

MKX² & HX² 10 Series

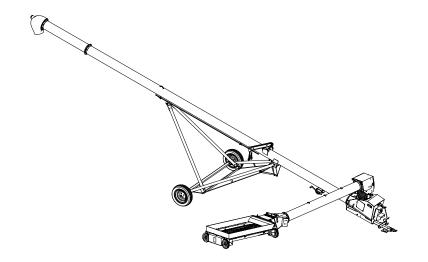
Swing-Away Grain Auger Operator's Manual

This manual applies to:

AGI Westfield MKX² 10 (36)

AGI Hutchinson HX² 10 (36)

AGI Mayrath HX² 10 (36)







Part Number: 31188 R3 Revised: March 2025

Original Instructions

Read this manual before using product. Failure to

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.

Date	Employee Name and Signature	Employer Name and Signature
	+	

CONTENTS

1. Int	roduction	5
	1.1 Serial Number Location	5
	1.2 Product Registration	6
	1.3 Intended Use	
	1.3.1 Misuse	6
2. Sa	fety	
	2.1 Safety Alert Symbol and Signal Words	
	2.2 General Safety Information	
	2.3 Rotating Flighting Safety	
	2.4 Overhead Power Lines	8
	2.5 Upending	
	2.6 Rotating Parts Safety	8
	2.7 Work Area Safety	9
	2.8 Guards Safety	10
	2.9 Raising and Lowering the Auger	10
	2.10 Hand Winch Safety	10
	2.11 Hydraulic Winch Safety	11
	2.12 Positioning the Auger	11
	2.13 Towing the Auger	12
	2.14 Drives and Lockout Safety	12
	2.14.1 PTO Driveline Safety	13
	2.14.2 Hydraulic Power Safety	14
	2.15 Tire Safety	15
	2.16 Personal Protective Equipment	15
	2.17 Safety Equipment	16
	2.18 Safety Decals	
	2.18.1 Decal Installation/Replacement	
	2.18.2 Safety Decal Locations and Details	17
	·	
3. Fe	atures	30
4. Tr	ansport	32
	4.1 Transport Safety	
	4.2 Transport Preparation	
	4.3 Connecting the Auger to the Towing Vehicle	
5. Pla	acement	35
	5.1 Placement Safety	35
	5.2 Positioning the Auger	35
	5.3 Hand Winch Operation	
	5.4 Hydraulic Winch Operation	38
	5.5 Auger-to-Tractor Hookup	
	5.6 Raising and Lowering the Intake Hopper	41
	5.7 Grain Hopper Positioning	42
	5.7.1 Electric Power Swing Operation	42
	5.7.2 Hydraulic Power Swing Operation	45
	5.8 Positioning the Tractor for Right Angle Drive Operation	46
6 0-	peration	40
0. UI	/EI & LIVI I	4Ö

6.1 Operation Safety	. 48
6.2 Start-up and Break-in	. 48
6.3 Operation — PTO Drive	. 49
6.3.1 PTO Operation — Forward and Reverse Modes	. 50
6.4 Safety Discharge Door	
6.5 Emergency Shutdown	
6.6 Restarting with a Full Tube	
6.7 Shutdown	. 51
6.8 Handling Fertilizer	
6.9 Storing the Auger	
7. Maintenance	
7.1 Maintenance Safety	
7.2 Maintenance Schedule	
7.3 Visually Inspect the Equipment	
7.4 Lubricate the Equipment	
7.4.1 Grease Points	
7.5 Inspect Hydraulic Hoses and Fittings	
7.6 Lubricate the Upper Bearing	
7.6.1 Single Nut Flight Tensioning	
7.6.2 Double Nut Flight Tensioning	
7.7 Inspect and Service the Hand Winch and Lift Cable	
7.8 Inspect and Service the Hydraulic Winch and Lift Cable	
7.9 Service the Pulleys	
7.10 Service the Swing Tube Coupler Chain	
7.11 Service the Gearbox Coupling Shaft	
7.12 Service the Boot and Hopper Chain Drive	
7.13 Check the Gearbox Oil	
7.13.1 Gearbox Access	
7.14 Change the Gearbox Oil	
7.15 Service the Landing Gear Power Swing Drive Chain	
7.16 Clean and Wash the Equipment	
7.17 Removable Hopper Mesh Guard	
7.18 Repack the Wheel Bearings with Grease	
7.19 Power Swing Remote Transmitter	
7.20 Inspect the Retroreflective Strips	. 69
8. Troubleshooting	. 70
9. Appendix	72
9.1 Power Swing Remote Transmitter Instructions	
9.2 Programming Receivers	
9.3 Open/Closed-Center Valve Conversion	
·	
10. Specifications	. 76
11. AGI Limited Warranty	. 77

1. Introduction

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

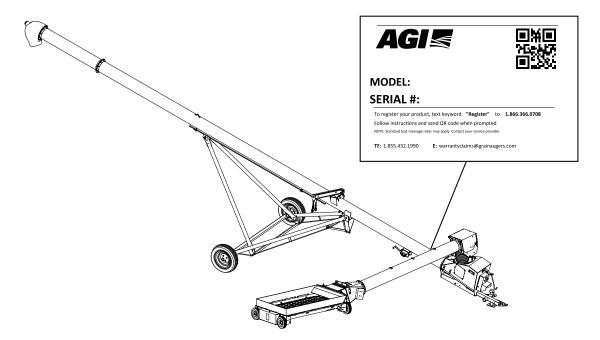
Keep this manual handy for frequent reference and to review with new personnel. A sign-off form is provided on the inside front cover for your convenience. If any information in this manual is not understood or if you need additional information, please contact AGI or your representative for assistance.

This manual should be regarded as part of the equipment.

1.1. Serial Number Location

The serial number location for your 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. Product Registration

Register the product to ensure warranty and to receive information about product safety recalls, repairs, and updates.

To register:

- 1. Go to warranty.aggrowth.io/register or scan the QR code.
- 2. On the website, scan the serial number QR code or manually enter the serial number.



1.3. Intended Use

The 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 auger

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

1.3.1 Misuse

Do not install/use the 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.

⚠ WARNING

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

⚠ CAUTION

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

NOTICE

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 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

A 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 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

A DANGER

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



2.5. Upending

⚠ WARNING

- Anchor intake end and/or support discharge end to prevent upending.
- Intake end must always have downward weight. Do not release until attached to tow bar or resting on ground.
- Do not raise intake end above tow bar height.
- Empty the auger and fully lower before moving.



2.6. Rotating Parts Safety

MARNING

- 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.

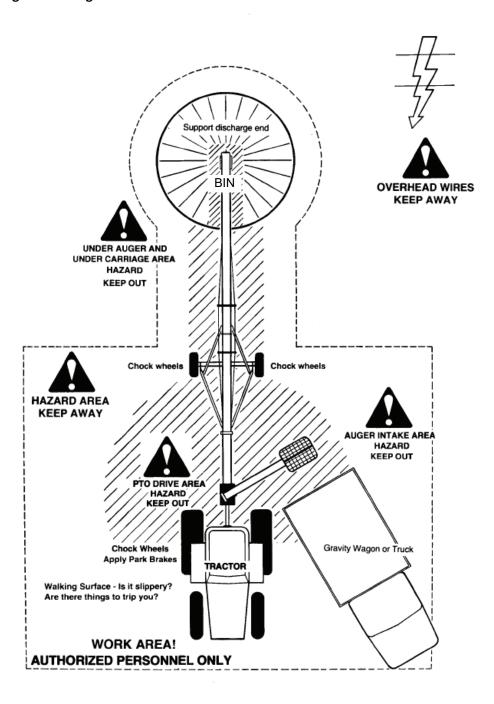


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2.7. Work Area Safety

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

Figure 1. Auger Work Area



2.8. 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.

2.9. Raising and Lowering the Auger

- MARNING Before raising/lowering/moving/adjusting the auger, make sure the area around the auger is clear of obstructions and/or untrained personnel. Never allow anyone to stand on or beneath the auger when it is being placed.
 - Lower the auger to its lowest position when not in use.
 - Empty the auger before raising or lowering.
 - Do not get on or beneath the auger when raising or lowering.
 - Raise and lower auger on reasonably level ground only.
 - Never attempt to increase height of the auger by positioning wheels on lumber, blocks, or by any other means. To do so will result in damage to auger and/or serious injury.
 - Do not raise the auger in high winds.

2.10. Hand Winch Safety



When Equipped:



- ⚠ WARNING Inspect lift cable before using. Replace if frayed or damaged. Make sure lift cable is seated. and tracking properly and cable clamps are secure.
 - Tighten brake lock by turning winch handle clockwise at least two clicks after lowering the auger.
 - Lower the auger fully before towing, then rotate winch handle until cable has light tension.
 - Do not lubricate winch brake discs.
 - Raise the swing hopper fully before towing.

2.11. Hydraulic Winch Safety

When Equipped:

- MARNING Keep away from rotating cable drum and winch cable. Do not touch or grab cable while winch is being operated or use hands to guide the cable.
 - Inspect cable and cable clamps before using hydraulic winch. Replace cable if frayed or damaged. Tighten cable clamps if necessary.
 - Check the cable anchor on the winch drum is tight.
 - Confirm hydraulic hoses are in good condition.
 - Do not continue to supply power to hydraulic winch after the auger has reached full up position.
 - Do not disconnect hydraulic quick couplers when lines are pressurized.
 - Make sure lift cable is seated properly.
 - Always keep a minimum of 3 cable wraps on the cable drum.

2.12. Positioning the Auger

- positioning, or operating.
 - Move the auger into position slowly. Do not unhitch and attempt to move by hand.
 - Chock wheels after placement.

2.13. Towing the Auger

The auger is not intended for transport on public roads. If it requires transport on a public roadway, the following steps should be taken:

- ⚠ WARNING Check with local authorities regarding transport on public roads. Obey all applicable laws. and regulations.
 - Always travel at a safe speed, never exceeding 20 mph (32 km/h).
 - Reduce speed on rough surfaces.
 - Do not transport on slopes greater than 20°.
 - Use caution when turning corners or meeting traffic.
 - Make sure the SMV (slow moving vehicle) emblem and all the lights and reflectors that are required by local authorities are in place, are clean, and can be seen by all over-taking and oncoming traffic.
 - Always use hazard-warning flashers on tractor/towing vehicle when transporting unless prohibited by law.
 - Do not allow riders on the auger or towing vehicle during transport.
 - Attach to towing vehicle with an appropriate pin and retainer. Always attach safety chains.
 - Place the auger in the transport position before moving on roads.

2.14. 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 follow lockout and tagout procedures 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 only 1 key exists for each assigned lock, and that you are the only one that holds that key. Ensure that all personnel are clear before turning on power to equipment.



