



# UB & UX 4" Series

## Utility Grain Auger Operator and Assembly Manual

This manual applies to:

AGI Westfield UB411, UX405, UX410

AGI UB411, UX405, UX410

AGI Hutchinson UB411, UX405, UX410

AGI Mayrath UB411, UX405, UX410



Read this manual before using product. Failure to follow instructions and safety precautions can result in serious injury, death, or property damage. Keep manual for future reference.

Part Number: 30264 R2

Revised: October 2024

Original Instructions

This product has been designed and manufactured to meet general engineering standards. Other local regulations may apply and must be followed by the operator. All personnel must be trained in the correct operational and safety procedures for this product. Use the sign-off sheet below to record initial and periodic reviews of this manual with all personnel.

[illegible]

# CONTENTS

<b>1. Introduction .....</b>	<b>5</b>
1.2 Intended Use .....	6
1.2.1 Misuse .....	6
<b>2. Safety.....</b>	<b>7</b>
2.1 Safety Alert Symbol and Signal Words.....	7
2.2 General Safety Information.....	7
2.3 Rotating Flighting Safety .....	8
2.4 Overhead Power Lines .....	8
2.5 Rotating Parts Safety.....	8
2.6 Work Area Safety .....	8
2.7 Guards Safety .....	9
2.8 Drives and Lockout Safety.....	9
2.8.1 Electric Motor Safety.....	9
2.9 Personal Protective Equipment.....	10
2.10 Safety Equipment .....	11
2.11 Safety Decals .....	11
2.12 Decal Installation/Replacement.....	11
2.13 Safety Decal Locations and Details .....	11
<b>3. Assembly .....</b>	<b>16</b>
3.1 Assembly Safety .....	16
3.2 Install the Tube/Flight Extensions.....	16
3.3 Install the Intake Assembly .....	17
3.4 Install the Hopper Assembly (Optional).....	18
3.5 Install the Head Drive Assembly .....	19
3.6 Install the Feed Control Assembly (Optional) .....	20
3.7 Install the Swivel Mount Assembly (Optional).....	21
3.8 Site Installation Procedures .....	22
<b>4. Operation .....</b>	<b>23</b>
4.1 Operation Safety .....	23
4.2 Start-up and Break-in .....	23
4.3 Operation — Electric Motor Models .....	24
4.4 Emergency Shutdown .....	24
4.5 Restarting with a Full Tube .....	24
4.6 Handling Fertilizer .....	24
4.7 Shutdown .....	24
4.8 Extended Shutdown / End of Season.....	25
<b>5. Maintenance .....</b>	<b>26</b>
5.1 Maintenance Safety .....	26
5.2 Maintenance Schedule .....	26
5.3 Visual Inspection .....	27
5.4 Lubricate the Equipment.....	27
5.5 Clean and Wash the Equipment .....	27
5.6 Tension the Drive Belts .....	28
5.7 Align the Drive Belts.....	28
5.8 Replace the Drive Belts .....	28

6. Troubleshooting..... 29

7. Specifications ..... 31

8. AGI Limited Warranty..... 32

# 1. Introduction

Follow the instructions in this manual for safe use of this utility auger. Following proper operation and maintenance will help to keep the utility auger running in optimal condition.

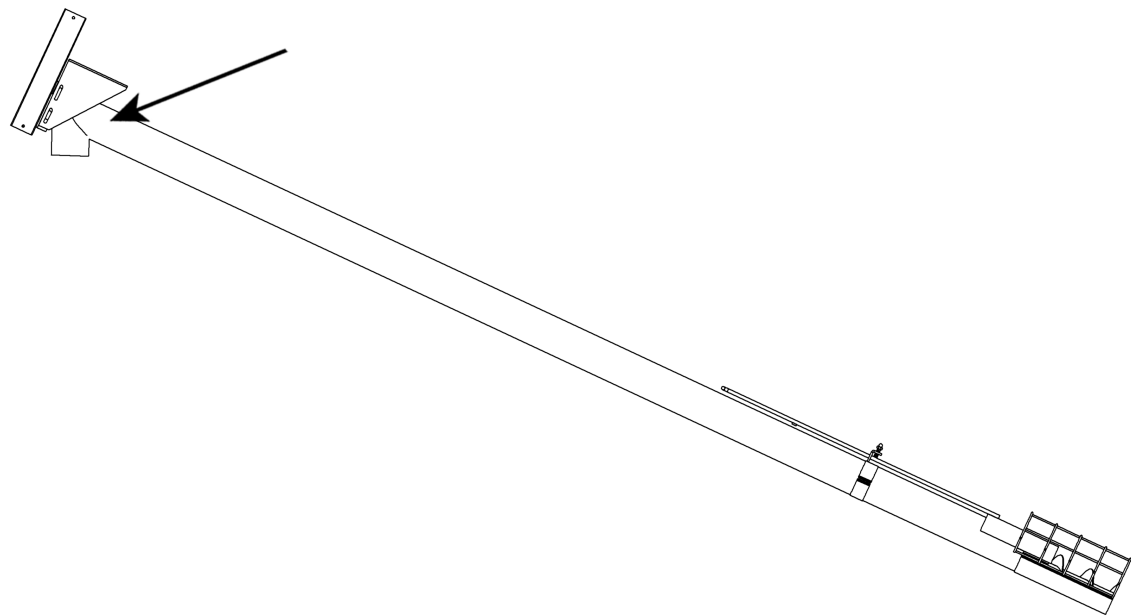
Keep this manual handy for frequent reference and to review with new personnel. A sign-off form is provided on the inside front cover for your convenience. If any information in this manual is not understood or if you need additional information, please contact AGI or your representative for assistance.

This manual should be regarded as part of the equipment.

## 1.1. Serial Number Location

The serial number location for your utility auger is shown in the figure below. Have the serial number ready when ordering parts or requesting service or other information. Record information in the table below for easy reference.

Model Number	
Serial Number	
Date Received	



## 1.2. Intended Use

---

The utility auger is intended for use as listed below and described throughout this manual. Use in any other way is considered contrary to the intended use and is not covered by the warranty.

### **Intended use for the utility auger**

- Handling grain, pulse crops, treated seeds, or other similar materials.

