

# **WESTFIELD<sup>®</sup>**

## **GRAIN AUGERS**

# **PTO-BD**

**ASSEMBLY &  
OPERATIONS  
MANUAL**

**Model 'WR'  
BD-04-04**



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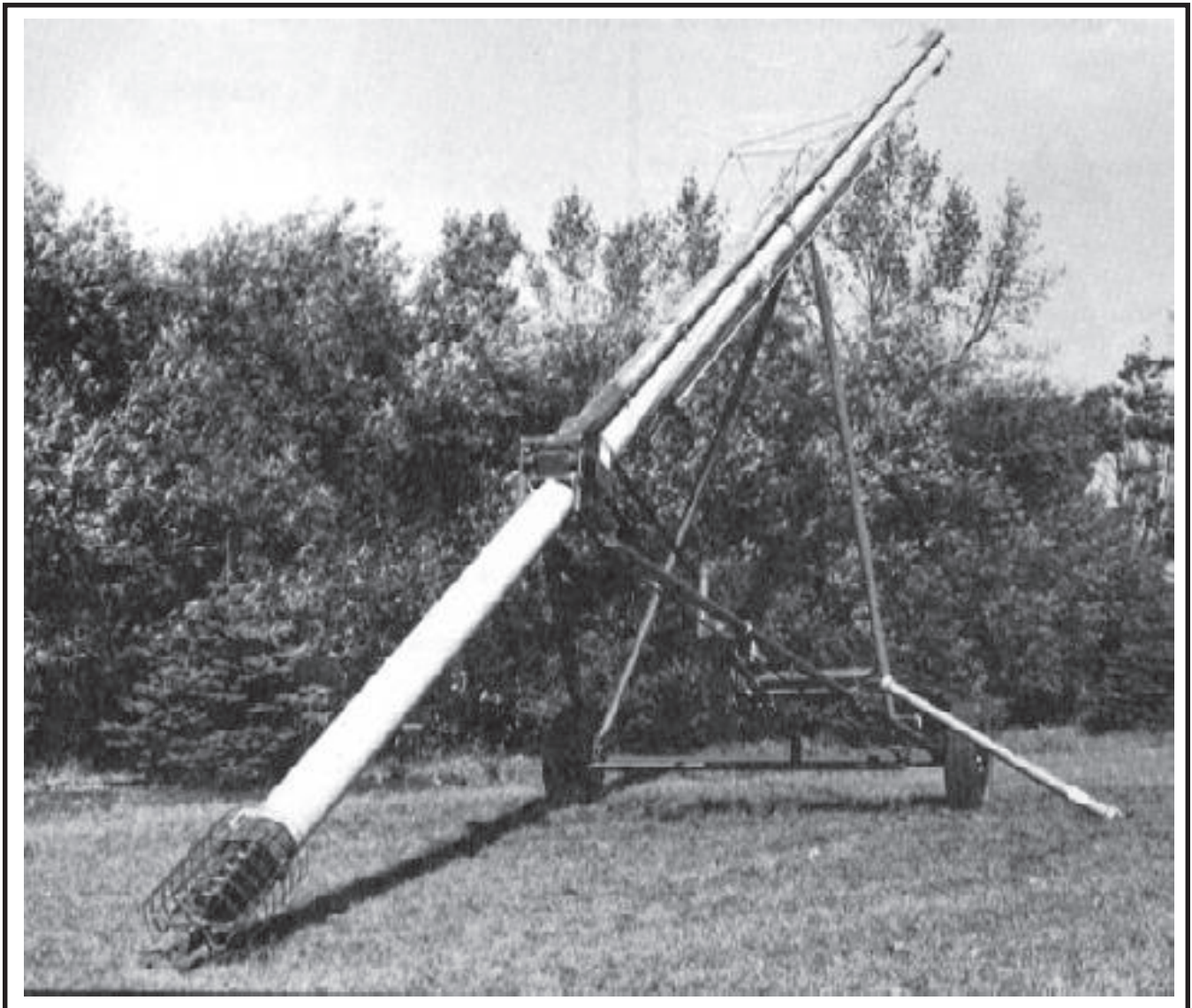
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# 1 . Introduction

Congratulations. As the new owner of a WESTFIELD PTO-BD Grain Auger, you will be working with equipment especially designed to complement and improve your farming operation. Before using this auger, we recommend that you read this manual and familiarize yourself with the various features of the machine and the necessary precautions for an efficient and safe operation.

In addition, we suggest that anyone using this auger be required as a matter of record to be familiar with all safety precautions. A sign-off form is supplied on the inside cover for your convenience and permanent records.

Thank you.





**Watch for this symbol. It identifies potential hazards to health or personal safety. It points out safety precautions. It means: ATTENTION - Be alert. Your safety is involved.**

**Failure to read this auger manual before operating the auger is a misuse of the equipment and a needless risk of life and limb.**



## 2. Safety First

Safety first! Everyone knows about it. Most people practise it. Sadly, a few choose to ignore it. Safety should be a habit, something you practise every time you work with machinery. Safe working habits prevent needless accidents and needless injuries or deaths.

Whether you are the owner, a supervisor, or an operator, it is **your** responsibility to know the operational requirements, the safety precautions and the potential

hazards of portable grain augers. Furthermore, you must ensure that anyone working with or around the augers be familiar with them. Failure to read this manual and/or noncompliance with correct safety procedures is a misuse of equipment. Remember, a lack of knowledge serves only to endanger yourself and those around you.

TAKE THE TIME - BE ALERT - BE SAFE

### 2-1. OPERATIONAL SAFETY

Operational safety means using common sense. Moreover, it means knowing and observing proper precautions. Always remember to:

Keep children and untrained people away from auger work area (see **Figure No. 1**). The area around an auger is not safe for untrained personnel, and especially not safe for children.

Have another person nearby who can shut down the auger in case of accident. It is good practise to always work with a second person around augers.

Inspect the lift cable before using auger. Replace if frayed or damaged.

Make certain lift cable is properly seated in cable pulleys.

Inspect the drive belt(s) before using auger. Replace if frayed or damaged.

Ensure that auger is empty before raising or lowering.

Ensure that winch is locked before operating auger.

Augers are not insulated. Keep away from electrical lines. Electrocutation can occur without direct contact.

Wear hearing protection when operating auger.

Do not operate any auger with any safety shield removed.

Never use a PTO driveline without a rotating shield in good working order.

Be certain the PTO driveline is securely attached to the jackshaft and to the tractor.

Before starting tractor, be certain that power to PTO is in the off position.

Keep body, hair, and clothing away from moving parts.

Do not grab or **touch** drive belt(s) during operation for any reason.

Operate the auger on level ground free of debris. If ground is uneven, anchor the auger to prevent tipping or upending.

Support the discharge end and/or anchor the intake end before operating to prevent upending.

Shut off all power to auger before servicing, cleaning, or adjusting.

Keep away from auger intake during operation.

Lower auger at completion of operation, or when not in use.

