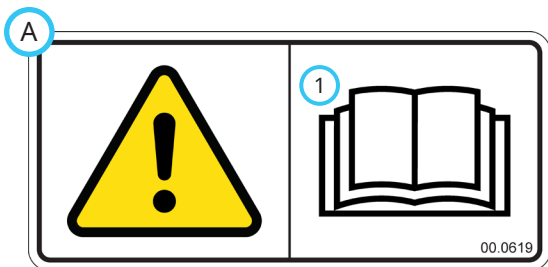
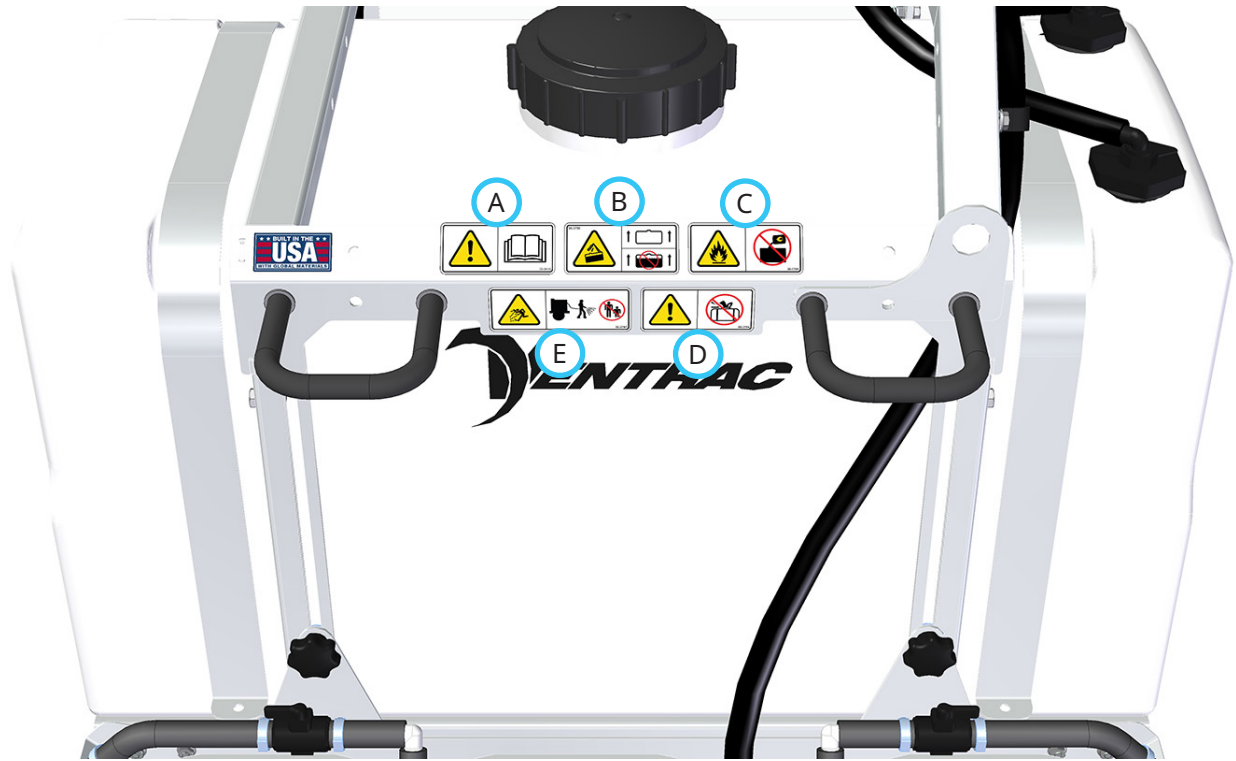
SAFETY

Safety Decals

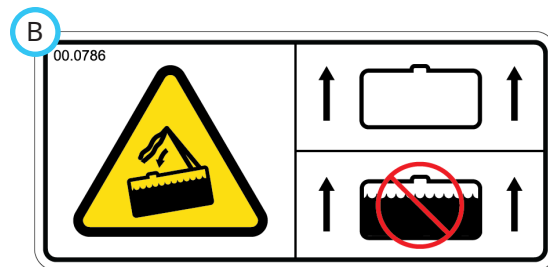
The following safety decals must be maintained on your brine system.

Keep all safety decals legible. Remove all grease, dirt, and debris from safety decals and instructional labels. If any decals are faded, illegible, or missing, contact your dealer promptly for replacements.