### ***1.2.1 Misuse***

Do not install/use the utility auger for/with:

- transferring material other than dry, free-flowing grains.
- lifting or using as a hoist or crane.

## 2. Safety

### 2.1. Safety Alert Symbol and Signal Words

---



This safety alert symbol indicates important safety messages in this manual. When you see this symbol, be alert to the possibility of injury or death, carefully read the message that follows, and inform others.

**Signal Words:** Note the use of the signal words **DANGER**, **WARNING**, **CAUTION**, and **NOTICE** with the safety messages. The appropriate signal word for each message has been selected using the definitions below as a guideline.



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



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



Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.



Indicates a potentially hazardous situation that, if not avoided, may result in property damage.

### 2.2. General Safety Information

---

Read and understand all safety instructions, safety decals, and manuals and follow them when operating or maintaining the equipment.

- Owners must give instructions and review the information initially and annually with all personnel before allowing them in the work area. Untrained users/operators expose themselves and bystanders to possible serious injury or death.
- Use for intended purposes only.
- Modification of the utility auger in any way without written permission from the manufacturer is not covered by the warranty.
- Follow a health and safety program for your worksite. Contact your local occupational health and safety organization for information.
- Follow applicable local codes and regulations.



## 2.3. Rotating Flighting Safety

---

### DANGER

- KEEP AWAY from rotating flighting.
- DO NOT remove or modify flighting guards, doors, or covers. Keep in good working order. Have replaced if damaged.
- DO NOT operate the utility auger without all guards, doors, and covers in place.
- NEVER touch the flighting. Use a stick or other tool to remove an obstruction or clean out.
- Shut off and lock out power to adjust, service, or clean.



## 2.4. Overhead Power Lines

---

### DANGER

- When operating or moving, keep utility auger away from overhead power lines and devices.
- The utility auger is not insulated.
- Electrocution can occur without direct contact.



## 2.5. Rotating Parts Safety

---

### WARNING

- Keep body, hair, and clothing away from rotating shafts, pulleys, belts, chains, and sprockets.
- Do not operate with any guard removed or modified. Keep guards in good working order.
- Shut off and lock out power source before inspecting or servicing machine.



## 2.6. Work Area Safety

---

### WARNING

- Have another trained person nearby who can shut down the utility auger in case of accident.
- Do not allow any unauthorized persons in the work area.
- Keep the work area clean and free of debris.



## 2.7. Guards Safety

### **WARNING**

- Keep guards in place. Do not operate with guard removed.
- Do not walk on, step on, or damage guards.
- Lock out power before removing a guard.
- Ensure all guards are replaced after performing maintenance.

## 2.8. Drives and Lockout Safety

Inspect the power source(s) before using and know how to shut down in an emergency. Whenever you service or adjust your equipment, make sure you shut down the power source and unplug or remove the key (as applicable) to prevent inadvertent start-up and hazardous energy release. Know the procedure(s) that applies to your equipment from the following power source(s). Ensure that all personnel are clear before turning on power to equipment.



### 2.8.1 Electric Motor Safety

#### **WARNING**

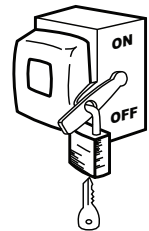
#### **Power Source**

- Electric motors and controls shall be installed and serviced by a qualified electrician and must meet all local codes and standards.
- Use a magnetic starter to protect the electric motor.
- You must have a manual reset button.
- Reset and motor starting controls must be located so that the operator has full view of the entire operation.
- Locate main power disconnect switch within reach from ground level to permit ready access in case of an emergency.
- Motor must be properly grounded.
- Ensure electrical wiring and cords remain in good condition; replace if necessary.

#### **Lockout**

- The main power disconnect switch should be in the locked position during shutdown or whenever maintenance is performed.
- If reset is required, disconnect all power before resetting motor.

SERVICE DISCONNECT



## 2.9. Personal Protective Equipment

---

The following Personal Protective Equipment (PPE) should be worn when operating or maintaining the equipment.

### Safety Glasses

- Wear safety glasses at all times to protect eyes from debris.



### Coveralls

- Wear coveralls to protect skin.



### Hard Hat

- Wear a hard hat to help protect your head.



### Steel-Toe Boots

- Wear steel-toe boots to protect feet from falling debris.



### Work Gloves

- Wear work gloves to protect your hands from sharp and rough edges.



### Dust Mask

- Wear a dust mask to prevent breathing potentially harmful dust.



### Hearing Protection

- Wear ear protection to prevent hearing damage.



## 2.10. Safety Equipment

---

The following safety equipment should be kept on site.

### Fire Extinguisher

- Provide a fire extinguisher for use in case of an accident. Store in a highly visible and accessible place.



### First-Aid Kit

- Have a properly-stocked first-aid kit available for use should the need arise, and know how to use it.



## 2.11. Safety Decals

---

- Keep safety decals clean and legible at all times.
- Replace safety decals that are missing or have become illegible. See decal location figures that follow.
- Replaced parts must display the same decal(s) as the original part.
- Replacement safety decals are available **free of charge** from your distributor, dealer, or factory as applicable.

