



GRAIN AUGERS

WR PTO-SD

ASSEMBLY & OPERATION MANUAL



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: 30254 R2

Revised: 14/8/15



This product has been designed and constructed according to general engineering standards^a. Other local regulations may apply and must be followed by the operator. We strongly recommend that all personnel associated with this equipment be trained in the correct operational and safety procedures required for this product. Periodic reviews of this manual with all employees should be standard practice. For your convenience, we include this sign-off sheet so you can record your periodic reviews.

[illegible]

- a. Standards include organizations such as the American Society of Agricultural and Biological Engineers, American National Standards Institute, Canadian Standards Association, International Organization for Standardization, EN Standards, and/or others.

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1. Introduction

Thank you for purchasing a Westfield grain auger. Before using, please read this manual and understand the various features of the equipment and precautions for efficient and safe operation.

Keep this manual handy for frequent reference and to review with new personnel. A sign-off form is supplied on the inside front cover to record your safety reviews. Call your local distributor or dealer if you need assistance or additional information.

This manual should be regarded as part of the equipment. Suppliers of both new and second-hand equipment are advised to retain documentary evidence that this manual was provided with the machine.



Serial Number:	
Serial number is found on the right at the top of the lower tube.	

1.1. GENERAL DESCRIPTION

Your grain auger is designed to transport granular, dry, free flowing grains. Treated seed and fertilizer can be safely augered as well, however when augering fertilizer, special procedures apply as noted in the Operation Section. The auger must be operated with all guards installed and can be used in any non-extreme weather. Although the auger is designed for on-farm use, it can be transported on public roadways with the addition of a Westfield lighting and marking kit.

When operating or maintaining the auger, **never**:

- auger material other than dry free flowing grains.
- enter a grain bin or truck while loading or unloading grain with the auger.
- operate the auger empty for extended periods of time.
- overfeed or overload the auger
- modify the equipment.
- use the auger as a hoist.

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. Basic Operator Safety, Responsibilities, & Qualifications



The safety information found throughout this complete Safety Section of the manual applies to all safety practices. Additional instructions specific to a certain safety practice (such as Operation Safety), can be found in the appropriate section.

YOU are responsible for the **SAFE** use and maintenance of your equipment. **YOU** must ensure that you and anyone else who is going to work around the equipment understands all procedures and related **SAFETY** information contained in this manual.

Remember, **YOU** are the key to safety. Good safety practices not only protect you, but also the people around you. Make these practices a working part of your safety program. All accidents can be avoided.

- It is the equipment owner, operator, and maintenance personnel's responsibility to read and understand **ALL** safety instructions, safety decals, and manuals and follow them when assembling, operating, or maintaining the equipment.
- Equipment owners must give instructions and review the information initially and annually with all personnel before allowing them to operate this product. Untrained users/operators expose themselves and bystanders to possible serious injury or death.
- This equipment is not intended to be used by children.
- Use this equipment for its intended purposes only.
- Do not modify the equipment in any way without written permission from the manufacturer. Unauthorized modification may impair the function and/or safety, and could affect the life of the equipment. Any unauthorized modification of the equipment will void the warranty.



2.2.1. Personal Protective Equipment (Required to be Worn)

Ear Protection

- Wear ear protection to prevent hearing damage.



Work Gloves

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



Steel-Toe Boots

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



Safety Glasses

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



Dust Mask

- A dust mask may be needed to prevent breathing potentially harmful dust.



Hard Hat

- Wear a hard hat to help protect your head.



Coveralls

- Wear coveralls to protect skin.



2.2.2. Safety Equipment Required

First-Aid Kit

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



Fire Extinguisher

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



2.3. Drives and Lockout Safety

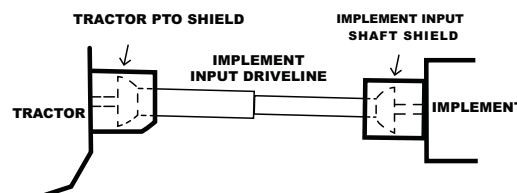
Inspect the power source (drive) before using and know how to shut down in an emergency. Whenever you service or adjust your equipment, make sure you shut down and lock out your power source to prevent inadvertent start-up and hazardous energy release. Know the procedure(s) that applies to your equipment from the following power sources.

2.3.1. PTO Driveline Safety

WARNING

Driveline

- 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 equipment unless all driveline, tractor, and equipment shields are in place and in good working order.
- Do not exceed operating speed of 540 rpm.
- 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.

2.4. Rotating Parts Safety

WARNING

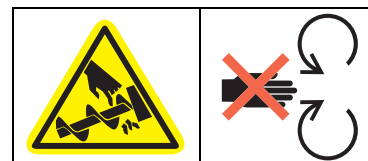
- Keep body, hair, and clothing away from rotating pulleys, belts, chains, and sprockets.
- Do not operate with any guard removed or modified. Keep guards in good working order.
- Shut off and remove key or lock out power source before inspecting or servicing machine.



2.5. Rotating Flighting

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 equipment without all guards, doors, and covers in place.

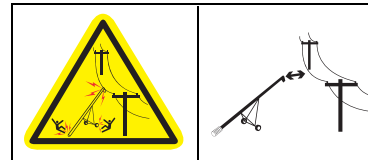


- NEVER touch the flighting. Use a stick or other tool to remove an obstruction or clean out.
- Shut off and lock out power to adjust, service, or clean.

2.6. Overhead Power Lines

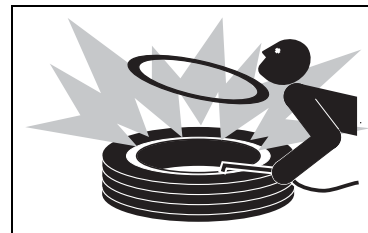


- When operating or moving, keep equipment away from overhead power lines and devices.
- This equipment is not insulated.
- Electrocution can occur without direct contact.



2.7. 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.



2.8. 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.

2.8.1. 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 sign backing paper.

2.8.2. Safety Decal Locations and Details

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

Wheatheart reserves the right to update safety decals without notice. Safety decals may not be exactly as shown.