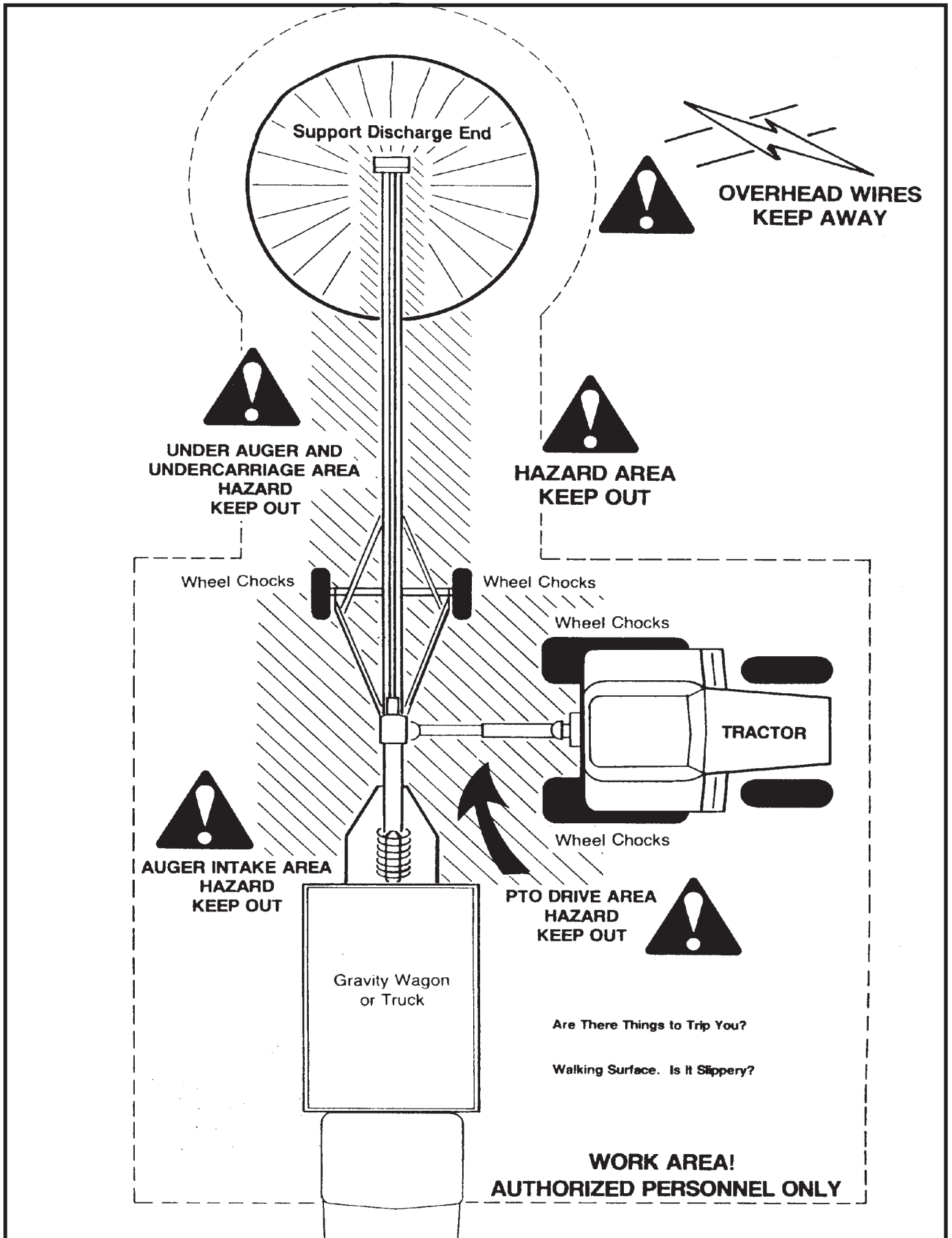


Figure No. 1

## 2-2. TRANSPORT AND PLACEMENT SAFETY

The approach to transport and placement safety is no different than that of operational safety. Follow the basic rules of good sense and know the limitations of your machinery. While a few of the precautions are the same, they bear repeating. Remember to:

Keep children and unauthorized personnel away from the hazard area surrounding auger.

Transport auger in full down position with slight tension on cable.

Check the lift cable before each use and replace if frayed or damaged. Also make certain the cable clamps are secure.

Make certain that the hitch pin is in place and the safety chain is properly attached. Use a type of hitch pin that will not permit auger to separate from towing vehicle.

Always attach a SMV (Slow Moving Vehicle) sign before transporting auger.

Disconnect PTO driveline from tractor before moving auger or tractor.

Secure the PTO driveline in transport saddle before moving auger.

Equip the auger with necessary lights for transportation where required by law.

Before moving auger, make sure the area around the auger is clear of obstructions and/or unauthorized personnel (see **Figure No. 2**).

Before moving auger, check and double check for overhead obstructions and/or electrical wires. Electrocutation can occur without direct contact.

Do not transport auger faster than 15 mph (24 km/h).

Do not transport auger on a slope greater than 20 degrees.

Use extreme caution in turning and cornering.

Do not raise or lower auger until the hazard area is clear.

Do not permit anyone to stand on or beneath auger when raising or lowering.

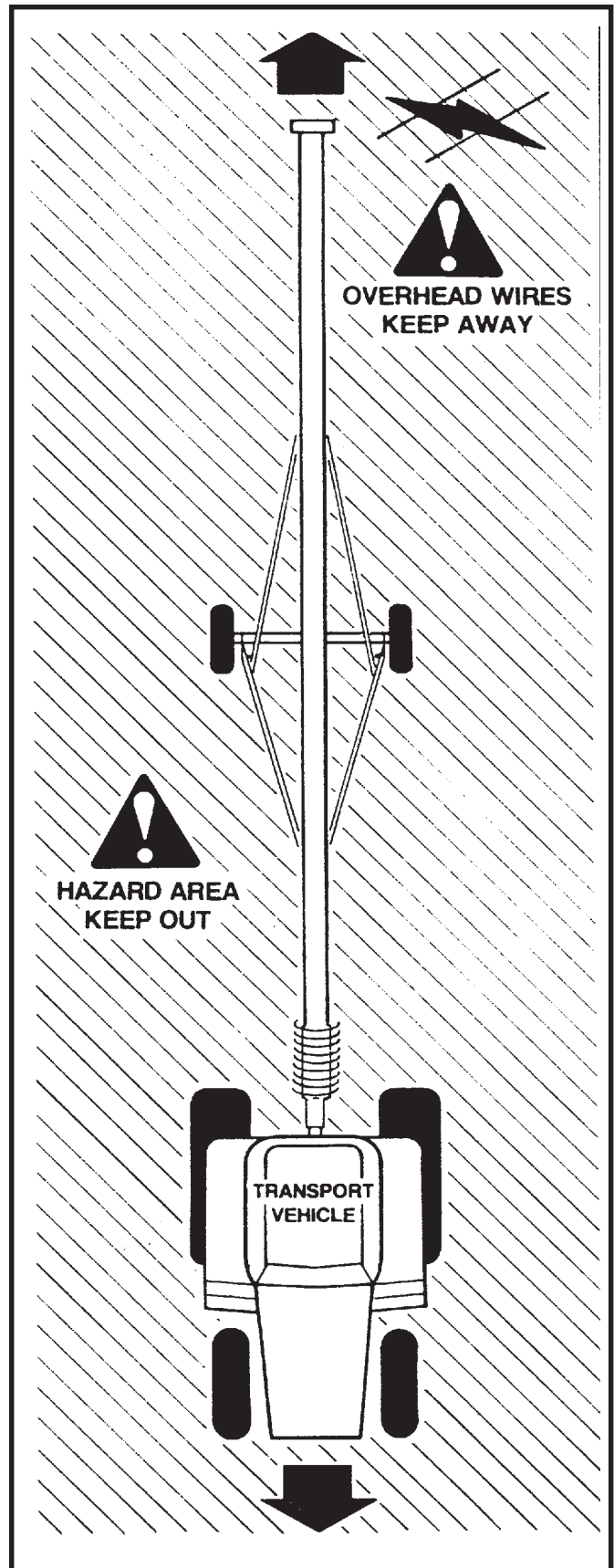


Figure No. 2

## 2-3. MAINTENANCE SAFETY

When lowering auger, never continue to turn winch handle counter-clockwise if the cable does not keep moving out under load. This will disengage the brake mechanism and will create an unsafe condition. This condition generally indicates that the track shoe is stuck. Too much slack in the cable could allow auger to drop suddenly. To correct the problem, winch in the slack cable and correct the sticking track shoe.