## 2.12. Decal Installation/Replacement

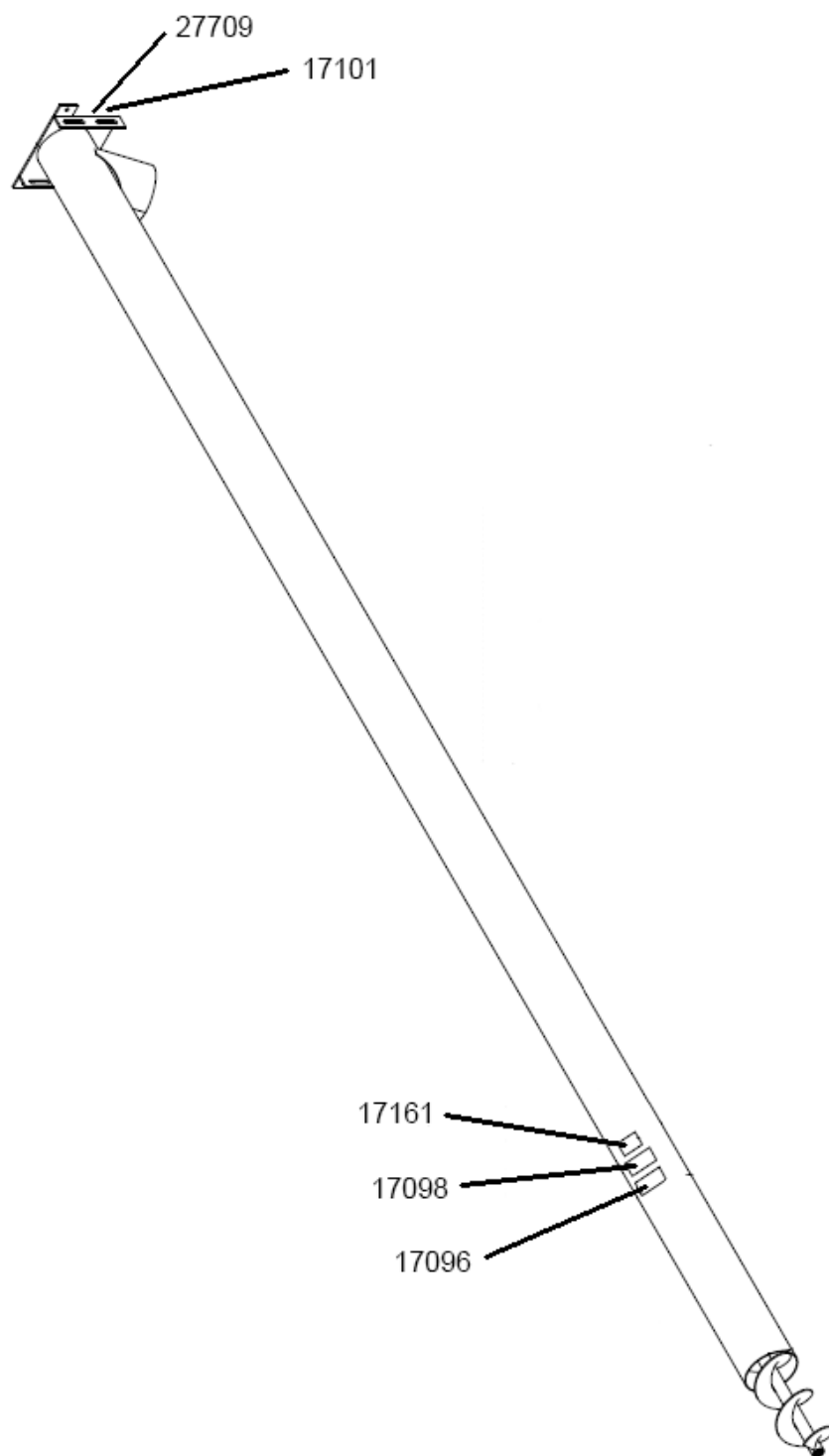
---

1. Decal area must be clean and dry, with a temperature above 50°F (10°C).
2. Decide on the exact position before you remove the backing paper.
3. Align the decal over the specified area and carefully press the small portion with the exposed sticky backing in place.
4. Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.
5. Small air pockets can be pierced with a pin and smoothed out using the decal backing paper.



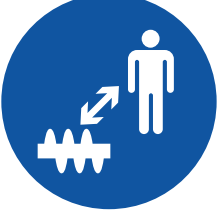

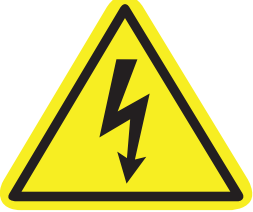
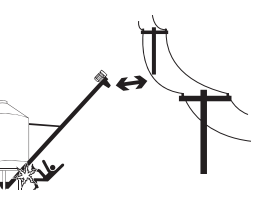
## 2.13. Safety Decal Locations and Details

---

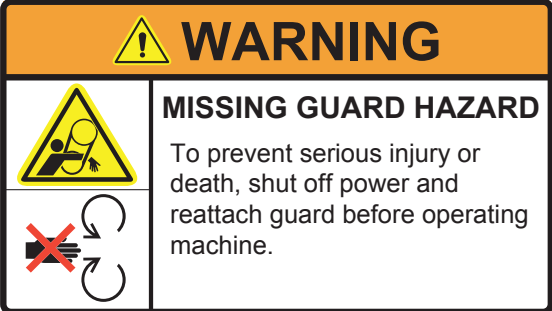

Replicas of the safety decals that are attached to the utility auger and their messages are shown in the figure(s) that follow. Safe operation and use of the utility auger requires that you familiarize yourself with the various safety decals and the areas or particular functions that the decals apply to, as well as the safety precautions that must be taken to avoid serious injury, death, or damage.

**Figure 1. Safety Decal Locations**




**Table 1. Safety Decals**

Part Number	Description
17098	<div data-bbox="414 268 963 1060"> <div data-bbox="414 268 963 342">  <b>DANGER</b> </div> <div data-bbox="414 352 963 583">   </div> <div data-bbox="414 594 963 1060"> <p><b>ROTATING FLIGHTING HAZARD</b></p> <p>To prevent death or serious injury:</p> <ul style="list-style-type: none"> <li>• KEEP AWAY from rotating auger flighting.</li> <li>• DO NOT remove or modify auger flighting guards, doors, or covers. Keep in good working order. Have replaced if damaged.</li> <li>• DO NOT operate the auger without all guards, doors, and covers in place.</li> <li>• NEVER touch the auger flighting. Use a stick or other tool to remove an obstruction or clean out.</li> <li>• Shut off and lock out power to adjust, service, or clean.</li> </ul> </div> </div>
17161	<div data-bbox="414 1102 963 1774"> <div data-bbox="414 1102 963 1176">  <b>DANGER</b> </div> <div data-bbox="414 1186 963 1417">   </div> <div data-bbox="414 1428 963 1774"> <p><b>ELECTROCUTION HAZARD</b></p> <p>To prevent death or serious injury:</p> <ul style="list-style-type: none"> <li>• When installing, keep equipment away from overhead power lines and devices.</li> <li>• Do not install equipment near overhead power lines and devices.</li> </ul> <p>This equipment is not insulated.</p> <p>Electrocution can occur without direct contact.</p> </div> </div>

**Table 1 Safety Decals (continued)**

Part Number	Description
27709	<div data-bbox="414 275 963 583">  </div>
17101	<div data-bbox="414 632 963 1276">  </div>

