# LYNX AG, LLC



# Operator's Manual

LYNX AG, LLC 783 140<sup>th</sup> Street Churdan, IA 50050 www.lynxag.com

# **A** WARN

Read and understand this operator's manual prior to operating this equipment. Failure to follow these instructions could result in personal injury or damage to the equipment.

### **Machine Identification**

Machine Details Log		
Serial Number Range	LXC-2023-01 through LXC-2023-99	
Model Number		

#### **Model Designations**

This manual covers LYNX AG, LLC C Series Dry Fertilizer systems

#### **Serial Number Location:**

Right front side of the fertilizer box engraved into the plate that holds the fertilizer system air pressure gauge.

# **Table of Contents**

Introduction	3
Intended Use	3
Using this Manual	3
Owner Assistance	3
Dealer Contact Information	4
Safety Information	5
Safety Alert Symbol	5
Safety Signal Words	5
Additional Definitions	6
General Safety Requirements	7
Safety Labels	7
Controls and Displays	14
Assembly and Initial Set-up Instructions	14
Safety Information	14
Adjustments	14
Operating Instructions	15
Pre-Operation Checklist	15
Transporting on Public Roadways and Highways	16
Troubleshooting	16
Maintenance Instructions	16
Maintenance Schedules	16
Maintenance Procedures	17
Specifications	17
Warranty	18

#### Introduction

Thank you for purchasing your new LYNX system from LYNX AG, LLC. We welcome you to our growing family of new product owners. Proper assembly, maintenance, and safe operating practices will help you get years of satisfactory use from this machine.

#### Intended Use

The LYNX system is designed and built by LYNX AG, LLC and is intended to be used as a fertilizer application tool. The LYNX system is designed to be pulled by an ISO equipped tractor of proper size. It is not designed to be used for any other purpose other than its intended use.

#### **Using this Manual**

This manual is designed to help familiarize the operator with the safety, assembly, operation, adjustments, troubleshooting, and maintenance expectations of this machine and create awareness of the hazards that may be encountered because of its use. The intent of this manual is to provide specific machine guidelines and help owners and operators obtain the best results and safe operation from their investment with a focus on accident and injury prevention.

All users must read and understand the information in this manual prior to operation. Do not allow anyone to operate or maintain this equipment who has not fully read and understood this manual. Failure to follow the procedures described in this manual could result in equipment damage or physical injury or death to you or bystanders.

Keep this manual with the machine for future reference as it is considered part of your machine. There is a designated manual canister affixed to the machine where the manual must be stored. The life of any machine depends largely on the care it is given, and LYNX AG, LLC suggests that you refer to and review the manual often for preventative maintenance.

The information contained within this manual was current at the time of printing. Some parts or information are subject to change to ensure the best performance of the machine. LYNX AG, LLC reserves the right to make changes in materials or design of the product and its manual at any time without notice.

#### **Owner Assistance**

The parts on your machine have been specifically designed by LYNX AG, LLC and should only be replaced with genuine LYNX AG, LLC parts. Do not modify the machine or use with attachments other than LYNX AG, LLC options and accessories specified for use with this product.

Contact your dealer if service or repair parts are needed. Your authorized dealer has trained personnel, repair parts, and equipment needed to service this implement.

For quick reference and prompt service, record the model and serial number on the inside cover page and again on the warranty page of this manual. You will need these numbers when ordering parts from your dealer.

There may be times when circumstances occur that are not covered in the manual. At those times, or if for any reason you do not understand the instructions or safety

requirements in this manual, first contact your dealer. If they are unable to assist, then contact our service department.

Deal	ler	Contact	Inform	nation
$\mathbf{D} \mathbf{C} \mathbf{u}$		Contact		ιατισιι

Name:	 	 
Address:		
Phone #:	 	
Email:		

# **Safety Information**

When operating this equipment, you are responsible for your own safety and the safety of those around you. This machine is designed and equipped with proper safety features, including machine guards and safety labels, to protect you and bystanders from hazards that could cause serious injury. Guards and safety labels serve a critical purpose and must not be altered. Guards should only be removed for maintenance purposes and must be reinstalled prior to operation. Some of the illustrations in this manual may show the equipment with machine guards removed for clarity. Never operate this machine unless all machine guards are in place.

