

WRX Series

Portable Grain Auger Operator's Manual

This manual applies to:

Westfield, AGI, Hutchinson, Mayrath 8-31, 8-36, 8-41, 8-46, 8-51, 8-56, 8-61, 8-71, 8-76 10-31, 10-36, 10-41, 10-51, 10-61, 10-71





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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: 31060 R3 Revised: January 2022 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.

Date	Employee Name and Signature	Employer Name and Signature

CONTENTS

1. Introduction	5
1.1 Serial Number Location	5
1.2 Intended Use	6
1.2.1 Misuse	6
2. Safety	7
2.1 Safety Alert Symbol and Signal Words	
2.2 General Safety Information	
2.3 Rotating Flighting Safety	
2.4 Overhead Power Lines	
2.5 Upending 2.6 Rotating Parts Safety	
o ,	
2.7 Work Area Safety	
2.8 Guards Safety	
2.9 Raising and Lowering the Auger	
2.10 Hand Winch Safety	
2.11 Hydraulic Winch Safety	
2.12 Positioning the Auger	
2.13 Towing the Auger	
2.14 Drives and Lockout Safety	
2.14.1 Gas Engine Safety	
2.14.2 Electric Motor Safety	
2.14.3 PTO Driveline Safety	
2.14.4 Hydraulic Power Safety	
2.15 Tire Safety	
2.16 Battery Safety	. 15
2.17 Personal Protective Equipment	. 16
2.18 Safety Equipment	. 17
2.19 Safety Decals	. 17
2.19.1 Decal Installation/Replacement	
2.19.2 Safety Decal Locations and Details	
3. Features	20
4. Transport	. 29
4.1 Transport Safety	
4.2 Transport Preparation	
4.3 Connect the Auger to the Towing Vehicle	
4.3.1 Enclosed Hopper	. 31
5. Placement	. 32
5.1 Placement Safety	
5.2 Positioning the Auger	
5.3 Hand Winch Operation	
5.4 Hydraulic Winch Operation	
6. Operation	
6.1 Operation Safety	
6.2 Start-up and Break-in	
6.3 Operation - Electric Motor Models	. 36

6.4 Operation - Gas Engine Models	. 36
6.5 Operation - PTO Drive	. 36
6.6 Operation - Hydraulic Motor Models	
6.7 Emergency Shutdown	. 38
6.8 Restarting with a Full Tube	. 38
6.9 Bin Level Indicators	. 38
6.10 Use of Grain Spreaders	. 38
6.11 Shutdown	. 39
6.12 Operating the Auger with Fertilizer	. 39
6.13 Storage	. 39
7. Maintenance	. 40
7.1 Maintenance Safety	
7.2 Maintenance Schedule	
7.3 Visually Inspect the Equipment	
7.4 Inspect Hydraulic Hoses and Fittings	
7.5 Lubricate the Equipment	
7.5.1 PTO Driveline	. 42
7.6 Apply Oil to the Motor Mount	
7.7 Check the Gearbox Oil	. 43
7.8 Change the Gearbox Oil	. 43
7.9 Adjust the Upper Drive Chain	. 44
7.10 Grease the Intake Bushing and Upper Drive Chain	. 44
7.11 Clean and Wash the Equipment	
7.12 Tension the Drive Belts	. 45
7.13 Align the Drive Belts	. 46
7.14 Replace the Drive Belts	. 46
7.15 Repack the Wheel Bearings with Grease	
7.16 Inspect and Service the Hand Winch and Lift Cable	
7.17 Inspect and Service the Hydraulic Winch and Lift Cable	. 48
8. Troubleshooting	. 49
9. Specifications	. 53
10. Appendix	
10.1 Bolt Torque	
10.1 Bolt Torque	
10.2 Installing the PTO-BD on the Left-Hand side	
-	
11. AGI Limited Warranty	. 63

1. Introduction

Thank you for your purchase. 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. 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.

1.2.1 Misuse

Do not install/use the auger for/with:

- transferring material other than dry, free-flowing food-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.

DANGER 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.
- Do not modify the auger in any way without written permission from the manufacturer and 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 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

- 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

- 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

- 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.









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. 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

WARNING When Equipped:

- 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.

2.11. Hydraulic Winch Safety

WARNING When Equipped:

- 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

• Transport and place equipment on reasonably level ground when raising, lowering, positioning, or operating.

- Move the auger into position slowly. Do not unhitch and attempt to move by hand.
- Chock wheels and anchor intake end 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:

- 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 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.

2.14.1 Gas Engine Safety

WARNING Power Source

- Keep guards in place and secure.
- Properly ventilate surrounding area.
- Never fill the fuel tank with the engine running, while smoking, or near an open flame. Always shut down and allow engine to cool before filling with fuel.
- Never overfill the tank or spill fuel. If fuel is spilled, clean it up immediately.
- Be sure to use the correct type and grade of fuel. Ground the fuel funnel or nozzle against the filler neck to prevent sparks that could ignite fuel vapors.
- Be sure to replace the fuel fill cap when you are done.