The winch must have a clicking sound when raising auger. If clicking sound stops, retain grip on handle, lower auger fully and repair winch.

After lowering auger, turn handle clockwise two clicks to lock winch brake.

Always keep a minimum of three cable wraps on the winch drum.

The winch is designed for MANUAL operation only.

Make sure that wheels are free to move when raising or lowering auger.

**DO NOT USE AUGER AS A HOIST.**

When performing maintenance on the PTO-BD auger, understand and observe the following precautions.

Support auger tube before attempting maintenance on the undercarriage assembly or when removing gearbox. Auger should be in full down position for maintenance.

Shut down and lockout all power before attempting maintenance of any kind. If lockout is impossible, disconnect auger drive from tractor.

Keep decals clean. Replace any decal that is damaged or not clearly visible.

After maintenance is completed, replace and secure all safety shields and safety devices.

Use only genuine WESTFIELD replacement parts or equivalent. Replacement parts such as intake shields, pulley shields, PTO driveline shields, winches and lift cables **MUST MEET ASAE STANDARDS** or serious injury may result. Use of unauthorized parts will void warranty. If in doubt, contact WESTFIELD or your WESTFIELD dealer. Do not modify any auger components.

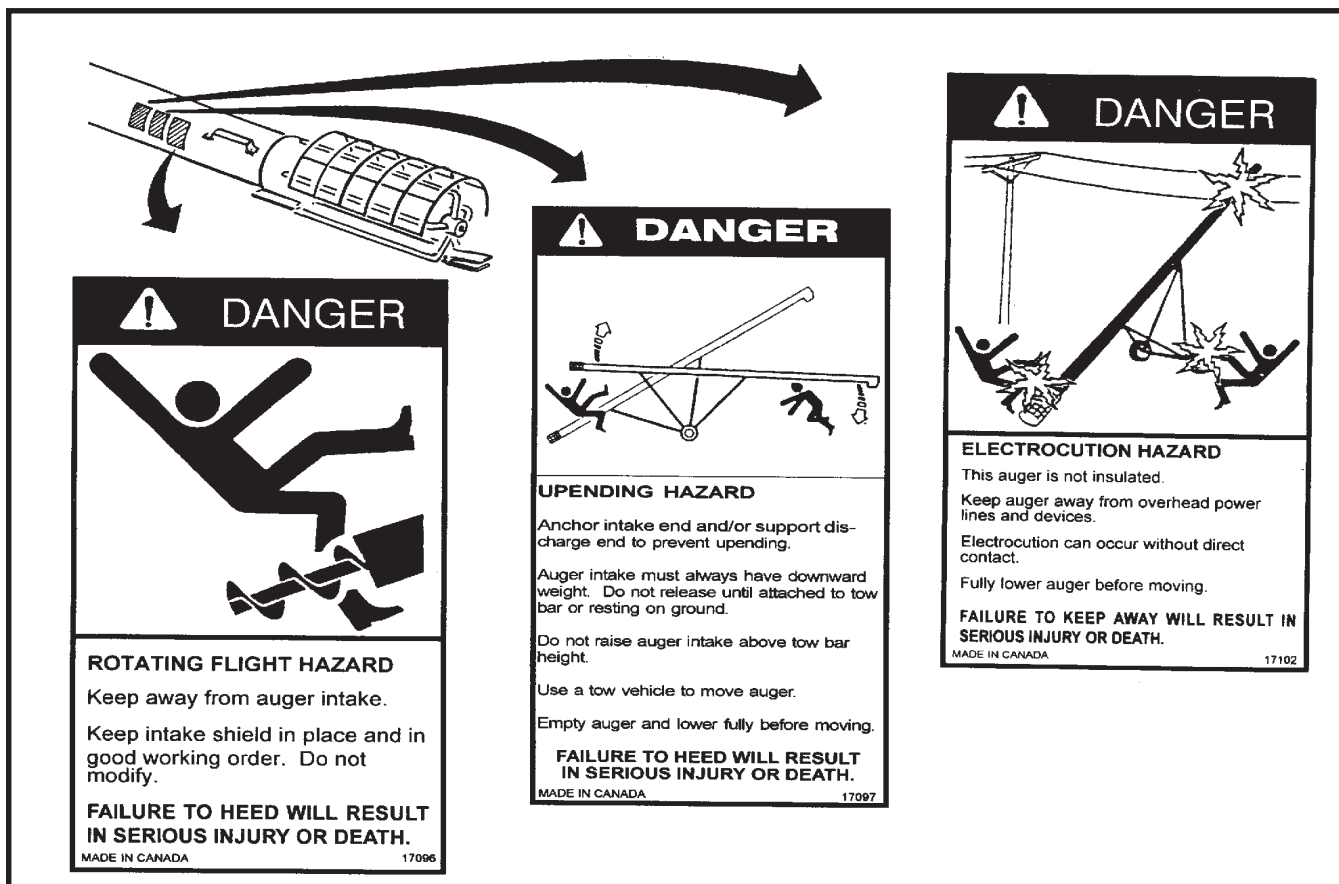
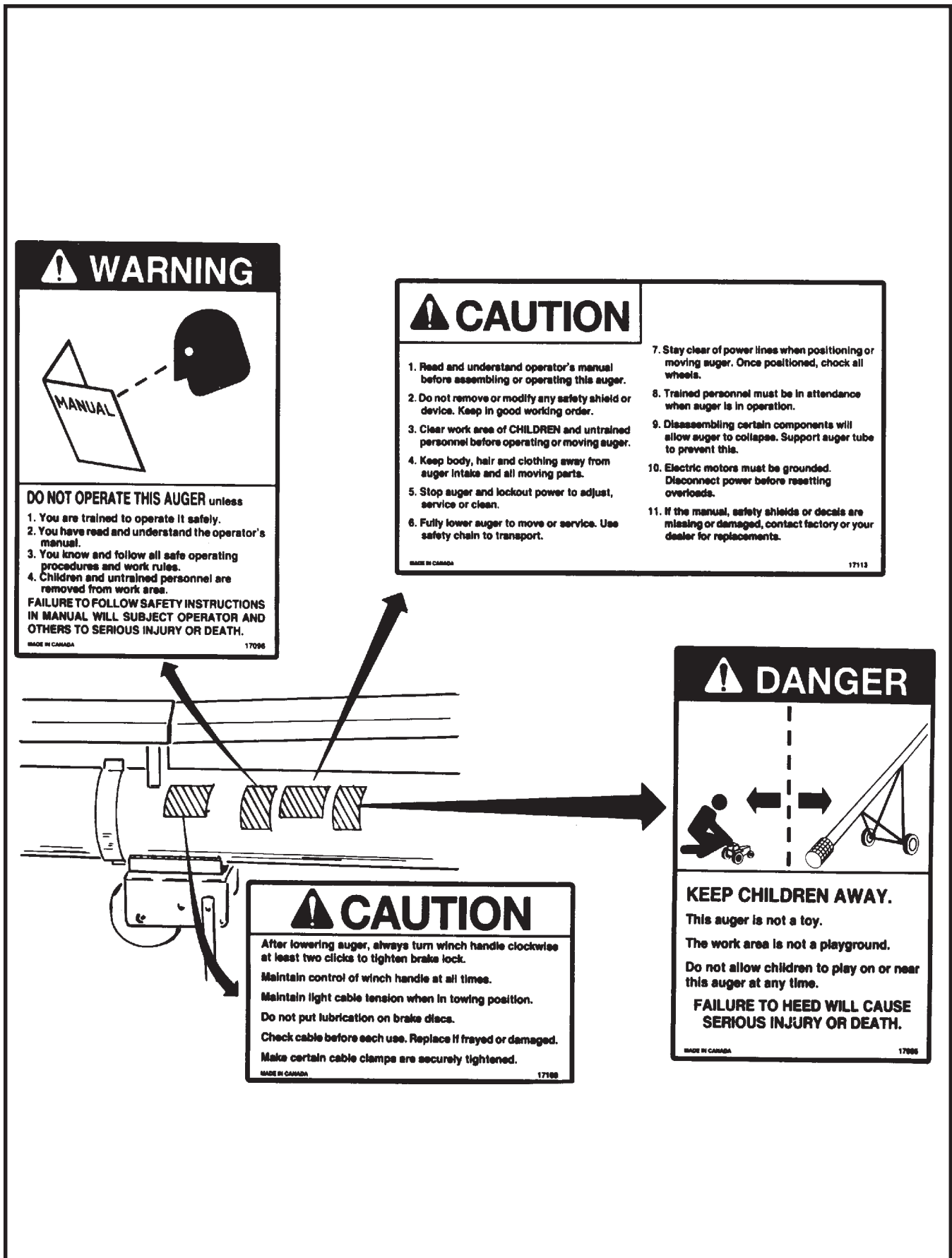
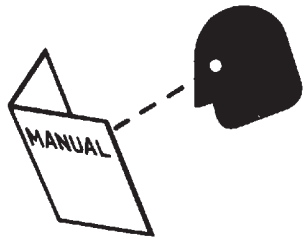