#### **Safety Alert Symbol**



This is the safety alert symbol. It is used to alert you to potential physical injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

#### **Safety Signal Words**

The safety labels on the machine and safety messages in this manual use a combination of symbols, signal words, and color-coding to identify the following hazardous situations or safety practices:



**DANGER** indicates a hazardous situation which, if not avoided, will result in death or serious injury.



**WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury.



**CAUTION** indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



**NOTICE** is used to address practices not related to physical injury.



**SAFETY INSTRUCTIONS** (or equivalent) is used to indicate specific safety-related instructions or procedures.

#### **Additional Definitions**

**Note** indicates a special point of information that the operator should be aware of before continuing.

**Important** indicates a point of information related to the following topic. This information must be read and understood before continuing.

#### **Safety Messages**

### **A**DANGER

A crushing hazard exists while hooking-up and/or unhooking the attachment. Do not allow anyone to stand between attachment and power machine while approaching or backing away from the attachment.

## **A**DANGER

A crushing hazard exists while lifting and/or lowering the attachment. Do not operate lift and/or lower controls while someone is near the power machine and/or the toolbar.

### **A**DANGER

A crushing hazard exists while operating the machine in field position. Do not allow anyone to stand between attachment and power machine while operating the machine.

**AWARNING:** Allow only persons to operate this equipment who have fully read and understand this manual, who have been properly trained in the safe operation of this equipment, and who are age 16 or older. Serious injury or death can result from failure to read, understand, and follow instructions provided in this manual.

# **<u>∧</u>WARNING**

Hydraulic fluid under high pressure can penetrate skin and/or eyes causing serious injury or death.

- Wear proper hand and eye protection.
- Relieve pressure on hydraulic system before servicing or disconnecting hoses.
- Use a piece of cardboard or wood rather than hands when searching for leaks.
- Consult a doctor familiar with this type of injury within a few hours or gangrene may result. DO NOT DELAY.





#### **General Safety Requirements**

These general safety requirements apply to the overall use and maintenance of this machine. In addition to this safety section, you must also refer to the safety messages and instructions in each of the appropriate sections of this manual. Each section provides further details on section- or task-specific safety messages that alert you about hazards associated with normal use and foreseeable misuse of the machine.

#### **Transport Safety**

Be sure that the machine is empty of product before transporting on roadways.

#### Safety Labels

Your LYNX system comes equipped with all safety labels in place. These safety labels are designed to help you safely operate your equipment. They inform you about possible hazards associated with the normal operation or foreseeable misuse of the product and how to properly avoid those hazards to prevent physical injury or death. You are required to read and follow their directions.

- 1. Keep all safety labels clean and legible.
- 2. Replace all damaged or missing labels.
- 3. New equipment installed during repairs may require replacement safety labels to be affixed to the replaced part, if missing, as specified by LYNX AG, LLC.
- 4. Contact your local LYNX AG, LLC dealer to order replacement labels
- 5. Refer to this section for proper label placement. When installing new labels:
  - a. Clean placement surface with soapy water or surface cleaning solution and allow to dry.
  - b. Peel backing from label, carefully center and place label in proper location ensuring no creases or air pockets.
  - c. Press label firmly onto the surface and use a straight edge to smooth the label on the machine for a secure adhesion.