2.14.1 PTO Driveline Safety

⚠ WARNING Drive

- · Keep body, hair, and clothing away from rotating PTO
- · Make certain the driveline shields telescope and rotate freely on driveline before attaching.
- Make certain the driveline is securely attached at both ends.
- Do not operate auger unless all driveline, tractor, and equipment shields are in place and in good working order.
- Do not exceed the specified operating speed.
- Keep universal joint angles small and equal. Do not exceed maximum recommended length for PTO driveline.
- Engage tractor park brake and/or chock wheels.

Lockout

- Position all controls in neutral, shut off tractor's engine, and remove key from tractor.
- If removing key is impossible, remove PTO driveline from tractor.



2.14.2 Hydraulic Power Safety

⚠ WARNING Power Source

- Refer to the rules and regulations applicable to the power source operating the hydraulic system.
- Do not connect or disconnect hydraulic lines while system is under pressure.
- Keep all hydraulic lines away from moving parts and pinch points.
- Escaping hydraulic fluid under pressure will cause serious injury if it penetrates the skin surface (serious infection or toxic reaction can develop). See a doctor immediately if injured.
- Use metal or wood as a backstop when searching for hydraulic leaks and wear proper hand and eye protection.
- Check all hydraulic components are tight and in good condition. Replace any worn, cut, abraded, flattened, or crimped hoses.
- Clean the connections before connecting to equipment.
- Do not attempt any makeshift repairs to the hydraulic fittings or hoses with tape, clamps, or adhesive. The hydraulic system operates under extremely high pressure; such repairs will fail suddenly and create a hazardous and unsafe condition.

Lockout

 Always place all hydraulic controls in neutral and relieve system pressure before disconnecting or working on hydraulic system.



2.15. Tire Safety



Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion that may result in serious injury or death.



- DO NOT attempt to mount a tire unless you have the proper equipment and experience to do the job.
- Have a qualified tire dealer or repair service perform required tire maintenance.
- When replacing worn tires, make sure they meet the original tire specifications. Never undersize the replacement tire.
- DO NOT weld to the tire rim with the tire mounted on the rim. This action may cause an explosion which could result in serious injury or death.
- Inflate tires to the manufacturer's recommended pressure.
- Tires should not be operated at speeds higher than their rated speed.
- Keep wheel lug nuts tightened to manufacturer's recommendations.
- Never reinflate a tire that has been run flat or seriously under-inflated without removing the tire from the wheel.
 Have the tire and wheel closely inspected for damage before remounting.



2.16. 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.



2.17. 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.



2.18. 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.

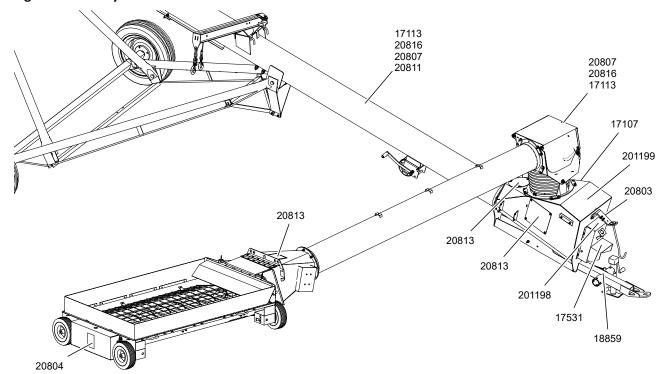
2.18.1 Decal Installation/Replacement

- 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.

2.18.2 Safety Decal Locations and Details

Replicas of the safety decals that are attached to the auger and their messages are shown in the figure(s) that follow. Safe operation and use of the 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.

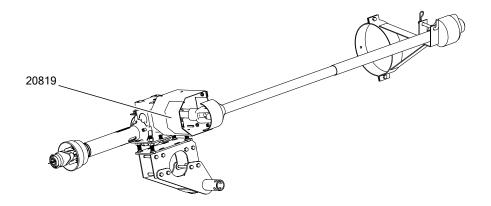
Figure 2. Safety Decals



22546 20806 21838

Figure 3. Hydraulic Landing Gear Power Swing Safety Decals (Option Kit)

Figure 4. Right Angle Drive Safety Decals (Option Kit)



21838

Figure 5. Electric Landing Gear Power Swing Safety Decals (Option Kit)

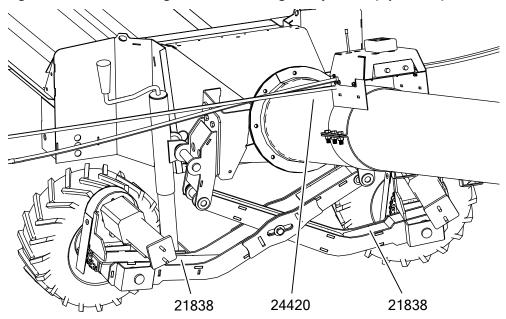


Figure 6. Reversing Kit Safety Decals (Option Kit)

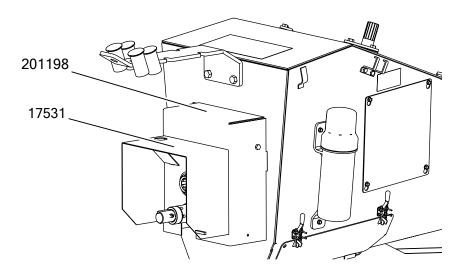


Figure 7. Hydraulic Winch Safety Decals (Option Kit)

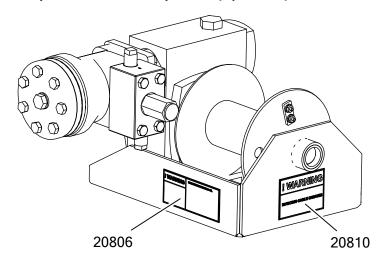


Table 1. Safety Decals

Part Number	Description	
20813	DANGER	
	ROTATING FLIGHTING HAZARD	
	To prevent death or serious injury:	
	KEEP AWAY from rotating auger flighting.	
	 DO NOT remove or modify auger flighting guards, doors, or covers. Keep in good working order. Have replaced if damaged. 	
	DO NOT operate the auger without all guards, doors, and covers in place.	
	NEVER touch the auger 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.	

Table 1 Safety Decals (continued)

Part Number	Description	
20816	⚠ DANGER	
	ELECTROCUTION HAZARD	
	To prevent death or serious injury:	
	When operating or moving, keep equipment away from overhead power lines and devices.	
	Fully lower equipment before moving.	
	This equipment is not insulated.	
	Electrocution can occur without direct contact.	

Table 1 Safety Decals (continued)

Part Number	Description
20819	ROTATING PTO DRIVELINE To prevent serious injury or death: • Keep body, hair, and clothing away from rotating PTO driveline. • Do not operate equipment unless all driveline, tractor, and equipment shields are in place and in good working order. • Make certain the driveline shields turn freely on driveline. • Make certain the driveline is securely attached at both ends. • Do not exceed specified operating speed (see operator's manual). • Keep u-joint angles small and equal. Do not exceed maximum recommended length for PTO driveline.
17113	TRANSPORT HAZARD To prevent serious injury or death: Securely attach equipment to vehicle with correct pin and safety chains. Use a tow vehicle to move equipment.

Table 1 Safety Decals (continued)

Part Number	Description	
20804	⚠ WARNING	
	ENTANGLEMENT HAZARD	
	To prevent serious injury or death:	
	 Keep body, hair, and clothing away from rotating 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.	
20806	WARNING HIGH PRESSURE FLUID HAZARD Hydraulic fluid can cause serious injury if it penetrates the skin. If it does, see a doctor immediately. Relieve system pressure before repairing, adjusting or disconnecting. Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.	
201198		
	ENTANGLEMENT HAZARD To prevent serious injury or death: • Keep body, hair, and clothing away from rotating 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.	

Table 1 Safety Decals (continued)

Part Number	Description
201199	ROTATING PTO DRIVELINE To prevent serious injury or death: * Keep body, hair, and clothing away from rotating pro driveline. * Do not operate equipment unless all driveline, tractor, and equipment shields are in place and in good working order. * Make certain the driveline is securely attached at both ends. * Do not exceed specified operating speed (see operator's manual). * Keep bujoint shields are in place and in good working order. * Make certain the driveline is securely attached at both ends. * Do not exceed specified operating speed (see operator's manual). * Keep pujoint shields turn freely or driveline. * Make certain the driveline is securely attached at both ends. * Do not exceed specified operating speed (see operator's manual). * Keep pujoint shields turn freely or driveline. * Mortice * To prevent damage, wheels must be free to move when raising or lowering equipment. When equipment is positioned, chock all wheels.
20811	WARNING
	UPENDING HAZARD
	To prevent death or serious injury:
	Anchor intake end and/or support discharge end to prevent upending.
	Intake end must always have downward weight. Do not release until attached to tow bar or resting on ground.
	Do not raise intake end above tow bar height.
	Empty tube and fully lower before moving.

Table 1 Safety Decals (continued)

Part Number	Description	
20807	⚠ WARNING	
	To prevent serious injury or death:	
	 Read and understand the manual before assembling, operating, or maintaining the equipment. 	
	Only trained personnel may assemble, operate, or maintain the equipment.	
	 Children and untrained personnel must be kept outside of the work area. 	
	 Do not modify the equipment. Keep in good working order. 	
	 If the manual, guards, or decals are missing or damaged, contact factory or representative for free replacements. 	
	Lock out power before performing maintenance.	
	 To prevent equipment collapse or upending, support equipment tube while disassembling certain components. 	
	 Follow grain storage structure manufacturer's warnings when loading and unloading. 	
	 Electric motors must be grounded. Disconnect power before resetting overloads. 	

Table 1 Safety Decals (continued)

Part Number	Description
20803 (placed behind guard)	WARNING MISSING GUARD HAZARD To prevent serious injury or death, shut off power and reattach guard before operating machine.
20810	To prevent death or serious injury: • Keep away from rotating cable drum and winch cable. • Inspect lift cable periodically; replace if damaged. • Inspect cable clamps periodically; tighten if necessary.
17107	To prevent personal injury or damage to equipment, close valve in lift cylinder hydraulic line after raising equipment into position.
21838	CAUTION

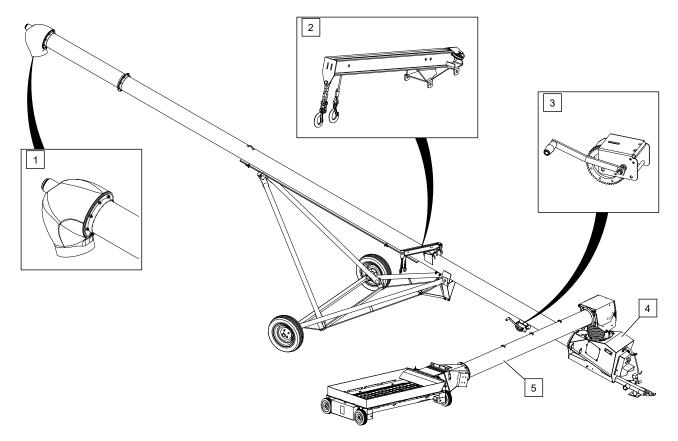
Table 1 Safety Decals (continued)

Part Number	Description	
18859	Disconnect PTO driveline from tractor before moving equipment. If attached, driveline will bottom out, severely damaging the CV u-joint and lower flight shaft. See manual for maintenance.	
17531	To prevent damage during auger-to-tractor hookup: • Follow dimensions above for correct auger-to-tractor hookup. • Auger must be on level ground and in full down position when measuring. • Adjust drawbar as needed. See operation manual for complete details.	