**Table 1 Safety Decals (continued)**

Part Number	Description
17096	<div data-bbox="412 273 964 1331"> <div data-bbox="412 273 964 342">  <b>WARNING</b> </div> <div data-bbox="412 348 964 583">   </div> <div data-bbox="435 600 837 632"> <p>To prevent serious injury or death:</p> </div> <div data-bbox="435 646 935 1310"> <ul style="list-style-type: none"> <li>• Read and understand the manual before assembling, operating, or maintaining the equipment.</li> <li>• Only trained personnel may assemble, operate, or maintain the equipment.</li> <li>• Children and untrained personnel must be kept outside of the work area.</li> <li>• Do not modify the equipment. Keep in good working order.</li> <li>• If the manual, guards, or decals are missing or damaged, contact factory or representative for free replacements.</li> <li>• Lock out power before performing maintenance.</li> <li>• To prevent equipment collapse or upending, support equipment tube while disassembling certain components.</li> <li>• Follow grain storage structure manufacturer's warnings when loading and unloading.</li> <li>• Electric motors must be grounded. Disconnect power before resetting overloads.</li> </ul> </div> </div>

# 3. Assembly

## 3.1. Assembly Safety

---

- Do not take chances with safety. The components can be large, heavy, and hard to handle. Always use the proper tools, rated lifting equipment, and lifting points for the job.
- Do not stand on, under, or near any component that is not secured.
- Carry out assembly in a large open area with a level surface.
- Always have two or more people assembling the utility auger.
- Make sure you have sufficient lighting for the work area.
- Stay away from overhead power lines and other obstructions during assembly. Contact with power lines can cause electrocution.

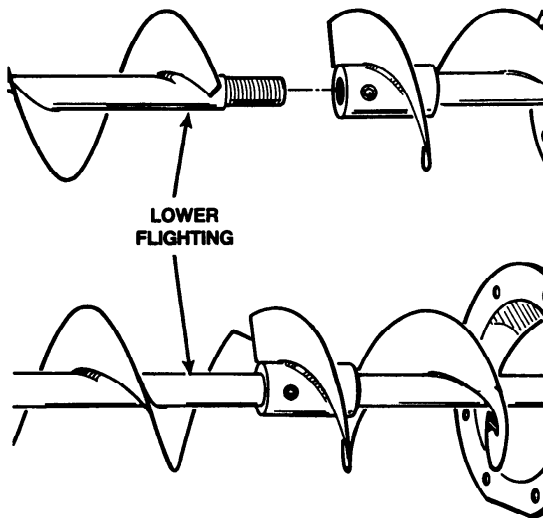
## 3.2. Install the Tube/Flight Extensions

---

**⚠ WARNING** Do not drop. Damage to equipment or serious personal injury will result.

1. When extending the basic upper section, align the upper and lower tube sections on a flat surface.
2. Connect the flighting by screwing the lower flight into the threaded pipe on upper flight until flight ends butt together and flighting spiral matches up.

**Figure 2. Connecting the flighting**

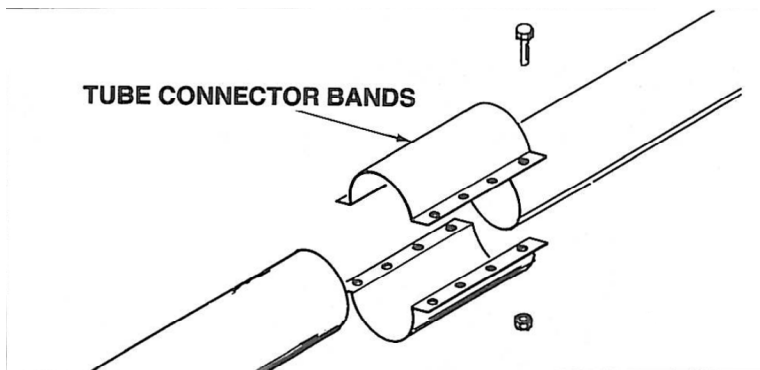


3. Slide the tube sections together.
4. Connect the tube sections with 2 half-tube connector bands.



5. Secure the tube connector bands with 5/16" x 3/4" bolts and flange lock nuts.

**Figure 3. Installing tube connector bands**

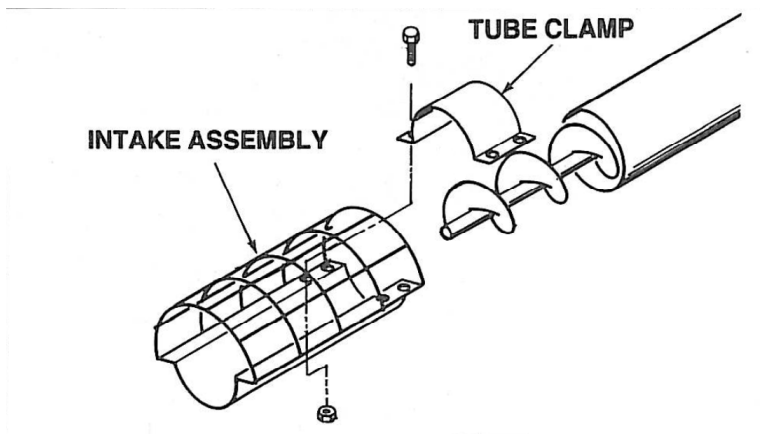


### 3.3. Install the Intake Assembly

---

1. Attach the guarded intake assembly to lower end of auger tube.
2. Use a tube clamp and four 5/16" x 3/4" bolts and flange lock nuts.