When new components are installed, be sure that current safety decals are affixed to the replacement components.

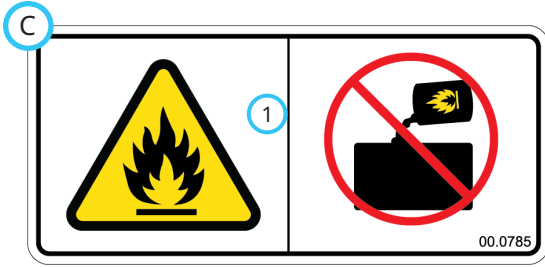


1. Read the operator's manual.

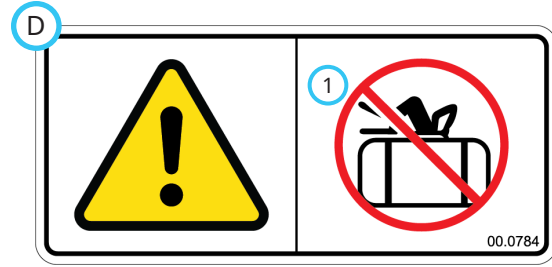


1. Tipping hazard - lift only an empty tank; do not lift the tank with fluid in it.

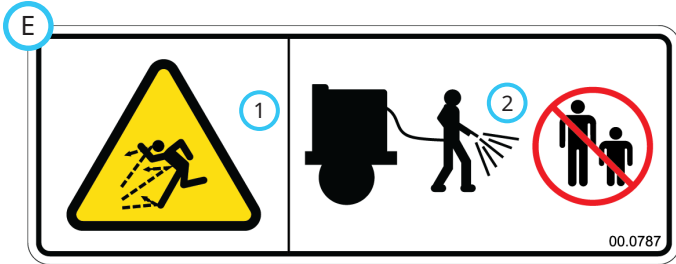
SAFETY



1. Fire hazard - do not put flammable liquids in the tank.



1. Do not enter the tank.



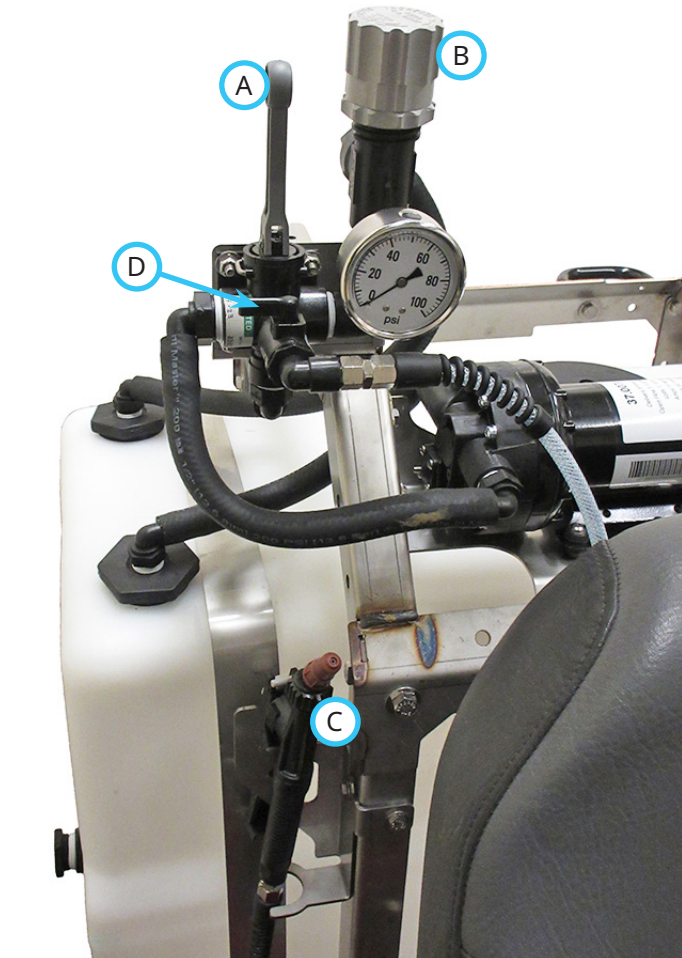
1. Thrown object (spray) hazard.
2. Keep bystanders away.

