

FERTILIZER BIN MINOR



OPERATOR'S MANUAL

Document: TD-09-06-1077



Revision: A

Effective Date: Oct. 2022













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INTRODUCTION

Thank you for choosing USC, LLC for your equipment needs. We appreciate your business and will work diligently to ensure that you are satisfied with your choice.

OVERVIEW

The purpose of this manual is to provide you with the basic information needed to operate and maintain the Fertilizer Bin Minor. It does not hold USC, LLC liable for any accidents or injuries that may occur.

The technical information provided in this document is based on extensive testing under controlled conditions at the USC research and development facility. This information is given without guarantee as the conditions of operation and storage of the equipment are beyond our control. Variables such as temperature, humidity, viscosity of chemical products and changes in seed size or variety may all effect the accuracy of application and seed coverage. Periodically check the equipment calibration while treating and make adjustments as required. This will insure the optimum seed coverage.

OPERATOR RESPONSIBILITIES

As the purchaser/owner/operator of this equipment and control system, you have an obligation to install, operate, and maintain the equipment in a manner that minimizes the exposure of people in your care to any potential hazards inherent in using this equipment. It is critical that the owner of this equipment:

- Has a clear and documented understanding of the process this machine is being used in and of any resulting hazards or special requirements arising from this specific application.
- Allow only properly trained and instructed personnel to install, operate or service this equipment.
- Maintain a comprehensive safety program involving all who work with this machine and other associated process equipment.
- Establish clear areas of staff responsibility (e.g. operation, setup, sanitation, maintenance, and repairs).
- Provide all personnel with necessary safety equipment.
- Periodically inspect the equipment to insure that the doors, covers, guards, and safety devices are in place and functioning, that all safety instructions and warning labels are intact and legible, and that the equipment is in good working order.
- In addition to the operating instructions, observe and enforce the applicable legal and other binding regulations, national and local codes.



As the person with the most to gain or lose from working safely, it is important that you work responsibly and stay alert. By following a few simple rules, you can prevent an accident that could injure or kill you or a co-worker.

- Disconnect, lockout, and tagout electrical and all other energy sources before inspecting, cleaning, servicing, repairing, or any other activity that would expose you to the hazards of electrical shock.
- Do not operate, clean, or service this equipment until you have read and understood the contents of this manual. If you do not understand the information in this manual, bring it to the attention of your supervisor, or call USC at (785) 431-7900 for assistance.
- Any operator who is known or suspected to be under the influence of alcohol or drugs should not be allowed to operate the equipment.
- Understand and follow the safety practices required by your employer and this manual.
- **PAY ATTENTION** to what you and other personnel are doing and how these activities may affect your safety.
- Failure to follow these instructions may result in serious personal injury or death.

RECEIVING YOUR EQUIPMENT

As soon as the equipment is received, it should be carefully inspected to make certain that it has sustained no damage during shipment and that all items listed on the packing list are accounted for. If there is any damage or shortages, the purchaser must immediately notify USC, LLC. Ownership passes to purchaser when the unit leaves the USC, LLC. premises. The purchaser is responsible for unloading and mounting all components of the equipment.

Document the serial number of the machine for future reference. The serialization label is located on the back side of the unit.



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SAFETY INSTRUCTIONS A

Every year accidents in the work place maim, kill, and injure people. Although it may be impossible to prevent all accidents, with the right combination of training, operating practices, safety devices, and operator vigilance, the number of accidents can be significantly reduced. The purpose of this section is to educate equipment users about hazards, unsafe practices, and recommended hazard avoidance techniques.

SAFETY WORDS AND SYMBOLS

It is very important that operators and maintenance personnel understand the words and symbols that are used to communicate safety information. Safety words, their meaning and format, have been standardized for U.S. manufacturers and published by the American National Standards Institute (ANSI). The European Community (E.C.) has adopted a different format based on the International Standards Organization (I.S.O.) and applicable machinery directives. Both formats are presented below. Graphic symbols are not standardized, but most manufacturers will use some variation of the ones seen in this manual.



Indicates an imminently hazardous situation which, if not avoided, **will** result in death or serious injury.