Table 1 Safety Decals (continued)

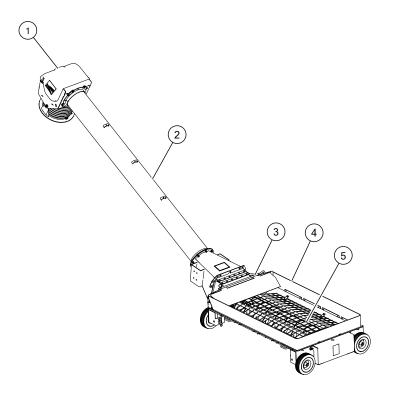
Part Number	Description		
24420	NOTICE		
	Connect to positive battery terminal only or system damage may result.		
22546	HOPPER SWING	HOPPER LIFT	
	←→	\	

3. Features



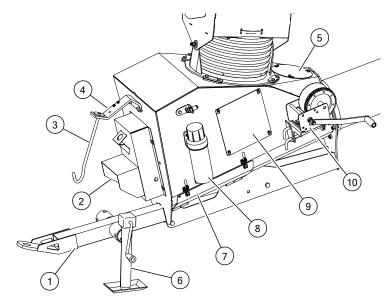
1	discharge spout	4	boot
2	lift arm	5	swing tube
3	manual winch		

Swing Features



1	spout head service cover
2	swing tube
3	maintenance hatch
4	hopper
5	flights and flight guarding

Grain Transfer Boot Features



1	hitch
2	PTO sprocket cover
3	PTO transport saddle
4	transport bracket
5	top access panel
6	hitch jack
7	clean-out hatch
8	manual holder
9	side access panel
10	manual winch (hopper)

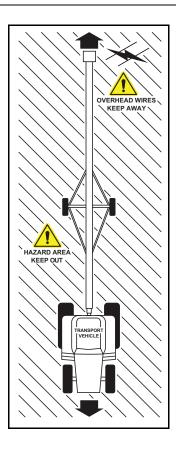
4. Transport

When transporting, follow all safety precautions and use a proper tow vehicle to help ensure safe transport of the auger.

4.1. Transport Safety

MARNING

- Check with local authorities regarding transport on public roads. Obey all applicable laws and regulations.
- Always travel at a safe speed, never exceeding 20 mph (32 km/h). Reduce speed on rough surfaces. Use caution when turning corners or meeting traffic.
- Yield to other drivers and allow faster traffic to pass.
- Make sure the SMV (slow moving vehicle) emblem, maximum transport speed sign, and all the lights and reflectors that are required by local authorities are in place, are clean, and can be seen by all over-taking and oncoming traffic. Always use hazard-warning flashers on tractor/towing vehicle when transporting unless prohibited by law.
- Do not transport during times of limited visibility such as fog, snow, or heavy rain. Take extra precautions at night and at dusk.
- Keep others away from the transport vehicle and auger.
- Do not allow riders on the auger or towing vehicle during transport.
- Stay away from overhead obstructions and power lines when operating and transporting. Electrocution can occur without direct contact.
- Fully lower the auger before transporting, and only raise when next to storage facility.
- Attach to a proper towing vehicle with a hitch pin and retainer. Always attach safety chains.
- Empty auger of all grain or seed before transporting.
 Transporting a full auger will place excessive loads on the tube, frame, axle, hitch, and tow vehicle.
- Do not transport on slopes greater than 20°.
- Do not transport with an under-inflated tire(s).
- If the auger wheels are partially or fully buried in snow or grain, failure to clear area around the wheels before transporting may cause damage to the auger or result in serious injury.



4.2. Transport Preparation

- Do not tow faster than 20 mph (32 km/h). Table 2 references the acceptable transport speed as per the
 ratio of tractor weight versus auger weight. See Specifications (Section 10. Specifications on page 76) for
 auger weights.
 - MARNING A weight imbalance between the auger and the towing vehicle could result in a collision from reduced stability, handling, and braking ability.
- Ensure the auger will clear any overhead obstructions or electrical wires prior to transporting. Refer to Section 10. Specifications on page 76 for the transport height of your auger.
- Longer augers have a large turning radius. Allow ample room for turning as the discharge end may swing dramatically. Allow all oncoming traffic to pass before turning right or left.
 - **MARNING** A collision with an oncoming vehicle could occur if the auger discharge swings into the opposing lane.

Table 2. Speed versus Weight Ratio

Road Speed	Weight of auger relative to weight of tow vehicle
Up to 20 mph (32 km/h)	1 to 1, or less than the weight of the tow vehicle
Up to 10 mph (16 km/h)	2 to 1, or less than the weight of the tow vehicle
Do not tow if	More than 2 to 1

4.3. Connecting the Auger to the Towing Vehicle

Follow all safety precautions when transporting the auger and use a proper towing vehicle.

- 1. Fully lower the auger.
- 2. Disconnect the PTO driveline and hydraulics (as applicable) from the tractor.
- 3. Place the hitch in transport position (if applicable).
- 4. Connect the auger to the tow vehicle with a hitch pin. Use a hitch pin that will not allow the auger to separate from the towing vehicle.
- 5. Connect the safety chain securely, forming a cradle to prevent the auger from digging into the road surface (should a breakaway occur). Do not use the safety chain if one or more links or end fittings are stretched, broken, damaged, or deformed.

Important

Use a safety chain with a load rating at least as high as the auger weight.

- 6. Place the intake hopper into transport position.
- 7. Place the swivel jack (on side of hitch) in transport position and lock.
- 8. Use caution when transporting the auger over rolling terrain. In severe dips, the intake end may contact the ground.

Refer to Section 10. – Specifications on page 76 for auger weight and hitch pin information.

Figure 8. Safety Chain and Hitch Connection

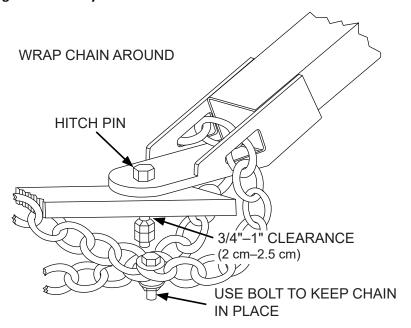
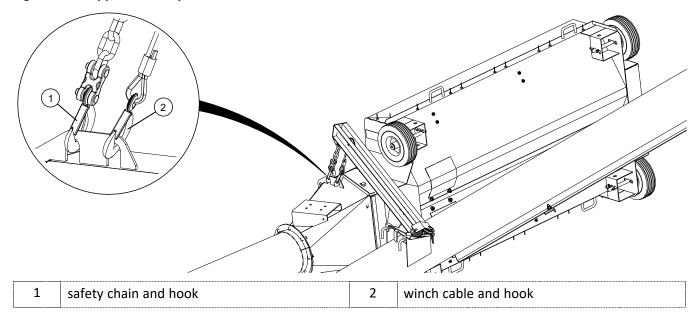


Figure 9. Hopper in Transport Position



5. Placement

5.1. Placement Safety

⚠ WARNING

- The auger is not insulated, keep away from overhead power lines. Electrocution can occur without direct contact.
- Place the auger on reasonably level ground before operating. The auger could topple if ground is too uneven.
- Chock the auger wheels after placement.
- Empty the auger before raising, lowering, or positioning.
- Check that wheels are free to move before raising or lowering the auger.
- Never attempt to increase height of the auger by positioning wheels on lumber, blocks, or by any other means.
- Do not permit anyone to stand beneath the auger when raising or lowering.
- Move the auger into position slowly. Do not unhitch and attempt to move by hand.
- Do not leave auger in raised position when not in use.

5.2. Positioning the Auger

Filling Bins

The auger is designed to be transported and operated without unhitching unit from tractor.

1. Disconnect the PTO driveline from the tractor and secure it in the transport saddle.



Failure to disconnect from the tractor will damage the PTO driveline.

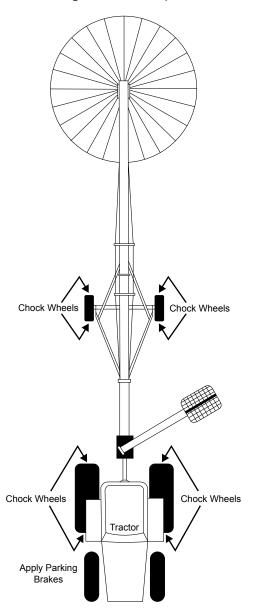
2. Ensure that the tractor and auger are securely hitched together.

Important

Use a type of hitch pin (see Auger / Tractor Hookup section) that will not allow the auger to separate from towing vehicle.

- 3. Disconnect the safety chain from the intake hopper.
- 4. Ensure the jack is in storage position.
- 5. Move the auger into working position slowly. Do not unhitch and attempt to move the auger by hand.
- 6. Set the park brake on the tractor before dismounting, or chock its wheels.
- 7. Once the auger is in position, chock its wheels.
- 8. Lower the intake hopper to the ground.
- 9. See Operation for correct operating procedures.

Figure 10. Auger Placement (Direct PTO Drive)



5.3. Hand Winch Operation



When equipped:

Before using the hand winch, ensure that:

- the cable anchor on the winch drum is tight.
- all cable clamps are secure.
- the lift cable is seated in cable pulley.
- the cable is in good condition, if damaged, replace it immediately.
- there is a minimum of 3 cable wraps on the winch drum when the auger fully lowered.

To operate:

- 1. Turn the winch handle to raise and lower the auger. The winch must make a clicking sound when raising the auger. If clicking sound stops, retain grip on handle, lower the auger fully and repair winch.
- 2. When lowering, if the cable becomes slack before auger is in full down position, this indicates that the track shoe is stuck. To correct the problem, reverse the winch and raise the auger until the cable is taut and the track slides normally. Do not lubricate the winch brake discs.
- 3. After lowering the auger, always tighten the brake lock by turning the winch handle clockwise at least two clicks.
- 4. After lowering, rotate the winch handle until cable has light tension.