Lockout

- For engines with an electric start, remove the ignition key, the spark plug wire, or the spark plug.
- For engines with a rope or crank start, remove the spark plug wire or the spark plug.



2.14.2 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.

2.14.3 PTO Driveline Safety

WARNING Drive

- Keep body, hair, and clothing away from rotating PTO driveline.
- 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.





2.14.4 Hydraulic Power Safety

WARNING Power Source

- Refer to the rules and regulations applicable to the power source operating your hydraulic drive.
- 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. Battery Safety

WARNING

- Wear safety glasses and protective gloves when working near batteries.
 - Make certain the battery or terminal covers are in place and in good working order.
 - Keep all sparks and flames away from batteries; gas given off by electrolyte is explosive.
 - Avoid contact with battery electrolyte. Wash off any spilled electrolyte immediately.
 - Do not tip batteries more than 45° to avoid electrolyte loss.
 - To avoid injury from sparks or short circuits, disconnect battery ground cable before servicing any part of an electrical system.









2.17. 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.















31060 R3

2.18. 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.

2.19. 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.

2.19.1 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.

2.19.2 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.

17



Figure 2. Safety Decal Locations for Basic Auger

Figure 3. Safety Decal Locations for EMD Option







Figure 5. Safety Decal Locations for PTO-SD Option



Figure 6. Safety Decal Locations for PTO-BD Option



Figure 7. Safety Decal Locations for Hydraulic Drive Option



Figure 8. Safety Decal Locations for Hydraulic Winch Option



Table 1. Safety Decals

Part Number	Description	
20813	ANGER	
	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. 	

Part Number	Description
20819	ANGER
	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.
20818	Image: Constraint of the second sec

Part Number	Description
20817	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.
20803 (placed on machine behind guard)	Missing guard hazard To prevent serious injury or death, shut off power and reattach guard before operating machine.

Table 1 Safety Decals (continued)

Part Number	Description
Part Number 20804	Description
	 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.

Part Number	Description	
20807		
	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.	
20810		
20810 (Optional Mover Kit)	Image: Warning 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. 	

Part Number	Description	
20811	MARNING Image: Constraint of the second s	
	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.	
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. 	
20806	Image: Ware of the system Im	

Part Number	Description	
17109		
	 For proper raising and lowering of equipment: After lowering equipment, always tighten brake lock by turning winch handle clockwise at least two clicks. Rotate winch handle until cable has light tension, when in towing position. Do not lubricate winch brake discs. Inspect lift cable periodically; replace if damaged. Inspect cable clamps periodically; tighten if necessary. 	
19960	NOTICE	
	To prevent damage, wheels must be free to move when raising or lowering equipment. When equipment is positioned, chock all wheels.	

3. Features

Read this section to familiarize yourself with the basic component names and functions of the auger.



4. Transport



Before continuing, ensure you have completely read and understood this manual's Safety section, in addition to the safety information in the section(s) below.

4.1. Transport Safety

- 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.
- Do not raise the intake end above drawbar, upending may occur.
- 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

1. It is not recommended that the auger be transported 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 9. – Specifications on page 53) for auger weights.

A weight imbalance between the auger and the towing vehicle could result in a collision from reduced stability, handling, and braking ability.

- 2. Ensure the auger will clear any overhead obstructions or electrical wires prior to transporting. Refer to Section 9. Specifications on page 53 for the transport height of your auger.
- 3. 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.

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

4.3. Connect the Auger to the Towing Vehicle

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

- 1. Place the auger in the full down position. The frame should be in the full down position with slight tension on the lift cable. Refer to Lowering procedure.
- 2. Place and secure hitch pin using a clevis to tongue connection only.

Important

Use a type of hitch pin that will not allow auger to separate from towing vehicle.

- 3. Thread the safety chain and form a cradle to prevent the auger from digging into the road surface or upsetting (should a breakaway occur), see Figure 9. Replace the safety chain if one or more links or end fittings are stretched, broken, damaged, or deformed. The safety chain should have a load rating at least as high as the auger weight, refer to Section 9. Specifications on page 53.
- 4. Use caution when transporting the auger over rolling terrain. In severe dips, the intake end may contact the ground.

Figure 9. Typical Safety Chain and Hitch Connection



4.3.1 Enclosed Hopper

When Equipped: Attach both hooks to the loops on the hopper and cross the chain underneath the tow bar to prevent the auger from digging into the road surface or upsetting (should a breakaway occur). Replace the safety chain if one or more links or end fittings are stretched, broken, damaged, or deformed. The safety chain should have a rating at least as high as the auger weight, refer to Section 9. – Specifications on page 53.



1	Tow Bar
2	Tractor Drawbar
3	Safety Chain
4	Hitch Pin
5	Grip Clip
6	Safety Chain Hook

5. Placement



Before continuing, ensure you have completely read and understood this manual's Safety section, in addition to the safety information in the section(s) below.