**Figure 4. Installing the Guarded Intake Assembly**

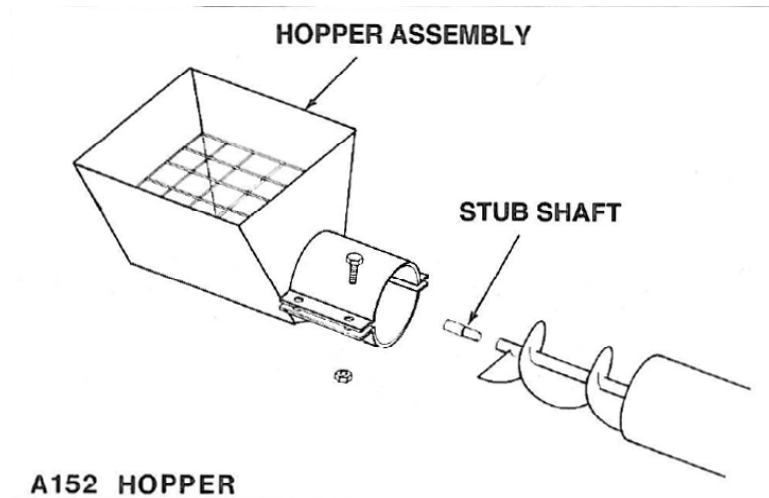


### 3.4. Install the Hopper Assembly (Optional)

---

1. Screw the stub shaft into the threaded pipe on the lower end of the auger flight.
2. Slide the hopper over the lower flighting.
3. Insert the stub shaft into the bearing at the back of the hopper.
4. Secure the assembly to the auger tube with four 5/16" x 3/4" bolts and flange lock nuts.

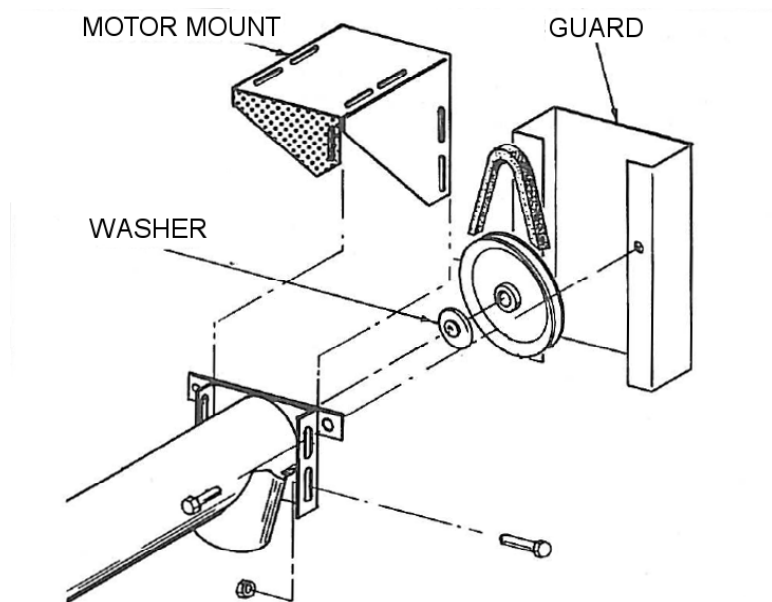
**Figure 5. Installing the Hopper Assembly**



## 3.5. Install the Head Drive Assembly

1. Remove all dirt from the upper end of flight shaft.
2. Insert the woodruff key.
3. Slide the pulley onto the flight shaft with the hub facing the auger.  
The washer should already be in place.

**Figure 6. Installing the Head Drive Assembly**

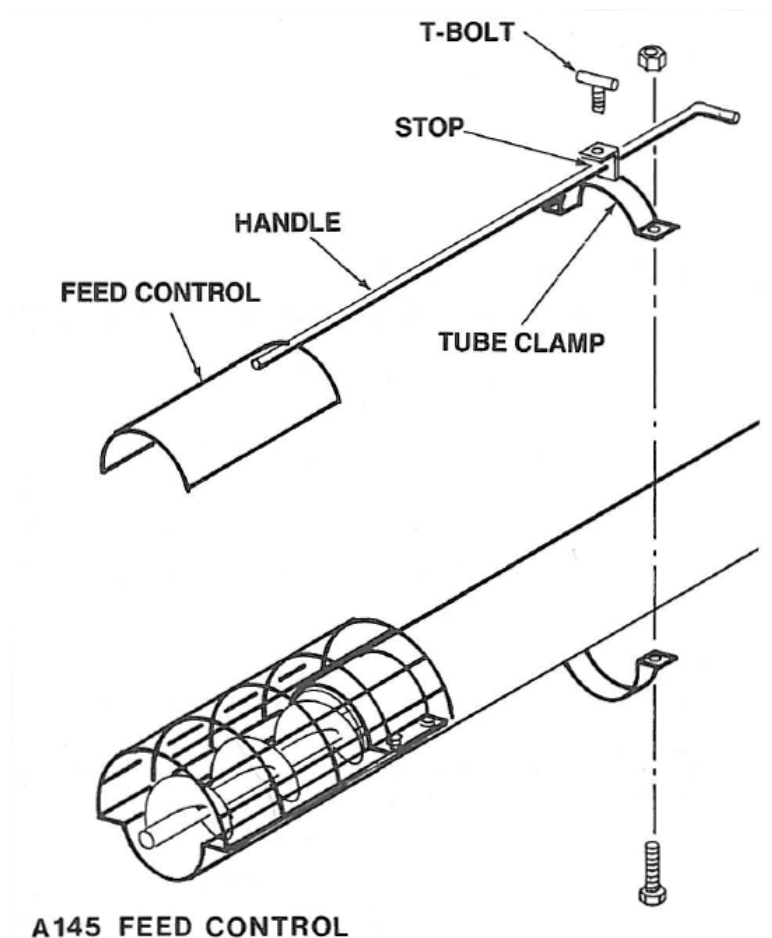


4. Tighten the set screws.
5. Place the motor mount over the top end of the auger.
6. Secure with four 5/16" x 3/4" bolts and flange lock nuts.
7. Place the pulley guard over the pulley.
8. Secure it with two self-tapping screws.
9. Mount the electric motor.
10. Align the two pulleys with a straight edge.
11. Adjust the belt tension.
  - The correct operating tension is the lowest tension at which the belts will not slip under peak load conditions.
  - Recommended pulley size for a 1750 rpm motor is 2".

### 3.6. Install the Feed Control Assembly (Optional)

1. Loosely attach the tube clamp to the auger tube with two 5/16" x 3/4" bolts and flange lock nuts. Do not tighten at this time.