31188 R3 37

5.4. Hydraulic Winch Operation



When equipped:

Before using the hydraulic winch, ensure that:

- the cable anchor on the winch drum is tight.
- all cable clamps are secure.
- the lift cable is seated properly.
- the cable is in good condition, if damaged, replace it immediately.
- there is a minimum of 3 cable wraps on the winch drum when the auger is fully lowered.
- the hydraulic hoses are free from leaks, binding, flattening, kinks, or wear.

To operate:

1. Start the power source and idle at low rpm. Engage hydraulic lever to power winch. Test the direction of rotation of winch to ensure drum is moving in the direction required. Increase tractor rpm until desired rate of lift or descent is reached.



Do not touch, grab, or guide cable while equipment is being raised or lowered.



Do not continue to supply power to winch when the auger has reached full up position as this can cause damage.

- 2. When lowering, if the cable becomes slack before the auger is in the full down position, this indicates that the track shoe is stuck. To correct the problem, reverse the winch and raise the auger until the cable is taut and track slides normally.
- 3. After lowering, adjust the hydraulic winch until cable has light tension.

5.5. Auger-to-Tractor Hookup

The auger must be correctly connected to the tractor for all operations, including transport, raising, placement, and augering grain.

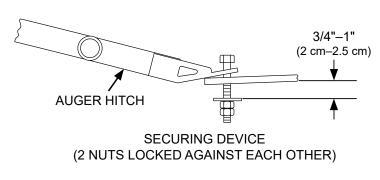
To secure the auger hitch to the tractor, use:

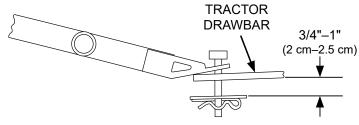
- a suitable bolt with 2 nuts locked against each other as a pin, or
- a hitch pin, a washer, and a hairpin.

A space between 3/4" and 1" (2 cm and 2.5 cm) must be provided between the bottom of the tractor drawbar and the top of the securing device on the pin.

The bolt/hitch pin must be 3/4" x 5" minimum.

Figure 11. Hitching the Auger to a Tractor





SECURING DEVICE (HAIRPIN AND WASHER)

Measurements Between Drawbar and Driveline

Since the auger and tractor become an integral unit during transport, placement, and operation, the configuration and measurements between the tractor drawbar and the tractor PTO driveline are very important.

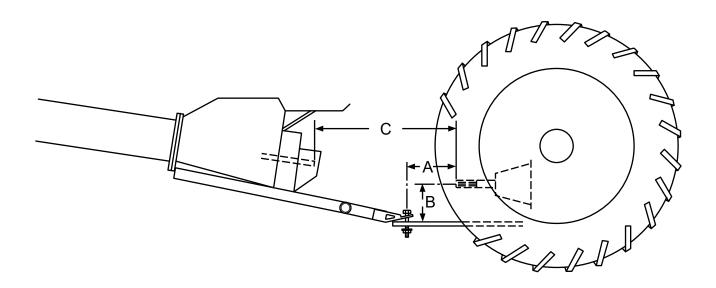
The ideal measurements are shown in Figure 12.

- Dimension (B) may range from 6" (15 cm) to 10" (25 cm) with 8" (20 cm) being ideal.
- If dimensions (A) and (B) on your tractor are as shown, then dimension (C), which is critical, will be correct.
- If (A) and (B) vary on your tractor from the recommended dimensions, consult the table below for potential problems and their solutions.

Figure 12. Measurements Between Drawbar and PTO Driveline

А	14" (36 cm)	
В	6"-10" (15 cm-25 cm)	
C	34-1/2"-36-1/2" (88 cm-93 c	n)

(MUST BE TAKEN WITH AUGER ON LEVEL GROUND AND IN FULL DOWN POSITION) RAISE TRACTOR DRAWBAR IF NECESSARY TO MAINTAIN (B) DIMENSION OF 6"-10". (15.2 cm-25.4 cm)

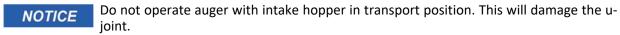


Measurement	Problem	Solution
If (A) is less than 14" (36 cm) (C) will be less than the recommended 34-1/2" to 36-1/2" (88 cm to 93 cm).	The PTO driveline will bottom out when auger is in raised position, causing damage to the PTO driveline, the bearing, or the boot housing.	Pull out or lengthen the tractor drawbar as needed to make (C) 34-1/2" to 36-1/2" (88 cm to 93 cm) when the auger is in full down position.
If (A) is more than 14" (36 cm) (C) may be more than the recommended 34-1/2" to 36-1/2" (88 cm to 93 cm).	The PTO driveline will separate from the auger in the lowered position, causing damage to equipment and/or injury to personnel.	Shorten distance (C) to the recommended 34-1/2" to 36-1/2" (88 cm to 93 cm) by attaching hitch to tractor drawbar at a point closer to the tractor PTO shaft.
If (B) is more than 10" (25 cm) (C) (between tractor PTO shaft and auger input shaft) shortens more quickly when auger is being raised.	The u-joint angle on the PTO driveline will be too severe in the raised position, causing the PTO driveline to bottom out before auger is fully raised. This will cause damage to the PTO driveline, flight shaft, bearing, and boot.	Raise the tractor drawbar until dimension (B) is within the recommended 6" to 10" (15 cm–25 cm).

5.6. Raising and Lowering the Intake Hopper

The intake hopper must be off the ground when raising and lowering the auger.

- 1. Attach the winch cable hook to the appropriate hopper lifting point.
- 2. Fully raise the hopper with intake side facing away from the main auger tube.
- 3. Secure the hopper with the safety chain and hook.

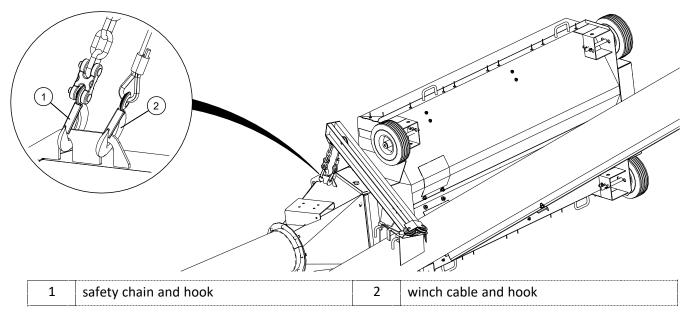


Important

The hopper intake must face away from the main auger when in transport, see Figure 13.

- 4. Ensure swing-away is empty before raising or lowering.
- 5. Do not permit anyone to stand near the swing-away when raising or lowering.

Figure 13. Hopper in Transport Position



5.7. Grain Hopper Positioning

The low-profile grain hopper is designed to be rolled into position to receive grain for transfer through the boot to the auger discharge spout. Ground clearance can be adjusted by raising or lowering the position of the hopper wheel axles.

The grain hopper must be lifted and secured for transport using the hopper lift arm, hydraulic winch, and safety chain and hook. The hopper lift arm can be reconfigured for lifting on either side of the auger.

5.7.1 Electric Power Swing Operation

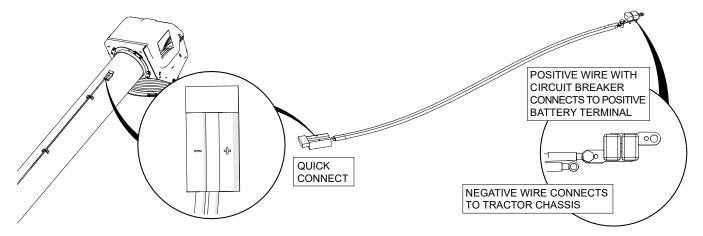


The electric power swing is an optional component.

Remote transmitters are pre-programmed from the factory—to reprogram your remote (or to add additional remotes), please see the Appendix.

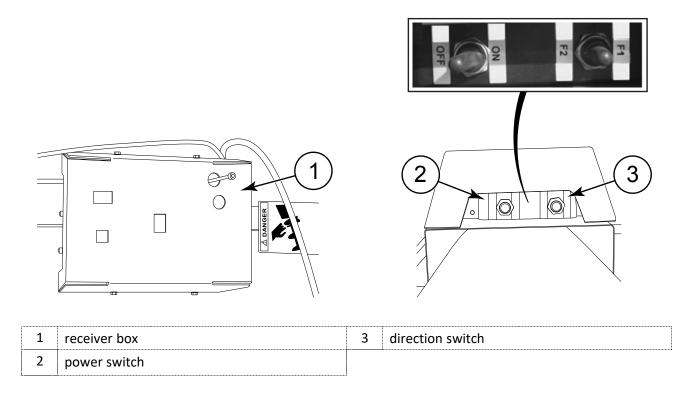
You can register more than one remote transmitter to a single power swing. However, it is not recommended to register one remote transmitter to multiple power swings.

Figure 14. Electrical Cables



- 1. Connect the end opposite the quick-connect to the battery and chassis ground using the 5/16" lugged connectors supplied with the kit:
 - a. Attach the positive wire directly to the positive terminal on the tractor battery (the positive wire has a circuit breaker on it).
 - b. Attach the negative wire to a tractor chassis ground point (assuming that the tractor battery is also grounded to the chassis).
 - **NOTICE** If these electrical cables are not hooked up properly the electric controller will be damaged.
- 2. Attach the receiver cable quick connect to the tractor wire harness quick connect.
- 3. On the high end of the power swing remote receiver box, flip the power switch to the ON position.

Figure 15. Power Swing Receiver Box



For Receiver Box Operation:

- 1. Using the direction switch, move the switch in the desired direction of travel (either F1 or F2).
- 2. Once finished moving the hopper, release the switch to stop operation (it should return to the neutral position).

Figure 16. Power Swing Remote Transmitter



For Remote Transmitter Operation:

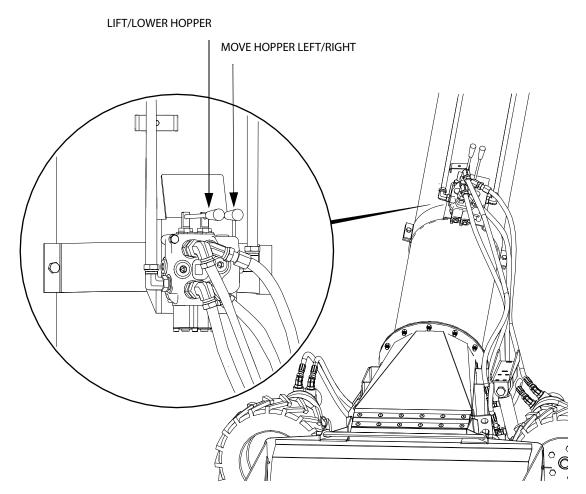
1. Push the green button (no symbol) to turn the remote ON (Figure 16).