Figure No. 3



**WARNING**



**DO NOT OPERATE THIS AUGER** unless

1. You are trained to operate it safely.
2. You have read and understand the operator's manual.
3. You know and follow all safe operating procedures and work rules.
4. Children and untrained personnel are removed from work area.

**FAILURE TO FOLLOW SAFETY INSTRUCTIONS IN MANUAL WILL SUBJECT OPERATOR AND OTHERS TO SERIOUS INJURY OR DEATH.**

MADE IN CANADA 17096

**CAUTION**

1. Read and understand operator's manual before assembling or operating this auger.
  2. Do not remove or modify any safety shield or device. Keep in good working order.
  3. Clear work area of CHILDREN and untrained personnel before operating or moving auger.
  4. Keep body, hair and clothing away from auger intake and all moving parts.
  5. Stop auger and lockout power to adjust, service or clean.
  6. Fully lower auger to move or service. Use safety chain to transport.
  7. Stay clear of power lines when positioning or moving auger. Once positioned, chock all wheels.
  8. Trained personnel must be in attendance when auger is in operation.
  9. Disassembling certain components will allow auger to collapse. Support auger tube to prevent this.
  10. Electric motors must be grounded. Disconnect power before resetting overloads.
  11. If the manual, safety shields or decals are missing or damaged, contact factory or your dealer for replacements.
- MADE IN CANADA 17113

**CAUTION**

After lowering auger, always turn winch handle clockwise at least two clicks to tighten brake lock.

Maintain control of winch handle at all times.

Maintain light cable tension when in towing position.

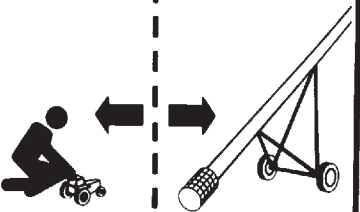
Do not put lubrication on brake discs.

Check cable before each use. Replace if frayed or damaged.

Make certain cable clamps are securely tightened.

MADE IN CANADA 17108

**DANGER**



**KEEP CHILDREN AWAY.**

This auger is not a toy.

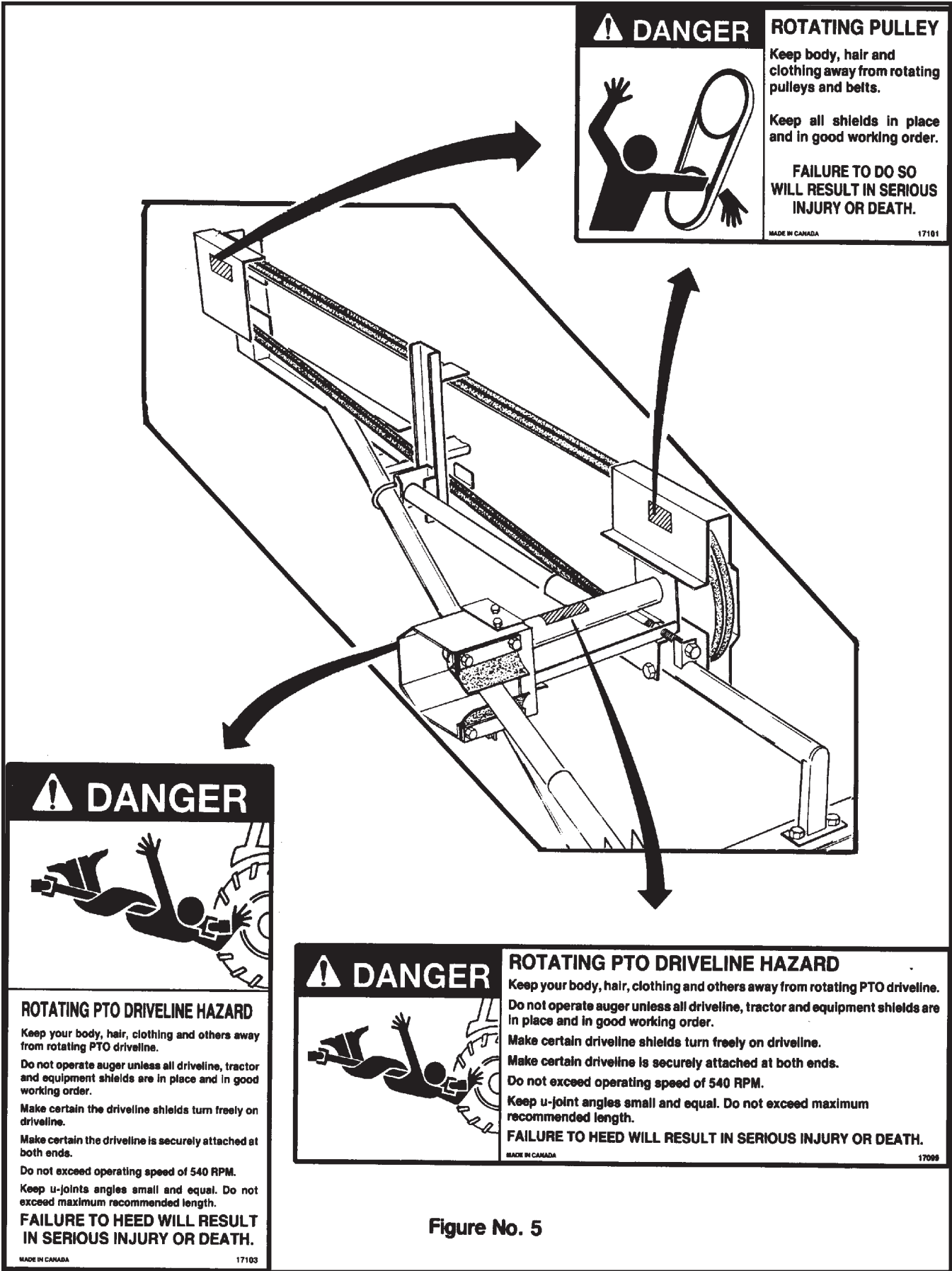
The work area is not a playground.