Decal	Description	Part Number	Quantity
A	Warning, Read Operator's Manual	00.0619	1
D	Tipping Hazard	00.0786	1
C	Warning, Fire Hazard	00.0785	1
B	Warning, Do Not Enter Tank	00.0784	1
E	Thrown Object Hazard (Spray)	00.0787	1

OPERATIONAL CONTROLS

Operational Control Locations

Use the following images to identify the locations of operational controls. Become familiar with all the controls before operating the machine.



- A. On/Off Control Valve
- B. Pressure Regulating Valve
- C. Spray Wand
- D. Spray Wand Valve
- E. Outer Spray Nozzle Valves
- F. Spray Wand (Hose Reel Kit)

On/Off Control Valve (A)

The on/off control valve turns on or shuts off flow to the spray nozzles. Rotate the handle forward or backward 90 degrees to turn on the flow of brine solution to the spray nozzles. Rotate the handle to the vertical position to shut off the flow of brine solution to the spray nozzles. Brine solution flows through the control valve to the pressure regulating valve and the spray wand with the handle in all positions.

Pressure Regulating Valve (B)

The pressure regulating valve controls the pressure of the brine system. Turning the handle clockwise increases the system pressure. Turning the handle counterclockwise decreases the system pressure. The valve is equipped with a pressure relief bypass that returns excess brine solution to the main tank.

Spray Wand (C)

The spray wand is equipped with a 2.4 meter (8 foot) coiled hose and is used to treat small or hard to reach areas. Squeeze the handle to activate the spray wand. The handle can be locked in the On position by pushing the handle lock forward.

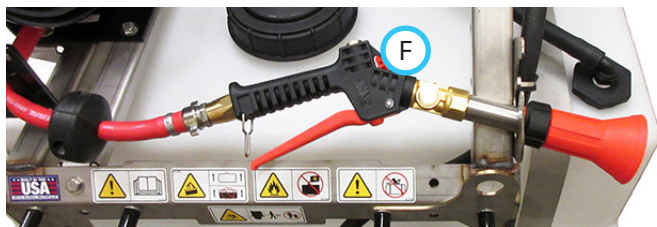
The spray pattern can be adjusted by rotating the nozzle tip on the spray wand until the desired spray pattern is achieved.

Spray Wand Valve (D)

The spray wand valve controls the flow of brine solution to the optional spray wand. It can be turned off when the spray wand is not needed to prevent dripping from the spray wand nozzle.

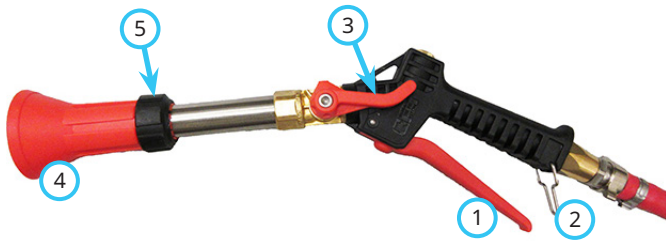
Outer Spray Nozzle Valves (E)

The outer spray nozzle valves control the flow of brine solution to the outer nozzle on each side of the machine.



OPERATIONAL CONTROLS

Spray Wand (Hose Reel Kit) (F)



The hose reel kit includes a premium spray wand and a 7.6 meter (25 foot) hose and is used to treat small or hard to reach areas. Squeeze the handle (1) to activate the spray wand. The handle can be locked in the On position by pushing engaging the handle latch (2).

The flow lever (3) can be adjusted to limit the flow through the spray wand.

The spray pattern can be adjusted by sliding the nozzle (4) in or out. Loosen the collar (5) and adjust the nozzle to the desired spray pattern. Tighten the collar to lock the nozzle in place.

GENERAL OPERATION

Daily Inspection

⚠ WARNING

Always engage the parking brake, shut off the power unit engine, remove the ignition key, and ensure that all moving parts have come to a complete stop before inspecting the components, or attempting any repair or adjustment.

1. Park the machine on a level surface, with the engine shut off and all fluids cold.
2. Perform a visual inspection of both the machine and the brine system. Look for loose or missing hardware, damaged components, or signs of wear.
3. Inspect the hoses and fittings to ensure tight, leak free connections.
4. Check the nozzles for even spray patterns.

Attaching the Brine System

⚠ CAUTION

If possible, use a crane or forklift to lift the brine system. If the brine system must be lifted manually, make sure you have an assistant to help you.

1. Park the machine on a level surface.
2. Engage the parking brake, shut off the engine, and remove the ignition key.
3. Lift the brine system (with assistance) and slide the hitch tube into the hitch receiver on the machine. Fasten in place with a clevis pin and a hair pin.
4. Connect the 4-pin plug on the brine system harness to the machine's 4-pin socket.