5.1. Placement Safety

- MARNING
 The auger is not insulated, keep away from overhead power lines. Electrocution can occur without direct contact.
 - Anchor intake end before using.
 - 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

To position the auger using a tractor:

Filling Bins

- 1. Back the auger up to the bin while it is in its lowered configuration.
- 2. Set the park brake on the tractor before dismounting.
- 3. Raise the auger so it clears the bin.
- 4. Slowly back the auger up until the outlet is over the opening in the bin.
- 5. Unhook the auger from the tractor and lower the intake end to the ground.

WARNING Upending hazard, do not hook or unhook hitch unless the auger has a downward weight.

6. Slowly lower the auger spout to the bin.

NOTICE Do not rest the spout on the bin. This may cause damage to the auger or bin.

7. Place chocks in the front and back of each wheel and anchor the intake end.

Figure 10. Typical Grain Auger Placement for Filling Bins



Under Hopper Bottom Bins

- 1. Position the intake hopper between the hopper bin vertical legs.
- 2. Move auger into place. Do not allow auger or components to contact grain bin.
- 3. Raise the auger to desired height.
- 4. Place chocks in the front and back of each wheel and anchor the intake end.

5.3. Hand Winch Operation

When equipped with a Hand Winch:

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.

5.4. Hydraulic Winch Operation



When equipped with a hydraulic winch:

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.
 - \bigwedge **CAUTION** Do not touch, grab, or guide cable while equipment is being raised or lowered.

NOTICE

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.

6. Operation



Before continuing, ensure you have completely read and understood this manual's Safety section, in addition to the safety information in the section(s) below.

6.1. Operation Safety

- MARNING Keep away from rotating and moving parts, including the auger/mixer flighting, drive components, shafts, and bearings.
 - 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.

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.

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

- 2. Gas and Electric Drive Models: Check the drive belt tension and alignment. See Maintenance Section for instructions.
- 3. Visually inspect the auger, see Visual Inspection in Maintenance Section.
- 4. Check tightness of all bolts/nuts, fasteners, and hardware (re-torque if necessary).
- 5. Ensure adequate power is supplied to operate the auger, see Section 9. Specifications on page 53.
- 6. Start the auger and operate normally.
- 7. 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.

- 8. Do not run the auger for long periods of time without material because it increases wear. Try to run only when moving material.
- 9. 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 - Electric Motor Models



When equipped with an Electric Motor:

- 1. Turn the electric motor on.
- Run until the auger is empty.
- 3. Turn off motor and lock out power source.
- Unplug the power cord, wrap around the equipment and secure to prevent dragging, especially when 4. transporting or placing the auger.

6.4. Operation - Gas Engine Models



When Equipped with a Gas Engine:

- 1. If the drive belts are tight, disengage the belts.
- 2. Start the gas engine. Follow instructions provided with the gas engine for specific starting instructions.
- Engage belt drive lever (when equipped).

Note

The drive belt should be just tight enough to not slip on the drive pulley. If the belt is too loose, it will slip, lowering power transfer from the engine and possibly causing a squealing sound. If the belt is too tight, it will cause excess wear.

- 4. Adjust gas engine to provide maximum engine RPM.
- 5. Run until all grain has been emptied from the equipment.
- Reduce engine speed to low idle.
- 7. Shut off engine and lock out power source.
- 8. Shut off fuel supply.
- 9. Keep the belts engaged when transporting the auger.

6.5. 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 9. – Specifications on page 53.

- 4. Ensure the PTO drive on the tractor is in the off position before starting the tractor.
- 5. 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.
- 6. 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.
- 7. To shut down, reduce the speed to low idle and lock out the PTO.
- 8. 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.

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

6.6. Operation - Hydraulic Motor Models

- 1. Inspect all hydraulic lines, hoses, fittings, and couplers for tightness. Use a clean cloth to wipe any accumulated dirt from the couplers before connecting to the hydraulic system of the tractor.
- 2. Position the tractor next to the auger.
- 3. Place chocks in the front and rear of each wheel of the tractor, and be sure the hoses are routed out of the way.
- 4. Connect hydraulic hoses to the couplers.
- 5. Place all tractor controls in neutral.
- 6. Start the tractor and run at low idle.
- 7. Engage the tractor hydraulic control lever to "float" position, and increase the engine RPM to desired speed.

Note

If the auger direction is wrong, then switch the hydraulic hoses around.

Note

The correct operation of a hydraulic system is directly linked to the pump's ability to supply the correct oil flow and pressure. If you cannot obtain the correct augering speed, check with your dealer to ensure the power unit is delivering the correct oil volume and pressure.

- 8. Run until the auger is empty.
- 9. Reduce tractor engine speed to low idle.
- 10. Place hydraulic control lever in neutral.
- 11. Shut off engine and remove ignition key.
- 12. Disconnect hydraulics from tractor.

WARNING Relieve hydraulic pressure before disconnecting the couplers.

When starting under load: If restarting the auger under load (tube is full), start at low speed since the start-up torque loads are so much higher than normal.

6.7. Emergency Shutdown

In an emergency situation:

- 1. Stop or 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.

6.8. 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.

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

- 2. If guards or covers have been opened or removed, close or replace them before restarting the unit.
- 3. **Electric Motor Models:** 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. Gas and PTO Drive Models: 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.
- 5. Once the auger has been started, you may resume normal operation.

