



# INSTRUCTION MANUAL



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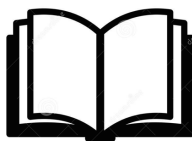
**CONGRATULATIONS!**

## INSTRUCTION MANUAL

Congratulations and welcome to the Nutri-Foin Family. You will very quickly see the incredible effects hay treated by the Nutri-Foin System have on your horse's health.

Nutri-Foin System Inc. has designed this equipment to treat dry hay by neutralizing the respirable dust mold and allergens in your horse's hay that causes respiratory ailments. The Nutri-Foin System improves the hay's texture, nutritional value and digestibility.

### **EQUIPMENT SAFETY:**

	<p>To avoid injury: Be sure to read and understand the instruction manual before using the machine.</p>	
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According to Nutri-Foin system Inc., it is imperative that only those having read and understood the instruction manual operate the unit.

**NOTE:** THE FAILURE TO FOLLOW ALL SAFETY INSTRUCTIONS, INSTALLATION INSTRUCTIONS, OPERATION, AND MAINTENANCE INSTRUCTIONS IS CONSIDERED MISUSE OF THE NUTRI-FOIN SYSTEM EQUIPMENT (MACHINE) AND WILL AUTOMATICALLY CANCEL AND NULLIFY THE WARRANTY THE FAILURE TO FOLLOW ALL SAFETY INSTRUCTIONS CAN ALSO CAUSE SERIOUS INJURY.

**As an owner, you must ensure an adequate and safe operation of your machine.**

## EQUIPMENT SAFETY

There are many safety messages in this manual and on your machine. Be sure to always read and follow all safety messages.

Here is the safety alert symbol:



This safety alert symbol alerts you to potential hazards of death and serious injury to yourself and others.

All safety messages will follow the safety alert symbol, the word DANGER or WARNING.

These words mean:

**DANGER**

Possible risk of death or serious injury if you do not immediately follow the instructions.

**WARNING**

Possible risk of death or serious injury if you do not follow the instructions

All safety messages will tell you what the potential hazard is and tell you how to reduce the risk of injury and what can happen if the instructions are not followed.

### IMPORTANT SAFETY INSTRUCTIONS:

- Read all the instructions and identify all warning symbols before using your machine.

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- Familiarize yourself with the machine functioning and limitations, as well as potential risks that are associated with its use.
- Locate the warning symbols on the machine to familiarize yourself with hazardous areas.
- Never climb on or climb up the machine.
- When moving the machine, always use a suitable vehicle or the lever arms designed to move the towable unit (weight 330Kg).
- Keep children and pets away from the machine especially when in use.

### **NEVER LEAVE THE MACHINE ON AND UNMONITORED**

**DANGER: NEVER PUT HANDS OR ANY OTHER PART OF THE BODY IN THE MACHINE IF IT IS ON AND FUNCTIONAL.**

**WARNING:** THE ENTRY AND EXIT DOORS OF THE MACHINE MUST ALWAYS REMAIN CLOSED DURING AND AFTER ITS OPERATION.

**ALWAYS TURN OFF THE MAIN INTERRUPTER DIAL (LOCATED ON THE SMVector BOX) AND LOCK IT AFTER EVERY USE.**



- Only use dry hay (the use of heated hay or pre-treated hay, can cause serious harm to your horse).
  - Ensure that treated hay does not in contact with any other unprocessed hay.
  - The use of the Nutri-Foin System Neutralizers ONLY is strictly required for the optimal treatment of hay in The Nutri-Foin Machine.
- It is possible (optional) to use a Shop-Vac to remove excess dust during the first few minutes of operation. It is highly recommended to use the Shop-Vac or vacuum if the machine when

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in use, is kept in close proximity to horses. The vacuum or Shop-Vac can be inserted into the optional vacuum exhaust located on the top of the machine (see machine diagram).

- Do not use any other substance than the Nutri-Foin Neutralizers in the Nutri-Foin machine, using anything other than the required and approved Nutri-Foin System Neutralizers, can pose a serious health risks to your horse.
- Keep the Neutralizer in a cool, dry place away from direct sunlight and temperatures above 10 degrees Celsius.

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**MACHINE DIAGRAM**



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Inspect the installation location of your Nutri-Foin system. It must have the following characteristics:

- Do not install in an environment with unfavourable conditions: steam, excessive dust or vibrations, direct UV radiation or extreme temperatures.