- 2. Push the yellow directional buttons (marked with arrows) located below the ON/OFF buttons in the direction you want the hopper to move (Figure 16).
- 3. If this does not work:
 - a. Push the red button (with an exclamation mark) to turn the remote OFF.
 - b. Then push the green button (no symbol) to turn the remote back ON.
- 4. Operate the remote as outlined above, using the two yellow directional buttons (marked with arrows) located at the bottom of the remote to move the hopper as desired.

5.7.2 Hydraulic Power Swing Operation

- The hydraulic power swing is an optional component.
- 1. Ensure that the valve is in the proper configuration (open-center or closed center). Please see Open/Closed-Center Valve Conversion in the Appendix.
- 2. Adjust the tractor's output flow using the flow control lever to achieve 4–5 gpm. This will ensure a controlled speed.
- 3. Put the lever that controls your tractor hydraulics in the detent position where the hydraulics stay engaged all the time.
- 4. In order to activate the power swing:
 - a. Push the right side control lever on the power swing valve control assembly to raise the hopper.
 - b. Use the left side control lever to move the hopper in the desired direction of travel.
 - c. Once finished moving the hopper to the desired position, use the right side control lever to lower the hopper.

Figure 17. Control Valve Lever Functions



5.8. Positioning the Tractor for Right Angle Drive Operation

Before setting up for right angle drive operation, the auger must first be positioned at the bin with a tractor with the auger wheels securely chocked.

- The right angle drive is an optional component.
- 1. Position hitch jack with a board underneath, then raise the auger hitch slightly.
- 2. Relieve pressure in the hydraulic hose, then disconnect from tractor and place in the auger's hose rack.
- 3. Remove the safety chain and hitch pin, then move the tractor.
- 4. Attach the support leg as shown in Figure 19, and secure with a pin and hairclip.
- 5. Place a board under the support leg if needed, then lower the hitch jack until the auger's intake weight is supported with the support leg. Place the hitch jack into the transport position. See Figure 19.
- 6. Position the tractor at a right angle to the auger intake; apply the parking brake, and chock the tractor wheels.
- 7. Securely connect the non-separable PTO driveline to the tractor. Make sure all guards and master guards are in place.
- 8. Do not exceed the maximum PTO operating length of 80" (2 m) or a maximum angularity of 15° from the ideal 90° drive angle.

Figure 18. Tractor Position for Right Angle PTO Drive (Left Side Drive Configuration)

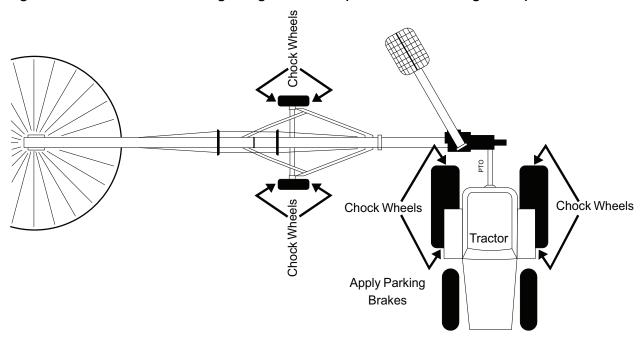
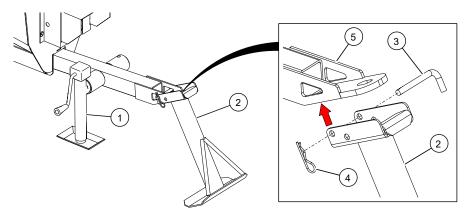
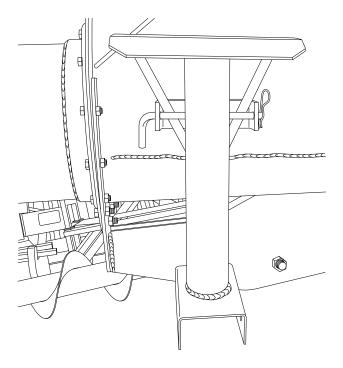


Figure 19. Right Angle Drive Support Leg (Working Position)



Į Į	1	jack	4	hair pin
ĺ	2	support leg	5	hitch
ľ	3	pin		

Figure 20. Right Angle Drive Support Leg (Storage Position)



6. Operation

This section provides important safety precautions and instructions for optimal operation. Follow all guidelines carefully to ensure safe and efficient use.

6.1. Operation Safety

- WARNING
 Keep away from rotating and moving parts, including the flighting, drive components, shafts, and bearings.
 - Do not enter the grain bin or truck while the 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.



Refer to your bin operation manual for specific operating and safety information for your bin.

6.2. Start-up and Break-in

Check the following during the first hours of operation.

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



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

- 2. Visually inspect the auger, see Visual Inspection in Maintenance Section.
- 3. Check tightness of all bolts/nuts, fasteners, and hardware (re-torque if necessary).
- 4. Lubricate all grease fittings and oil chains.
- 5. Check drive chain tension and alignment.
- 6. Ensure adequate power is supplied to operate the auger, see Section 10. Specifications on page 76.
- 7. Start the tractor and idle at low rpm. Slowly engage the PTO drive. Refer to PTO Drive Operation.
- 8. Gradually begin feeding grain into the hopper, bringing the tractor PTO drive to roughly half speed. Do not overfeed the hopper on initial loads; keep the feed of grain at about half capacity.
- 9. Be aware of unusual sounds. If any are heard, determine the source and stop the 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.

10. After the auger tube is polished and runs fairly smoothly, proceed to unload at the specified full PTO speed. Do not exceed the specified full PTO speed (see Section 10. – Specifications on page 76).

31188 R3 48

- 11. Do not run the auger for long periods of time without material because it increases wear. Try to run only when moving material.
- 12. Stop the auger when it is empty of grain, lower fully and lockout power.

Important

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

6.3. Operation — PTO Drive

- 1. Attach the PTO driveline securely to the tractor and confirm the connection to the auger shaft is secure.
- 2. Confirm the PTO driveline rotating shield and other shields/guards are in place and in good working order.
- 3. Align the tractor axis with the auger input shaft to minimize the angles of the universal joints on the PTO driveline.

Important

Check that the PTO does not exceed the maximum operating angle, refer to Section 10. – Specifications on page 76.

- 4. Confirm that the auger-to-tractor PTO hookup distances are set as required.
- 5. Ensure the PTO drive on the tractor is in the off position before starting the tractor.
- 6. Start tractor engine at low idle, slowly engage the PTO with the tractor idling to prevent unneeded stress on the drive components and shear bolts.
- 7. If everything is operating normally, start running grain through the auger and increase the tractor PTO to the specified full speed to produce the required flow.
- 8. To shut down, reduce the speed to low idle and lock out the PTO.
- 9. Disconnect the PTO driveline from the tractor and secure it to the PTO transport saddle with the safety chain and keep it in transport saddle when transporting.

When raising or lowering the auger:

Disconnect the PTO driveline.

When starting under load:

If restarting the auger under load (tube is full), engage the PTO with the tractor idling.



Engaging the PTO at high engine speed under load will result in equipment damage.

Shear Bolts:

If a shear bolt in the PTO driveline fails, shut down and lock out the tractor to replace the shear bolt. Ensure that the shear point is through the shank of the bolt, not the threads. Refer to Section 10. – Specifications on page 76 for shear bolt sizes.

6.3.1 PTO Operation — Forward and Reverse Modes

Note

Reverse mode is intended to assist in clean out of the auger. It is not designed to unplug the auger. When operating in reverse mode, the auger must be monitored to prevent the boot from overfilling.

⚠ WARNING

Shut down and lock out power before changing to forward or reverse modes.

To Operate in Forward Mode:

The stub spline on the PTO driveline must be inserted into the forward spline coupler and securely locked into place.

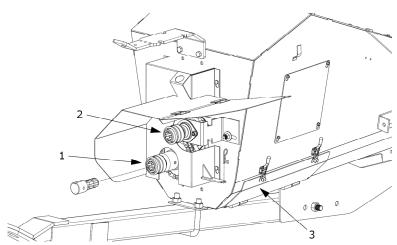
To Operate in Reverse Mode:

- 1. Insert the stub spline on the PTO driveline into the reverse spline coupler making certain it is securely locked into place.
- 2. Open the cleanout doors on the boot before operating in reverse mode.
- 3. Operate the auger slowly in reverse for a short period of time. Do not exceed 100 RPM.
- 4. When the boot is nearly full, shut off and lock out power, then clean out any remaining grain from the boot using a stick. Do not use your hands. Repeat the above procedure as needed.

NOTICE

Excessive back pressure will cause extensive damage to the auger which is not covered by warranty.

Figure 21. Forward and Reverse PTO Positions



1	forward position	3	cleanout cover
2	reverse position		

6.4. Safety Discharge Door

The auger is equipped with a safety discharge door which will allow grain to overflow out of the swing-away discharge spout and prevent the main auger tube from plugging. This will happen when the auger is at a steeper angle because the capacity of the auger will decrease as the tube angle increases. If the safety discharge door opens, decrease the flow of grain to the swing-away intake hopper or lower the angle of the auger tube.

6.5. 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.

6.6. Restarting with a Full Tube

When the 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.



Starting under load may result in damage to the auger.

- 2. Close or replace guards or covers before restarting.
- 3. If the auger tube is full of grain, do not restart at full speed. Engage the drive at low power, gradually increasing until normal operating speed is reached.
- 4. Once the auger has been started, resume normal operation.

6.7. Shutdown

When operation has been completed:

- 1. Once auger is clear of grain, lock out the power source.
- 2. Clean out any remaining grain from the auger with a vacuum or sweep out.
- 3. Clean the entire work area.
- 4. Remove anchors, supports, and chocks.
- 5. Disconnect the PTO driveline, and raise the intake hopper off the ground.
- 6. Move the auger away from the bin, and ensure that there is nothing under the auger that would make contact when the auger tube is lowered.
- 7. Lower the auger, refer to Raising and Lowering.
- 8. Lift the intake feed hopper fully into transport position, and secure it with the safety chain, refer to Raising and Lowering the Intake Hopper.

6.8. 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 auger.

6.9. Storing the Auger

After the season's use, thoroughly inspect the auger and prepare it for storage. Repair or replace any worn or damaged components and perform maintenance to prevent downtime at the start of the next season.

To ensure a long, trouble-free life, follow the below procedure.