6.9. Bin Level Indicators

A full bin will cause auger to plug, which can damage the flighting and other drive components. Installing grainlevel indicators on your bins will allow you to monitor bin filling and help prevent damage to your auger.

6.10. Use of Grain Spreaders

Many grain spreaders cannot handle the large capacity of some augers and can cause the auger to plug, damaging the flighting and other drive components. This type of damage is not covered by warranty. To avoid this:

- Make sure spreader is turned on and operating.
- When using a flex down spout, center auger spout above spreader and do not lower auger spout into spreader.
- Suspend the spreader lower from bin ceiling leaving extra room for excess grain to flow over the spreader.
- Get a larger spreader, if available.
- Remove the spreader.

6.11. Shutdown

When operation has been completed:

- 1. Once the auger is clear of grain, lock out the power source.
- 2. Lower the auger fully. See Raising and Lowering instructions.
- 3. Clean out any remaining grain from the auger with a vacuum or sweep out.
- 4. Clean the entire work area.
- 5. Remove anchors, supports, and chocks.

6.12. Operating the Auger with Fertilizer

If 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 clean the machine as noted in the Maintenance section.

6.13. Storage

After the season's use, the auger should be thoroughly inspected and prepared for storage. Repair or replace any worn or damaged components and perform maintenance as described in the Maintenance Section to prevent any unnecessary downtime at the start of the next season.

To ensure a long, trouble-free life, this procedure should be followed when preparing the unit for storage.

- 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.
- 3. 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 9. Specifications on page 53.
- 6. Inspect the auger for cracks, tightness of fittings and fasteners, 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. Motor Equipped Models: Cover motor with waterproof tarpaulin if stored outside to protect from weather.
- 9. Chock wheels.
- 10. Support intake on blocks to eliminate prolonged contact with the ground.
- 11. Lower the auger fully for storage.

7. Maintenance

Before continuing, ensure you have completely read and understood this manual's Safety section, in addition to the safety information in the section(s) below.

7.1. Maintenance Safety

- 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 Westfield replacement parts or equivalent. Use of unauthorized parts will void warranty. If in doubt, contact Westfield or your local dealer.

Before attempting maintenance of any kind:

- Lower the auger fully.
- Chock wheels.
- Support 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

Proper maintenance habits mean a longer life, better efficiency, and safer operation. Please follow the Maintenance Schedule below. Keep good records of the hours the auger has been operated and the maintenance performed.

Daily:
Section 7.3 – Visually Inspect the Equipment on page 41
Section 7.5 – Lubricate the Equipment on page 42
Monthly:
Section 7.4 – Inspect Hydraulic Hoses and Fittings on page 42

Section 7.10 – Grease the Intake Bushing and Upper Drive Chain on page 44	
Annually:	
Section 7.6 – Apply Oil to the Motor Mount on page 43	
Section 7.11 – Clean and Wash the Equipment on page 45	
Section 7.7 – Check the Gearbox Oil on page 43	
Section 7.9 – Adjust the Upper Drive Chain on page 44	
2–3 Years:	
Section 7.8 – Change the Gearbox Oil on page 43	
As Required:	
Section 7.12 – Tension the Drive Belts on page 45	
Section 7.13 – Align the Drive Belts on page 46	
Section 7.14 – Replace the Drive Belts on page 46	
Section 7.15 – Repack the Wheel Bearings with Grease on page 46	
Section 7.16 – Inspect and Service the Hand Winch and Lift Cable on page 47	
When equipped: Section 7.17 – Inspect and Service the Hydraulic Winch and Lift Cable on page 48	

7.3. Visually Inspect the Equipment

A 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.
- Check wheel bolts are tight and examine tires for gashes, uneven wear, or loss of air pressure. See Section 9.
 Specifications on page 53 for recommended tire pressure and torque information.
- 8. Check all operating, lifting, and transport components. Replace damaged or worn parts before using the auger.
- 9. Inspect the auger shaft bushing for unusual wear or discoloration.
- 10. Inspect the winch cable for fraying, kinking, unwinding, or other possible damage.
- 11. PTO Models: Check the PTO shield & replace if damaged.
- 12. When equipped: Inspect hydraulic hoses and fittings for leaks and wear. Fix or replace where necessary.

7.4. Inspect Hydraulic Hoses and Fittings

When equipped:

- 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 9. Specifications on page 53.
- 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.

7.5. 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.

Check Section 9. – Specifications on page 53 for lubricating grease type information.

7.5.1 PTO Driveline

Figure 11. Typical PTO Driveline Grease Points (North American)



Figure 12. Typical PTO Driveline Grease Points (European)



7.6. Apply Oil to the Motor Mount

When equipped: Lightly oil motor mount pipes and the belt release eccentric for greater ease in disengaging the drive.

7.7. 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), adding as necessary or drain and refill if condition is poor.

Refer to Section 9. – Specifications on page 53 for gearbox oil information.