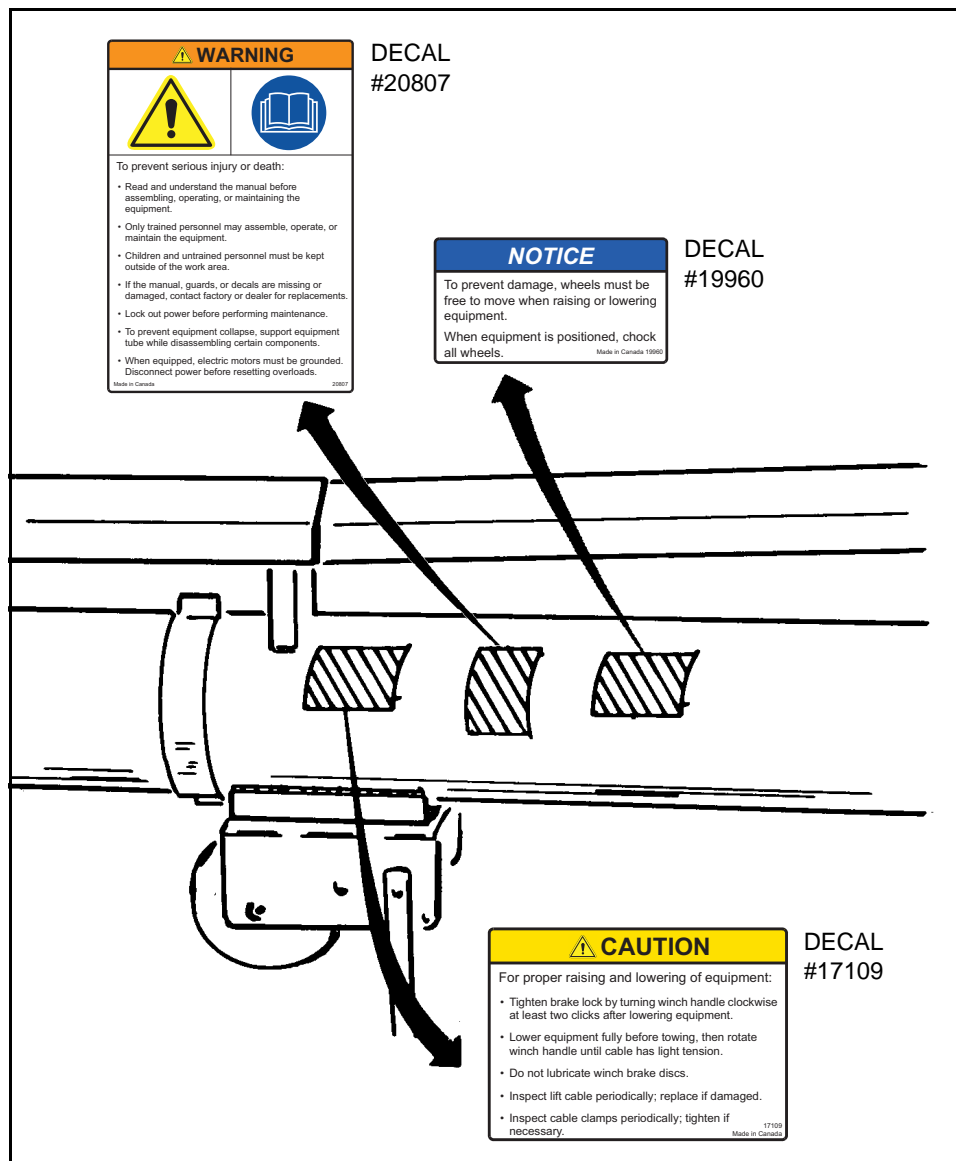


Figure 2.1 Safety Decal Locations

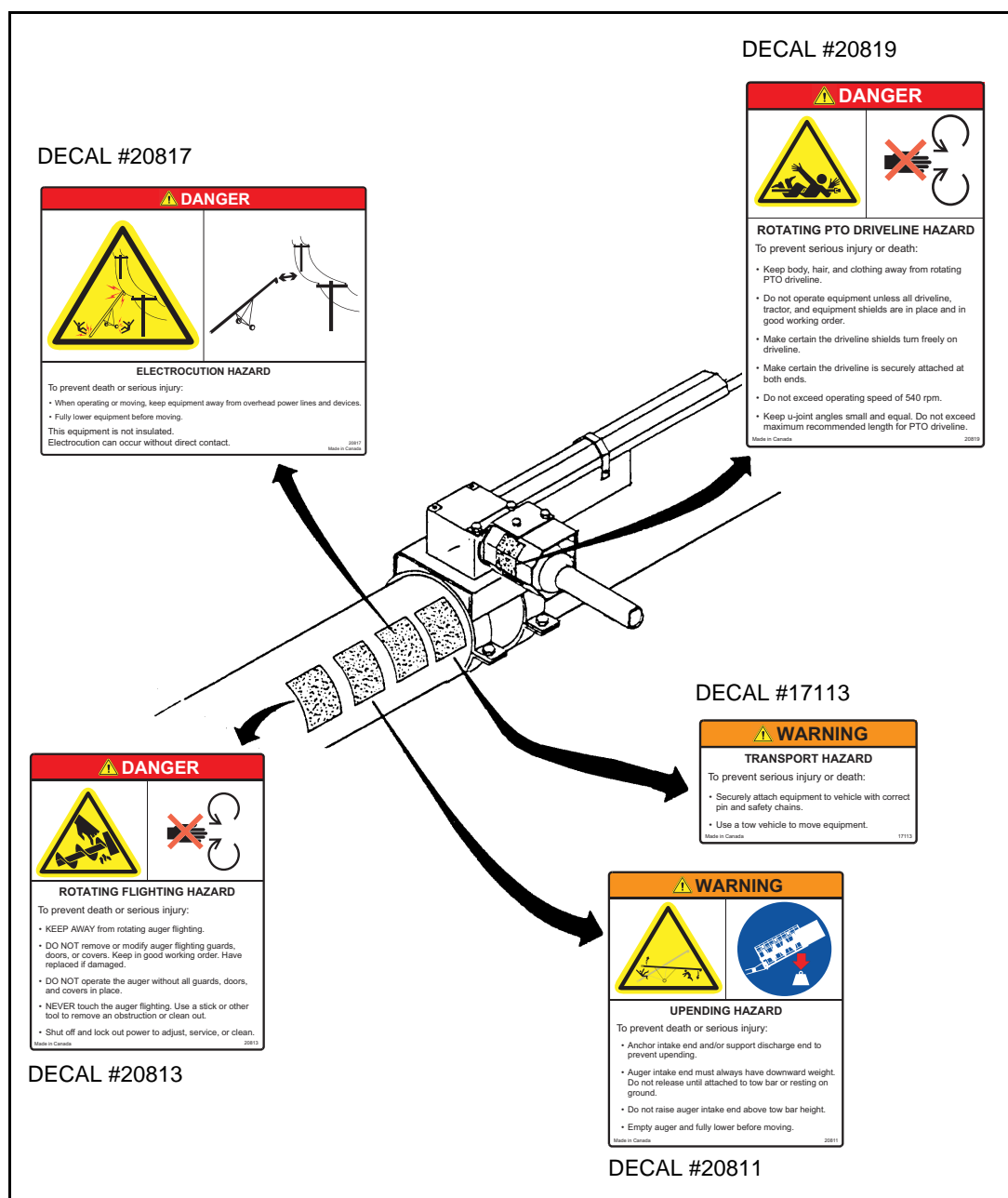


Figure 2.2 Safety Decal Locations

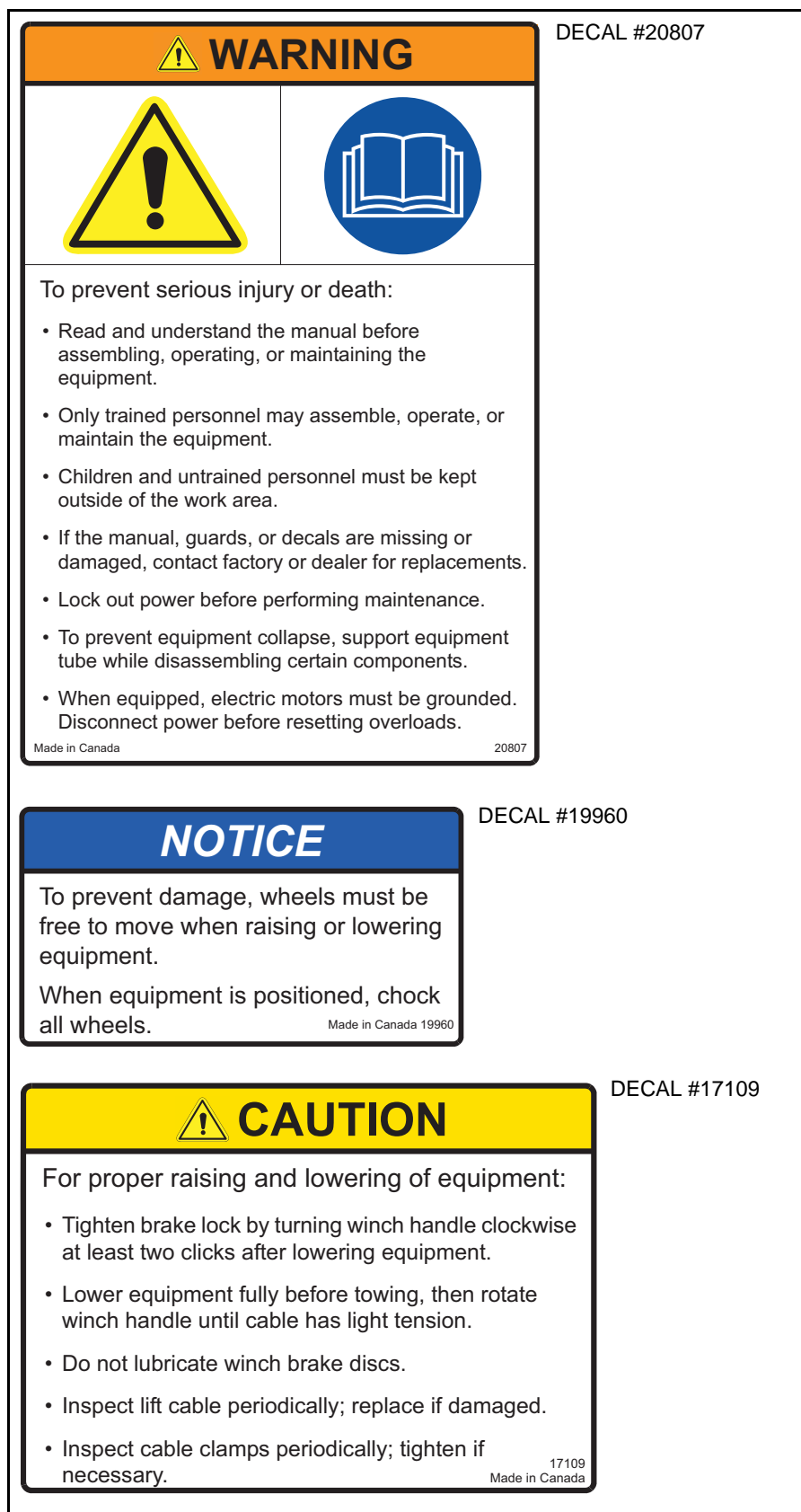


Figure 2.3 Safety Decal Details

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.

20817
Made in Canada

DECAL #20817

DANGER

ROTATING FLIGHTING HAZARD

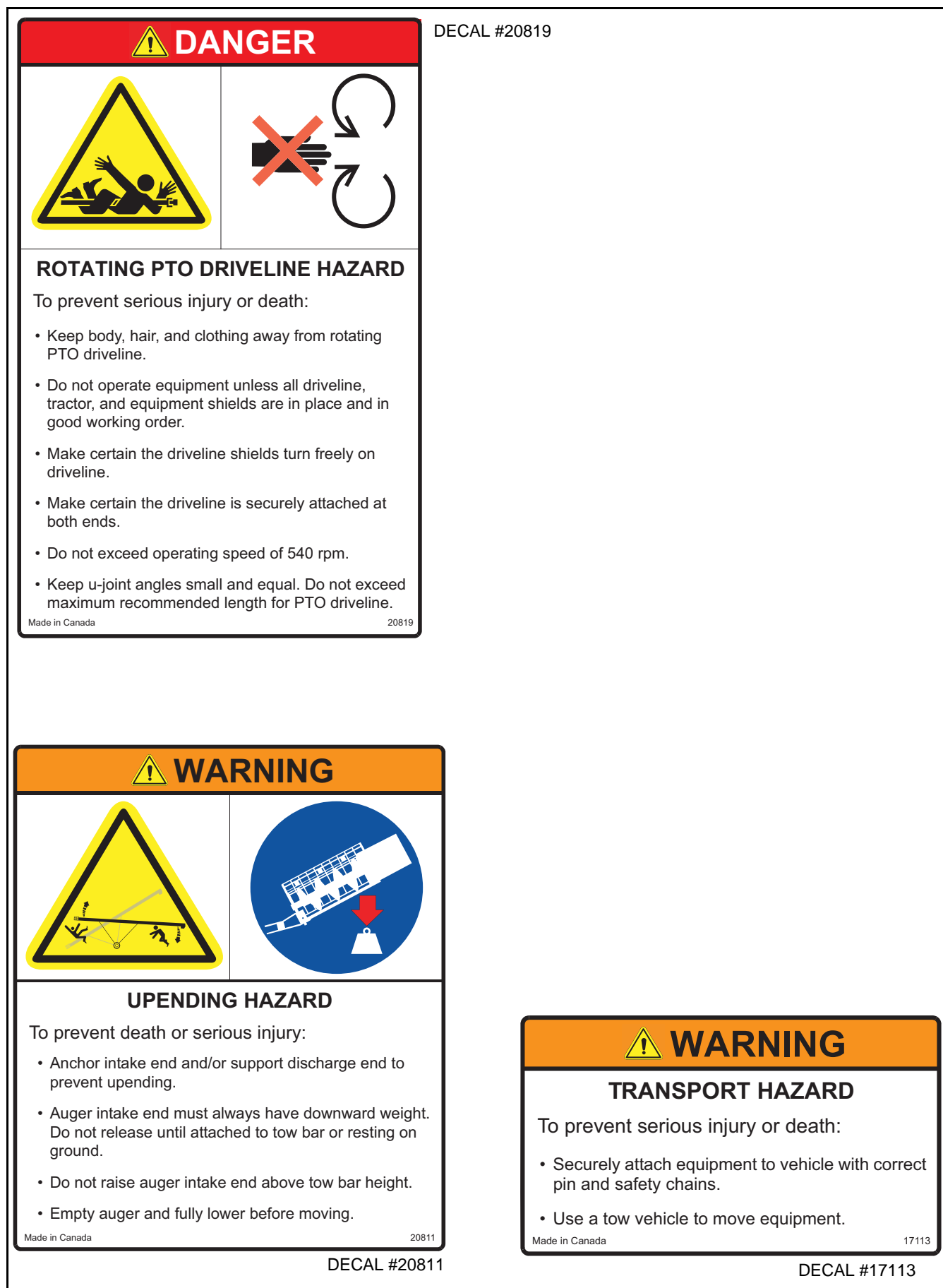
To prevent death or serious injury:

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

Made in Canada
20813

DECAL #20813

Figure 2.4 Safety Decal Details



3.Assembly

WARNING Before continuing, ensure you have read and understand the relevant information in the safety section. Safety information is provided to help prevent serious injury, death, or property damage.