Removing the Brine System

⚠ CAUTION

Do not attempt to remove the brine system from the machine while there is still brine in the tank. Empty the brine tank before removing the brine system from the machine

1. Park the machine on a level surface.
2. Engage the parking brake, shut off the engine, and remove the ignition key.
3. Disconnect the brine system harness from the machine's 4-pin socket.
4. Remove the clevis pin from the hitch receiver, lift up on the brine system (with assistance), and slide the hitch tube out of the hitch receiver.

Operating Procedure

Before operation, perform the daily inspection, set the pressure regulating valve to the desired pressure, adjust the boom height if desired, and turn the outer spray nozzles on or off to set the desired overall width of the spray pattern.

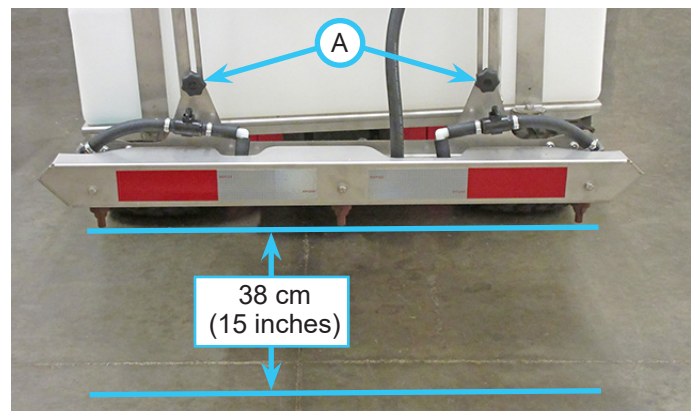
Move the on/off valve handle to the On position. Move the machine into position and turn on the 12V rear switch for the rear 4-pin socket to start the flow of brine solution. Drive forward following the sidewalk or other treatment area. When the end of the treatment area is reached, stop the machine and turn off the 12V rear switch to stop the flow of brine solution.

When treating an area that is wider than the spray pattern, spray in a back and forth pattern until the entire area has been treated.

Use the spray wand to treat steps and hard to reach areas. An optional hose reel kit with a premium spray wand provides 7.6 meters (25 feet) of reach from the brine system. Move the on/off valve handle to the Off position. Park the machine close to the treatment area and engage the parking brake. Turn the spray wand valve to the On position. Use the spray wand to treat the area, then return the spray wand to the brine system. Turn the spray wand valve to the Off position when the spray wand is not in use.

Boom Height Setting

The boom height should be set at 38 cm (15 inches) from the ground. Loosen the knobs (A) and move the boom to the correct height and retighten the knobs.



If the brine system is operated at a different boom height, it will affect the spray widths and the travel speed and coverage area charts.

GENERAL OPERATION

Spraying Width

The spraying width can be adjusted from 122 - 213.4 cm (48 - 84 inch) wide. The spray width can be adjusted by turning on or off the outer spray nozzles.

Pressure Regulation

The system pressure determines the flow rate through the nozzles. The SB350 brine system is designed to operate at 40 PSI system pressure. Note that pressures will change when the on/off valve is turned on and off, as well as when the outer spray nozzles are turned on or off.

Rotate the handle on the pressure regulating valve to increase or decrease the pressure to the desired setting. Tighten the plastic lock nut against the handle to lock the handle in the desired position.

Travel Speed and Coverage Area Charts

Outer Nozzles Off - 122 cm (48 inch) Spray Width and 40 PSI Pressure

Application Rate		Travel Speed		Coverage Area					
gallons/ acre	liters/ hectare	mph	km/h	square feet	square meters	acres	hectares	miles	kilometers
20	187.1	9.3	15.0	76,230	7,082	1.75	0.71	3.6	5.8
25	233.8	7.4	11.9	60,984	5,666	1.40	0.57	2.9	4.7
30	280.6	6.2	10.0	50,820	4,721	1.17	0.47	2.4	3.9
35	327.4	5.3	8.5	43,560	4,047	1.00	0.40	2.1	3.4
40	374.2	4.6	7.4	38,115	3,541	0.88	0.36	1.8	2.9
45	420.9	4.1	6.6	33,880	3,148	0.78	0.32	1.6	2.6
50	467.7	3.7	6.0	30,492	2,833	0.70	0.28	1.4	2.3