- **IF TEMPERATURES ARE BELOW -10 DEGREES CELSIUS TURN ON THE MACHINE AND WAIT 10 MINUTES BEFORE STARTING THE MOTOR OR TREATING YOUR HAY.**



- Refer to the instruction manual for the technical specifications and the installation for the Main interrupter dial box (SMVector). The SMVector control is already preprogrammed for use.
- You will need direct access to a power outlet (220V / 20AMP);
- The machine must be placed on a flat, level, solid surface.
- Make sure you have clear access to the entry door to be able to easily load the hay into the machine.
- Make sure you have ease of access to the exit door to facilitate emptying your machine after each use.
- Make sure the machine is installed on a flat level surface.

**Risk of overweight load**

Two or more people are required to move and / or install the Nutri-Foin System Machine equipment. Failure to do so may result in severe injury to the back or other major injuries.

**ELECTRICAL SPECIFICATIONS:**



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Contact a qualified electrician to verify that the electrical installation is adequate and that it meets the requirements of all applicable local and national electrical codes, laws, and regulations.

### Required Features:

- 220 volts AC, 60 Hz protected by a 20-amp circuit breaker;
- Copper conductors only.

### Recommendations:

- Supply power via an independent circuit.

### INFORMATION FOR THE MASTER ELECTRICIAN

- For connection information, refer to the included diagram on page 20 entitled: INFORMATION FOR THE ELECTRICIAN from the SMVector reference manual (Lenze).



- **WARNING: Verify the direction of the auger and blades before initial use**

- The SMVector main control box is pre-programmed and is ready for use.



**RISK OF ELECTRIC SHOCK**

## OPERATING SPECIFICATIONS

**THINK SAFETY: WORK SAFELY**

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**IMPORTANT:** THE MACHINE HAS A MAXIMUM CAPACITY OF 50lbs (50 POUNDS, 22.7KGS) OF HAY, OR THE EQUIVALENT OF ONE SQUARE BALE OF HAY. OVER FILLING THE MACHINE WILL DECREASE THE MACHINES EFFECTIVENESS, WILL CAUSE DAMAGE OR BREAK THE MACHINE. OVERLOADING THE MACHINE WILL NULLIFY THE WARRANTY

**Pre-operation:**

- Check that the exit door is closed.
- Check through the access door that the machine is completely empty of all contents and that nothing will obstruct the spin of the auger and blades.
- Unlock the padlock on the control panel (SMVector control panel box) and set the knob on the main interrupter to ON (I).


**Getting Started:**


- 1- Unlock and remove the padlock from the main interrupter box dial. Turn the main interrupter dial to position I (located on the SMV Vector control panel box)
- 2- Pour 350ml to 400 ml of the Nutri-Foin Neutralizer into the Neutralizer dispenser
- 3- Open the entry door. Insert hay a 45-pound square bale of hay into the Processor. Assure that there are no strings or cords left on the hay bale.
- 4- Push the selector switch toward the timer. Set the timer to 11 minutes for softer hay and 13 minutes for hard, thick or brittle hay


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5- Once the Processor has started working, insert the Neutraliser dispenser and unscrew the knob to release the Neutralizer into the machine

6- when the timer stops, the Processor will automatically stop according to the pre ser time

 7- Slide the exit door upwards to open. Make sure the door is secured to the door latch.

 8- Push the selector switch towards the empty button. Press the empty button to allow the hay to evacuate from the exit door

 9. Open the latch to allow the exit door to close. Make sure that nothing is obstructing the exit door. Slide it downwards to close it

10. Turn the main interrupter dial to position 0 and lock it with the padlock.

\*\*\* Always check that the hay no longer contains dust before emptying the machine

\*\*\* The usage time may vary depending on the type, freshness and age of your hay

\*\*\* A minimum of 11 minutes is recommended. If your hay does not get the desired consistency after 11 minutes, add 1 to 2 minutes to the cycle

\*\*\* You can add selenium, salt, or any other supplements additives or minerals to the process only after following the advice of an equine nutritionist.

### **TROUBLESHOOTING:**

Use the diagnostic guide **below** to identify and correct any problems that may occur.