Before beginning assembly, familiarize yourself with all the sub-assemblies and hardware making up the auger. Have all parts on hand and arrange them for easy access. Carry out assembly in a large open area with a level surface.

Important: Always have 2 or more people assembling the equipment. Because of the weight, do not attempt assembly alone.

➔ Augers are available in various combinations. In most cases, the following instructions will apply to all augers. Where the assembly information varies, additional instructions will be included and will be indicated with an arrow.

3.1. TUBES & FLIGHTING

1. Position tube sections. Align tube sections on a flat surface or on a series of benches.

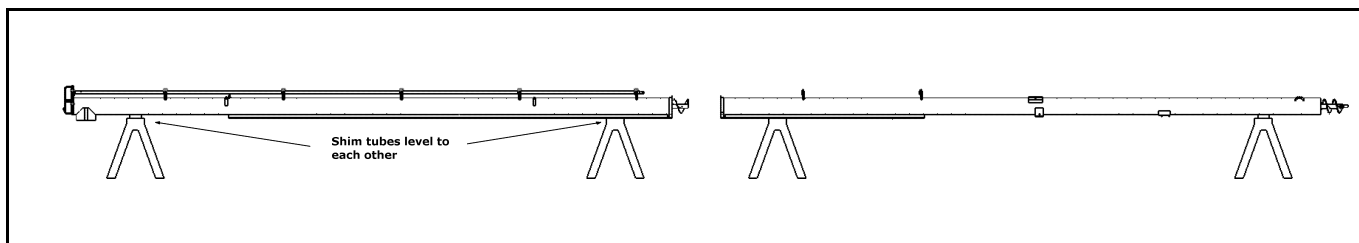


Figure 3.1

WARNING



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

Note: When assembling more than 2 sections, start from spout end and work towards hopper.

2. Screw or slide lower flight shaft onto upper flight shaft until flight ends butt together and flighting spiral matches up. Secure with hardware listed in table below. Repeat, if necessary, for any remaining flight shafts.

3. Slide tube sections together and secure. Make sure to align upper and lower track ends and then tighten bolts. Secure with hardware in table below.

Important: *Track ends must align to allow track shoe to smoothly slide over track joint. Misalignment may cause jamming.*

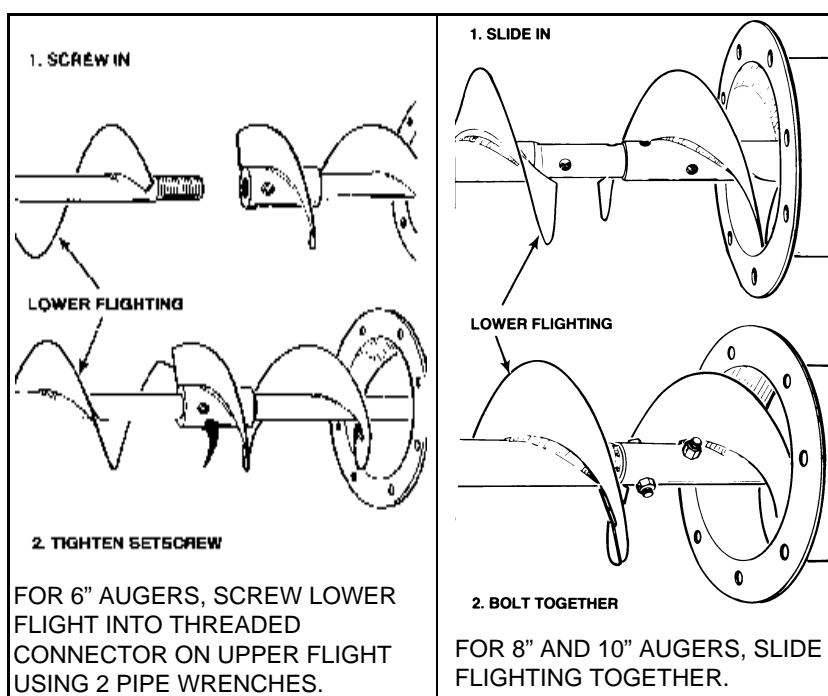


Figure 3.2

Details for connections:				
Auger	For Flighting	Amt.	For Tubes	Amt.
6"	use pipe wrenches set screw	2 1	7/16" x 1" bolts and locknuts	6
8"	7/16" x 2-1/4" GR 8 bolts and locknuts	2	7/16" x 1" bolts and locknuts	8
10"	1/2" x 2-3/4" GR 8 bolts and locknuts	2	7/16" x 1" bolts and locknuts	8

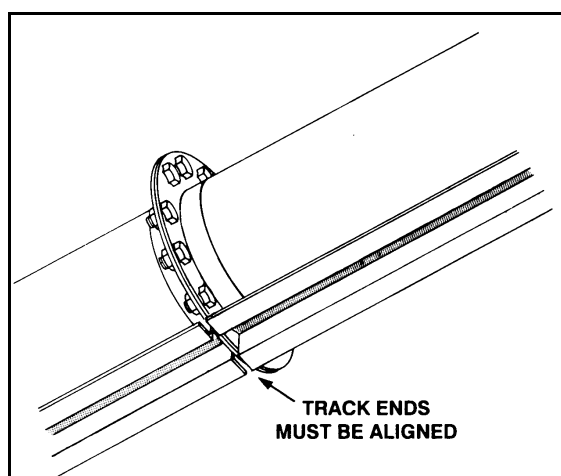


Figure 3.3

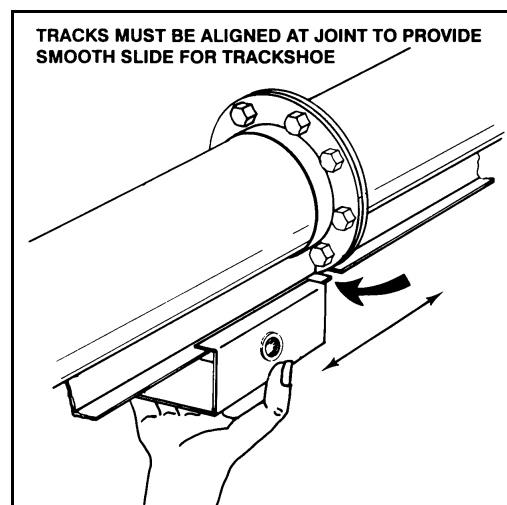


Figure 3.4

3.2. TRACK SHOE AND TRACK STOP

1. Slide roller track shoe onto track.
2. Attach the upper track stop with 7/16" x 1" bolts, heavy flat washers, and locknuts (Figure 3.5). For correct positioning of the upper track stop, see Table 3.1.
3. Attach the lower angle-iron track stop (on 36', 56', and 61' augers) with two 7/16" x 1" bolts and locknuts. For correct positioning of the lower track stop, see Table 3.2.

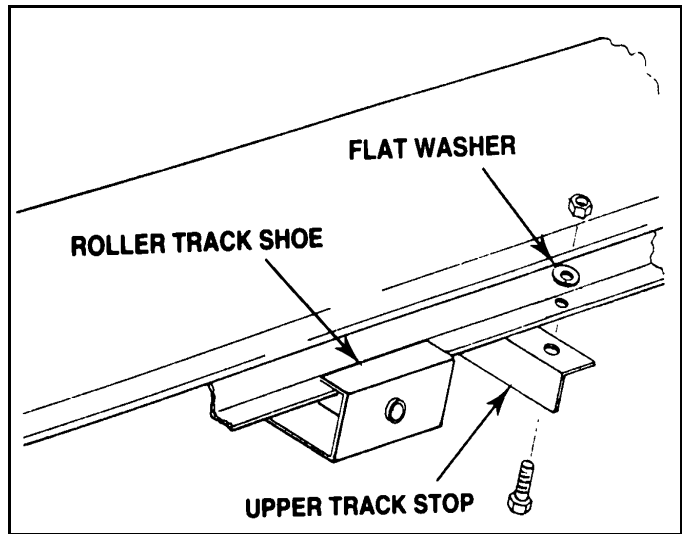


Figure 3.5

Table 3.1 Upper Track Stops^a

Auger Length		Upper Track Stop Locations				
		1st Hole	2nd Hole	3rd Hole	4th Hole	5th Hole
31'	From Discharge End	6"-8"-10"				
36'			6"-8"			
41'		10"			6"-8"	
46'					8"	
51'		6"	10"			8"
56'			8"			
61'			6"	8"-10"		
71'					8"-10"	

a. Count from upper discharge end of auger. For example, "1st Hole" refers to the first set of holes in the upper end of the track nearest the discharge end.

CAUTION



Failure to locate track stops in the proper holes can result in damage to auger and/or personal injury.

4. Slide track shoe along full length of track to make certain there is no binding and that track ends are properly aligned. The upper and lower tracks must be aligned to allow track shoe to roll smoothly over this joint.

Table 3.2 Lower Track Stops^a

Auger Length		Lower Track Stop Locations		
		Welded Trackstop	1st Hole	2nd Hole
31'	From Intake End	6"-8"-10"	-	-
36'		-	6"-8"	-
41'		6"-8"-10"	-	-
46'		8"	-	-
51'		6"-8"-10"	-	-
56'		-	-	8"
61'		6"	8"-10"	-
71'		8"-10"	-	-

- a. Count from the lower intake end of auger. For example, "1st Hole" refers to the first set of holes in the lower end of the track nearest the intake end.

3.3. INTAKE HITCH

1. Clean dirt and paint from lower flight stub and intake bushing.
2. Attach intake hitch to lower auger tube and tighten securely.
3. Maintain 1/4" (0.64 cm) clearance between bushing and end of flight.
4. Attach clevis to intake hitch with clevis pin and gripclip.