Outer Nozzles On - 213.4 cm (84 inch) Spray Width and 40 PSI Pressure

Application Rate		Travel Speed		Coverage Area					
gallons/ acre	liters/ hectare	mph	km/h	square feet	square meters	acres	hectares	miles	kilometers
20	187.1	8.8	14.2	76,230	7,082	1.75	0.71	2.1	3.3
25	233.8	7.1	11.4	60,984	5,666	1.40	0.57	1.7	2.7
30	280.6	5.9	9.5	50,820	4,721	1.17	0.47	1.4	2.2
35	327.4	5.1	8.2	43,560	4,047	1.00	0.40	1.2	1.9
40	374.2	4.4	7.1	38,115	3,541	0.88	0.36	1.0	1.7
45	420.9	3.9	6.3	33,880	3,148	0.78	0.32	0.9	1.5
50	467.7	3.5	5.6	30,492	2,833	0.70	0.28	0.8	1.3

NOTE: the application charts are based on a boom height of 38 cm (15 inches) above the ground and equipped with the 47.0439 brown spray nozzles. Use of different nozzles or a different boom height setting will affect the application rates and coverage.

SERVICE

⚠ WARNING

Always engage the parking brake, shut off the power unit engine, remove the ignition key, and ensure that all moving parts have come to a complete stop before inspecting the components, or attempting any repair or adjustment.

ATTENTION

If any component requires replacement, use only original Ventrac replacement parts.

Cleaning and General Maintenance

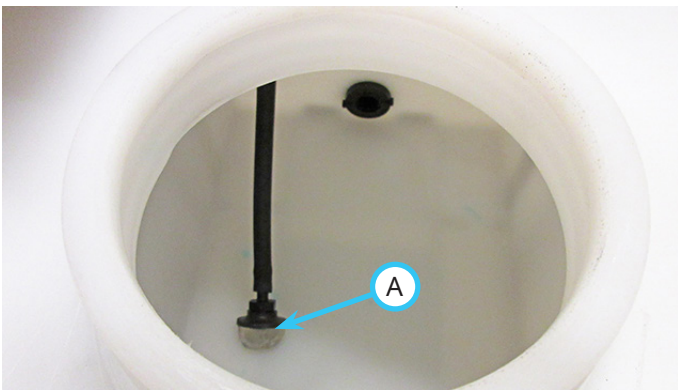
For best results, and to maintain the finish of the machine and brine system, clean or wash the machine and brine system to remove dirt, brine and salt deposits, and snow or ice accumulations.

ATTENTION

To maintain the finish of the machine and the brine system, thoroughly wash the equipment after each use to remove any corrosive agents (e.g., salt). Failure to clean the equipment may result in corrosion of (including but not limited to) steel, aluminum, and electrical components. Equipment that will experience repeated exposure to corrosive agents should be pretreated with a corrosion preventative.

Cleaning the Strainer

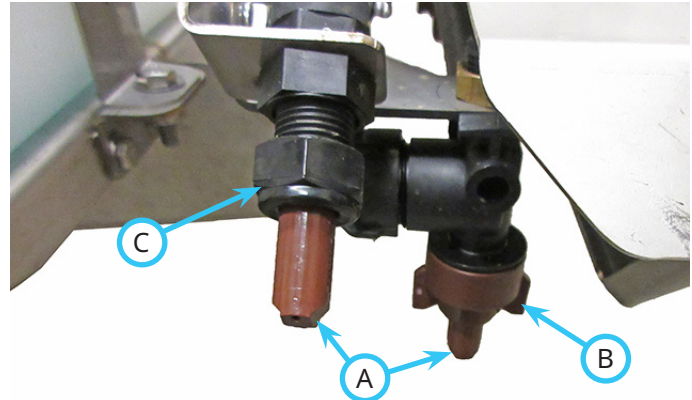
1. Turn off electrical power to the brine system.
2. Drain the brine tank so it is mostly empty.
3. Remove the lid from the brine tank.
4. Use a hose to wash buildup and debris from the strainer (A) on the end of the intake hose.



5. If the brine system has been removed from the machine, remove the plug on the side of the tank to drain the water and debris from the tank. If the brine system is installed on a machine, remove as much debris as possible from the tank.
6. Reinstall the lid onto the brine tank.