- 1. Remove all residual material from the hopper and the tube.
- 2. Wash the auger thoroughly using a water hose or pressure washer to remove all dirt, mud, debris, or residue. Be careful to not contact electronic controls with high pressure water.
- Inspect all moving or rotating parts to see if anything has become entangled in them. Remove any entangled material.
- 4. Touch up all paint nicks and scratches to prevent rusting.
- 5. Check tire pressure and inflate. For inflation pressure, refer to Section 10. Specifications on page 76.
- 6. Inspect the auger for cracks, tightness of fittings and fasteners, and hydraulic hose cracks (if applicable). Have required repairs performed to replace worn or damaged components.
- 7. Store in an area that is dry, level, free of debris, and away from human activity. Store inside if possible.
- 8. Chock wheels.
- 9. Clean and lightly lubricate the spline on the PTO driveline. Cover the PTO driveline with a plastic bag to protect it from the weather and place it in the transport saddle.
- 10. Lower the auger fully for storage.
- 11. Place the swing-away hopper in transport position, ensuring there will be adequate drainage of any moisture.

Power Swing

₩ When Equipped:

- 1. Raise wheels to full up position.
- 2. Clean out axle assembly and lubricate chains with a light coating of oil.
- 3. Inspect unit for damage and note any repairs required. Order replacement parts from your dealer.
- 4. Check tire pressure and inflate according to tire side-wall recommendations.

7. Maintenance

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

7.1. 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.

Before attempting maintenance of any kind:

- Lower the auger fully.
- · Chock wheels.
- Support the tube if performing maintenance on the undercarriage assembly.
- If equipped with hydraulics: Before applying pressure to a hydraulic system, make sure all components are tight and that hoses and couplings are in good condition.





7.2. Maintenance Schedule

Follow the maintenance procedures below. Keep records of the hours the auger has been operated and the maintenance performed.

Daily:

Section 7.3 – Visually Inspect the Equipment on page 55

Section 7.4 – Lubricate the Equipment on page 55

Section 7.20 - Inspect the Retroreflective Strips on page 69

Monthly:

When equipped: Section 7.5 – Inspect Hydraulic Hoses and Fittings on page 57

Section 7.13 – Check the Gearbox Oil on page 65

Annually:

Section 7.6 – Lubricate the Upper Bearing on page 58

Section 7.16 – Clean and Wash the Equipment on page 67

Section 7.17 – Removable Hopper Mesh Guard on page 67

2-3 Years:

Section 7.9 – Service the Pulleys on page 63

Section 7.10 – Service the Swing Tube Coupler Chain on page 63

Section 7.11 – Service the Gearbox Coupling Shaft on page 64

Section 7.12 – Service the Boot and Hopper Chain Drive on page 64

Section 7.14 - Change the Gearbox Oil on page 66

Section 7.15 – Service the Landing Gear Power Swing Drive Chain on page 66

When equipped: Section 7.7 – Inspect and Service the Hand Winch and Lift Cable on page 62

When equipped: Section 7.8 – Inspect and Service the Hydraulic Winch and Lift Cable on page 62

As Required:

Section 7.18 - Repack the Wheel Bearings with Grease on page 68

Section 7.19 – Power Swing Remote Transmitter on page 68

7.3. Visually Inspect the Equipment

⚠ WARNING

Lock out power before inspecting.

Check the following during a visual inspection:

- 1. Ensure all guards are in place and in good working order.
- 2. Examine the auger for damage or unusual wear.
- 3. Check tightness of bolts/nuts, fasteners, and hardware (re-torque if necessary).
- 4. Be sure all safety decals are in place and are legible.
- 5. Check that the discharge and intake area are free of obstructions.
- 6. Inspect all moving or rotating parts to see if anything has become entangled in them. Remove any entangled material.
- 7. Inspect hydraulic hoses and fittings for leaks and wear. Fix or replace where necessary.
- 8. Check wheel bolts are tight and examine tires for gashes, uneven wear, or loss of air pressure. See Section 10. Specifications on page 76 for recommended tire pressure and torque information.
- 9. Check all operating, lifting, and transport components. Replace damaged or worn parts before using the auger.
- 10. Check the PTO shield and replace if damaged.
- 11. Inspect the winch cable for fraying, kinking, unwinding, or other possible damage.

7.4. 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.

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

7.4.1 Grease Points

Apply grease to the locations shown in the following figures:

Figure 22. PTO Grease Fitting Locations

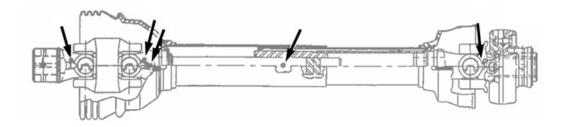


Figure 23. Hopper Grease Points

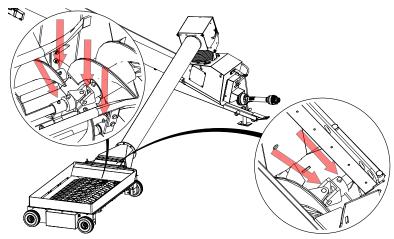


Figure 24. Upper Flighting Bearing Grease Point

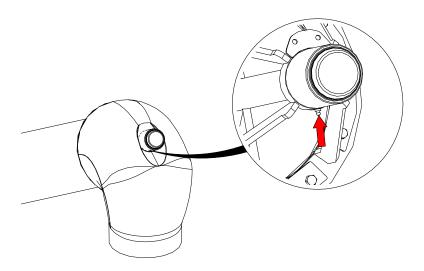
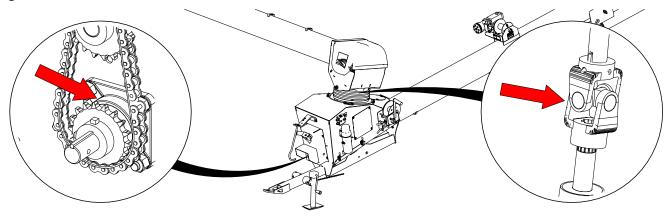
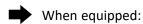


Figure 25. Boot Grease Points



7.5. Inspect Hydraulic Hoses and Fittings



- 1. Pressurize the system.
- 2. Using a piece of cardboard or wood, run it along the length of the hose and around all fittings.
 - **WARNING** Escaping hydraulic fluid under pressure will cause serious injury if it penetrates the skin surface.
- 3. Replace the hose or tighten/replace the fitting if a leak is found. For replacement hoses, refer to Section 10. Specifications on page 76.
- 4. Replace any hose that is badly cut, nicked, abraded, or is separating from the crimped end of the fitting.
- 5. Secure hoses to the machine.

7.6. Lubricate the Upper Bearing

The thrust adjuster lock nut must be tightened until the connection between the bearing, bushing, and lock nut is snug.

Important

When fully tightened, between 1/4" and 3/4" (5 mm and 20 mm) of threaded shaft must be visible above the lock nut to ensure that the nylon locking mechanism is fully engaged.

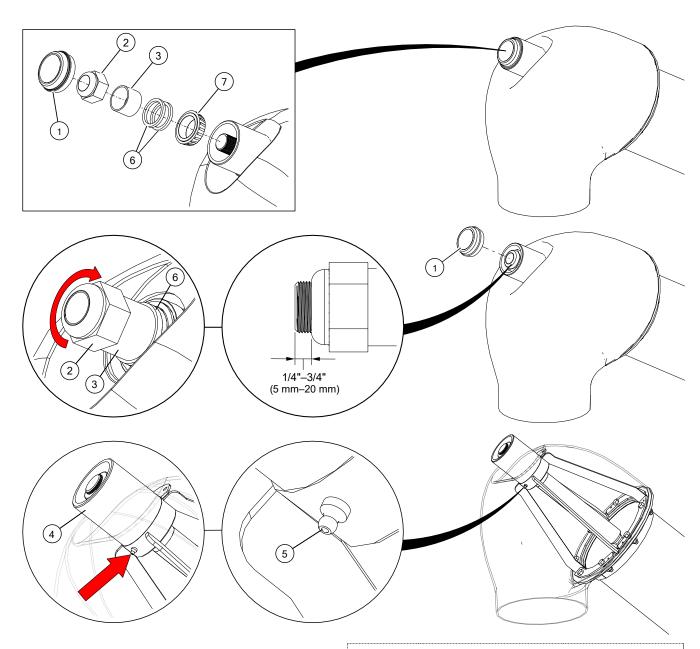
7.6.1 Single Nut Flight Tensioning



When equipped:

- 1. Ensure the swing hopper is secured in transport position.
- 2. Chock the auger wheels.
- 3. Unhook the tractor from the auger.
- 4. Secure the sling to the lower tube/boot. Using a loader/forklift, elevate the lower tube/boot to a height where the discharge spout is at a serviceable height.
- 5. Remove the dust cap.
- 6. Wedge a piece of wood into the flight at the boot end. This will prevent the flight from spinning.
- 7. Remove the lock nut, bushing, shims (if applicable), and small tapered bearing.
- 8. Pack the tapered bearing with grease.
- 9. Re-install the tapered bearing, shims (if applicable), bushing, and lock nut.
- 10. Tighten the lock nut until the bushing is snug (the bushing does not move when pushed firmly by a punch) and between 1/4" and 3/4" (5 mm and 20 mm) of threaded shaft is visible above the nut.
 - If less than 1/4" (6 mm) of threaded shaft is visible, remove one or more 1/4" shims (depending on what is required), and re-tighten until fully tightened.
 - If the nut cannot be tightened to the point where the bushing is snug and more than 3/4" (19 mm) of threaded shaft is visible, install one or more additional 1/4" spacers (not supplied, but available to order) between the bearing and the bushing, and re-tighten until fully tightened.
- 11. Remove the piece of wood from the flight.
- 12. Using the grease zerk, fill the bottom bearing cavity with grease until it comes through the bearing housing.
- 13. Fill the bearing housing with a full tube of grease. If the entire tube does not fit, put some of the grease inside of the dust cap.
- 14. Re-install the dust cap.

58 31188 R3



Scan the QR code to watch a video on how to grease the upper bearing.



Assembly Note:

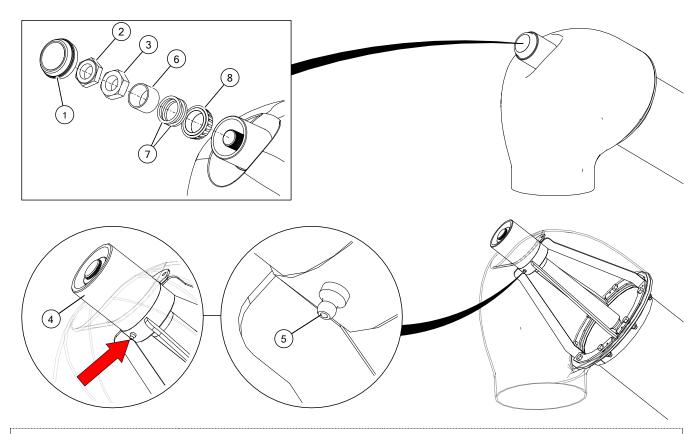
• Use SAE multi-purpose high-temperature grease with extreme pressure (EP) performance.