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



Indicates a potentially hazardous situation which, if not avoided, **may** result in minor or moderate injury and/or property damage.



Provides additional information that the operator needs to be aware of to avoid a potentially hazardous situation.





Mandatory Lockout Power Symbol. Disconnect, lockout and tagout electrical and other energy sources before inspecting, cleaning or performing maintenance on this panel.



International Safety Alert Symbol. The exclamation point (!) surrounded by a yellow triangle indicates that an injury hazard exists. However, it does not indicate the seriousness of potential injury. The exclamation point (!) is also used with the DANGER, WARNING and CAUTION symbols so the potential injury is indicated.



Electrocution Hazard Symbol. This symbol indicates that an electrocution hazard exists. Serious injury or death could result from contacting high voltage.



International Electrocution Hazard. This symbol indicates that an electrocution hazard exists. Serious injury or death could result from contacting high voltage.



Mandatory Read Manual Action Symbol. (I.S.O. format) This symbol instructs personnel to read the Operators Manual before servicing or operating the equipment.



Mandatory Read Manual Action Symbol. This symbol instructs personnel to read the Operators Manual before servicing or operating the equipment.



Notice is used to notify people of important installation, operation or maintenance information which is not hazard related.





LOCKOUT / TAGOUT PROCEDURES

Lockout/Tagout is the placement of a lock/tag on an energy isolating device in accordance with an established procedure. When taking equipment out of service to perform maintenance or repair work, always follow the lockout/tagout procedures as outlined in ANSI Z344.1 and/or OSHA Standard 1910.147. This standard "requires employers to establish a program and utilize procedures for affixing appropriate lockout devices or tagout devices to energy isolating devices and to otherwise disable machines or equipment to prevent unexpected energizing, start-up, or release of stored energy in order to prevent injury to employees."

HAZARD REVIEW

Electrocution Hazard

Electrocution accidents are most likely to occur during maintenance of the electrical system or when working on or near exposed high voltage wiring. This hazard does not exist when the electrical power has been disconnected, properly locked, and tagged out.

Automatic Start Hazard



This equipment may be controlled by an automated system and may start without warning. Failure to properly disconnect, lockout, and tagout all energy sources of remotely controlled equipment creates a very hazardous situation and could cause injury or even death. PLEASE STAY CLEAR AND BE ALERT.



YOU are responsible for the **SAFE** operation and maintenance of your USC, LLC equipment . **YOU** must ensure that you and anyone else who is going to operate, maintain or work around the equipment be familiar with the operating and maintenance procedures and related **SAFETY** information contained in this manual. This manual will take you step-by-step through your working day and alert you to good safety practices that should be adhered to while operating the equipment

Remember, **YOU** are the key to safety. Good safety practices not only protect you, but also the people around you. Make these practices a working part of your safety program. Be certain that **EVERYONE** operating this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- Equipment owners must give operating instructions to operators or employees before allowing them to operate the machine, and at least annually thereafter per OSHA (Occupational Safety and Health Administration) regulation 1928.57.
- The most important safety device on this equipment is a **SAFE** operator. It is the operator's responsibility to read and understand **ALL** Safety and Operating instructions in the manual and to follow them. All accidents can be avoided.
- A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.
- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment.
- Think SAFETY! Work SAFELY!

GENERAL SAFETY

- 1. Read and understand the operator's manual and all safety labels before operating, maintaining, adjusting or unplugging the equipment .
- 2. Only trained persons shall operate the equipment . An untrained operator is not qualified to operate the machine.
- 3. Have a first-aid kit available for use should the need arise, and know how to use it.







- 4. Provide a fire extinguisher for use in case of an accident. Store in a highly visible place.
- 5. Do not allow children, spectators or bystanders within hazard area of machine.
- 6. Wear appropriate protective gear. This includes but is not limited to:
 - A hard hat
 - Protective shoes with slip resistant soles
 - Protective goggles
 - Heavy gloves
 - Hearing protection
 - Respirator or filter mask
- 7. Place all controls in neutral or off, stop motor, and wait for all moving parts to stop. Then disable power source before servicing, adjusting, repairing, or unplugging.
- 8. Review safety related items annually with all personnel who will be operating or maintaining the equipment.