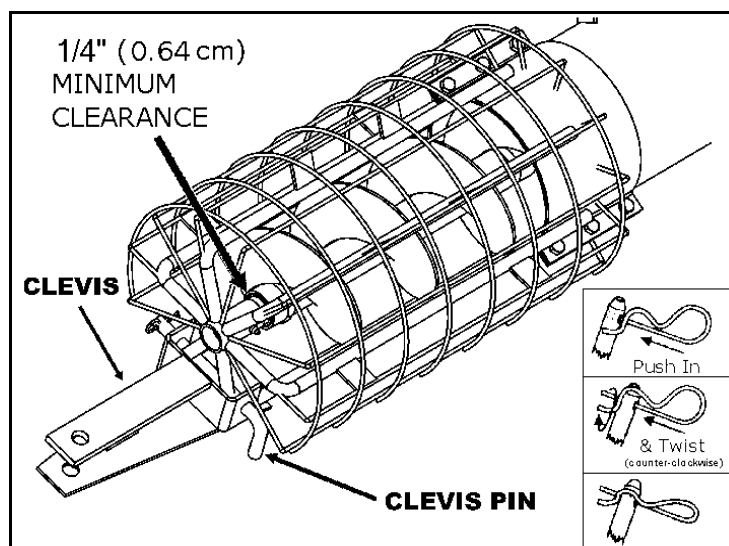


Figure 3.6

Part	Size	Amt.
Intake Hitch	7/16" x 1" bolt and locknut	6
Clevis Pin	5/8" for 8" 3/4" for 10"	1

3.4. MULTI-STAGE DRIVESHAFT

Because some sections of the driveshaft are factory installed, please consult the table below for correct sequence before completing installation. Then proceed as follows:

1. Clean paint and dirt from driveshaft end and shaft connectors.
2. Slide shaft connector halfway onto the last pre-installed driveshaft segment.

3. Slip lower driveshaft segments through bearings on lower tube section. Install a Woodruff key, and slide into shaft connector.



- Driveshafts on 10" x 51', 61', and 71' augers require a square key.
4. Place a few drops of oil at each driveshaft bearing to allow for break-in.
 5. Tighten all set screws on shaft connectors.

Table 3.3

Auger Size/Length	Shaft Size	Driveshaft Sequence From Discharge End			No. of Strap-On Bearings
		1st	2nd	3rd	
6" x 31'	1" (2.54 cm)	7' 3/4" (2.15 m)	---	---	1
6" x 36'	1" (2.54 cm)	4' 9" (1.45 m)	3' 2-1/2" (0.96 m)	---	1
6" x 41'	1" (2.54 cm)	3' 9-1/2" (1.15 m)	4' 9" (1.45 m)	4' 4" (1.32 m)	2
6" x 51'	1" (2.54 cm)	9' 2" (2.79 m)	4' 9" (1.45 m)	7' 3/4" (2.15 m)	2
6" x 61'	1" (2.54 cm)	7' 3/4" (2.15 m)	4' 9" (1.45 m)	---	3
8" x 31'	1-1/4" (3.18 cm)	7' 4-1/2" (3.25 m)	---	---	1
8" x 36'	1-1/4" (3.18 cm)	4' 5-1/2" (1.36 m)	3' 5-1/2" (1.05 m)	---	1
8" x 41'	1-1/4" (3.18 cm)	3' 9-1/2" (1.15 m)	4' 5-1/2" (1.36 m)	4' 7" (1.40 m)	2
8" x 46'	1-1/4" (3.18 cm)	10' 2-1/2" (3.11 m)	6' (1.83 m)	---	2
8" x 51'	1-1/4" (3.18 cm)	13' 10" (4.21 m)	7' 4-1/2" (3.25 m)	---	2
8" x 56'	1" (2.54 cm)	1' 3" (0.38 m)	---	---	0
8" x 61'	1-1/4" (3.18 cm)	6' 4" (1.92 m)	---	---	0
8" x 71'	1-1/4" (3.18 cm)	16' 4" (4.90 m)	---	---	0
10" x 31'	1-1/4" (3.18 cm)	---	---	---	0
10" x 41'	1-1/4" (3.18 cm)	---	---	---	0
10" x 51'	1-1/4" (3.18 cm)	---	---	---	0
10" x 61'	1-1/4" (3.18 cm)	6' 4" (1.92 m)	---	---	0

3.5. SHAFT DRIVE GEARBOX

The PTO-SD auger, depending on size, uses 1 of 2 gearbox assemblies.

GEARBOX MOUNTING PROCEDURE FOR THE FOLLOWING AUGERS

Refer to Figure 3.7, 3.8.

6"-8" x 31'	8" x 46'
6"-8" x 36'	6"-8" x 51'
6"-8" x 41'	6" x 61'

1. Remove chain and secure half of the chain coupler to driveshaft using a Woodruff key.

Important: *It is easier to fill gearbox with oil when flat. Fill half full only; do not overfill. See Table 3.4.*

2. Place gearbox assembly on auger tube, leaving a minimum 1/16" (1.59 mm) clearance between chain coupler sprockets.
3. Secure gearbox assembly to auger tube with half-tube clamps and four 7/16" x 1" bolts and locknuts.

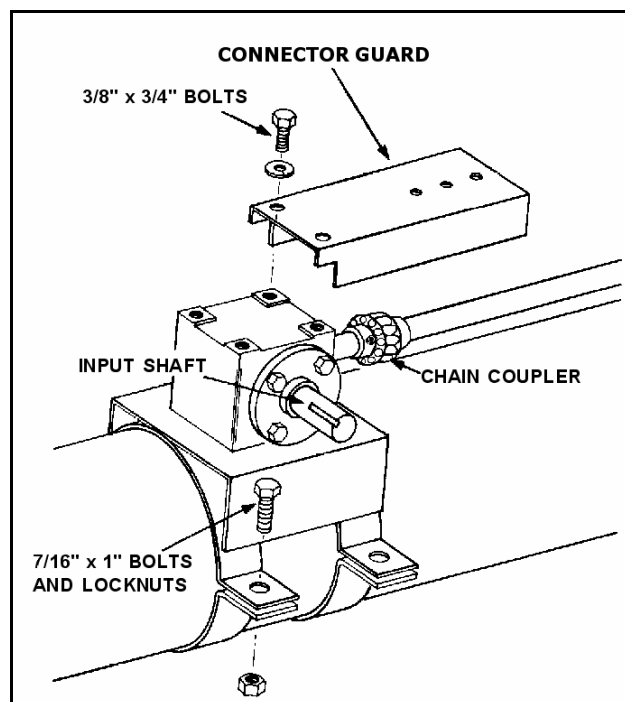


Figure 3.7

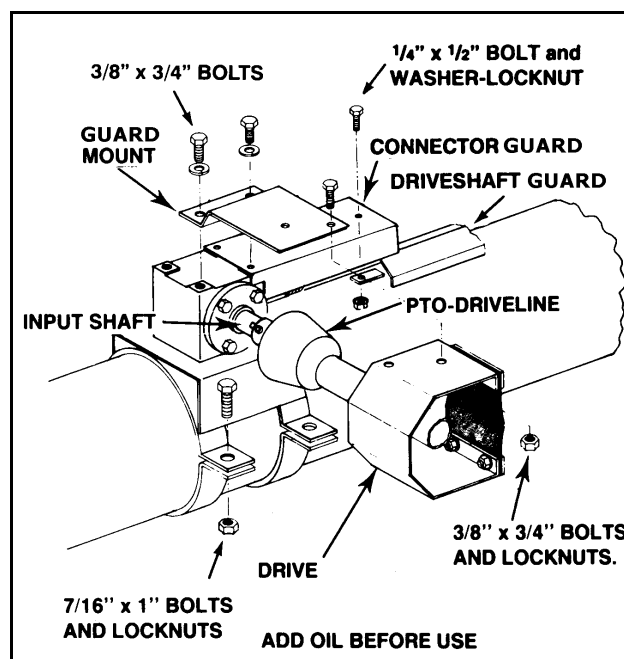


Figure 3.8



GEARBOX MOUNTING PROCEDURE FOR THE FOLLOWING AUGERS

- 8" x 56'-61'-71'
- All 10" augers

These augers are equipped with chain couplers (pre-installed on gearbox).

See Figure 3.9.

1. Remove chain and secure half the chain coupler to driveshaft, using a Woodruff key on 8" augers and a 1/4" x 1-1/2" square key on 10" augers.

Note: *It is easier to fill gearbox with oil when flat. Fill half full only; do not overfill. See Table 3.4.*

2. Place gearbox assembly on auger tube then reinstall chain, leaving 1/16" (1.59 mm) clearance between chain coupler sprockets. Tighten set screw.
3. Secure gearbox assembly to auger tube with half tube clamps and four 7/16" x 1" bolts and locknuts.

Important: *Add EP90 lube oil to the gearbox before operating auger. Failure to do so will void warranty. Do not overfill. Fill half full only.*

Table 3.4

Auger	Oil Requirements
all 6"	196 ml (7 fl oz)
8" (up to and incl. the 51')	
8" (56' and up)	700 ml (25 fl oz)
all 10"	

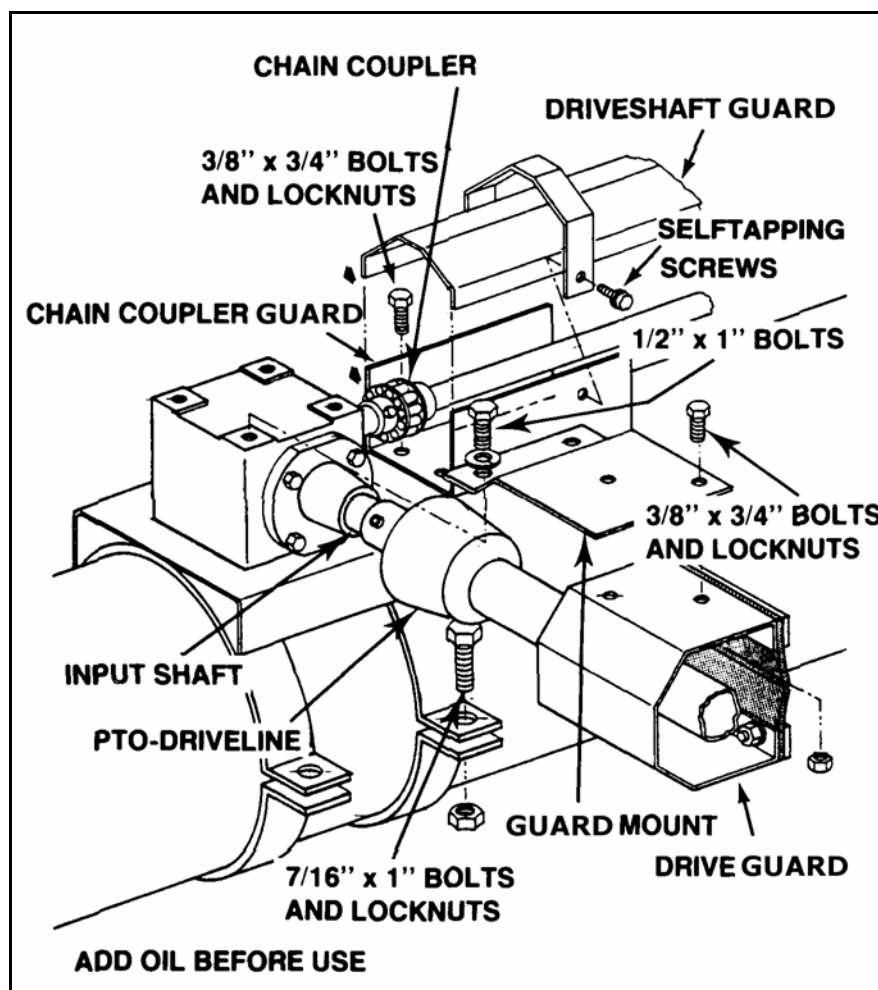


Figure 3.9

3.6. LEFT HAND PTO DRIVE

To change auger from a right-hand drive to a left-hand drive as seen when standing at intake end facing the discharge end, proceed as follows:

1. Remove the gearbox guard and the connector/coupler guard and set aside.

Note: *Where applicable, remove the coupler chain.*

2. Remove the gearbox from mount and place on side (with input shaft pointing up).
3. Switch drain plug (bottom of gearbox) with air vent plug (top of gearbox) and reinstall gearbox on mount with input shaft to left side and air vent up.