- 3. Ensure gearbox is level when checking or refilling.
- 4. Do not overfill when adding oil.
- 5. Replace fill/vent plug.

7.8. Change the Gearbox Oil

Refer to Section 9. – Specifications on page 53 for gearbox oil information.

- 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.

7.9. Adjust the Upper Drive Chain

Note

Improper adjustment of the drive chain will result in premature wear.

- 1. Loosen the bolts and remove the cover plate.
- 2. Check upper drive chain for tightness. Chain should have maximum deflection of 1/8" from factory.
- 3. If chain idler needs to be adjusted, loosen the idler sprocket bolt.
- 4. Adjust the idler sprocket position to take up chain slack.
- 5. Tighten the idler sprocket bolt.
- 6. Grease the chain. Check Section 9. Specifications on page 53 for lubricating grease type information.
- 7. Reattach the cover plate and tighten the bolts.

Figure 13. Upper Drive Chain



7.10. Grease the Intake Bushing and Upper Drive Chain

For continuous use in extreme cold, semi-fluid arctic grease or heavy oil may be used.

Use only a hand-held grease gun.

Wipe grease fitting with a clean cloth before greasing to avoid injecting dirt and grit.

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

- 1. Fill enclosed upper drive housing to plug level with grease. See Section 9. Specifications on page 53 for grease quantity.
- 2. Lubricate the intake bushing zerk.

Check Section 9. – Specifications on page 53 for lubricating grease type information.

Figure 14. Upper Chain Drive Zerk & Intake Zerk



7.11. 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.

7.12. 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 15. 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.

7.13. Align the Drive Belts

When equipped:

- 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.

7.14. Replace the Drive Belts

When equipped:

- 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.

7.15. 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 to 100 ft-lb (±10 ft-lb) of torque. Inspect to make sure the wheel is sitting flush with the hub.

Figure 16. Diagonal Pattern for 4-bolt and 6-bolt Tires



7.16. Inspect and Service the Hand Winch and Lift Cable



WARNING Place auger 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. Check Section 9. Specifications on page 53 for gearbox oil type information.
- 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" (1.6 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 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. Remove the cable clamps that secure the hook in place.
- 4. Reverse the above steps to install the new cable.

7.17. Inspect and Service the Hydraulic Winch and Lift Cable



WARNING Place auger 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" (1.6 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 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. Remove the cable clamps that secure the hook in place.
- 4. Reverse the above steps to install the new cable.

8. Troubleshooting



Before continuing, ensure you have completely read and understood this manual's Safety section, in addition to the safety information in the section(s) below.

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

In the following section, we have listed some causes and solutions to some of the problems you may encounter.

If you encounter a problem that is difficult to solve, even after having read through this section, please contact your local dealer or distributor. Before you contact them, please have this operation manual and the serial number from your machine ready.

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.
	Belt Slipping	Identify the belt, adjust or replace as required.
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.	Chatter from wooden bearings.	Spray penetrating lubricant between shaft and bearing surface. Bearings will break in over time. *If replacement of a bearing becomes necessary, split bearings are available to avoid having to slide all bearings off driveshaft.
	Flighting peeled back due to plugging.	Inspect spout end of auger for flighting condition. Remove and replace flighting sections as necessary.
	Top drive inadequately lubricated.	Fill to appropriate level with grease. Top drive is not designed to be filled with oil.
	Bent flighting sections.	Support 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 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 auger tubes.	Auger being run at low capacity or empty for extended period of time.	Frequently occurs on farms using grain wagons. Auger should not be left unattended when filling bins. Depending on application, a belt conveyor may be
	Bent flighting.	more appropriate.
	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.
The flighting does not turn.	Auger flighting is plugged or obstructed.	Identify and remove obstruction.
	Bearing is seized.	Identify the bearing and replace.
	A chain is broken.	Identify the chain and repair or replace.
	Upper drive chain is broken.	Repair or replace.
	Gearbox is seized.	Fix or replace the gearbox.
	Gearbox coupler bolt is broken or missing.	Replace the bolt.
The bottom flighting will not turn.	Center coupler bolt is broken or missing.	Replace the bolt.
Auger flighting is	Obstruction in the auger tube.	Identify and remove obstruction.
noisy.	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.
	Upper chain drive loose.	Tighten the chain as required.
Shear bolts fail repeatedly.	Incorrect shear bolt type.	Replace with correct part number. Westfield shear bolts are specifically designed to provide correct driveline protection.
	Shear bolt hole worn out-of- round.	Frequent use of the incorrect shear bolt size can wear the mounting hole creating a "scissor effect," which will require replacement of the affected parts.
	Corn spreaders in bin unable to keep up with auger output.	Slow down auger or remove corn spreaders.
	Flighting peeled back as a result of plugging.	Occurs when bin has overfilled, or corn spreaders restrict end of discharge. Inspect flighting at discharge end of auger. If necessary, replace flighting.
	Driveline failure.	See Maintenance Section.

Frame/Undercarriage with Hand Winch

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.			
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.		

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.		