OPERATING SAFETY:

- 1. Read and understand the operator's manual and all safety labels before using.
- 2. Disconnect and disable electrical supply completely and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
- 3. Clear the area of bystanders, especially children, before starting.
- 4. Be familiar with the machine hazard area. If anyone enters hazard area, shut down machine immediately. Clear the area before restarting.
- 5. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
- 6. Stay away from overhead obstructions and power lines during operation and transporting. Electrocution can occur without direct contact.
- 7. Do not operate machine when any guards are removed.
- 8. Inspect welds and repair if needed.









PLACEMENT SAFETY

- 1. Move only with the appropriate equipment
- 2. Stay away from overhead power lines when moving equipment. Electrocution can occur without direct contact.
- 3. Be familiar with machine hazard area. If anyone enters hazard areas, shut down machine immediately. Clear the area before restarting.
- 4. Operate the equipment on level ground free of debris. Anchor the equipment to prevent tipping or upending.



Before placement of the equipment, be sure that ground is reasonably level. The equipment may topple or work improperly if the ground is too uneven, damaging the equipment and/or causing personal injury.

MAINTENANCE SAFETY

- 1. Review the operator's manual and all safety items before working with, maintaining or operating the equipment .
- 2. Place all controls in neutral or off, stop motors, disable power source, and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
- 3. Follow good shop practices:

Keep service area clean and dry. Be sure electrical outlets and tools are properly grounded. Use adequate light for the job at hand.



- 4. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
- 5. Clear the area of bystanders, especially children, when carrying out any maintenance and repairs or making any adjustments.
- 6. Before resuming work, install and secure all guards when maintenance work is completed.
- 7. Keep safety labels clean. Replace any sign that is damaged or not clearly visible.



SAFETY LABELS

- 1. Keep safety labels clean and legible at all times.
- 2. Replace safety labels that are missing or have become illegible.
- 3. Replaced parts that displayed a safety label should also display the current label.
- 4. Replacement safety labels are available. Contact USC at (785) 431-7900 .

How to Install Safety Labels:

- Be sure that the installation area is clean and dry.
- Be sure temperature is above 50°F (10°C).
- Decide on the exact position before you remove the backing paper.
- Remove the smallest portion of the split backing paper.
- Align the sign over the specified area and carefully press the small portion with the exposed sticky backing in place.
- Slowly peel back the remaining paper and carefully smooth the remaining portion of the sign in place.
- Small air pockets can be pierced with a pin and smoothed out using the piece of sign backing paper.



Located on the USC equipment you will find safety labels. Always be sure to read and follow all directions on the labels.



Guards provided with USC equipment are to remain in place during operation.



Think **SAFETY!** Work **SAFELY!**

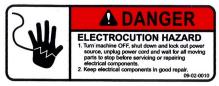
REMEMBER—If Safety Labels have been damaged, removed, become illegible, or parts replaced without safety labels, new labels must be applied. New safety labels are available from USC at (785) 431-7900.



Part # 09-02-0009



Part # 09-02-0022



Part # 09-02-0010



INSTALLATION B



HIGH VOLTAGE ~ Always disconnect the power source before working on or near the control panel or lead wires.



HIGH VOLTAGE ~ Use insulated tools when making adjustments while the controls are under power.



Permanent installation may require additional electrical cords, liquid hose, and air lines, since each installation is unique.



<u>DO NOT</u> modify any part of the Fertilizer Bin Minor, including the auger tube or add any mechanical device to attempt to change the way the product discharges from the end of the tube. This could pack the product tighter and change the flow rate of the product being added. It could also increase the pressure on the mechanical components of the drive assembly causing it to fail.