**IMPORTANT: ALWAYS TURN OFF THE MACHINE (SMVector MAIN SWITCH OFF AND LOCKED) BEFORE PROCEEDING**

#### **DIAGNOSTIC GUIDE**

<b>Problem</b>	<b>Possible Causes</b>	<b>Solutions</b>

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<p>Hay wrapped around the auger</p>	<ul style="list-style-type: none"><li>- Can be caused by the uneven and changing nature of the hay.</li><li>- Defective auger</li><li>- Machine too full</li></ul>	<ul style="list-style-type: none"><li>- Remove the hay around the auger and blades</li><li>- Check the condition of the knives</li><li>- Do not exceed the recommended limit of 50 pounds of hay.</li></ul>
<p>The electric motor stops</p>	<ul style="list-style-type: none"><li>- SMVector circuit breaker or control in the off position</li></ul>	<ul style="list-style-type: none"><li>- Re-engage the circuit breaker or the SMVector control</li></ul>
<p>The auger does not rotate</p>	<ul style="list-style-type: none"><li>- The auger could be jammed</li><li>- The machine is too full</li><li>- Transmission</li></ul>	<ul style="list-style-type: none"><li>- Remove the object that is obstructing the auger</li><li>- Remove all hay from the auger</li><li>- Call a technician</li></ul>

**If any of the above problems persist, do not hesitate to contact us at: 450-475-0419**

**MACHINE MAINTENANCE SPECIFICATIONS:**

Inspecting and maintaining your Nutri-Foin System will ensure its safe and optimal performance.

	<p><b>Rotating knives can cause serious injury: Never put your hands in the machine.</b></p>	
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**IMPORTANT: ALWAYS TURN OFF THE MACHINE AND LOCK IT (SMVector MAIN SWITCH TO OFF AND LOCKED) BEFORE MAINTENANCE**

### **Recommended Steps:**

- Carefully inspect the condition of the knives (wear, shape, missing part). **NB:** It should be noted that replacing the knives is part of normal wear and tear and ongoing maintenance of your machine.
- Check the condition of the motor (presence of rust, bare or exposed wires, water infiltration, condensation).
- Unscrew the bolts of the armature supporting the neutralizer. Clean the dispenser with warm, soapy water.
- **ALWAYS MAKE SURE THAT THE MAIN CONTROL PANEL (SMVector) AND ITS COMPONENTS ARE FREE OF OBJECTS, DUST, OR HAY**



Running your Nutri-Foin machine with worn or damaged parts will reduce its effectiveness and can cause damage to other components of the machine or break the machine entirely.

### **MACHINE STORAGE:**

If your Nutri-Foin system is not going to be used for an extended period of time, proceed as follows:

### **IMPORTANT:**

- **TURN THE MAIN INTERRUPTER SWITCH OFF TO POSITION 0 (LOCATED ON SMVector MAIN CONTROL PANEL BOX)**
- **MAKE SURE THE PADLOCK IS LOCKED WHEN NOT IN USE**

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- **REMOVE AND CLEAN THE NEUTRALIZER CONTAINER.**
- **ALWAYS STORE INDOORS, IN A DRY PLACE PROTECTED FROM THE ELEMENTS (RAIN, SNOW, DUST OR OTHER, EXTREME TEMPERATURES)**
- **CLEAN THE INTERIOR OF THE MACHINE**

**Before re-using the machine after prolonged storage:**

- CLEAN THE CONTROL PANEL WITH DRY CLOTH OR WITH AN AIR COMPRESSOR.
- Grease the grease zut under the auger.
- Clean the machine thoroughly with a damp cloth to remove residual hay and accumulated dust.
- Inspect all moving parts of the machine to ensure they are secure and clean.
- Inspect the wires, make sure there is no wear, corrosion or bare wiring.
- Check the condition of the blades and change them if necessary.
- Apply aerosol lubricant to moving parts (wheels, doors, hinges and latches) if necessary.
- Make sure the machine is always kept on a flat and level surface.

## **ANSWERS TO THE MOST FREQUENTLY ASKED QUESTIONS:**

### **How long will it take to see the results of feeding Nutri-Foin Hay to my horse?**

The results are fast. You can expect to see your horse stop coughing within two weeks of beginning it on Nutri-Foin Hay.

### **How Do I introduce Nutri Foin Hay to my horse's diet?**

You can introduce Nutri-Foin Hay immediately and exclusively. It is recommended to feed your horse only hay that has been treated in the Nutri- Foin System Processor as of the first use. It is strongly advised not to feed your horse any other untreated dry hay as of the day of introduction of Nutri-Foin Hay.

### **Will my horses eating habits change initially when I introduce Nutri-Foin Hay to my horse's diet?**

Your horse will consume less hay in the first three to four days after starting Nutri-Foin Hay due to the change in the smell of the hay. Your horses hay consumption will normalize as the horse acclimatizes to the new smell.