Figure 7. Installing the Feed Control Assembly



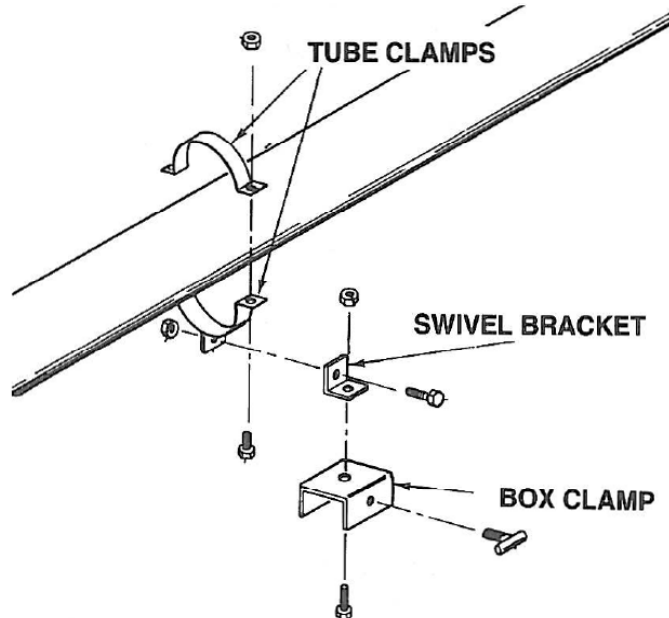
2. Thread the control handle through the tube clamp.
3. Place the feed control slide beneath the intake guard.
4. Seat the tube clamp against the stop on the control handle.
5. Lock it into place with the T-bolt on the clamp.
6. Slide the feed control assembly down until its lower end is 1/2" past the lower end of the auger tube.
7. Tighten the tube clamp.

### 3.7. Install the Swivel Mount Assembly (Optional)

---

1. Attach the half tube clamps with two 5/16" x 3/4" bolts and flange lock nuts.

**Figure 8. Installing the Swivel Mount Assembly**



#### **A146 SWIVEL MOUNT**

2. Attach the swivel bracket to the bottom tube clamp with one 5/16" x 3/4" bolt and lock nut.
3. Screw the T-bolt into the box clamp.
4. Attach the box clamp to the swivel bracket with one 5/16" x 3/4" bolt and lock nut.

## 3.8. Site Installation Procedures

---

**DANGER**

Keep equipment away from overhead power lines and obstructions. Machine is not insulated and electrocution may occur without direct contact. Failure to keep away will result in serious injury or death.

Site installation procedures for any utility auger will vary depending on auger length, location, and intended use. Because of these variables, the following instructions are meant to be used as a guide only. It is the installer's responsibility to ensure that the auger is properly braced and/or supported before operating, with the primary concern being on safety.

### Before and During Site Installation

1. Check that all bolts are tightened as per instructions.
2. Ensure that all safety devices are in place and secure.
3. Use a safe lifting device such as a front-end loader or forklift to raise and position the auger, ensuring that the entire area in line of travel is clear of any obstructions or electrical wires.

### Once the Auger is in Position:

1. Where possible, secure both the intake and discharge ends of the auger to prevent upending or upsetting from factors such as high wind, vibration, or grain weight shift.
2. If the auger is used in a free standing position, it must be braced and/or supported to prevent upending or upsetting from factors such as high wind, vibration, or grain weight shift.
3. Ensure that on/off switches are conveniently located and marked in case of emergency.

# 4. Operation

For optimal operation, follow these safety precautions, checklists, and instructions.

## 4.1. Operation Safety

---

### **WARNING**

- Keep away from rotating and moving parts, including the flighting, drive components, shafts, and bearings.
- Do not enter the grain bin while the utility auger is operating.
- Always operate with guards, covers, and shields in place.
- Have another trained person nearby who can shut down the equipment in case of accident.
- Keep the work area clear of bystanders.
- Keep the work area clean and free of debris.
- Ensure maintenance has been performed and is up to date.
- Support the auger securely to prevent upending or upsetting.

## 4.2. Start-up and Break-in

---

Check the following during the first hours of operation.

1. Check that the utility auger intake and discharge areas are free of obstructions.

### **NOTICE**

Foreign objects can damage the utility auger. Remove any obstructions from the intake and discharge areas before operating the utility auger.

2. Visually inspect the utility auger, see Visual Inspection in Maintenance Section.
3. Check tightness of all bolts/nuts, fasteners, and hardware (re-torque if necessary).
4. Ensure adequate power is supplied to operate the utility auger, see [Section 7. – Specifications on page 31](#).
5. Start the utility auger and operate normally.
6. Be aware of unusual sounds. If any are heard, determine the source and stop the utility auger. Lock out the power and correct the problem before resuming work. If you are unsure of the problem or procedure, contact your local dealer.

### **Note**

The auger may run rough until the tube is polished.


7. Do not run the utility auger for long periods of time without material because it increases wear. Try to run only when moving material.
8. Near the end of the load, decrease the flow of grain until auger is clear.
9. Stop the utility auger when it is empty of grain, lower fully and lockout power.

### **Important**

After the initial start-up and inspection, the utility auger should be shut down and visually inspected (see Maintenance Section) after approximately ten hours of operation.

### 4.3. Operation — Electric Motor Models

---

 When equipped with an Electric Motor:

1. Turn the electric motor on.
2. Run until the utility auger is empty.
3. Turn off motor and lock out power source.

### 4.4. Emergency Shutdown

---

In an emergency situation:

1. Shut down the power source immediately and lock out all power.
2. Stop the flow of material (if applicable).
3. Ensure the machine components come to a stop before inspecting.
4. Correct the emergency situation before resuming work.

### 4.5. Restarting with a Full Tube

---

When the utility auger is shut down inadvertently or due to an emergency, the tube may still be filled with grain.

1. With the power source locked out, remove as much of the grain as possible from the tube and intake using a shop vacuum or other tool. Do not use your hands.

**NOTICE**

Starting under load may result in damage to the utility auger.

2. Close or replace guards or covers before restarting.
3. If the auger tube is full of grain, it may be necessary to tighten the drive belts slightly to handle the heavier than normal loads.
4. Once the utility auger has been started, resume normal operation.

### 4.6. Handling Fertilizer

---

If the auger has been used to move fertilizer, it should be cleaned out to prevent corrosion. The easiest way to prevent corrosion is to run a load of grain through it after moving fertilizer or wash the utility auger.

### 4.7. Shutdown

---

When operation has been completed:

1. Once the utility auger is clear of grain, lock out the power source.
2. Clean out any remaining grain from the utility auger with a vacuum or sweep out.
3. Clean the entire work area.