BIN SET-UP

The following steps outline the initial set-up of your USC seed hopper :

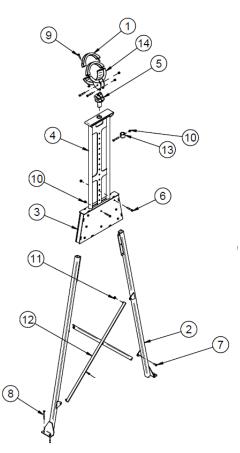
- 1. Clear the area of bystanders, especially small children, before moving.
- 2. Be sure there is enough clearance from overhead obstructions and power lines or other equipment to move the machine into its working position.
- 3. Using a forklift, place the bin in the desired position on a level surface.
- 4. Inspect bin thoroughly for screws, bolts, fittings, etc. which may have come loose during shipping.
- 5. Adjust the leg height on the bin to fit your application.
- 6. After you are sure the bin is located in the correct position, anchor the hopper to the floor to prevent the machine from moving during operation.
- 7. Mount the control panel in an area that is convenient to you and where cords from control panel to bin gate(s) and will reach.
- 8. Have an electrician supply the correct power to control panel, see electrical schematic from panel
- 9. Connect cords from control panel to bin gate(s).



BIN SET-UP WITH AUGER

The following steps outline the installation of an auger under a bin minor :

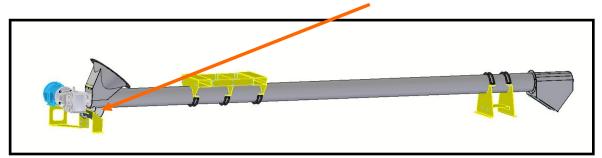
- 1. Clear the area of bystanders, especially small children, before moving.
- 2. Uncrate the auger stand and assemble together using diagram to the right.



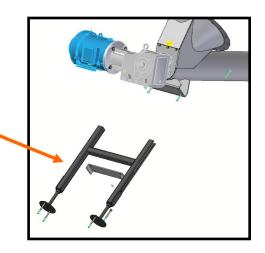
ltem #	Part #	Description
1	05-03-1262	WDMT 8IN TUBE CLMP
2	05-03-1829	WDMT LEG STND S3
3	05-03-1832	WDMT LEG MNT STND
4	05-03-1834	WDMT SLIDE STAND MID
5	05-03-1841	WDMT STAND PIVOT
6	06-01-0029	BOLT .500-13 X 3.25 ZP GR5
7	06-01-0080	BOLT .500-13 X 1.25 ZP GR5
8	06-01-0086	BOLT .500-13 CONC ANCHOR ZP 4.25
9	06-01-0361	BOLT FLG .500-13 X 1.75 MAGNI GR5.1
10	06-03-0004	NUT NYL LOCK .500-13 ZP GR5
11	06-03-0015	NUT LOCK FLG .500-13 ZP GR5
12	103614	ANGLE CROSS BRACE
13	106582	BUSHING RETAINER
14	35-01-0029	WDMT CLMP PIVOT 8IN RND CS



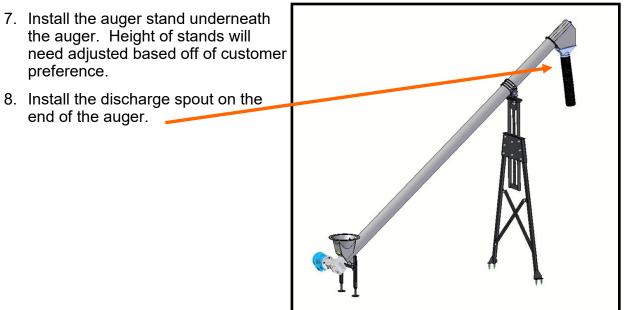
- 3. Move the auger closest to the area where it will be used.
- 4. Support the auger with a forklift and remove the shipping bracket around the motor.



5. Install the lower stand on the lower part of the auger (right)



6. Using a forklift, raise the head of the auger and remove the 2 remaining shipping brackets.





9. Using a forklift, set the bin over the top of the auger. Bin braces can be temporarily removed to set the bin over top of auger. The bin legs and auger stands may need adjusted to get the correct clearance.