Do not allow children to play on or near this auger at any time.

**FAILURE TO HEED WILL CAUSE SERIOUS INJURY OR DEATH.**

MADE IN CANADA 17095

Figure No. 4



**⚠ DANGER**

**ROTATING PULLEY**

Keep body, hair and clothing away from rotating pulleys and belts.

Keep all shields in place and in good working order.

**FAILURE TO DO SO WILL RESULT IN SERIOUS INJURY OR DEATH.**

MADE IN CANADA 17101

**⚠ DANGER**

**ROTATING PTO DRIVELINE HAZARD**

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

Do not operate auger 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 operating speed of 540 RPM.

Keep u-joints angles small and equal. Do not exceed maximum recommended length.

**FAILURE TO HEED WILL RESULT IN SERIOUS INJURY OR DEATH.**

MADE IN CANADA 17103

**⚠ DANGER**

**ROTATING PTO DRIVELINE HAZARD**

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

Do not operate auger unless all driveline, tractor and equipment shields are in place and in good working order.

Make certain driveline shields turn freely on driveline.

Make certain driveline is securely attached at both ends.

Do not exceed operating speed of 540 RPM.

Keep u-joint angles small and equal. Do not exceed maximum recommended length.

**FAILURE TO HEED WILL RESULT IN SERIOUS INJURY OR DEATH.**

MADE IN CANADA 17099

Figure No. 5

## **3. Assembly**

**(Contact Westfield Industries Ltd. for details)**


# 4. Transport

When transporting the PTO-BD auger, we strongly recommend that all safety precautions be observed, that a proper towing vehicle be used, and that transport procedures as detailed below be followed.

**CAUTION**

**KEEP CHILDREN AND ALL UN-AUTHORIZED PERSONNEL AWAY.**

**ATTACH A SMV SIGN BEFORE TRANSPORTING AUGER.**



**DO NOT TOW FASTER THAN 15 MPH (24 km/h).**

**USE EXTREME CAUTION IN TURNING AND CORNERING.**

**DO NOT TOW AUGER ON SLOPES GREATER THAN 20 DEGREES.**

**DO NOT ALLOW PERSONS TO STAND BENEATH OR RIDE ON THE AUGER WHEN IT IS BEING TRANSPORTED. (See Figure No. 2.)**

## 4-1. PRE-TRANSPORT CHECKLIST

Before Transporting auger, ensure that:

1. Auger is in full down position. The lift-arm track shoe should be seated against the down position stop with slight tension on the lift cable.

## IMPORTANT

**WINCH MUST BE IN LOCKED POSITION. TO LOCK, TURN HANDLE CLOCKWISE UNTIL TWO CLICKS ARE HEARD. CHECK CABLE BEFORE EACH USE. REPLACE IF DAMAGED OR FRAYED.**

2. **Make certain** that the hitch pin and safety chain are in place and secure. The safety chain should be threaded through handle on the lower tube and wrapped around auger tube before attaching to the towing vehicle.

**NOTE:** We recommend that a type of hitch pin be used that will not allow auger to separate from towing vehicle.

3. Ensure that PTO driveline is in transport saddle (with the u-joint down) and secure.

## IMPORTANT

**PTO DRIVELINE MUST BE PLACED IN THE TRANSPORT SADDLE WITH THE U-JOINT IN THE DOWN POSITION AT THE AXLE WHEN TRANSPORTING (See Figure No. 25).**

**NOTE:** If auger wheels are partially or fully buried in snow or grain, do not attempt to move auger until snow or grain has been cleared away from auger wheels. Failure to heed may cause damage to auger and/or serious injury.

## 4-2. TRANSPORT PROCEDURE

When transporting auger, remember to:

1. Ensure that all unauthorized personnel are clear of transport zone. (See **Figure No. 2**)
2. Be alert to overhead obstructions and electrical wires and devices. The PTO-BD augers have minimum clearances from 10'0" (3.05 m) to 13'0" (3.96 m), in normal transport position.