9. Specifications

Specification	8-31 8-36 8-41							
Tube Size	8" (203 mm)							
CAPACITIES								
Unloading Rate	Up to 3000 Bu/Hr							
		(106 m³/Hr)						
TRANSPORT DIMENSIONS								
Length	32'7"	36'5"	42'5"					
	(9.93 m)	(11.10 m)	(12.93 m)					
Width	6'5" (1.96 m)	7'10" (2.39 m)	7'10" (2.39 m)					
	9'3"	10'10"	11'0"					
Height	(2.82 m)	(3.30 m)	(3.35 m)					
DISCHARGE CLEARANCE DIMENSIONS								
Min	8'1"	9'8"	9'10"					
	(2.46 m)	(2.95 m)	(3.00 m)					
Min (BD)	9'9" (2.97 m)	10'10" (3.30 m)	11'7" (2.52 m)					
	15'6"	18'2"	(3.53 m) 20'3"					
Max (MD)	(4.72 m)	(5.54 m)	(6.17 m)					
	20'6"	24'6"	28'5"					
Max (BD)	(6.25 m)	(7.47 m)	(8.66 m)					
Max (EMD/SD/HYD)	20'9"	24'7"	29'1"					
	(6.32 m)	(7.49 m)	(8.86 m)					
TIRES								
Туре		15" Radial						
Inflation Pressure		20-24 PSI (137-165 kPa)						
WEIGHT	* 000 11-		*1000 !!-					
Total Weight (Basic)	*680 lb (309 kg)	850 lb (386 kg)	*1020 lb (464 kg)					
POWER RECOMMENDATIONS	(000.0)	(000.00)	(
Gas Engine	16 HP	16–18 HP	18–20 HP					
Electric Motor	5 HP	5–7.5 HP	5–7.5 HP					
PTO Drive (SD & BD)	15 HP	15 HP	20 HP					
Hydraulic	22GPM @	22GPM @	22GPM @					
PART SPECIFICATIONS	2200 PSI	2200 PSI	2200 PSI					
Gas Tank Capacity (MD)		47.6 US quarts (45 L)						
	SAE multi-purpose high-temperature grease with extreme pressure (EP)							
Lubricating Grease		ulti-purpose lithium-based grea						
Gearbox Oil	SAE	approved 90W or equivalent ge	ear oil					
Gearbox Oil Capacity (MD/EMD/SD)		0.9 US quarts (0.85 L)						
Upper Drive Housing Grease Quantity		1100 g (40 oz)						
Belt Size (MD)		B100						
Belt Size (BD)	B160	B210 Doub	le Banded					
Belt Size (EMD)		B62						
Maximum Operating Angle (SD & BD)		15°						
Hydraulic Hoses	Minimur	n 2500 psi (17200 kPa) working	pressure					
,			,					

*Weights are estimated

Tube Size CAPACITIES			8" (20	3 mm)	1						
CAPACITIES				8" (203 mm)							
Unloading Rate		Up to 3000 Bu/Hr (106 m³/Hr)									
TRANSPORT DIMENSIONS			•								
Length	46'8" (14.2 m)	52'2" (15.9 m)	56'10" (17.3 m)	62'2" (18.9 m)	72'0" (21.9 m)	76'10" (23.4 m)					
Width	9'6" (2.9 m)	9'6" (2.9 m)	10'0" (3.0 m)	10'0" (3.0 m)	10'6" (3.2 m)	10'6" (3.2 m)					
Height	12'0" (3.7 m)	11'9" (3.6 m)	12'2" (3.7 m)	12'2" (3.7 m)	13'6" (4.1 m)	11'5" (3.2 m)					
DISCHARGE CLEARANCE DIMENSIONS											
Min	10'5" (3.18 m)	10'5" (3.18 m)	11'5" (3.48 m)	11'0" (3.35 m)	12'4" (3.76 m)	10'10" (3.30 m)					
Min (BD)	11'5" (3.48 m)	11'11" (3.63 m)		N,	/A	-					
Max (MD)			N,	/A							
Max (BD)	31'5" (9.75 m)	35'6" (10.82 m)		N,	/A						
Max (EMD/SD/HYD)	31'3" (9.52 m)	35'0" (10.67 m)	37'5" (11.40 m)	40'1" (12.22 m)	46'5" (14.15 m)	45'5" (13.84 m)					
TIRES			-	-	-	-					
Туре	15" Radial										
Inflation Pressure			20-24 PSI (1	37-165 kPa)							
WEIGHT		_	-	-	-	-					
Total Weight (Basic)	1180 lb (536 kg)	*1350 lb (614 kg)	1520 lb (691 kg)	*1690 lb (768 kg)	*2030 lb (923 kg)	*2160 lb (982 kg)					
POWER RECOMMENDATIONS											
Gas Engine			N,	/A							
Electric Motor	7.5 HP	10–15 HP	15 HP	15–20 HP	20 HP	20–25 HP					
PTO Drive (SD & BD)	25 HP	25 HP	30 HP	35 HP	45 HP	50 HP					
Hydraulic			N,	/A							
PART SPECIFICATIONS											
Gas Tank Capacity (MD)			N,	/A							
Lubricating Grease		ulti-purpose hi nance. (SAE mu									
Gearbox Oil		SAE a	pproved 90W o	or equivalent g	ear oil						
Gearbox Oil Capacity (MD/EMD/SD)			0.9 US qua	rts (0.85 L)							
Upper Drive Housing Grease Quantity			1100 g	(40 oz)							
Belt Size (MD)			N,	/A							
Belt Size (BD)	B270 Douł	ble Banded		N,	/A						
	B62										
Belt Size (EMD)			B	52							
				5°							