- 10. The tarp handle may need moved to the opposite side of the bin if it interferes with the auger.
- 11. After you are sure the bin and auger is located in the correct position, anchor them to the floor to prevent from moving during operation.
- 12. Mount the control panel in an area that is convenient to you and where cords from bin gate and auger will reach.
- 13. Have an electrician supply the correct power to control panel, see electrical schematic from panel
- 14. Connect cords from control panel to bin gate, and from auger to control panel.





FERTILIZER BIN MINOR OVERVIEW

FBM-0833C6

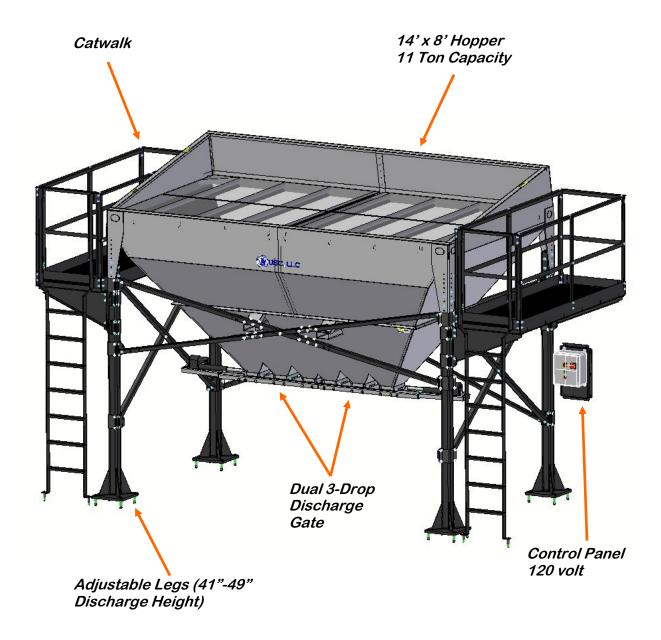


FBM-1051Cx





FBM-1483C7





ELECTRICAL OPERATION





HIGH VOLTAGE ~ Always disconnect the power source before working on or near the control panel or lead wires.

HIGH VOLTAGE ~ Use insulated tools when making adjustments while the controls are under power.



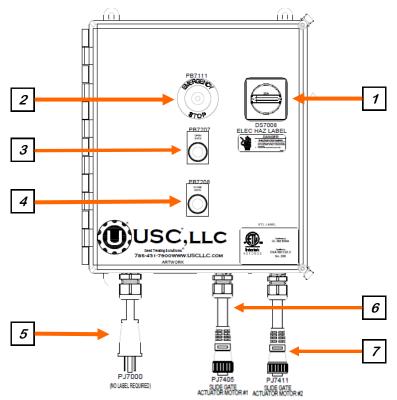
AUTHORIZED PERSONNEL only shall work on the control panel. Never allow anyone who has not read and familiarized themselves with the owner's manual to open or work on the control panels.

FERTILIZER BIN MINOR CONTROL PANELS

This section provides a general overview and description of the operator control panel for the Fertilizer Bin Minor. The Fertilizer Bin Minor panel can be mounted anywhere close to the bin. It contains the electrical components required to actuate the bin gate (s). This includes the motor controller for the motor that runs the auger. Please see the panel name plate and schematics for each panel for power requirements.







1. POWER DISCONNECT SWITCH : This Switch powers on and off the panel.

<u>2. EMERGENCY STOP BUTTON</u>: When this maintained button is pressed all controls come to a immediate stop. To clear the emergency stop pull the switch out to reenergize the controls.

<u>3. OPEN GATE BUTTON</u>: When this momentary button is pressed the gate actuator will move the gate actuator to the open position until the button is released.

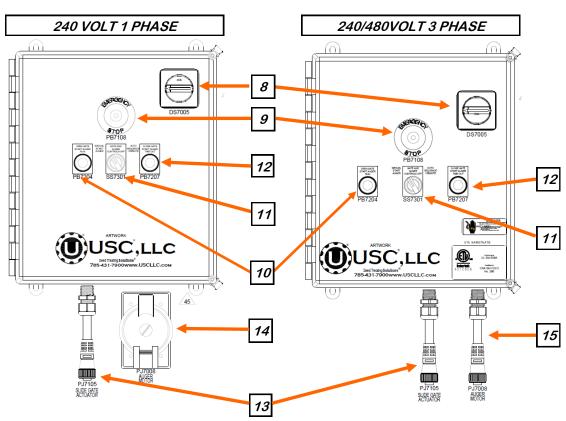
<u>4. CLOSE GATE BUTTON</u>: When this momentary button is pressed the gate actuator will move the gate actuator to the closed position until the button is released.