## 4.8. Extended Shutdown / End of Season

---

After the season's use, the utility auger should be thoroughly inspected. Repair or replace any worn or damaged components and complete maintenance as described in [Section 5. – Maintenance on page 26](#) to prevent any unnecessary downtime at the start of the next season. Protect the motor from weather by covering it with a waterproof tarpaulin.

# 5. Maintenance

Proper maintenance will improve safety, efficiency, and will keep the utility auger operating reliably.

## 5.1. Maintenance Safety

### WARNING

- Keep components in good condition. Follow the maintenance procedures.
- Ensure the service area is clean, dry, and has sufficient lighting.
- Do not modify any components without written authorization from the manufacturer. Modification can be dangerous and result in serious injuries.
- Shut down and lock out power before maintaining equipment.
- After maintenance is complete, replace all guards, service doors, and/or covers.
- Use only genuine AGI replacement parts or equivalent. Use of unauthorized parts will void warranty. If in doubt, contact AGI or your local dealer.




## 5.2. Maintenance Schedule

Follow the Maintenance Schedule below. Keep good records of the hours the utility auger has been operated and the maintenance performed.

<b>Daily:</b>
<a href="#">Section 5.3 – Visual Inspection on page 27</a>
<a href="#">Section 5.4 – Lubricate the Equipment on page 27</a>
<b>Annually:</b>
<a href="#">Section 5.5 – Clean and Wash the Equipment on page 27</a>
<b>As Required:</b>
<a href="#">Section 5.6 – Tension the Drive Belts on page 28</a>
<a href="#">Section 5.7 – Align the Drive Belts on page 28</a>
<a href="#">Section 5.8 – Replace the Drive Belts on page 28</a>

## 5.3. Visual Inspection

---

 **WARNING** Lock out power before inspecting.

Check the following during a visual inspection:

- Ensure all guards are in place and in good working order.
- Examine the utility auger for damage or unusual wear.
- Check tightness of bolts/nuts, fasteners, and hardware (re-torque if necessary).
- Be sure all safety decals are in place and are legible.
- Check that the discharge and intake area are free of obstructions.
- Check all operating, lifting, and transport components. Replace damaged or worn parts before using the auger.
- Inspect auger supports.

## 5.4. Lubricate the Equipment

---

Your equipment can operate at top efficiency only if clean fluids and lubricants are used. Use clean containers to handle all fluids and lubricants. Store them in an area protected from dust, moisture, and other contaminants.

1. Wipe the grease fittings with a clean cloth before greasing to avoid injecting dirt and grit.
2. Use a hand-held grease gun for all greasing.
3. If fittings will not take grease, remove and clean thoroughly.
4. Replace fittings if they are broken or will not accept grease.
5. If Intake Bushing is present in your auger, lubricate it.

Use SAE multi-purpose high-temperature grease with extreme pressure (EP) performance. SAE multi-purpose lithium-based grease is also acceptable.

## 5.5. Clean and Wash the Equipment

---

1. Clean out excess grain from all areas of the utility auger.
2. Make sure water can drain from the utility auger tube and intake, then wash the tube with a water hose or pressure washer until all dirt, mud, debris, or residue is gone.

**Important**

Do not contact electronic controls with high pressure washer.

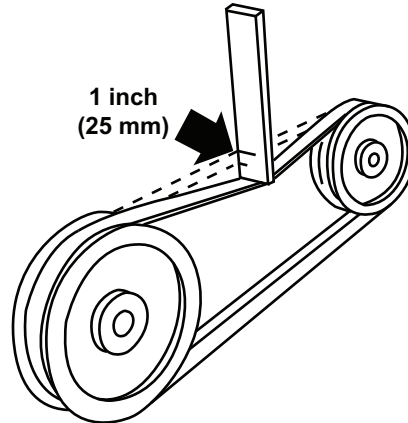
3. Provide sufficient time for the water to drain from the utility auger.

## 5.6. Tension the Drive Belts

---

1. Remove guard and push on the center of the belt span with a force of approximately 5 lb. The belts will deflect approximately 1" (25 mm) when properly tensioned.

**Figure 9. Typical Drive Belt Tensioning**



2. Tighten or loosen the drive belts (or idler pulley when equipped) to achieve the proper tension.

**Important**

The drive belt should be just tight enough to not slip on the drive pulley when operating. If the belt is too loose, it will slip, possibly causing a squeaking sound and slowing the belt down. If the belt is too tight, it will cause excess wear.

3. Reattach and secure guard. Start system to ensure proper operation.

## 5.7. Align the Drive Belts

---

1. Lay a straight edge across the pulley faces to check the alignment.
2. Use the pulley hub to move the pulley to the required position for alignment.
3. Tighten the hub bolts to secure pulley on the drive shaft.
4. Check the belt tension.
5. Reattach and secure the guard.

## 5.8. Replace the Drive Belts

---

1. Remove the guard.
2. Fully loosen the drive belts.
3. Remove and replace the old belts.
4. Tighten the drive belts as described in Belt Tension.
5. Align the drive belts as described in Belt Alignment.
6. Reattach and secure the guard.

# 6. Troubleshooting

Find causes and solutions to common problems that can be encountered.

**⚠ WARNING** Shut down and lock out all power sources before diagnosing any of the causes or attempting any of the solutions below.

The following section covers some causes and solutions to some of the problems that may be encountered.

If there is a problem that is difficult to solve, even after having read through this section, please contact your representative or AGI. Have this manual and the serial number available.

Auger

Problem	Cause	Solution
Excessive noise or vibration. *Remember to follow proper break-in procedures—flighting may run rough until tube is polished. If noise is extreme from outset or continuous after several loads of grain are fed, continue with troubleshooting.	Flighting peeled back due to plugging.	Inspect spout end of utility auger for flighting condition. Remove and replace flighting sections as necessary.
	Bent flighting sections.	Support utility auger and remove all flighting sections. Check for straightness of flight stubs by rolling across flat concrete section. Straighten stub or replace as necessary. Take care not to bend flighting when reinstalling.
	Obstruction in utility auger tube.	Visually inspect for cloth or trash wrapped around flighting, or buildup of gum from oily crops such as flax or canola.
Premature wear on utility auger tubes.	Utility auger being run at low capacity or empty for extended period of time.	Frequently occurs on farms using grain wagons. Utility auger should not be left unattended when filling bins.
	Bent flighting.	
	Flighting allowed to wear beyond normal point of replacement.	When flighting becomes razor thin at intake, replacement is critical. Since flight material is double thickness at welded lap joints, high spots on flight occur and can accelerate spot tube wear.