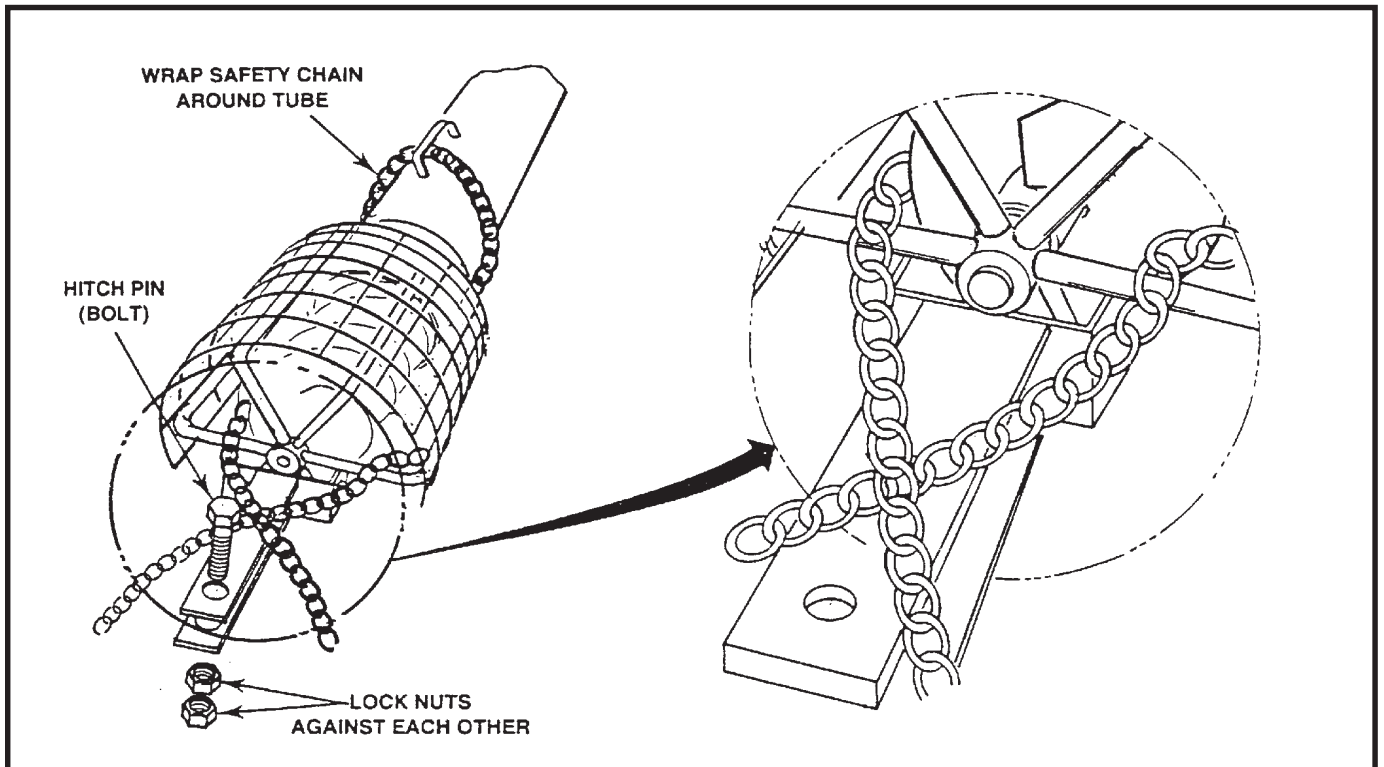


Figure No. 26

**DANGER**



**ELECTROCUTION HAZARD**

**THIS MACHINE IS NOT INSULATED. KEEP AWAY FROM OVERHEAD WIRES AND DEVICES. ELECTROCUTION CAN OCCUR WITHOUT DIRECT CONTACT.**

**FAILURE TO MAINTAIN PROPER CLEARANCE WILL RESULT IN SERIOUS INJURY OR DEATH.**

3. Observe all regulations concerning marking, towing, and maximum width.
4. Equip the auger with necessary lights where required by law.
5. Do not transport auger at speeds greater than 15 mph (24 km/h).
6. Do not transport auger on slopes greater than 20 degrees.
7. Use extreme caution in turning and cornering when towing auger.


# 5. Placement

Before moving auger into position for operation, ensure that all safety precautions and placement procedures are observed.

2. If the auger must be raised before positioning, make sure that the entire area in the line of travel, both on the ground and overhead, is clear of any obstructions or electrical wires.

**NOTE:** Make certain cable is properly seated in cable grove before raising auger.

**CAUTION**



**BE ALERT**

**KEEP CHILDREN AND ALL UN-AUTHORIZED PERSONNEL AWAY.**


**ENSURE AREA IS CLEAR BEFORE RAISING OR LOWERING AUGER.**

**DO NOT ATTEMPT TO MOVE AUGER BY HAND.**

**ALWAYS CHOCK WHEELS AFTER POSITIONING AUGER FOR OPERATION.**

**DANGER**

**ELECTROCUTION HAZARD**



**BE ALERT**

**THIS MACHINE IS NOT INSULATED. KEEP AWAY FROM OVERHEAD WIRES AND DEVICES. ELECTROCUTION CAN OCCUR WITHOUT DIRECT CONTACT.**

**FAILURE TO MAINTAIN PROPER CLEARANCE WILL RESULT IN SERIOUS INJURY OR DEATH.**

## 5-1. PRE-PLACEMENT PROCEDURE

Before positioning auger, the following steps are recommended:

1. Ensure that towing hitch is in place and secure.

**NOTE:** We recommend that a type of hitch pin be used that will not allow auger to separate from towing vehicle. (See **Figure No. 26**)

### **IMPORTANT**

**BEFORE RAISING OR PLACEMENT OF AUGER, ENSURE THAT GROUND IS REASONABLY LEVEL. AUGER COULD TOPPLE IF GROUND IS TOO UNEVEN, DAMAGING EQUIPMENT AND/OR CAUSING PERSONAL INJURY.**

### **IMPORTANT**

**WHEELS MUST BE FREE TO MOVE WHEN RAISING OR LOWERING AUGER.**

3. To raise auger, turn winch handle clockwise. Use a firm grip on winch handle, do not release unless the ratchet pawl is fully engaged.

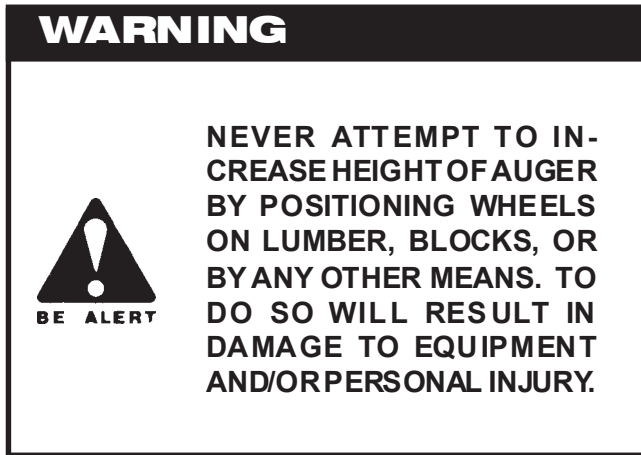
### **IMPORTANT**

**DO NOT TURN WINCH HANDLE COUNTER-CLOCKWISE EXCEPT WHEN LOWERING AUGER, OR SEVERE DAMAGE TO WINCH WILL OCCUR.**

**NOTE:** Winch must have clicking sound when raising auger. If clicking sound stops, retain grip on handle, lower auger fully, and repair ratchet. The winch is designed for **MANUAL** operation only.

## 5-2. PLACEMENT PROCEDURE

1. Move auger into working position slowly, making sure that all persons are clear of the work area (see **Figure No. 1**). Do not unhitch auger and attempt to move by hand.



2. Once auger is in position, chock wheels on both sides. Also, chock wheels on the tractor, or apply the park brake.

### IMPORTANT

*WHEN RELEASING AUGER FROM THE TOWING VEHICLE, TEST THE INTAKE END FOR DOWNWARD WEIGHT. DO NOT RAISE THE INTAKE END ABOVE DRAWBAR HEIGHT. WHEN THE INTAKE END IS ELEVATED TOO HIGH WITH AUGER IN RAISED POSITION, THE BALANCE OF WEIGHT QUICKLY TRANSFERS TO THE DISCHARGE END, CAUSING THE AUGER TO UPEND.*

**NOTE:** *The PTO driveline is a non-separable type. Remove from tractor and secure in transport saddle on auger before moving tractor away from auger.*

3. When operating auger in the raised position, rest the discharge end on bin roof, or tie down to bin to prevent upending or wind upsetting auger. When operating auger in a freestanding position, anchor the intake end.

### IMPORTANT

*ANCHORING AND/OR SUPPORT OF AUGER DURING OPERATIONS IS NECESSARY. WHEN LOWER HALF OF AUGER EMPTIES OF GRAIN, THE WEIGHT BALANCE TRANSFERS TO UPPER END OF AUGER, WHICH CAN CAUSE UPENDING.*

4. See Operations **Section 6-6** for correct lowering procedure.

**NOTE:** *If auger wheels are partially or fully buried in snow or grain, do not attempt to move auger until snow or grain has been cleared away from auger wheels. Failure to heed may cause damage to auger and/or serious injury.*

# 6. Operation

Efficient operation of the PTO-BD auger requires that operators follow a checklist before each start-up and demands that safety precautions be observed at all times. To do otherwise is endangering life and limb, and is a misuse of equipment.