5. PLUG POWER CORD: PJ7000 into 120 volt wall outlet.

6. SLIDE GATE ACTUATOR CORD: Connect PJ7405 to the gate actuator.

<u>7. SLIDE GATE ACTUATOR CORD #2:</u> Applicable only on bins with 2 gates. Connect PJ7411 to the second gate actuator.





CONTROL PANELS FOR BINS WITH AUGER

Fertilizer Bin Minor

<u>8. POWER DISCONNECT SWITCH</u>: This Switch powers on and off the panel.

<u>9. EMERGENCY STOP BUTTON</u>: When this maintained button is pressed all controls come to a immediate stop. To clear the emergency stop pull the switch out to reenergize the controls.

<u>10. OPEN GATE & START AUGER RUN BUTTON</u>: When this momentary button is pressed the gate actuator will move the gate to the open position, and start the auger motor. The gate will continue to open until the actuator fully opens and the auger will remain running, the Close Gate & Start Auger Time out button can interrupt the gate open gate command, or the emergency stop button being depressed will interrupt the open gate command and stop the auger.

<u>11. GATE AND AUGER CONTROLS SELECTOR SWITCH</u>: This maintained selector switch has 3 Positions. <u>Manual Start Auger Position</u>: this position will start the auger running and will keep the auger running. <u>OFF position</u>: will not allow the auger or gate positions to change. <u>AUTO SEQUENCE / REMOTE Position</u>: This position will allow for the Open Gate & Start Auger Commands, and Close Gate Start Auger Time Out Commands to run.



CONTROL PANELS FOR BINS WITH AUGER (CONTINUED)

<u>12. CLOSE GATE & SART AUGER TIME OUT BUTTON</u>: When this momentary button is pressed the gate actuator will move the gate to the closed position, and start the auger motor. The gate will continue to close until the actuator fully closes or the timer times out, and the auger will remain running until the timer times out. The emergency stop button being depressed will interrupt the gate close command and stop the auger. The Open Gate & Start Auger Command will be ignored until the timer times out.

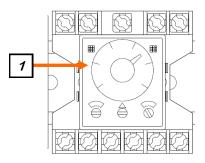
13. SLIDE GATE ACTUATOR CORD: Connect PJ7105 cord to the gate actuator.

<u>14. AUGER MOTOR RECEPTACLE (1 PHASE ONLY)</u>: Connect the auger motor to the PJ7005 receptacle.

15. AUGER MOTOR CORD (3 PHASE ONLY): Connect PJ7005 cord to auger motor.

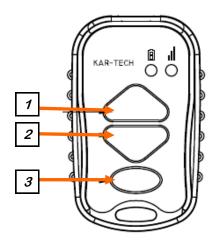
Timer for Gate Close Command

<u>1. TIMER:</u> ONLY MODIFY WITH POWER REMOVED FROM THE PANEL FOLLOW ALL LOCK OUT AND TAG OUT REQUIREMENTS. The Timer is located inside of the control panel and is used to control how long the Gate Close and Auger Time Out Command will stay active. This is adjusted by turning the knob on the timer. The default setting is for 12 seconds.





REMOTE CONTROL COMMANDS FOR ALL CONTROL PANELS



<u>**1. UP BUTTON:</u>** When this momentary button is pressed this will issue the Open Gate Command / Open Gate & Start Auger Command.</u>

<u>2. DOWN BUTTON</u>: When this momentary button is pressed this will issue the Close Gate Command / Close Gate & Start Auger Command.

<u>3. PROGRAM BUTTON</u>: This button is not used for the control panels. Please See Kar-Tech for additional information.