## Drive

Problem	Cause	Solution
Drive belts jumping off pulleys.	Motor misaligned	Ensure drive and driven pulleys are correctly aligned
	Belts mismatched	Check Specifications section for correct belt sizes and only replace in pairs
	Belt tension inadequate	Adjust tension
	Using a lower horsepower motor than recommended	See Specifications for recommended motor sizes

# 7. Specifications

**Table 2. Utility Auger Specifications & Sizes**

<b>Specification</b>		<b>4"</b>
Upper Section Length		11'
Tube Extension Length		5' and 10'
Pulley Size		8" Single
Belt Size		A33
Flighting		3-1/2" OD
Top Bearing		7/8" Oil Impregnated Wood
Tube Connectors		Bolt-On Tube Clamp
Flight Connector		Threaded Coupler
Recommended Pulley Size for 1750 RPM Motor		1A 2"—2-1/4"
Hopper Size	Length	12"
	Width	10"
	Depth	10-1/2"

**Table 3. Horsepower Requirements for 4" Augers**

Length of Auger	Electrical HP
11'	3/4
16' to 21'	3/4–1
26' to 31'	1–1-1/2
36' to 41'	1-1/2–2
46' to 51'	2–3

## Note

Approximate horsepower requirements under normal conditions. When augering full tube of high moisture grain, additional horsepower will be needed.

**Table 4. Pulley Specifications for 4" Augers**

Specification	Value
Recommended pulley size for 1750 RPM motors	1A 2"—2-1/4"
Flight Speed	440–490
Auger Pulley	1A 8"
Belt(s)	1—A33

# 8. AGI Limited Warranty

This warranty relates to AGI Augers (the “Product”) sold by AGI, (referred to herein as the “Seller”) and applies only to the first user of the Product (meaning a purchaser directly from the Seller or from an authorized dealer or distributor of the Product, referred to herein as the “Buyer”).

This warranty shall only be effective if properly registered with the Seller in accordance with information provided to the Buyer at the time of sale.

1. The Seller warrants to the Buyer that the Product is free from defects in material and workmanship **under normal and reasonable use.**
2. This warranty applies only to defects in materials and workmanship and not to damage incurred in shipping or handling, through normal wear and tear, or damage due to causes beyond the control of the Seller such as lightning, fire, flood, wind, earthquake, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration, improper assembly, improper installation, improper maintenance or improper repair of the Product.
3. **The warranty period for the Product shall be two years from delivery of the Product to the Buyer where the Product is used in a normal farm operation. First year of warranty coverage of parts and labour, second year warranty coverage of parts only. Warranty period for the Product shall be 90 days from delivery of the Product to the Buyer where the Product is used in a commercial operation.** In the event that any part incorporated into the Product is manufactured and sold to the Seller by a third party vendor, such part is only warranted to the extent of the warranty given by that third party.
4. The obligations set forth in this warranty are conditional upon the Buyer promptly notifying the Seller of any defect and completing reasonably required documentation and, if required, promptly making the Product available for correction. The Seller shall be given reasonable opportunity to investigate all claims and no Product shall be returned to the Seller or part disposed of until after inspection and approval by the Seller and receipt by the Buyer of written shipping instructions, with transportation charges prepaid.
5. Upon return of the Product, or such part of the Product that requires correction, the Seller shall, at the Seller’s option, either repair or replace the Product or such part. The Seller shall replace or attempt to repair and return the Product or such part within a reasonable period of time from receipt of an approved warranty claim from the Buyer. If the Seller is unable to repair or replace the Product, the Buyer shall be entitled to a credit note in the amount of the purchase price for the Product.
6. The total liability of the Seller on any claim, whether in contract, tort or otherwise, arising out of, connected with, or resulting from the manufacture, sale, delivery, repair, replacement or use of the Product or any part thereof **shall not exceed the price paid for the Product** and the Seller shall not be liable for any special indirect, incidental or consequential damages caused by reason of the installation, modification, use, repair, maintenance or mechanical failure of the Product. **Consequential or special damages as used herein include, but are not limited to, lost or damaged products or goods, costs of transportation, lost sales, lost orders, lost income, increased overhead, labor and incidental costs and operational inefficiencies.**
7. **Notwithstanding anything contained herein to the contrary, the foregoing is the Buyer’s sole and exclusive remedy for breach of warranty by the Seller in respect of the Product. The Seller, for itself, its agents, contractors, employees and for any parent or subsidiary of the Seller, expressly disclaims all warranties, either express or implied, written or oral, including implied warranties of merchantability or fitness for a particular purpose and undertakes no obligation with respect to the conformity of the Product except as set out in the purchase agreement, if any, or marketing materials.**
8. The foregoing warranty is the entire warranty of the Seller to the Buyer and the Buyer shall not be entitled to rely upon any representation or warranty contained in any marketing material of the Seller in respect of the Product. The Seller neither assumes, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning the Product.

**WARRANTY VOID IF NOT REGISTERED**










AGI is a leading provider of equipment solutions for agriculture bulk commodities including seed, fertilizer, grain, and feed systems with a growing platform in providing equipment and solutions for food processing facilities. AGI has manufacturing facilities in Canada, the United States, the United Kingdom, Brazil, South Africa, India and Italy and distributes its products globally.



P.O. Box 39, Rosenort, Manitoba, R0G 1W0 Canada

**P** 866.467.7207 (Canada & USA) or 204.746.2396 | **F** 866.768.4852 | **E** [sales@grainaugers.com](mailto:sales@grainaugers.com)

AGGROWTH.COM      [aggrowthintl](https://www.aggrowthintl.com)     

©Ag Growth International Inc. 2024 | Printed in Canada

If you have any comments or questions on this manual, or find an error, email us at [comments@aggrowth.com](mailto:comments@aggrowth.com).  
Please include the part number listed on the cover page in your message.