Important: *To reinstall gearbox assembly on auger, see "Shaft Drive Gearbox" on page 22.*

3.7. PTO DRIVESHIELD

1. Clean paint and dirt from gearbox shafts and inside driveline yokes.
2. Slide non-spline end of PTO driveline onto input shaft on gearbox using a 1/4" x 1-1/2" square key. Tighten set screws securely.

Note: *The PTO driveline is non-separable type. Do not extend beyond 80" (2.03 m).*

3.8. DRIVESHAFT SHIELD

ALL 6" AND 8" AUGERS UP TO AND INCLUDING 8" X 51':

See Figure 3.7 and 3.8.

1. Place connector guard on gearbox.
2. Attach driveshield to guard mount with two 3/8" x 3/4" bolts and locknuts, then slide this assembly over PTO driveline. Attach the guard mount and connector guard to gearbox with three 3/8" x 3/4" bolts and lockwashers.
3. Attach the driveshaft shields starting from gearbox (refer to Table 3.5 for correct sequence).
4. Attach driveshaft shield to the connector guard with a 1/4" x 1/2" bolt, washer-locknut, and a punched flat iron plate.
5. Position the driveshaft shields according to Table 3.5, overlapping at bearing support brackets and at strap-on bearings where applicable. Fasten with shield straps and self-tapping screws. Do not tighten until all driveshaft shields are positioned (Figure 3.10).

8" X 56' TO 71' AND ALL 10" AUGERS:

See Figure 3.9.

1. Attach driveshield to guard mount with two 3/8" x 3/4" bolts and locknuts, then slide this assembly over PTO driveline. Attach to gearbox with 1/2" x 1" bolts and lockwashers.
2. Attach the chain coupler guard to gearbox base with two 3/8" x 3/4" bolts and locknuts.

3. Attach the driveshaft shields starting from gearbox (refer to Table 3.5 for correct sequence).
4. Place driveshaft shield against gearbox and over chain coupler guard, then secure with a guard strap and two self-tapping screws (Figure 3.9).
5. Position the driveshaft shields according to Table 3.5, overlapping at bearing support brackets and at strap-on bearings where applicable. Fasten with shield straps and self-tapping screws. Do not tighten until all driveshaft guards are positioned (Figure 3.10).

Table 3.5 Driveshaft Shielding Sequence

Auger Size/ Length	Step 1		Step 2		Step 3		Step 4		Step 5	
	Qty	Length	Qty	Length	Qty	Length	Qty	Length	Qty	Length
6"/8" x 31'	1	42" (1.07 m)	1	48" (1.22 m)	1	42" (1.07 m)	3	48" (1.22 m)	1	42" (1.07 m)
6"/8" x 36'	1	42" (1.07 m)	1	48" (1.22 m)	1	42" (1.07 m)	4	48" (1.22 m)	1	42" (1.07 m)
6"/8" x 41'	3	42" (1.07 m)	1	48" (1.22 m)	1	42" (1.07 m)	4	48" (1.22 m)	1	42" (1.07 m)
6" x 51'	1	24" (0.61 m)	8	60" (1.52 m)	1	48" (1.22 m)	--	--	--	--
6" x 61'	1	24" (0.61 m)	10	60" (1.52 m)	1	48" (1.22 m)	--	--	--	--
8" x 46'	5	42" (1.07 m)	4	60" (1.52 m)	1	48" (1.22 m)	--	--	--	--
8" x 51'	2	42" (1.07 m)	1	48" (1.22 m)	6	60"	1	48" (1.22 m)	--	--
8" x 56'	2	42" (1.07 m)	11	48" (1.22 m)	1	42" (1.07 m)	--	--	--	--
8" x 61'	1	48" (1.22 m)	2	42" (1.07 m)	11	48" (1.22 m)	1	42" (1.07 m)	--	--
8" x 71'	4	42" (1.07 m)	1	48" (1.22 m)	1	42" (1.07 m)	11	48" (1.22 m)	1	42" (1.07 m)
10" x 31'	1	42" (1.07 m)	5	48" (1.22 m)	1	42" (1.07 m)	--	--	--	--
10" x 41'	1	48" (1.22 m)	3	42" (1.07 m)	5	48" (1.22 m)	1	42" (1.07 m)	--	--
10" x 51'	11	48" (1.22 m)	1	42" (1.07 m)	--	--	--	--	--	--
10" x 61'	1	48" (1.22 m)	2	42" (1.07 m)	11	48" (1.22 m)	1	42" (1.07 m)	--	--
10" x 71'	4	42" (1.07 m)	1	48" (1.22 m)	1	42" (1.07 m)	11	48" (1.22 m)	1	42" (1.07 m)

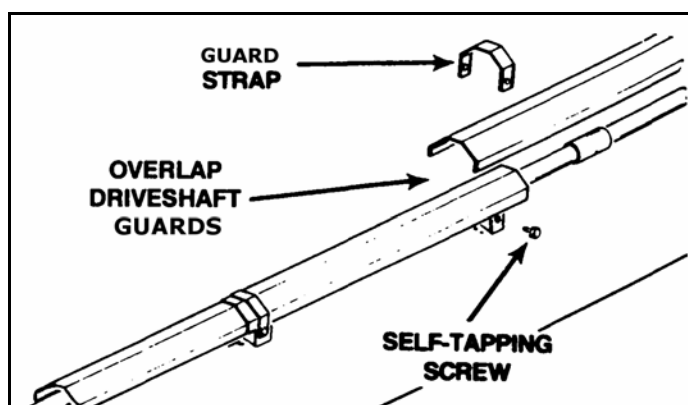


Figure 3.10

3.9. DISCHARGE SPOUT

1. Attach discharge spout with half tube clamps and 7/16" x 1-3/4" bolts and locknuts as required. Note that some augers are equipped with weld-on discharge spouts.

Note: *If a safety spout is being used with this auger, the safety release door should be on the left side of the auger, as determined when standing at intake, facing the discharge end.*

3.10. SPROCKET HEAD GEARING

Change the upper drive sprockets on the following augers:

To obtain the correct flighting speed on the following PTO-SD augers, the **14** and **25** tooth sprockets must be replaced:

- PTO-SD 6" diameter - all lengths
- PTO-SD 8" diameter - all lengths up to and including 51'.

Note: *Replacement sprockets are included in the PTO-SD shipping carton.*

Replace both the upper (14 tooth) and lower (25 tooth) sprocket with 20 tooth sprockets.

Note: *If the PTO-SD augers discussed in this section are changed to a PTO-BD, EMD, or MD drive, the 14 and 25 tooth sprockets should be reinstalled. This is necessary to maintain the correct rpm of the flighting.*

3.11. UPPER HOUSING LUBRICATION

Fill enclosed upper drive housing with grease.

WR60	550 g	20 oz
WR80 x 26' - 51'	750 g	26 oz
WR80 x 56' - 71'	900 g	32 oz
WR100	1100 g	40 oz

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

3.12. TRUSS

See Figure 3.11, 3.12, 3.13, and 3.14.

1. Fasten lower truss anchor to bracket.
 - use two 7/16" x 1" bolts and locknuts (see Figure 3.11, 3.12, and 3.13 for location).
 - ➔ • On 6" x 61' augers, fasten lower truss anchor to 10' lower tube section. (See Figure 3.13 for location.)
2. Fasten the center truss support bracket on 46' and 51' augers with two 7/16" x 1" bolts and locknuts (Figure 3.12).
 - ➔ • The 56' and 61' augers require two center truss support brackets, each fastened with two 7/16" x 1" bolts and locknuts.
 - ➔ • The 6" x 61' augers require three center truss support brackets, each fastened with two 7/16" x 1" bolts and locknuts.
 - ➔ • The 71' auger requires a high truss support center bracket located between the two standard support brackets. Fasten with two 7/16" x 1" bolts and locknuts. See Figure 3.13 for correct placement.
3. Attach eyebolt to one end of truss cable with a 5/16" cable clamp. Insert eyebolt into lower truss anchor and thread on nut a short way.

Important: *On the 8" x 56' augers, the truss cable must be threaded through the reach-arm bracket as shown in Figure 3.11 and then attached to the eyebolts at the lower truss anchor.*

4. Pull truss cable over truss support brackets, around upper truss anchor and back over truss support brackets to lower truss anchor, holding it loosely in place with one 5/16" cable clamp at upper truss anchor, and two 5/16" cable clamps at each truss support bracket.

Important: *Do not tighten cable clamps at this time.*

5. The upper end of augers equipped with truss cables should have an upward bow before being placed on the transport undercarriage (auger tube will straighten when fully assembled). Place supports under the discharge end until upward bow is correct.

- ➔ • The upward bow should be about 2"

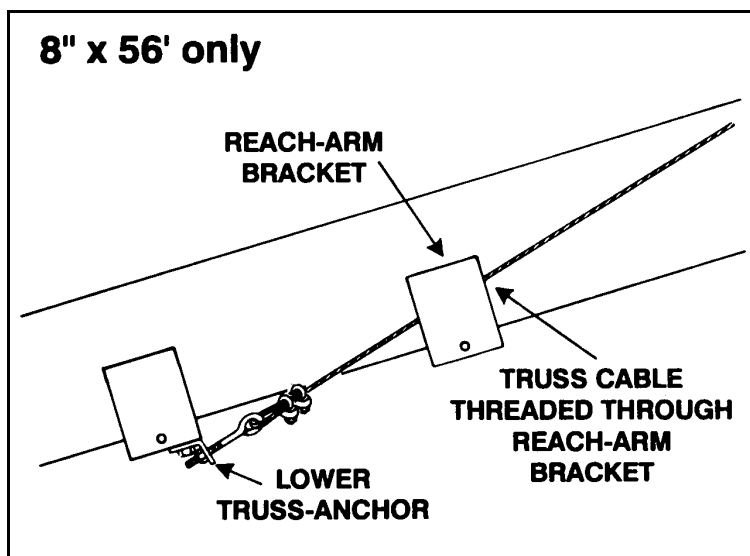


Figure 3.11

(5.08 cm) on the 46' and 51', 3" (7.62 cm) on the 56' and 61', and 5" (12.7 cm) on the 71' auger.