OPERATION

- 1. Turn the panel on.
- 2. Press the Open Gate Command.
- 3. Begin feeding fertilizer into the auger (if equipped) or other receptacle.
- 4. When complete Press the Close Gate Command



WARNING DO NOT leave product in the Fertilizer Bin Minor for extended periods of time as moisture could be absorbed causing the product to solidify. When the machine is started and the drive assembly is bound and unable to move, it will fail.

> Failures caused by these actions will not be covered under the factory warranty (see page 31).



TROUBLESHOOTING E

Below is a table describing the most frequent mechanical problems and solutions with the USC Fertilizer Bin Minor. For further assistance, contact USC at (785) 431-7900.

Problem	Possible Cause	Solution
Gate will not open.	 Gate not getting power. Product built up in gate causing it to seize 	 Check connections to gate. Disconnect actuator from gate and try to open manual- ly to free up gate.
Auger will not turn.	 Auger not getting power. Product is binding in the tube. 	 Check connections to gate. Clean out auger tube to free up auger.
Panel will not power on	 No power supplied. Panel is powered off. Breaker is tripped 	 check power source and requirements Turn power switch to ON. Check and reset breakers.



MAINTENANCE F

Proper maintenance of the Fertilizer Bin Minor is critical for peak performance, reliability and accuracy of this system. The following is a guideline for the type of maintenance and servicing that should be performed on this unit. Your environment and uses may require additional maintenance and service beyond this list to assure a reliable and safe unit. The operator of this unit has ultimate responsibility to identify areas of concern and rectify them before they become a hazard or safety issue. There is no substitute for a trained, alert operator.



Do not put this unit into operation with any questionably maintained parts. Poor performance or a hazard may occur.

GREASING

Use an SAE multipurpose high temperature grease with extreme pressure (EP) performance. Also acceptable is an SAE multipurpose lithium-based grease.

- 1. Use a Maintenance Checklist to keep record of all scheduled maintenance.
- 2. Use a hand-held grease gun for all greasing.
- 3. Wipe grease fitting with a clean cloth before greasing to avoid injecting dirt and grit.
- 4. Replace and repair broken fittings immediately.



If fittings will not take grease, remove and clean thoroughly. Also clean lubricant passageway. Replace fitting if necessary.

CONTROL PANEL

- 1. Check and tighten wire connections.
- 2. Check quick connects on bottom of control panel.
- 3. Check to see if relays, timers and/or breakers are tripped.
- 4. Check quick connects on end of Auxiliary cord.
- 5. Check relay and fuse holder.
- 6. Check power cords for cuts or frays and ensure ground is present.



<u>BIN</u>

- 1. Periodically clean out any build up of dry material in the hopper.
- 2. Inspect the roll tarp for any tears or frays.
- 3. Grease the u-joint on the roll tarp.
- 4. Check gate to ensure rollers are functioning and gate opens and closes all the way.

<u>AUGER</u>

- 1. Grease top and lower bearings on auger
- 2. Inspect oil level in gearbox.
- 3. Clean out any build up of material in the auger.





When storing the Fertilizer Bin Minor for long periods of time, the following procedure must be followed to reduce the chance of rust, corrosion and fatigue of the equipment. You can also use these steps when storing the machine for the winter.



A dust mask and protective rubber gloves shall be used when cleaning the machine.

- 1. Disconnect power to the machine.
- 2. Clean out the bin of any debris (compressed air may be used).
- 3. After the machine is thoroughly cleaned, grease the bearings as directed in the maintenance section.
- 4. Roll tarp over the bin and strap down to prevent tarp from coming loose in high winds.
- 5. Clean out auger of any dry material.



NOTES:



LIMITED WARRANTY SECTION

USC, LLC, MANUFACTURER WARRANTY ON SEED TREATING EQUIPMENT

01AUG22

USC, LLC, (Manufacturer) warrants its equipment as follows:

1.Limited Warranty: Manufacturer warrants that the Products sold hereunder will be free from defects in material and workmanship for a period of 18 months from date of shipment by Manufacturer for all seed treating equipment and a period of 12 months from date of shipment for all grain and fertilizer handling equipment.