Cleaning the Nozzles

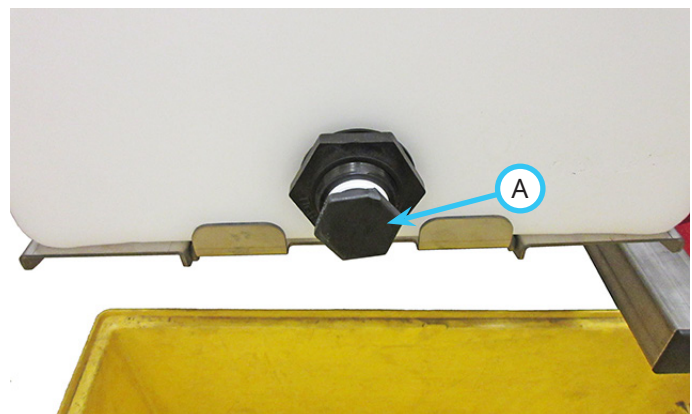
1. Remove the nozzle tip (A) and filter screen from the nozzle base by turning the collar (B) a quarter turn or by unthreading the nut (C) from the base.



2. Rinse the filter screen under clean running water to remove any debris.
3. Reinstall the filter screen and nozzle tip onto the nozzle base. Do not overtighten.

Draining the Brine System

1. Park the machine on a level surface.
2. Engage the parking brake, shut off the engine, and remove the ignition key.
3. Place a suitable container large enough to hold the remaining brine solution under the brine tank drain plug (A).



4. Remove the drain plug to empty the brine tank.
5. When the tank is empty, reinstall the drain plug.

SERVICE

Flushing the Brine System

1. Fill the brine tank with clean water.
2. Turn the spray wand valve to the On position.
3. Turn both outer spray nozzle valves to the On position.
4. Turn on the 12V rear switch and move the On/Off valve handle to the On position. Check to ensure all the nozzles are being flushed.
5. Pick up the spray wand, squeeze the handle, and engage the handle lock.
6. Allow the system to flush until the brine tank is empty, then refill with clean water and flush a second time.
7. After flushing is complete, it is recommended to treat the brine system if it will be stored outside in cold temperatures.

Treating the Brine System for Cold Storage

1. Add 4 liters (1 gallon) of RV antifreeze to the brine system tank.
2. Turn both outer spray nozzle valves to the On position.
3. Turn on the 12V rear switch and move the On/Off valve handle to the On position.
4. Allow the brine system to run until the antifreeze starts to discharge from all the spray nozzles.
5. Move the On/Off valve handle to the Off position to shut off the flow to the nozzles.
6. Turn the spray wand valve to the On position.
7. Pick up the spray wand and squeeze the handle until antifreeze discharges from the spray wand nozzle.
8. Turn off the 12V rear switch and replace the spray wand on the brine system.
9. The brine system is now treated for cold weather storage.

Storage Between Snow Events

Store the brine system inside to prevent freezing when the temperatures are extremely low. Drain, flush, and treat the brine system for cold storage if it will be stored outside during extremely low temperatures.

Seasonal Storage

Preparing the Attachment for Storage

1. Clean the attachment to remove dirt, brine and salt deposits, and snow or ice accumulations.
2. Raise the spray boom as needed to prevent damage to the nozzles when setting the brine system on a pallet.
3. Inspect for loose or missing hardware, damaged components, or signs of wear. Repair or replace any damaged or worn components.
4. Inspect the hoses and fittings to ensure tight, leak free connections.
5. Inspect the safety decals. Replace any decals that are faded, illegible, or missing.
6. Inspect the hitch mount for chips, scratches, or rust. Clean and touch up the surfaces as needed.

Removing the Attachment from Storage

1. Clean the attachment to remove any accumulated dust or debris.
2. Inspect the attachment as instructed in the Daily Inspection section of this manual.
3. Set the spray boom height if it was adjusted for storage.
4. Test the attachment to ensure that all the components are working properly.

SPECIFICATIONS

Dimensions

Overall Height	96.5 cm (38 inches)
Overall Length	67.3 cm (26-1/2 inches)
Overall Width	92.7 cm (36-1/2 inches)
Weight (Dry).	45.4 kg (100 pounds)
Brine Capacity.	132.5 liters (35 gallons)
Spray Width	122 - 213.4 cm (48 - 84 inches)
Optional Hose Reel Weight	18.1 kg (40 pounds)

Features

- Stainless steel construction
- Rear mounted spray boom with adjustable spray width
- Pressure regulating relief valve.
- In-line main filter and filter screens at each nozzle