6. Place other eyebolt onto lower truss anchor and thread on nut a short way.
7. Insert other end of truss cable through this eyebolt. Pull out all slack and secure with two 5/16" cable clamps.
8. Tighten eyebolts to take remaining slack out of truss cable and to maintain the appropriate upward bow. After tension is adjusted, tighten cable clamps on truss support brackets and upper truss anchor. Check for proper side alignment.

Important: Once auger is fully assembled, adjust truss cables on all units (because of initial stretching). Cables may also require adjustment for side alignment.

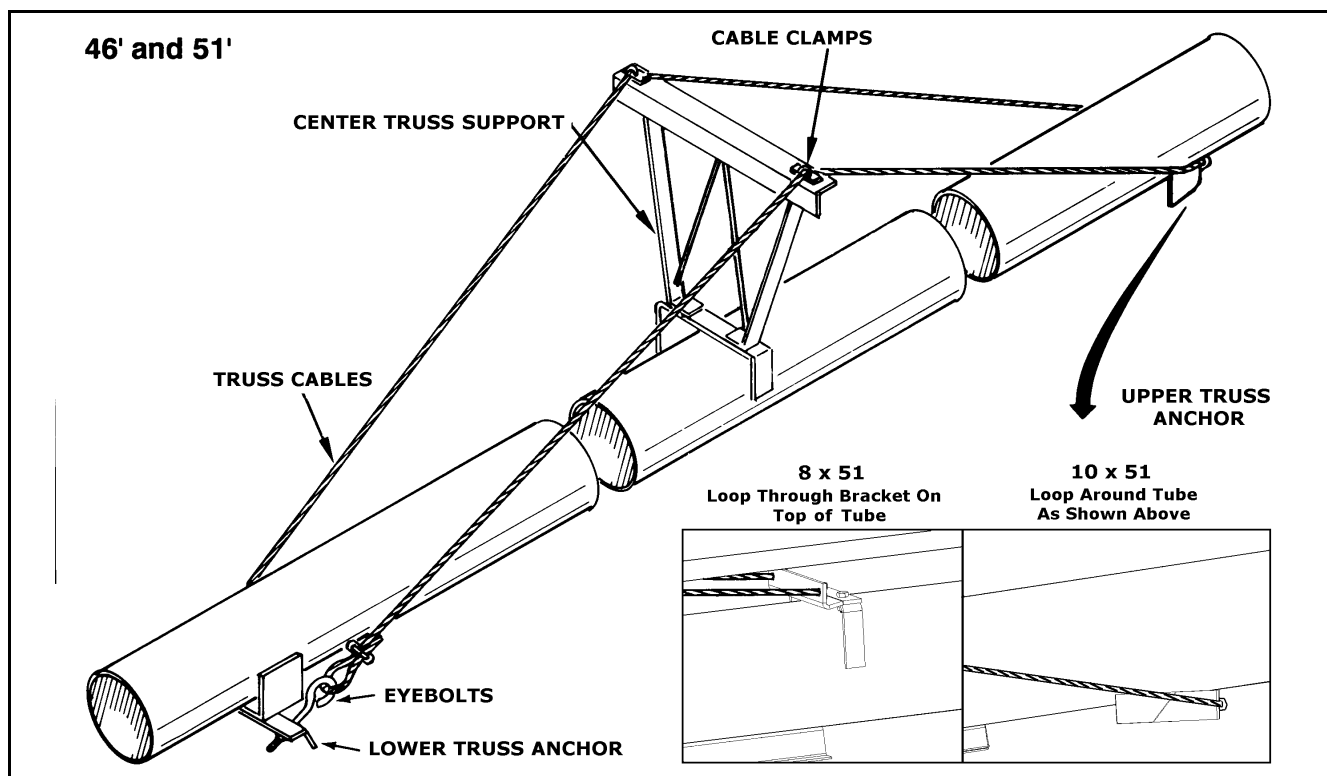


Figure 3.12

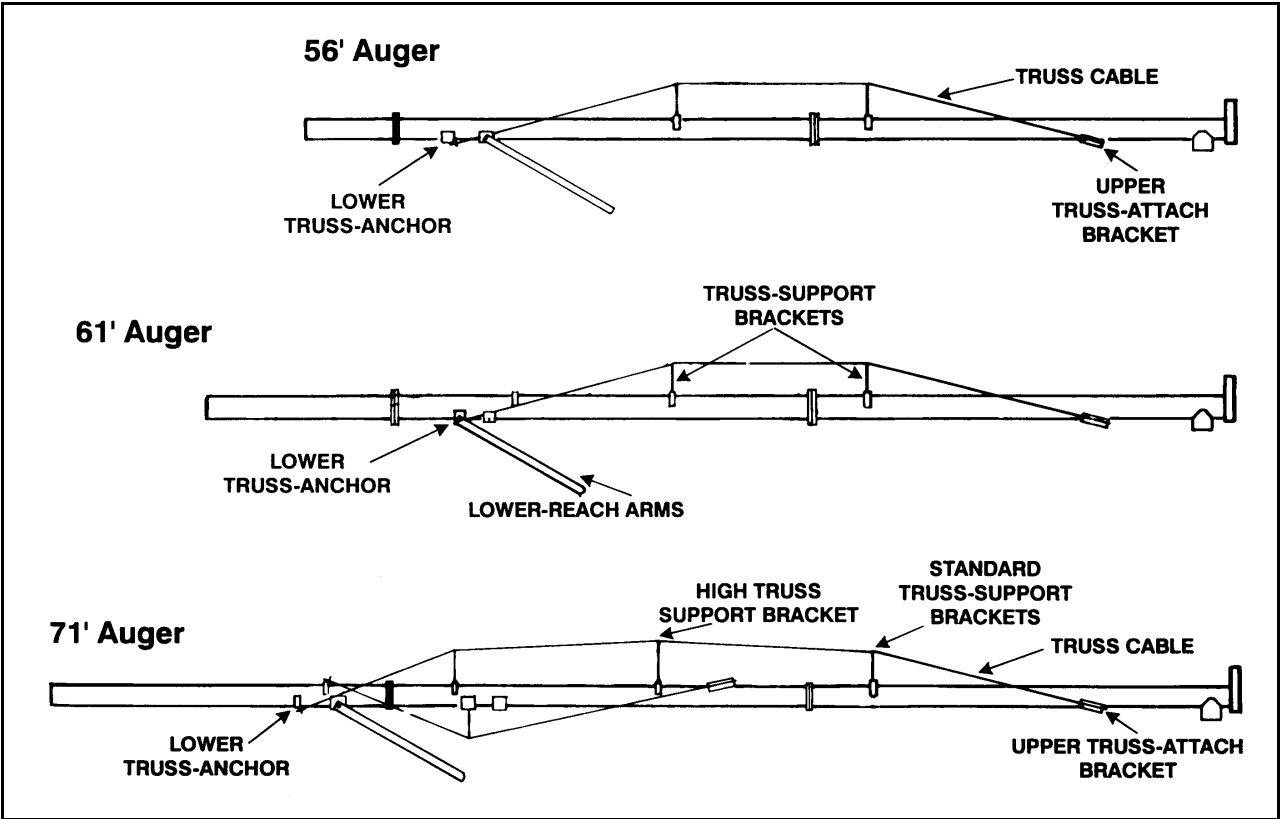


Figure 3.13

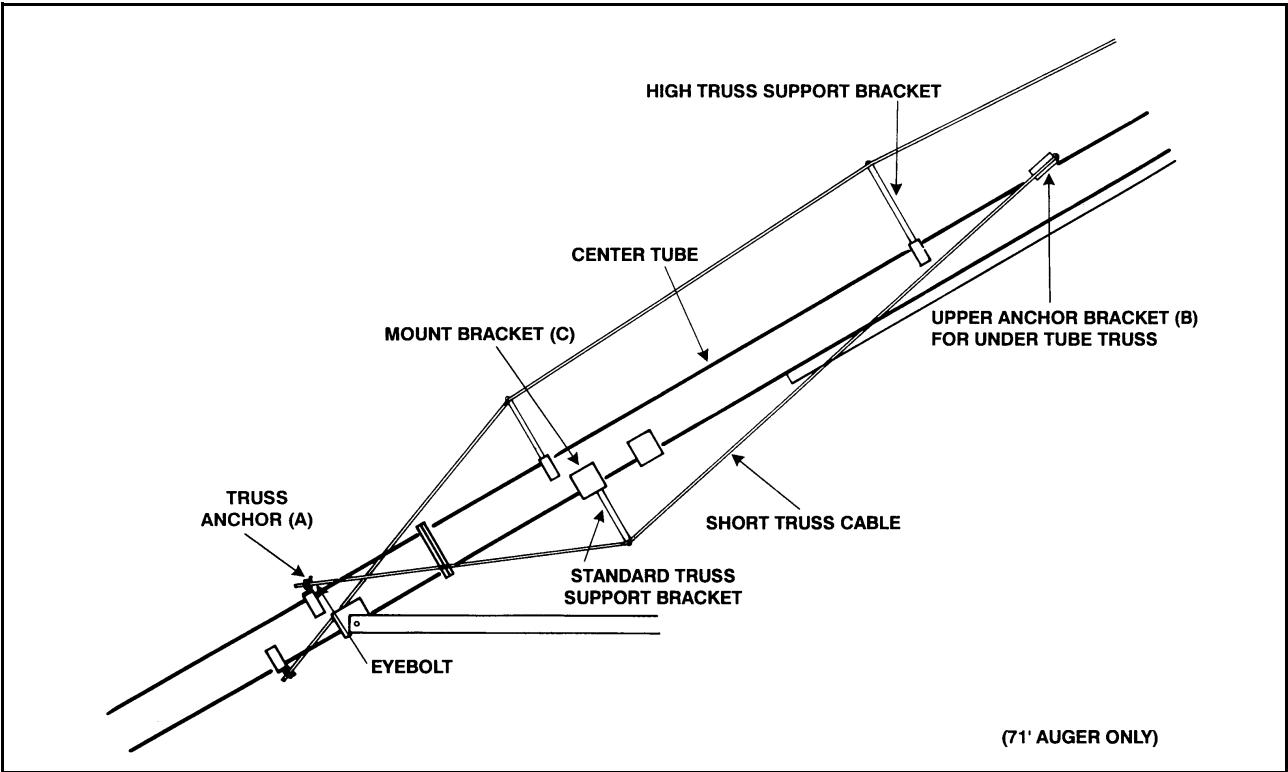


Figure 3.14

- ➡ 9. For 71' augers only (Figure 3.14).
- Fasten short truss anchor (A) to lower auger tube with 7/16" x 1" bolts and locknuts.
 - Fasten high truss support bracket to mount (C) on bottom of center tube with 7/16" x 1" bolts and locknuts.
 - Attach eyebolt to one end of truss cable with two 5/16" cable clamps, then insert eyebolt into short truss anchor and thread on nut a short way.
 - Pull truss cable over truss support bracket, around upper truss anchor (B) and back over truss support bracket to short truss anchor, holding it loosely in place with one cable clamp at upper truss anchor and 2 cable clamps at truss support bracket.
 - Place other eyebolt into short truss anchor and thread nut on a short way.
 - Insert other end of truss cable through this eyebolt. **Pull out all slack** and secure with two 5/16" cable clamps.
 - Tighten eyebolt to take remaining slack out of truss cable and adjust tension to keep auger tube straight. Tighten cable clamps on truss support bracket and upper truss anchor.