If the Products do not conform to this Limited Warranty during the warranty period, Buyer shall notify Manufacturer in writing (on the approved USC warranty claim form) of the claimed defects and demonstrate to Manufacturer satisfaction that said defects are covered by this Limited Warranty (through pictures, video or other objective data). If the defects are properly reported to Manufacturer within the warranty period, and the defects are of such type and nature as to be covered by this warranty, Manufacturer shall, at its expense, furnish replacement Products or, at Manufacturer's option, replacement parts for the defective products. Shipping and installation of the replacement Products or replacement parts shall be at the Buyer's expense.

All replacement parts orders through Manufacturer will carry their specific manufacturer's standard warranty. There is no warranty on replacement parts manufactured by Manufacturer. Manufacturer will not extend any warranty due to replaced parts. The end user is responsible for all shipping and handling expenses for parts returned to Manufacturer under this section which may or may not be included in that specific warranty. Manufacturer will pay shipping expense between USC and its vendor.

2.0ther Limits: THE FOREGOING IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A

PARTICULAR PURPOSE. Manufacturer does not warrant against damages or defects arising from improper installation (where installation is by persons other than Manufacturer), against defects in products or components not manufactured by Manufacturer, or against damages resulting from such non-Manufacturer made products or components. Manufacturer passes on to the Buyer the warranty it received (if any) from the maker of such non-Manufacturer made products or components. This warranty also does not apply to Products upon which repairs and / or modifications have been affected or attempted by persons other than pursuant to written authorization by Manufacturer. This includes any welding on equipment which could damage electrical components. Manufacturer does not warrant against injuries or damages resulting from misuse and / or abuse of Products, improper storage or handling, acts of nature, effects of weather, including effects of weather due to outside storage, accidents, or damages incurred during transportation by common carrier or Dealer/customer arranged freight. Any replacement or repair covered under this warranty will not extend the warranty period. The remainder of the manufacturer's warranty will remain in force until stated expiration.

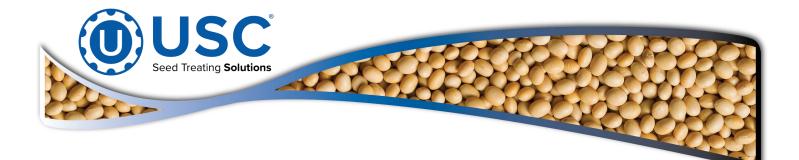
3. Exclusive Obligation: THIS WARRANTY IS EXCLUSIVE. The sole and exclusive obligation of Manufacturer shall be to repair or replace the defective Products in the manner and for the period provided above. Manufacturer shall not have any other obligation with respect to the Products or any part thereof, whether based on contract, tort, strict liability or otherwise. Under no circumstances, whether based on this Limited Warranty or otherwise, shall Manufacturer be liable for lost profits, lost revenue, lost sales (whether direct or indirect damages), incidental, special, punitive, indirect or consequential damages. Buyer shall make no claims for renumeration for any loss as a result of USC equipment and USC shall reject any and all claims that may arise as stated herein.

4.Other Statements: Manufacturer's employees or representatives' oral or other written statements do not constitute warranties, shall not be relied upon by Buyer, and are not a part of the contract for sale or this limited warranty. The USC Warranty Manager is the final decision point for all warranty claims.

5. Return Policy: Approval is required prior to returning goods to Manufacturer irrespective of warranty claim. Manufacturer may give a credit, less a 15% restocking fee, for goods that are returned in new, sellable condition. Items returned for warranty that are found to be not covered by the warranty will remain the property of the Buyer. The Buyer will have the ability to have part returned at their expense or, if in new, sellable condition, receive a credit less a 15% restocking fee and less any USC paid freight for its return.

6.Entire Obligation: This Limited Warranty states the entire obligation of Manufacturer with respect to the Products. If any part of this Limited Warranty is determined to be void or illegal, the remainder shall remain in full force and effect. Other terms included in Manufacturer's Terms of Sale will also apply.





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