### **I started my horse on Nutri-Foin Hay and my horse does not eat as much. Why?**

Regular hay is difficult for horses to digest. Horses fed regular hay need to eat more in order to feel satiated. The stems of Nutri- Foin Hay are broken, making Nutri- Foin Hay more digestible. Horses fed Nutri -Foin Hay eat less because they feel full faster.

### **Can my horse eat both untreated hay and Nutri-Foin Hay if I keep my horse outdoors?**

No. For a horse fed with Nutri-Foin Hay, it is not recommended to feed it any other dry untreated hay.

### **My horse suffers from COPD (Heaves) but cannot stand the cold. Can I stall my horse and feed it Nutri-Foin Hay?**

Yes, you can put your horse in a stall. If you stall your horse, it is important to make sure that the bedding you use is dust free and that the stable is well ventilated.

### **My horse suffers from laminitis. Is it ok to feed it Nutri-Foin Hay?**

Yes, as long as you ensure that the hay you are using is low in sugar, it is fine to feed a horse with laminitis Nutri-Foin Hay.

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**I compete. How do I bring my Nutri-Foin Hay with me?**

You can easily transport Nutri-Foin hay in bags or in bins

**I am going on Vacation and I want to prepare my hay in advance. What should I do?**

You can prepare your Nutri -Foin Hay in advance. Ensure to store the treated hay in an area that is not in contact with moisture or direct sunlight.

**Is it normal for my horse that eats Nutri-Foin Hay to have lost his hay belly? Why?**

Yes, it is normal. Horses that start eating Nutri-Foin Hay may look like they have lost their hay belly, lost weight, or look less bloated. This is due to the difference in digestibility of Nutri-Foin Hay versus regular hay. As the stems of the hay made with the Nutri-Foin System are broken during treatment, Nutri-Foin Hay is much easier for a horse to digest.

**I have had a very poor first-cut of hay and the second cut is too rich. What should I do?**

Mixing both the first and second cut of hay will give you a balanced blend.

**I just received an order of mold free but very dusty hay. Can the Nutri-Foin System Processor treat it?**

Yes, the Nutri-Foin System can treat extremely dusty hay. For hay that is very dusty, add more Neutralizer before treating the hay in the Nutri-Foin Processor.

**My horse is prone to colic or diarrhea at every transition of hay. Can Nutri-Foin help me?**

Yes, Nutri-Foin Hay can be helpful for colicky horses and horses with sensitive stomachs. Because the stems of hay treated with The Nutri-Foin System are more digestible, it is not as hard to transition horses with sensitive stomachs. You can also transition your horse by mixing both the old hay with the new hay during the period of transition.

**My old horse has trouble eating hay. Can Nutri-Foin Hay help?**

Yes Nutri-Foin Hay will definitely help geriatric horses that have difficulty ingesting hay. Due to the fact that the stems of Nutri-Foin Hay are broken, the hay will be much easier for your horse to ingest and digest.

**Can I free feed my horse with Nutri-Foin Hay?**

Yes, you can feed your horse as much Nutri- Foin Hay as you want at any time.



**I feed my horse outside. How do I serve my horse Nutri- Foin Hay?**

You can serve Nutri- Foin Hay in bins, feeders, directly on the ground, or on any other desired surface. Never feed your horse any hay on a sandy surface.

**How do I make the transition from last year's hay to this year's hay without any problems?**

To make a smooth transition from last year's hay to this year's hay, gradually mix the two hays together in the Nutri-Foin System Processor over a two-week period.

## **WARRANTY INFORMATION**

Each machine is rigorously inspected and tested before delivery. As a result, it is warranted to be free from defects in raw material and workmanship for a period of one year from its original purchase if used under normal conditions recommended by Nutri-Foin System Inc.

This warranty is only available to the original purchaser of the machine sold by Nutri-Foin System.

**The above warranty does not apply if repairs are due to:**

- Damage sustained during transportation, displacement or movement of equipment;
- Incorrect power supply (non-compliant electrical installation, low voltage, faulty wiring);  
Inappropriate, abusive or negligent use of the machine;
- Use for commercial purposes;
- Exposure of the machine to abnormal or extreme conditions;
- Alterations attempted or carried out without the authorization of Nutri-Foin system;
- Repairs due to abnormal wear;
- Failure to observe the operating instructions (installation, operation and maintenance specifications).

\* For the warranty to be sanctioned and enacted, ALL repairs must be authorized by Nutri-Foin System beforehand.