Important: *Once auger is fully assembled, adjust truss cables on all units (because of initial stretching). Cables may also require adjustment for side alignment.*

3.13. TRANSPORT UNDERCARRIAGE

- To assemble undercarriage, fasten the lower reach arms to axle with three 7/16" x 1" bolts and locknuts on each side.

➡ • The 10" x 51' auger and all 56', 61' and 71' augers require 1/2" x 1-1/4" bolts and locknuts.
- Attach long crossmember to bottom of undercarriage brackets as shown in Figure 3.15, with two 7/16" x 1" bolts and locknuts.

➡ • The 56', 61', and 71' augers require 1/2" x 1-1/4" bolts and locknuts.

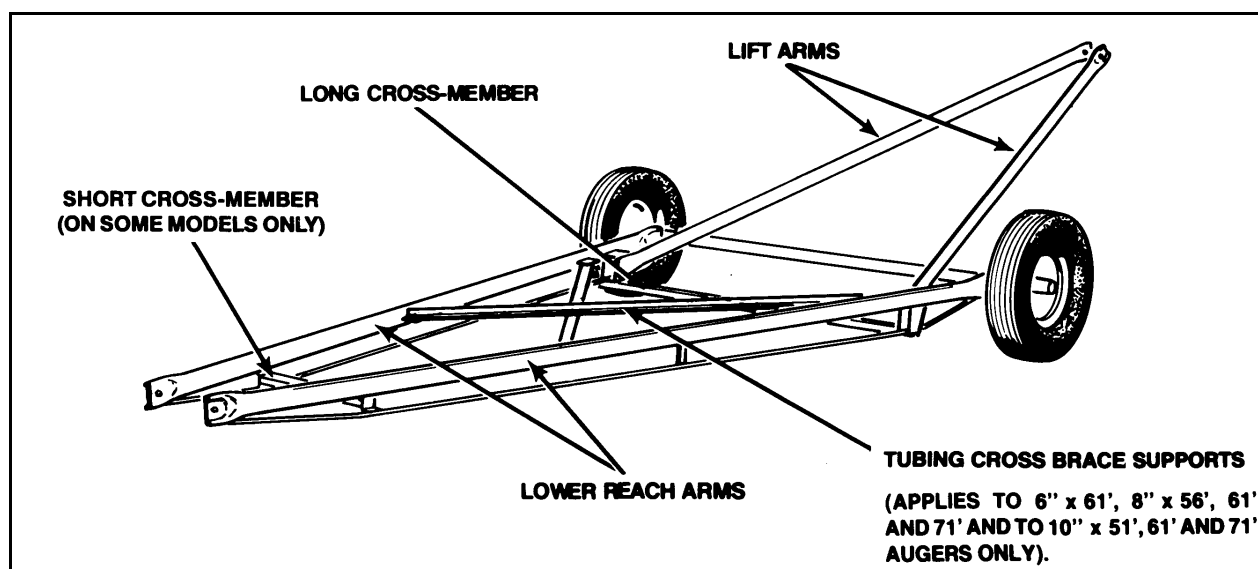


Figure 3.15

- ➔ 3. *This step applies only to the 8" x 46' and 51' and the 10" x 41' augers.* These augers require extension arms with a short crossmember to be attached to the lower reach arms (6.). Fasten the short crossmember to lower reach arms with two 1/2" x 1-1/4" bolts and locknuts. Then fasten the extension arms with two 7/16" x 1" bolts and locknuts and two 5/8" x 1-1/2" bolts and locknuts.
- ➔ 4. *This step applies only to 6" x 61', 8" x 56'-61'-71' and 10" x 51'-61'-71' augers.* Install tubing cross brace supports to the welded brackets on lower reach arms with five 1/2" x 1-1/4" bolts and locknuts.
5. Wheel hub assembly:
 - a. Remove any dirt or paint from spindle and hub.
 - b. Thoroughly pack wheel bearings and cups with a good grade of bearing grease.
 - c. Place large bearing into hub and carefully tap in seal.
 - d. Slip hub onto spindle and insert small bearing.
 - e. Tighten slotted spindle nut until hub drags slightly. Back off nut about 1/4 turn until hub turns freely.
 - f. Install cotter pin and dust cap.

Note: *Installing tires may not leave you with enough clearance to position and attach undercarriage once auger tube is raised. If so, install wheels after assembly is complete.*

- g. Check that pressure of pre-inflated tires matches pressure indicated on tire sidewall. Mount wheels on hubs and attach with six 1/2" x 1-3/4" wheel bolts.

6. Fasten upper lift arms to lower reach arms with $5/8"$ x $1-1/2"$ bolts and locknuts. **Do not overtighten.** Tighten snug only. These bolts act as pivot points.

- The 6" x 61', 8" x 56'-61'-71' and the 10" x 51'-61'-71' augers require $3/4"$ x 2" bolts and locknuts.

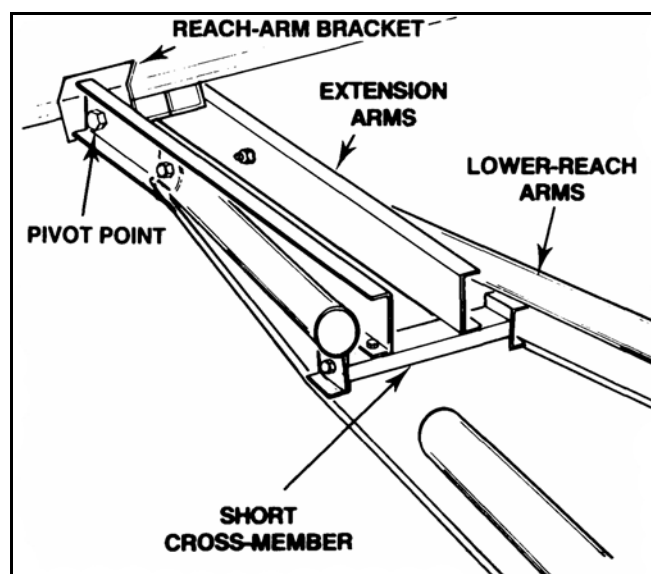
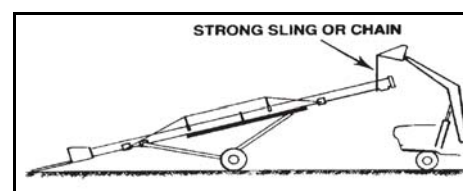


Figure 3.16

7. Raise the discharge end of auger with a front end loader and a strong sling/chain or block and tackle. The height should be sufficient to clear undercarriage assembly.



WARNING



Do not remove tube support until auger is fully assembled.

8. **6" and 13" augers only:** Position transport undercarriage beneath tube assembly and attach lower reach arms (Figure 3.17) or extension arms (6.) to reach arm bracket on bottom tube with $5/8"$ x $1-1/2"$ bolts and locknuts. **Do not overtighten.** Tighten snug only; these bolts act as pivot points.

- The 6" x 61', 8" x 56'-61'-71' and the 10" x 51'-61'-71' augers require $3/4"$ x 2" bolts and locknuts.

9. **8" and 10" augers only:**

- a. Attach short crossmember to small frame brackets loosely with two $1/2"$ x $1-1/2"$ bolts and locknuts, sandwiching the flat braces (B) between the short crossmember and small frame braces on each side (Figure 3.18).

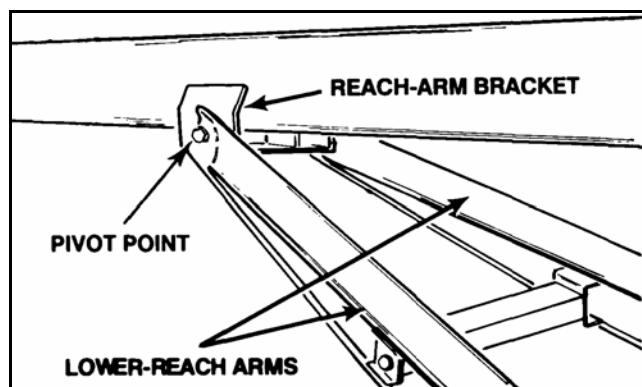


Figure 3.17

- b. Place undercarriage beneath the tube assembly, then position stabilizer braces (A) as shown in Figure 3.22 and attach lower reach arms to reach arm bracket welded on lower end of auger tube with two $\frac{3}{4}$ " x 2" bolts and locknuts. **Do not overtighten.** Tighten snug only; these bolts act as pivot points.

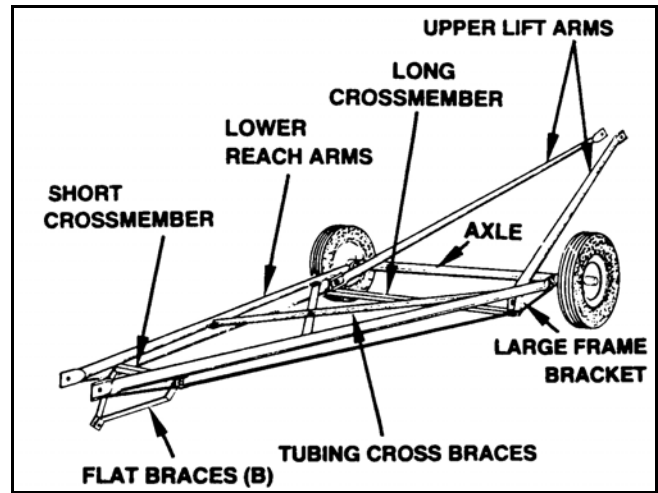


Figure 3.18

- c. Next, fasten the two stabilizer brackets and stabilizer braces using fasteners as shown in the appropriate Figure 3.19 - 3.21.