1	dust cap
2	lock nut, 1-1/2"
3	bushing
4	bearing housing
5	grease zerk
6	shim, 1/4"
7	small tapered bearing

7.6.2 Double Nut Flight Tensioning

When equipped:

- 1. Ensure the swing hopper is secured in transport position.
- 2. Chock the auger wheels.
- 3. Unhook the tractor from the auger.
- 4. Secure the sling to the lower tube/boot. Using a loader/forklift, elevate the lower tube/boot to a height where the discharge spout is at a serviceable height.
- 5. Remove the dust cap.
- 6. Remove the lock nut, hex nut, bushing, shims (if applicable), and small tapered bearing.
- 7. Pack the tapered bearing with grease.
- 8. Re-install the tapered bearing, shims (if applicable), and bushing.
- 9. Install and tighten the thin hex nut until the flighting starts to rotate in the tube. Using a punch and hammer, check to see if the bushing can rotate.
 - If the bushing rotates, remove the hex nut and thrust bushing. Install one or more 1/4" shims between the bearing and the bushing. Re-install the thrust bushing and tighten the hex nut until the flight starts rotating in the tube.
 - If less than 1/4" (6 mm) of threaded shaft is visible, remove one or more 1/4" shims (depending on what is required), and re-tighten the hex nut as per step 9.
- 10. Once the bushing is unable to rotate, install the thin lock nut and lock in place against the hex nut. Ensure there is at least 1/4" (6 mm) of shaft exposed.
- 11. Using the grease zerk, fill the bottom bearing cavity with grease until it comes through the bearing housing.
- 12. Fill the bearing housing with a full tube of grease. If the entire tube does not fit, put some of the grease inside of the dust cap.
- 13. Re-install the dust cap.



Assembly Note:

• Use SAE multi-purpose high-temperature grease with extreme pressure (EP) performance.

1	dust cap	5	grease zerk
2	thin lock nut	6	bushing
3	thin hex nut	7	shim, 1/4"
4	bearing housing	8	small tapered bearing

7.7. Inspect and Service the Hand Winch and Lift Cable

\Rightarrow

When equipped:

MARNING Place the hopper in fully lowered position with cable slack.

- 1. Inspect the cable for damage such as fraying, kinking, or unwinding. Replace if damaged (see below).
- 2. Check to make sure cable clamps are secure.
- 3. Oil cable pulleys as needed.
- 4. Keep a film of grease on the gears. Occasionally oil the bushings, drum shaft, and ratchet.
- 5. Do not get oil or grease on brake discs.
- 6. Replace brake discs if less than 1/16" (2 mm) thick.
- 7. Check for proper ratchet pawl operation:
 - When cranking in (clockwise) = loud clicking
 - When cranking out (counterclockwise) = no clicking and ratchet pawl fully engaged into gear teeth.

To Replace the Hopper Lift Cable:

- 1. Unwind the winch drum until cable is slack and remove all cable clamps.
- 2. Free the cable from the winch and pulleys.
- 3. Reverse the above steps to install the new cable.

7.8. Inspect and Service the Hydraulic Winch and Lift Cable



When equipped:

⚠ WARNING

Place the hopper in the fully lowered position with the cable slack.

To Inspect the Hopper Lift Cable:

- 1. Inspect the cable for damage such as fraying, kinking, or unwinding. Replace if damaged (see below).
- 2. Check to make sure the cable clamps are secure.
- 3. Oil the cable pulleys as needed.
- 4. Occasionally oil the bushings and drum shaft.

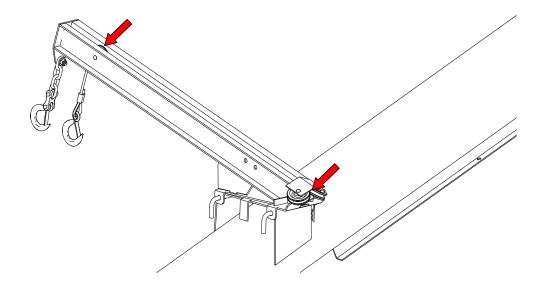
To Replace the Hopper Lift Cable:

- 1. Unwind the winch drum until the cable is slack and remove the cable clamps.
- 2. Free the cable from the winch and pulleys.
- 3. Reverse the above steps to install the new cable.

7.9. Service the Pulleys

- Ensure the cable is slack before servicing the winch.
- Check to make sure cable clamps are secure.
- Oil cable pulleys as needed.

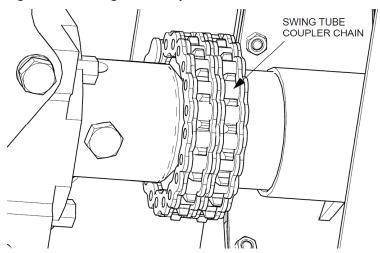
Figure 26. Cable Pulleys



7.10. Service the Swing Tube Coupler Chain

- 1. Remove any accumulated debris with a cloth or a soft wire brush.
- 2. Inspect the power transfer chain for wear.
- 3. Lightly oil the chain.

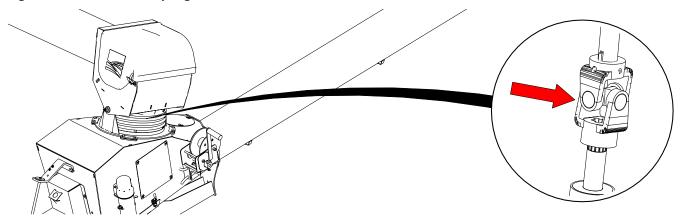
Figure 27. Swing Tube Coupler Chain



7.11. Service the Gearbox Coupling Shaft

- 1. Remove any accumulated debris with a cloth or a soft wire brush.
- 2. Inspect the gearbox coupling shaft and u-joints for wear and damage.

Figure 28. Gearbox Coupling Shaft U-Joint



7.12. Service the Boot and Hopper Chain Drive

- 1. Remove chain cover plate from the boot or hopper.
- 2. Check the chain slack at the midpoint of the longest span. It should be no more than 1/4" (6 mm).

Note

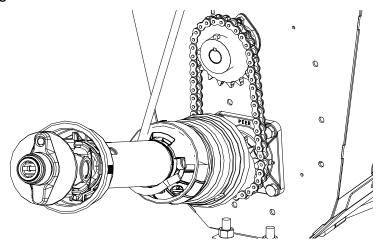
The hopper has two chains, one for each flighting.

3. Adjust the chain slack for the boot by loosening the 4 bolts of the lower bearing and adjust the chain slack Figure 29.

Note

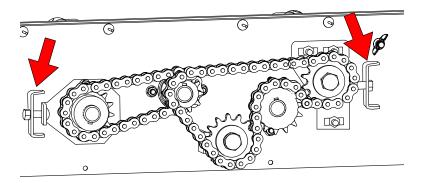
If the chain can't be tightened enough, remove a link from the chain. If the chain will not fit with one link removed, add a half link to the chain and replace.

Figure 29. Boot Chain Drive



4. Tighten or loosen the adjustment nut on the side to set the chain slack for the hopper.

Figure 30. Hopper Chain Drive



5. Tighten the chain tension roller idler bolt to 120 ft·lb using a torque wrench.

NOTICE Improper adjustment of chain will result in premature wear.

6. Lightly oil the chain.

7.13. Check the Gearbox Oil

- 1. Remove fill/vent plug to check gearbox oil level. Insert an improvised dipstick (rolled paper or plastic tie) into the oil filler hole to determine the oil level.
- 2. Note the level and the condition of the oil. Maintain oil level at half full (center of cross shaft) with 90W or equivalent gear oil, adding as necessary or drain and refill if condition is poor.
- 3. Ensure gearbox is level when checking or refilling.
- 4. Do not overfill when adding oil.
- 5. Replace fill/vent plug.

7.13.1 Gearbox Access

Upper Gearbox: Unfasten latches, open spout-head lid, and service gearbox as required.

Lower Gearbox: Open square service door and service gearbox as required.

7.14. Change the Gearbox Oil

Use SAE approved 90W or equivalent gear oil.

- 1. Remove gearbox from the auger.
- 2. Place a pan under the drain plug.
- 3. Use a wrench and remove the drain plug.
- 4. Loosen the filler plug so air can enter the gearbox and the oil will drain freely.
- 5. Allow the oil to drain completely.
- 6. Replace the drain plug.
- 7. Add oil until the gearbox is half full (center of cross shaft) and replace filler plug. A flexible funnel may be required. Gearbox should be level when checking or refilling. **Do not overfill.**
- 8. Reinstall the gearbox and guards.

7.15. Service the Landing Gear Power Swing Drive Chain

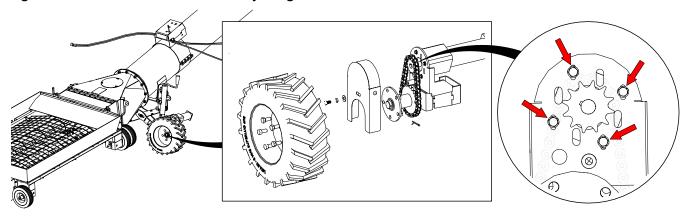
1. Keep the drive chain tension adjusted to about 1/4" (5 mm) deflection by loosening the four bolts on the hydraulic or electric motor mount, then retighten.

Note

The power swing has two chains, one for each motor.

- 2. Oil chain frequently enough to keep a light film of oil on it.
- 3. Replace guards when complete.

Figure 31. Location of the Bolts for Adjusting the Chain Tension



7.16. Clean and Wash the Equipment

- 1. Clean out excess grain from all areas of the auger.
- 2. Make sure water can drain from the 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.

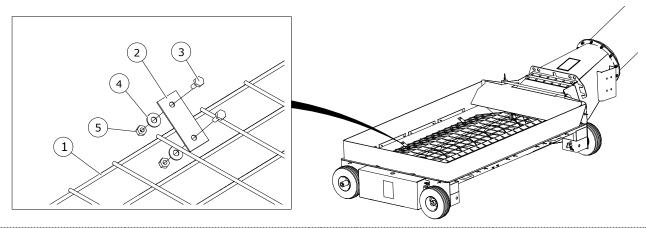
3. Provide sufficient time for the water to drain from the auger.

7.17. Removable Hopper Mesh Guard

The hopper mesh guard can be removed for better access to cleanout or to service the hopper components.

▲ DANGER Install hopper mesh prior to operation of the auger.

- 1. Remove the six hopper mesh straps securing the mesh guard to the hopper.
- 2. Remove the mesh guard.
- 3. Replace hopper mesh guard and secure using the six existing mesh straps.