\*\* All costs of transporting the machine for any reason before or after purchase is the responsibility of the buyer.

Under this warranty policy, Nutri-Foin System cannot be held liable in case of:

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- Personal injuries; whatever the causes
- Material damage, including machine damage; whatever the causes
- Indirect, damages, whatever the causes

**This disclaimer applies both before and after the warranty period.**

In order to maintain a higher level of efficiency and quality, Nutri-Foin System Inc. reserves the right to modify the design and / or operation of its machine, all component's, and equipment without making such modifications to previously manufactured or previously sold machines.

**Welcome to Nutri-Foin System Family!**

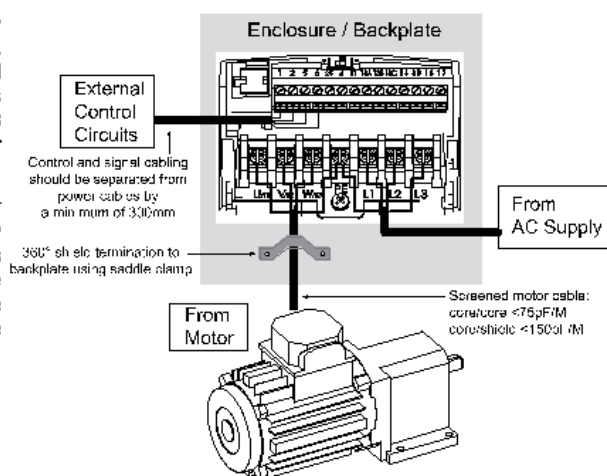
**INFORMATION FOR THE ELECTRICIAN:****Installation****3.2.1.5 Installation Recommendations for EMC Compliance**

For compliance with EN 61800-3 or other EMC standards, motor cables, line cables and control or communications cables must be shielded with each shield/screen clamped to the drive chassis. This clamp is typically located at the conduit mounting plate.

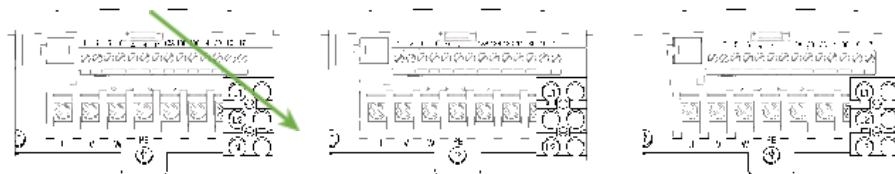
The EMC requirements apply to the final installation in its entirety, not to the individual components used. Because every installation is different, the recommended installation should follow these guidelines as a minimum. Additional equipment (such as ferrite core absorbers on power conductors) or alternative practices may be required to meet conformance in some installations.

Motor cable should be low capacitance (core/core <75pF/m, core/shield <150pF/m). Filtered drives can meet the class A limits of EN 55011 and EN 61800-3 Category 2 with this type of motor cable up to 10 meters.

**NOTE:** Refer to Appendix A for recommended cable lengths. Any external line filter should have its chassis connected to the drive chassis by mounting hardware or with the shortest possible wire or braid.

**3.2.1.6 NEMA 4X (IP65) Input Terminal Block**

For NEMA 4X (IP65) models with integrated EMC filter and/or integrated line disconnect, the input terminal block is located on the right-hand side of the SMV inverter in the NEMA 4X (IP65) enclosure. The single and three phase models are illustrated herein. Refer to paragraph 3.2.3 Control Terminals for pin out information.



Single Phase (2/PE) 120/240 VAC models (ESVxxxN01SMC) with integrated line disconnect

Single Phase (2/PE) 240 VAC models with Filter and/or integrated line disconnect

Three Phase (3/PE) models with Filter and/or integrated line disconnect

**WARNING**

Power remains present for up to 3 minutes on power input terminals (L1, L2 and L3) and output terminals (U, V and W) even when the disconnect switch is in the OFF position. Remove input power ahead of the drive and wait 3 minutes before removing the terminal cover.

## **HOW TO USE THE NEW NEUTRALIZER DISPENSING SYSTEM**

As a result of several reviews we have changed the oil dispenser to make it easier to clean.



Install the oil dispenser bracket which is located in a box inside the machine upon arrival of your new Nutri-Foin System



Add the desired amount of Neutralizer (soybean oil).



Insert the dispenser spout into the hole designed for this purpose.



Secure oil dispenser into the bracket

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Remove the small black cap to let air flow through



Place the cap in the small container on the bracket designed to store the cap while unscrewed