# These labels are to be located as seen on both sides of the dry fertilizer system





Warning
High Pressure Fluid Hazard
Reorder No. C42412-06



Warning
Moving Part Hazard
Reorder No. C42412-07

# These labels are to be located as seen on the dry fertilizer system





Warning

**Pinch Point** 

Reorder No. C42412-10

# This label is to be located as seen above the ladder on the dry fertilizer system



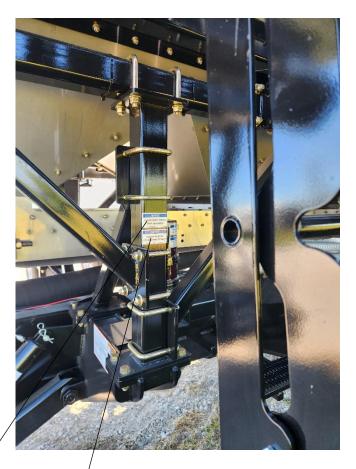


Danger

Do NOT enter bin

Reorder No. C42412-09

These labels are to be located in a visible location near the base of the ladder as pictured on or near the dry fertilizer system







#### Notice

Fold ladder before field operation

Reorder No. C42412-14

#### Notice

Failure to do so could cause damage

Reorder No. C42412-15

# This label is to be located as seen near the most accessible tarp tensioner on the dry fertilizer system





#### **Important**

Do not adjust ratchets during operation of tarping system! Refer to operator's manual for proper cable tensioning procedure.

Reorder No. P/N 1704414

# These labels are to be located as seen on the dry fertilizer system





Warning
Moving Part Hazard
Reorder No. C42412-07

## **Controls and Displays**

LYNX does not offer a standard controller or display but rather choses to use third party rate controlers.

## **Assembly and Initial Set-up Instructions**

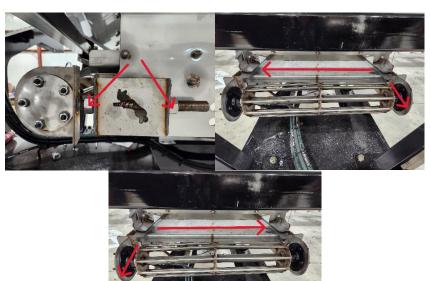
One of the catalysts of the LYNX AG, LLC product line is that our product is delivered to your farm turn-key unless otherwise negotiated. No assembly is typically necessary.

#### **Safety Information**

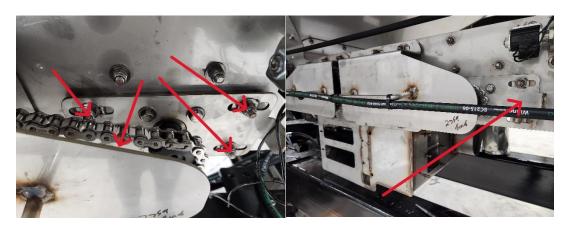
If a product is delivered to your farm requiring assembly, please contact your dealer or a LYNX AG, LLC representative prior to assembling the product for further instructions to ensure your safety.

# **Adjustments**

Tracking the belt on your LYNX dry fertilizer system is accomplished by
adjusting the jam nuts on the tensioner assembly. To track the belt to the left
the right tensioner must be extended or the left tensioner must be retracted.
To track the belt to the right, the left tensioner must be extended or the right
tensioner must be retracted. Over tension of belt may result in a torn belt or a
broken seem.



• The drive chain should be tensioned every 100 hours of operation. It can be tensioned by loosening the 4 nuts securing the belt drive motor mount assembly, sliding the assembly away from the drive roller and re-torquing the nuts securing the belt drive motor mount assembly.



## **Operating Instructions**

#### **Pre-Operation Checklist**

<b>~</b>	Step	Page or Reference
	Daily maintenance completed	Pg. #
	Machine is calibrated	Pg. #
	Machine is properly adjusted	Pg. #
	All safety labels are in place	Pg. #

#### General operating instructions

- Engaging the fertilizer delivery belts
  - 1. Engage in constant flow the SCV that controls the fertilizer delivery system.
  - 2. Turn on your rate controller and ensure that all rates and parameters are entered properly.
  - 3. Engage in constant flow the SCV that controls the fan and ensure that your air pressure gauge reads 60 inches of water column or above for optimal performance.
  - 4. Turn your product switch on.