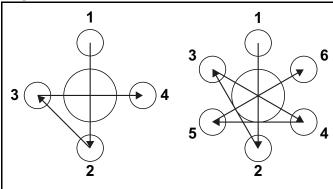


1	mesh guard	4	flat washer, 1/4"
2	mesh strap	5	lock nut, 1/4"
3	bolt, 1/4" x 3/4"		

7.18. Repack the Wheel Bearings with Grease

- 1. Block wheels and ensure unit is stable.
- 2. Remove the wheel bolts and the wheels.
- 3. Clean wheel and hub mounting surfaces to ensure there is no rust or debris.
- 4. Remove the wheel bearing and pack with grease. Use SAE multi-purpose high-temperature grease with extreme pressure (EP) performance. SAE multi-purpose lithium-based grease is also acceptable.
- 5. Tighten the wheel bolts (diagonal pattern) with a torque wrench. Refer to the table below for the recommended torque. Inspect to make sure the wheel is sitting flush with the hub.

Diagonal Pattern for 4-bolt and 6-bolt Tires



Bolt Pattern	Torque, ft-lb
4-bolt	80 (<u>+</u> 10)
6-bolt	100 (<u>+</u> 10)

7.19. Power Swing Remote Transmitter

Ensure that a 9V battery is installed in the back of the remote transmitter. To install:

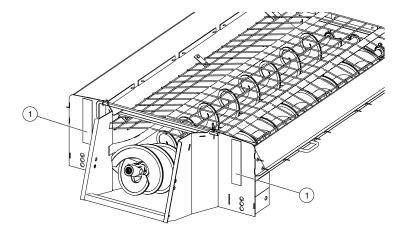
- Remove the plastic from around the battery
- Then place the battery into the back of the remote control.

For proper replacement procedure, refer to Section 9.1 – Power Swing Remote Transmitter Instructions on page 72 in the Appendix section of this manual.

7.20. Inspect the Retroreflective Strips

Replace missing or damaged retroreflective strips.

Hopper



1 yellow retroreflective strip

8. Troubleshooting

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

MARNING 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
Poor product flow.	Input speed is too slow.	Increase engine rpm.
	Inadequate material flow from truck or hopper.	Increase flow of material.
	Flow into the hopper is restricted.	Clear grating of obstructions.
	Material is too wet or heavy.	Unloading rates are for dry grain.
	Flighting is worn.	Repair or replace as required.
The flighting does not turn.	Auger flighting is plugged or obstructed.	Identify and remove obstruction.
	The coupler bolt below the non-rotating section is broken or missing.	Replace the bolt.
	Bearing is seized.	Identify the bearing and replace.
	A chain is broken.	Identify the chain and repair or replace.
	Gearbox is seized.	Fix or replace the gearbox.
	Gearbox coupler bolt is broken or missing.	Replace the bolt.
	A PTO shear bolt has failed.	Replace both PTO shear bolts.
Auger flighting is noisy.	Obstruction in the auger tube.	Identify and remove obstruction.

Problem	Cause	Solution
	Flighting shaft bolts are loose or damaged.	Tighten or replace bolts.
Flighting shaft is bent.		Repair or replace flighting shaft.
Flighting is damaged.		Repair or replace flighting.
Worn bearing.		Repair or replace bearing.
	Low gear oil level.	Inspect the gearbox, replace if damaged or add oil if not damaged.

A-Frame

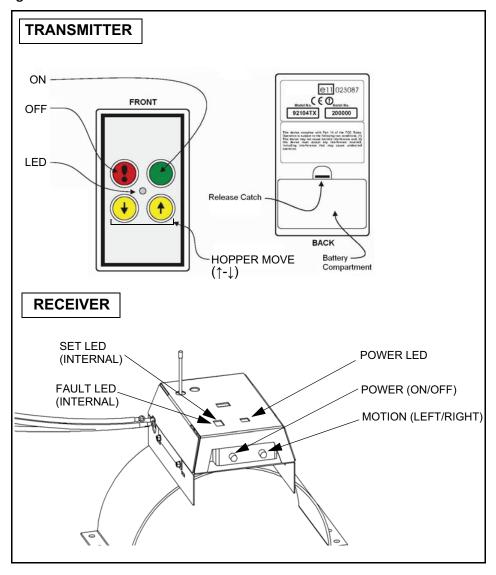
Problem	Cause	Solution
The auger will not raise or lower. The auger is already at its maximum or minimum height.		If at maximum height, lower the auger.
	Obstruction in the slide.	Clear the obstruction.
	Faulty cable.	Replace cable.
	Faulty winch.	Consult your local dealer.
	The bottom or top of the auger is obstructed.	Clear the obstruction.
The auger will not stay elevated.	Faulty winch.	Lower auger to transport position and repair or replace winch.
	Faulty cable.	Lower auger to transport position and repair or replace cable.

9. Appendix

9.1. Power Swing Remote Transmitter Instructions

Figure 32 shows the controls and indicators for the power swing remote and receiver.

Figure 32. Remote Transmitter and Receiver Controls and Indicators



Important

The transmitter LED blinks on and off when the transmitter and receiver are active (turned on by the transmitter) and no other button is pressed. The LED turns fully on while a transmitter button is pressed, unless the transmitter battery is low, in which case the LED pulses on and off.



The transmitter automatically transmits a **STOP** signal after 30 minutes; this de-activates the receiver and the transmitter keypad.



The remote transmitter that comes with each power swing is normally factory programmed to function with the power swing receiver. Refer to specific instructions for programming additional or replacement remotes according to the serial number of the power swing receiver.

9.2. Programming Receivers

Turn on all the remote transmitters before programming.

Note

To de-register all remote transmitters from the receiver, hold down the OFF button on a remote for at least 60 seconds.

TO REGISTER THE FIRST REMOTE TRANSMITTER:

1. Switch OFF the receiver.

Important

Steps 2 and 3 must be done within 10 seconds of each other. The FAULT LED on the receiver flashes for the duration of the registration window.

- 2. Switch ON the receiver.
- 3. On the first remote, press the ON button and the yellow Down-Arrow Motion button at the same time and hold until the red light on the receiver SET LED illuminates solid red. Release buttons. The remote is programmed, and should be set aside.

TO REGISTER A SECOND REMOTE TRANSMITTER:

1. Switch OFF the receiver.

Important

Steps 2 and 3 must be done within 10 seconds of each other. The FAULT LED on the receiver flashes for the duration of the registration window.

- 2. Switch ON the receiver.
- 3. On a 2nd remote, press and release the ON button once, then press the ON button and the Down-Arrow Motion button at the same time and hold until the red light on the receiver SET LED illuminates solid red. Release buttons. The remote is programmed, and should be set aside.

TO REGISTER A THIRD REMOTE TRANSMITTER:

1. Switch OFF the receiver.

Important

Steps 2 and 3 must be done within 10 seconds of each other. The FAULT LED on the receiver flashes for the duration of the registration window.

- 2. Switch ON the receiver.
- 3. On a 3rd remote, press and release the ON button twice, then press the ON button and the Down-Arrow Motion button at the same time and hold until the red light on the receiver SET LED illuminates solid red. Release buttons. The remote is programmed, and should be set aside.

TO REGISTER A FOURTH REMOTE TRANSMITTER:

1. Switch OFF the receiver.

Important

Steps 2 and 3 must be done within 10 seconds of each other. The FAULT LED on the receiver flashes for the duration of the registration window.

- 2. Switch ON the receiver.
- 3. On a 4th remote, press and release the ON button three times, then press the ON button and the Down-Arrow Motion button at the same time and hold until the red light on the receiver SET LED illuminates solid red. Release buttons. The remote is programmed, and should be set aside.

9.3. Open/Closed-Center Valve Conversion

Note

The standard configuration for the control valve is closed-center. The closed-center plug is pre-installed when delivered from AGI.

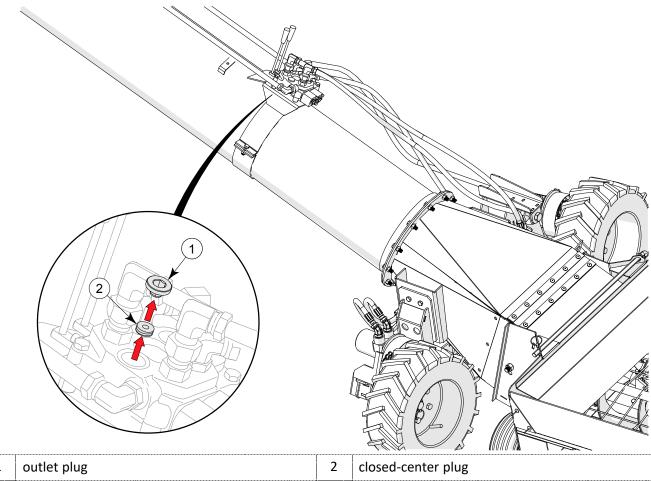
The control valve can be converted from the closed-center to the open-center configuration by removing the conversion plug.

- Remove outlet plug to access the closed-center plug.
- Remove the closed-center conversion plug for open-center operation.
- Re-install outlet plug.

Note

Retain the conversion plug that was removed for future use.

Conversion Plug Location



31188 R3 75

10. Specifications

Table 3. MKX²/HX² 10 Specifications

Specification		10-36			
Tube Size		10" (25.4 cm)			
CAPACITIES					
Unloading Rate		6600 Bu/Hr			
TRANSPORT DIMENSIONS					
Length		41' (12.5 m)			
Width		106" (2.7 m)			
Height		11'10" (3.6 m)			
DISCHARGE CLEARANCE DIME	NSIONS				
Min		9'8" (2.9 m)			
Max		21'10" (6.7 m)			
REACH TO WHEELS					
Min		17'9" (5.4 m)			
Max		18'6" (5.6 m)			
TIRES					
Туре		15"			
Inflation Pressure		See Manufacturer Recommended Pressure on Tire Sidewall			
Hubs		4 Bolt Automotive Type			
WEIGHT					
Total Weight		2396 lb (1087 kg)			
POWER RECOMMENDATIONS					
PTO Drive		40–45 HP			
PART SPECIFICATIONS					
PTO Speed		540 RPM			
PTO Shaft		14E			
Shear Bolt		5/16" x 1"			
PTO Maximum Operating Angle		15°			
Hitch Jack		2000 lb Side Winder			
Upper/Lower Gearbox Oil Capacity		0.45 US quarts (0.43 L)			
Replacement Hose & Hose Ends	Min Strength (Working Pressure)	2500 psi (17200 kPa)			
Pressure Required to Raise Auger		800 psi			
Hitch Pin (Minimum)		3/4" x 5"			

11. 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.



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