## CAUTION

**KEEP CHILDREN AND ALL UN-AUTHORIZED PERSONNEL CLEAR OF WORK AREA.**

**DO NOT OPERATE AUGER WITH ANY SAFETY SHIELD REMOVED.**



**ALWAYS HAVE ANOTHER PERSON NEARBY TO SHUT DOWN AUGER IN CASE OF ACCIDENT.**

**KEEP BODY, HAIR, AND CLOTHING AWAY FROM ANY MOVING PARTS.**

**WEAR HEARING PROTECTION DURING OPERATION.**

**SHUT DOWN AND LOCK OUT ALL POWER BEFORE SERVICING, CLEANING, OR ADJUSTING.**

**DO NOT USE AUGER AS A HOIST TO RAISE ANY OBJECT REGARDLESS OF WEIGHT. THIS WILL CREATE AN UNSAFE CONDITION AND WILL VOID WARRANTY.**

### 6-1. PRE-OPERATION CHECKLIST

Before operating auger for the initial time, and each time thereafter, the operator must follow a prescribed checklist. The checklist should confirm the following:

All fasteners are secured as per assembly instructions.

All safety shield are in place and secure.

Oil level in gearbox is adequate, half full only. **DO NOT OVERFILL.** Overfilling will cause gearbox to fail.

### IMPORTANT

**ADD EP90 LUBE OIL TO THE GEARBOX BEFORE OPERATING AUGER. FAILURE TO DO SO WILL VOID WARRANTY.**

PTO driveline is connected and secure.

PTO driveline shields rotate freely.

Drive belt(s) are not frayed or damaged.

Lift cable is not frayed or damaged.

Cable clamp(s) are secure.

Tube alignment is reasonably straight.

Auger and tractor wheels are chocked.

Discharge spout and intake area are free of obstructions.

Proper maintenance has been performed.

Operators are aware of all safety precautions.

### 6-2. AUGER DRIVE AND LOCKOUT

Correct operation of the PTO-BD auger requires pre-inspection of the drive system, operator knowledge on how to shut down the system, and a general monitoring of the system during operation.

### PTO Driveline

1. Ensure that the PTO driveline is securely attached to the tractor and jackshaft.
2. Do not use PTO driveline without a rotating shield in good working order.
3. Do not exceed the maximum operating length of 64 inches (1610 mm) of the PTO driveline or the maximum angularity of 15 degrees.
4. Be sure that the PTO drive on the tractor is in the off position before starting tractor.
5. Stay clear of PTO hazard area. (See **Figure No. 1**)

### Lockout and/or Shutdown

1. Shut off engine.
2. Remove ignition key from tractor.
3. If step 2 is impossible, remove PTO driveline from tractor.

## 6-3. START-UP AND BREAK-IN

Start-up and break-in procedures for the PTO-SD auger are as follows:

1. Ensure that you have completed checklist at the beginning of **Section 6-1**.
2. If everything is satisfactory, prepare for a 30 minute operation at half speed, augering grain.
3. Ensure that portable grain hopper is correctly positioned and secured to auger with both straps (where applicable).

### IMPORTANT

*ANCHORING AND/OR SUPPORT OF AUGER DURING OPERATIONS IS NECESSARY. THEN LOWER HALF OF AUGER EMPTIES OF GRAIN, THE WEIGHT BALANCE TRANSFERS TO THE UPPER END OF AUGER, WHICH CAN CAUSE UPENDING*

## CAUTION



**DO NOT START AUGER UNTIL AREA IS CLEAR OF ALL UNAUTHORIZED PERSONNEL.**

**DO NOT EXCEED 540 RPM ON PTO.**

### IMPORTANT

*WHEN STARTING AUGER FOR THE FIRST TIME, BE PREPARED FOR AN EMERGENCY SHUTDOWN IN CASE OF EXCESSIVE VIBRATION OR NOISE. NOTE THAT AUGER MAY RUN ROUGH UNTIL TUBE IS POLISHED.*

4. Start tractor and engage PTO driveline, then feed grain to auger. If auger functions normally, check at varying speeds for a period of 30 minutes.
5. Upon completion of initial run, slow down auger until empty, and stop.
6. Lock out tractor and conduct a complete inspection of auger, following the checklist in **Section 6-1**.
7. After the initial start-up and inspection, the auger should be shut down and inspected at least three times during the first 10 hours of operation.
8. Do not run empty auger at high speeds, as this results in excessive wear.
9. Once auger is broken in, the checklist should be a part of the daily routine before operating auger.

## 6-4. FULL LOAD PROCEDURES

For normal auger operations, the following procedures and safety precautions are strongly recommended.

1. When operating the auger, always work with a second person in a position to monitor the operation and initiate a shutdown in case of emergency.
2. Monitor the auger during the actual operation for abnormal noises or vibrations.

3. Observe the work area restrictions (see **Figure No. 1**). If unauthorized personnel enter the hazard zone, shut down the auger and clear the area before restarting.
4. Shut off all power before making adjustments, servicing, or clearing the machine.

### 6-5. NORMAL/EMERGENCY SHUTDOWN

The steps for a normal shutdown are as follows:

1. Near the end of a load, decrease auger speed until all grain is clear of machine.
2. When auger is clear, disengage the PTO.
3. Shut down and lock out tractor.

In the event of and intermittent or emergency shutdown, restart as follows:

1. If auger is full of grain, do not restart at full speed. Engage the PTO at low rpm, gradually increasing power, until normal operating speed is reached.

#### IMPORTANT

*STARTING AUGER UNDER FULL LOAD MAY RESULT IN DAMAGE TO THE UNIT. BE SURE THERE IS NO BLOCKAGE.*

2. If the auger is shut down for an emergency, lock out tractor before correcting problem. If the problem is clogging, clear as much of the grain as possible before restarting unit. (See **Section 6-2** for lockout procedures)

### 6-6. COMPLETION/CLEAN-UP

At the completion of an operation, the auger should be moved to the next work area or to a storage area. The recommended procedure is:

1. Clean entire work area.
2. Remove all wheels chocks.
3. After ensuring that area is clear of all unauthorized personnel, move auger out of working position and lower fully.

#### IMPORTANT

*THERE WILL BE NO CLICKING SOUND WHEN LOWERING AUGER. AFTER LOWERING AUGER, TURN HANDLE CLOCKWISE UNTIL YOU HEAR TWO CLICKS TO LOCK BRAKE. USE A FIRM GRIP ON WINCH HANDLE, DO NOT RELEASE UNLESS THE RATCHET PAWL IS FULLY ENGAGED. THE WINCH IS DESIGNED FOR MANUAL OPERATION ONLY.*

#### CAUTION

**DO NOT LEAVE AUGER IN RAISED POSITION WHEN NOT IN USE. AUGER COULD DROP RAPIDLY IN CASE OF CABLE BREAK. HIGH WINDS MAY ALSO UPSET AUGER.**



**WHEN LOWERING AUGER, NEVER CONTINUE TO TURN HANDLE COUNTERCLOCKWISE IF THE CABLE DOES NOT KEEP MOVING OUT UNDER LOAD. THIS WILL DISENGAGE THE BRAKE MECHANISM AND CREATE AN UNSAFE CONDITION. WHEN THIS OCCURS, WINCH IN SLACK CABLE AND CORRECT PROBLEM.**

4. Prepare for transport and placement or storage. (See Transport **Section 4** and Placement **Section 5** for correct procedure. If storing auger, see Maintenance & Storage **Section 7** for storage procedures).

#### DANGER



**BEFORE MOVING AUGER OUT OF POSITION, LOOK FOR ELECTRICAL WIRES AND OBSTRUCTIONS OVERHEAD.**

**ELECTROCUTION CAN OCCUR WITHOUT DIRECT CONTACT.**

**FAILURE TO HEED THIS WARNING WILL RESULT IN SERIOUS INJURY OR DEATH.**


# 7. Maintenance & Storage

Proper maintenance habits on the PTO-BD auger mean a longer life for the machine, and a more efficient and safe operation.