## Transporting on Public Roadways and Highways

- Empty machine of all product.
- Adhere to all state, and local government regulations.

# **Troubleshooting**

Problem	Cause	Solution
Rate was holding, but is now sporadic/surging	Mechanical friction	<ol> <li>Oil wood bearings</li> <li>Ensure belt is         aligned and         tensioned properly</li> </ol>
One side of the machine is not delivering product	Section control actuator is faulty	Replace linear actuator for the affected section.
Hydraulic oil in the air system	Blown fan motor seal	Replace fan assembly
Delivery belts are moving but monitor is not reading rate output	Electronic encoder is faulty	Replace electronic encoder
Belt is moving when rate is turned off	PWM valve is plugged/malfunctioning	Replace PWM valve
Rate is not consistent row to row	Y divider is out of adjustment or fertilizer air system has obstructions	Refer to page 26 to adjust Y dividers  Refer to page 29 for instruction on cleaning the air system
Machine is not building enough air pressure	Low tractor hydraulic output	Contact technical support team

# **Maintenance Instructions**

#### **Maintenance Schedules**

### Daily maintenance

- 1. Be sure the air system is clean of all obstruction and buildup to ensure accurate fertilizer placement.
- 2. Walk around machine and visually check that all bolts are properly tightened.

#### End of the season maintenance

- 1. Pressure wash the machine inside and out while air system and belts are running.
- 2. Apply fluid film or a like product to the entire machine inside and out.
- 3. Store the machine in a location protected from UV rays to protect the paint, tarp, tires and hoses from decay.

#### **Specific Maintenance Procedures**

#### Cleaning the air system

- 1. Turn on the fan and set the pressure to at least 40" of water column.
- 2. Using a lift basket or other safe lifting device hold a garden hose for five minutes at full stream above the top of the fan intake ring in the location pictured below.



3. Run the garden hose at full stream for one minute through each fertilizer delivery hose using the access area above the plastic delivery cartridge as picture below.



# **Specifications**

Specifications, Capacities, and Power Unit Requirements	
Air system capacity	900 pounds per acre at 5 mph at 60" of water column pressure
Hydraulic requirements	Minimum of 25 gallons per minute at 3,000 psi

### Warranty

LYNX AG, LLC (the "Manufacturer") warrants to the original purchaser that this equipment will be free from defects in material and workmanship beginning on the date of purchase by the end user according to the following schedule when used as intended and under normal service and conditions for individual use only.

- Overall unit: One-year parts and labor
- Hose: Considered wear items

This warranty is limited to the repair or replacement of any defective part by the Manufacturer and the installation by the dealer of any such replacement part and does not cover common wear items. The Manufacturer reserves the right to inspect any equipment or parts which are claimed to have been defective in material or workmanship.

This Warranty does not apply to any part or product which in the Manufacturer's judgment shall have been misused or damaged by accident or lack of normal maintenance or care, or which has been repaired or altered in a way which adversely affects its performance or reliability, or which has been used for a purpose for which the product is not designed. Misuse also specifically includes failure to properly maintain oil levels, grease points, and driveline shafts.

Claims under this Warranty should be made to the dealer which originally sold the product and all warranty adjustments must be made through an authorized LYNX AG, LLC dealer. The Manufacturer reserves the right to make changes in materials or design of the product at any time without notice.

This Warranty shall not be interpreted to render the Manufacturer liable for damages of any kind, direct, consequential, or contingent to property. Furthermore, the Manufacturer shall not be liable for damages resulting from any cause beyond its reasonable control. This Warranty does not extend to loss of crops, any expense or loss for labor, supplies, rental machinery or for any other reason.

No other warranty of any kind whatsoever, express or implied, is made with respect to this sale; and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations set forth in this written warranty are hereby disclaimed and excluded from this sale.

This Warranty is not valid unless registered with LYNX AG, LLC within 30 days from the date of purchase