*Weights are estimated

Specification	10–31	10–36	10-41	10–51	10–61	10-71		
Tube Size	10" (254 mm)							
CAPACITIES								
Unloading Rate	Up to 4800 Bu/Hr (169 m³/Hr)							
TRANSPORT DIMENSIONS								
Length	32'7" (9.93 m)	62'2" (18.9 m)	72'0" (21.9 m)					
Width	6'5" (1.96 m)	7'10" (2.39 m)	7'10" (2.39 m)	9'6" (2.9 m)	10'0" (3.0 m)	10'6" (3.2 m)		
Height	9'3" (2.82 m)	10'10" (3.3 m)	11'0" (3.35 m)	11'9" (3.6 m)	12'2" (3.7 m)	13'6" (4.1 m)		
DISCHARGE CLEARANCE DIMENSIONS								
Min	8'1" (2.46 m)	9'8" (2.95 m)	9'10" (3.00 m)	10'5" (3.18 m)	11'0" (3.35 m)	12'4" (3.76 m)		
Min (BD)	9'9" (2.97 m)	10'10" (3.30 m)	11'7" (3.53 m)	11'11" (3.63 m)	Ν	/A		
Max (MD)	15'6" (4.72 m)	18'2" (5.54 m)	20'3" (6.17 m)		N/A			
Max (BD)	20'6" (6.25 m)	24'6" (7.47 m)	28'5" (8.66 m)	35'6" (10.82 m)	Ν	/A		
Max (EMD/SD/HYD)	20'9" (6.32 m)	24'7" (7.49 m)	29'1" (8.86 m)	35'0" (10.67 m)	40'1" (12.22 m)	46'5" (14.15 m)		
TIRES								
Туре	15" Radial							
Inflation Pressure			20-24 PSI (1	37-165 kPa)				
WEIGHT		T	1	0	T	1		
Total Weight (Basic)	990 lb (449 kg)	1110 lb (504 kg)	1220 lb (553 kg)	1660 lb (755 kg)	1970 lb (895 kg)	2160 lb (982 kg)		
POWER RECOMMENDATIONS		T						
Gas Engine	18–20 HP	22–25 HP	22–25 HP		N/A	-		
Electric Motor	7.5–10 HP	10–15 HP	10–15 HP	15–20 HP	20 HP	20–25 HP		
PTO Drive (SD & BD)	30 HP	35 HP	40 HP	45 HP	55 HP	60 HP		
Hydraulic	22GPM @ 2200 PSI	22GPM @ 2200 PSI	22GPM @ 2200 PSI		N/A			
PART SPECIFICATIONS	-	<u></u>						
Gas Tank Capacity (MD) Lubricating Grease	SAE m		gh-temperatur					
Gearbox Oil	perforr		ulti-purpose lith	6		eptable)		
Gearbox Oil Capacity (MD/EMD/SD)			0.9 US qua		-			
Upper Drive Housing Grease Quantity				(40 oz)				
Belt Size (MD)		B100	1100 g	(10.02)	N/A			
Belt Size (BD)	B160	B210 Double Banded B270 Double N/A				/A		
Belt Size (EMD)			Di	Banded				
Maximum Operating Angle (SD & BD)			1	5°				
Hydraulic Hoses		Minimum	2500 psi (1720	00 kPa) working	g pressure			

*Weights are estimated

10. Appendix

10.1. Bolt Torque

Table 3 gives the correct torque values for various hardware. Tighten all bolts to the torque specified, unless otherwise noted. Check tightness periodically, using Table 3 as a guide. Replace the hardware with the same strength bolt, contact Westfield if you are unsure.