**CAUTION**

**KEEP CHILDREN AWAY WHEN PERFORMING MAINTENANCE.**

**BEFORE PERFORMING ANY MAINTENANCE, ENSURE THAT POWER IS SHUT DOWN AND LOCKED OUT.**



**BE ALERT**

**WHERE POSSIBLE, PERFORM MAINTENANCE WITH AUGER IN FULL DOWN POSITION.**

**REPLACE ALL SHIELDS.**

## 7-1 GENERAL MAINTENANCE PROCEDURES

We recommend the following steps for the general maintenance of this auger.

1. Observe the checklist in **Section 6-1** on a daily basis when auger is in use.
2. Check all operating, lifting and transport components. Replace damaged or worn parts before using auger.

**NOTE:** *To replace a damaged part, refer to Assembly instructions in **Section 3**.*

3. **PTO Driveline:** Lubricate both universal joints after every 8 hours of operation. Lubricate the center portion of driveline (grease fitting is beneath shield) on a yearly basis.
4. **Upper Chain Drive:** Fill enclosed upper drive housing with grease.

WR60 and WR70	550 grams	20 oz
WR80	750 grams	26 oz

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

5. **Intake Bushing:** Lubricate daily.
6. **Gearbox:** Maintain oil level at half full (center of cross shaft). Gearbox should be level when checking or refilling. DO NOT OVERFILL.

### IMPORTANT

*ADD EP90 LUBE OIL TO THE GEARBOX BEFORE OPERATING AUGER. FAILURE TO DO SO WILL VOID WARRANTY.*

7. **Drive belts:** check and replace if frayed or damaged. Ensure that tension is correct under load.

**NOTE:** *The correct operating tension is the lowest tension at which the belts will not slip under peak load conditions.*

8. **Winch:**
  - (A) Maintain a light film of automotive type grease on the teeth of both the pinion and drum gears.
  - (B) Keep the ratchet pawl pivot, bushings and pinion threads lubricated with engine oil.

### IMPORTANT

*TAKE CARE NOT TO GET OIL OR GREASE ON BRAKE DISK.*

- (C) Replace brake disk if less than 1/16" thick, or if cracked or broken.
  - (D) Check for proper ratchet pawl operation as follows:

When cranking in cable (CLOCKWISE) a loud clicking sound should be heard. When cranking out cable (COUNTER-CLOCKWISE) there is no clicking AND the ratchet pawl must be fully engaged into the gear teeth.
9. **Lift Cable:** Check and replace if frayed or damaged. Make certain that cable clamps are secure.

10. **Truss Cables:** On augers so equipped, adjust as needed to keep auger tube reasonably straight.
  11. **Wheel Hubs:** Repack every two or three years with lithium based grease.
  12. **Tire Pressure:** Check with a pressure gauge monthly or when tire pressure seems low. We recommend that pressure be maintained at 18-24 psi (124-165 kPa).
2. Tow auger to worksite, being mindful of electrical wires overhead. (See **Transport & Placement Section 4 & 5** for correct procedures.)
  3. Remove waterproofing from spline on PTO driveline and relubricate.
  4. Check oil level in gearbox and refill if needed, half full only. **DO NOT OVERFILL.**
  5. On augers equipped with lubricated upper drive, check level of lubrication annually and add as needed. Refill to plug level.
  6. Replace any damaged parts.
  7. Conduct general maintenance procedures before using auger.

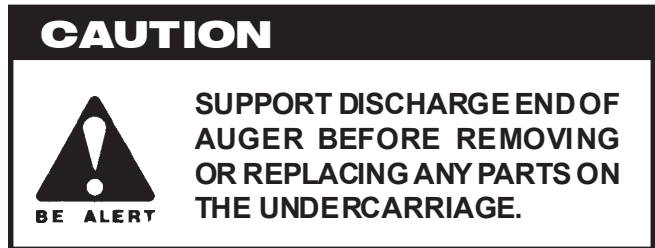
## 7-2. GENERAL STORAGE PROCEDURES

To protect auger in storage during the off season, we suggest the following:

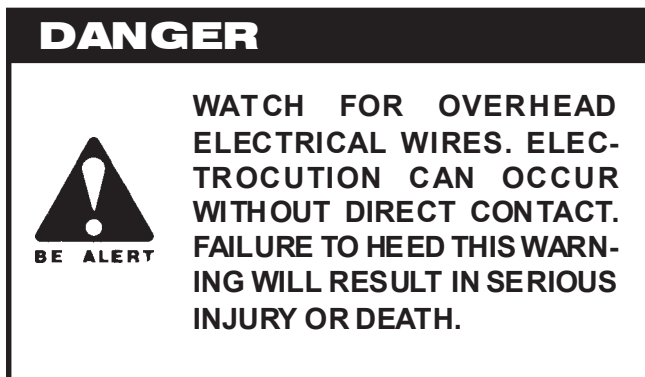
1. Lower the auger to full down position with a slight tension on cable.
2. Lubricate all grease fittings per maintenance procedures.
3. Inspect auger for damage and note any repairs required. Order replacement parts from your dealer.
4. Check tire pressure and inflate to 24 psi (165 kPa).
5. Clean and lubricate the spline on PTO driveline. Cover with a plastic bag to protect it from the weather and lock it in the transport saddle.
6. Tow auger to storage area. Park and chock wheels.

To prepare auger for use after storage, we recommend the following:

1. Check tire pressure and inflate to 18-24 psi (124-165 kPa) if necessary.



Use only genuine WESTFIELD replacement parts or equivalent. Replacement parts such as intake shields, pulley shields, PTO driveline shields, winches and lift cables **MUST MEET ASAE STANDARDS** or serious injury may result. Use of unauthorized parts will void warranty. If in doubt, contact WESTFIELD or your WESTFIELD dealer. Do not modify any auger components.



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## WARRANTY

Westfield Industries Ltd. warrants products of its manufacture against defects in materials or workmanship under normal and reasonable use for a period of one year after date of delivery to the original purchaser.

Our obligation under this warranty is limited to repairing, replacing, or refunding defective part or parts which shall be returned to a distributor or a dealer of our Company, or to our factory, with transportation charges prepaid. This warranty does not obligate Westfield Industries Ltd. to bear the cost of labor in replacing defective parts. Any defects must be reported to the Company before the end of the one year period.

This warranty shall not apply to equipment which has been altered, improperly assembled, improperly maintained, or improperly repaired so as to adversely affect its performance. Westfield Industries Ltd. makes no express warranty of any character with respect to parts not of its manufacture.

The foregoing is in lieu of all other warranties, expressed or implied, including any warranties that extend beyond the description of the product, and the IMPLIED WARRANTY of MERCHANTABILITY is expressly excluded.

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ROSENORT, MANITOBA  
CANADA  
ROG 1WO

***WESTFIELD***<sup>®</sup>

***INDUSTRIES LTD.***

a division of Ag Growth Industries  
***ROSENORT, MANITOBA, CANADA***  
***R0G 1W0***

***(204) 746-2396***

visit us at: [www.grainaugers.com](http://www.grainaugers.com)  
e-mail us at: [admin@westfieldindustries.com](mailto:admin@westfieldindustries.com)