					Recommended Torque (ft-lb)								
Size	Size Dry or per inch Lubricated (Course/		Area c (sq		Grade	a 7	Grad		Grad		8.8 S		
		Fine)	Coarse Fine		Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine	
	Dry				5.5	6.3	8	10	12	14	6.3	7.8	
1/4"	Lubricated	20/28	0.0318	0.0364	6.3	4.7	6.3	7.2	9	10	-	-	
E /4 CII	Dry	40/24		0.050	11	12	17	19	24	27	11	11.8	
5/16"	Lubricated	18/24	0.0524	0.058	8	9	13	14	18	20	-	-	
3/8"	Dry	16/24	0.0775	0.0878	20	23	30	35	45	50	20	22	
5/0	Lubricated	10/24	0.0775	0.0878	15	17	23	25	35	35	-	-	
7/16"	Dry	14/20	0.1063	0.1187	32	36	50	55	70	80	31	33	
//10	Lubricated	14/20	0.1003	0.1107	24	27	35	40	50	80	-	-	
1/2"	Dry	13/20	0.1419	0.1599	50	55	75	85	110	120	43	45	
1/2	Lubricated	13,20	0.1415	0.1419	0.1355	35	40	55	65	80	90	-	-
9/16"	Dry	12/18	0.182	0.203	70	80	110	120	150	170	57	63	
5/10	Lubricated	12, 10	0.102	0.200	55	60	80	90	110	130	-	-	
5/8"	Dry	11/18	0.226	0.256	100	110	150	170	210	240	93	104	
570	Lubricated	11/10	0.220	0.250	75	85	110	130	160	180	-	-	
3/4"	Dry	10/16	0.334	0.373	175	200	260	300	380	420	128	124	
5/ 1	Lubricated	10,10	0.554	0.373	130	140	200	220	280	310	-	-	
7/8"	Dry	9/14	0.462	0.508	170	180	430	470	600	670	194	193	
.,	Lubricated	3/11	0.102	0.500	125	140	320	350	180	180	-	-	
1"	Dry	8/14	0.606	0.679	250	280	640	720	910	1020	287	289	
_	Lubricated	-/			190	210	480	540	680	760	-	-	
1-1/8"	Dry	7/12	0.763	0.856	350	400	790	890	1290	1440	288	290	
, _	Lubricated	- ,	0.703 0.850	270	300	590	670	970	1080	-	-		
1-1/4"	Dry	7/12	0.989	1.073	500	550	1120	1240	1820	2010	289	291	
, .	Lubricated	• , ==	0.000		380	420	840	930	1360	1510	-	-	
1-1/2"	Dry	6/12	1.405	1.581	870	960	1950	2200	3160	3560	-	-	
, -	Lubricated	-,		1.301	650	730	1460	1640	2370	2670	-	-	

 Table 3.
 Recommended Bolt Torque¹

1. Torque value for bolts and cap screws are identified by their head markings. Established at 75% of yield strength of bolt given the cross-sectional area.

Note

Torque figures in table are valid for non-greased or non-oiled threads and head unless otherwise specified. Therefore, do not grease or oil bolts or cap screws unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

10.2. Installing the EMD on the Right-Hand side

If the motor drive is required on the right-hand side of the auger, the EMD will need to be disassembled and then reassembled with the following parts rotated:

- gearbox
- motor mount slide brackets
- backplate mount
- electric motor

Flipping the Gearbox





1	Gearbox Assembly	3	Bolt, 1/2" x 1"
2	Woodruff Key, 1/4" x 1"	4	Lock Washer, 1/2"

Installing the Gearbox

1	Gearbox Assembly	6	Bolt, #10 x 3/4"	
2	Woodruff Key, 1/4" x 1"	7	Locknut, #10	
3	Bolt, 7/16" x 1"	8	Set Screw, 3/8" x 3/8"	
4	Locknut, 7/16"	9	Bolt, 1/2" x 1"	
5	Chain Coupler Guard Assembly	10	Lock Washer, 1/2"	

Installing the EMD Mount Assembly



Installing the Backplate Mount



1	Back Plate Slide Mount Bracket	4	Bolt, 3/8" x 3/4"
2	Back Plate Mount	5	Whiznut, 3/8"



2 Bolt, 7/16" x 1"

Installing the Electric Motor



10.3. Installing the PTO-BD on the Left-Hand side

To change the auger from a right-hand drive to a left-hand drive, take the following steps:

1. Support the discharge end of the auger using a front-end loader and a sling or chain, or a block-and-tackle.

DANGER Never use a PTO driveline without a rotating guard in good working order. Do not exceed maximum recommended operating length or angularity of PTO driveline.

2. Remove the following items: pulley guards, v-belt(s), 8" pulley, PTO driveline, jackshaft assembly, belt guides, sliding bracket, support tubes, long crossmember, extension arms, and the spacer.



1	8" Pulley	7	Axle
2	Belt-Guide Bracket	8	Jackshaft Assembly
3	1-3/4" Support Tube	9	2" Support Tube
4	Driveshield	10	15" Pulley
5	Driveline	11	Pulley Guards
6	Transport Saddle		

- 3. Remove the gearbox from the auger, and remove the mounting plate from the gearbox.
- 4. Place the gearbox on a level surface with the output shaft up. Switch the air-vent filler plug (from top) with the solid plug (from bottom) to prevent oil leak after rotation of gear box.
- 5. Re-mount the gearbox with the pulley shaft to the left side of the auger as determined when standing at the intake end facing the discharge end.
- 6. Reverse and reinstall the long crossmember so that the support tube mounting holes are to the left side of the auger.
- 7. Reinstall all items removed. Remember to reverse the position of the items where necessary.



1	8" Pulley	7	Axle
2	Belt-Guide Bracket	8	Jackshaft Assembly
3	1-3/4" Support Tube	9	2" Support Tube
4	Driveshield	10	15" Pulley
5	Driveline	11	Pulley Guards
6	Transport Saddle		·

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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