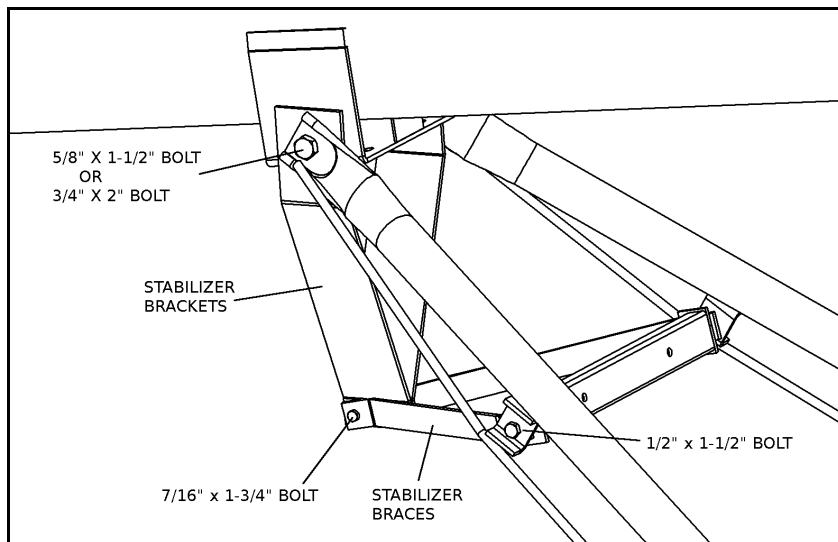


Figure 3.19 8" x 26', 31', 36', 41' and 10" x 31'

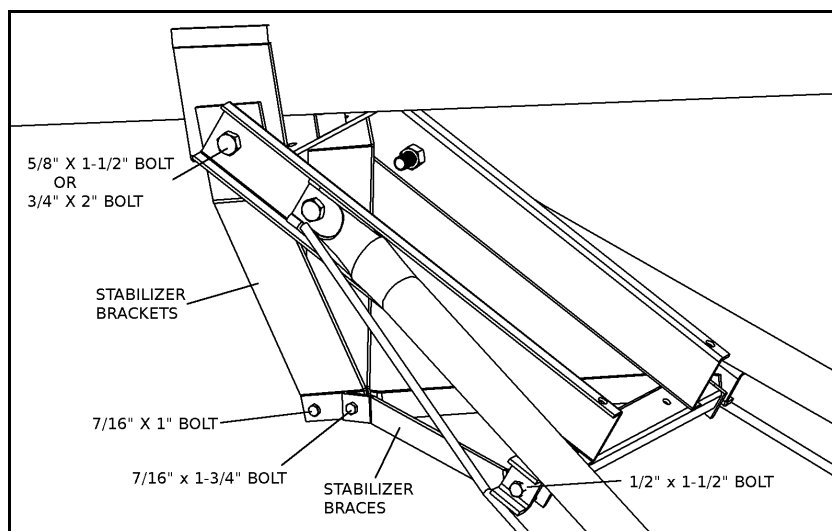


Figure 3.20 8' x 46', 51', and 10' x 41'

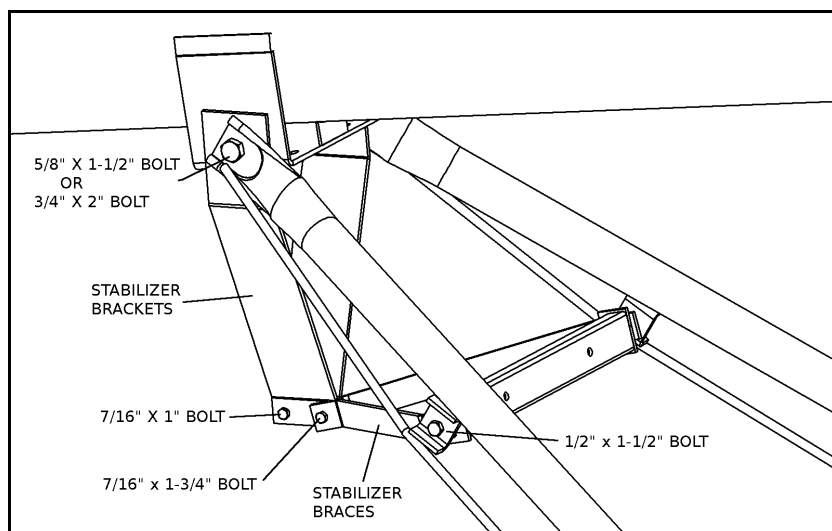


Figure 3.21 8' x 56', 61', and 10' x 51', 61', 71'

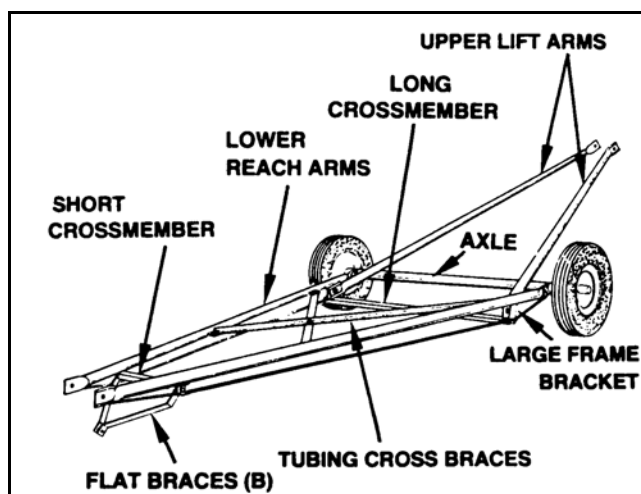


Figure 3.22

Important: *Where applicable, make sure that the lower reach arms are attached to the proper reach arm bracket (Figure 3.12 and 3.13).*

10. Attach upper lift arms to roller track shoe with one $\frac{5}{8}$ " x $6\frac{1}{2}$ " bolt and locknut. **Do not overtighten.** Tighten snug only; this bolt acts as a pivot point (Figure 3.23).



- The 6" x 61', 8" x 56'-61'-71' and the 10" x 51'-61'-71' augers require a $\frac{3}{4}$ " x $6\frac{1}{2}$ " bolt and locknut.

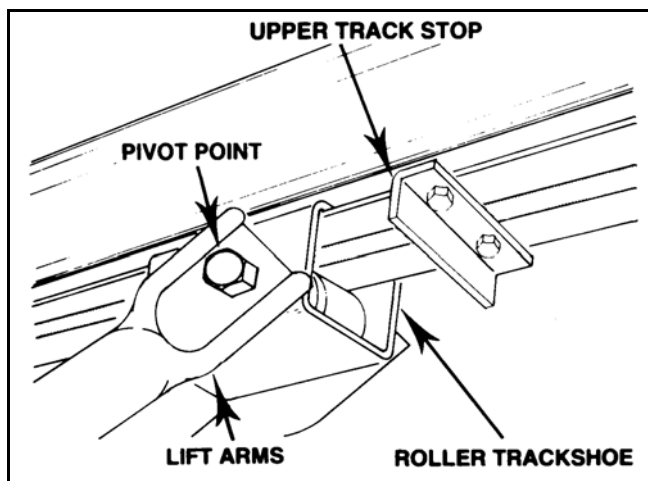


Figure 3.23



11. The 6" x 61' augers require additional tubing cross braces mounted to the upper lift arms.

- To correctly assemble, slip the tube clamps over the flat pressed ends of the lift arms (where they are attached to the frame) and loosely attach the tubing cross c-clamp vise grip to squeeze and hold the tube clamps in position for attachment to the tubing cross braces.
- Once in position, tighten the bolts (Figure 3.24).

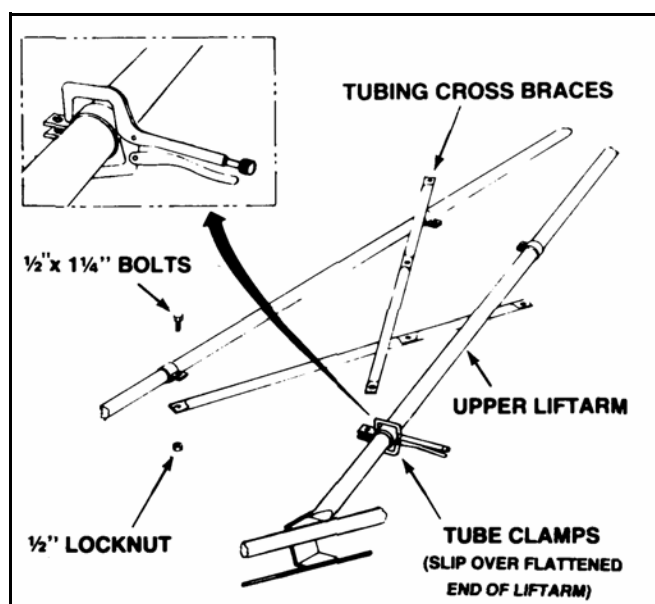


Figure 3.24

12. For the 8" x 56'-61'-71' and the 10" x 61'-71' augers: Attach the tubing cross braces to the upper lift arms using five $\frac{1}{2}$ " x $1\frac{1}{4}$ " bolts and locknuts (see Figure 3.25.)

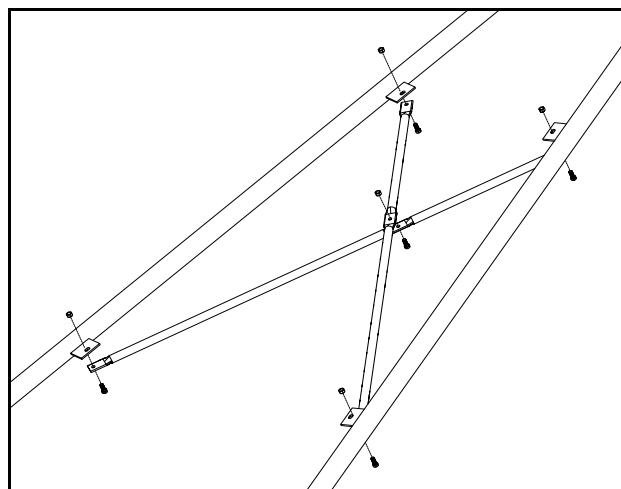
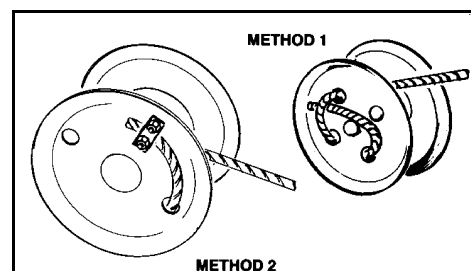


Figure 3.25

3.14. WINCH AND LIFTCABLE

1. Attach cable to winch using one of the 2 methods shown, depending on supplied winch.
 - If method 2 is used, the nut must be on the outside of the drum to prevent damage to the cable. Leave about one inch (2.54 cm) of cable extending past the clamp. Cable must leave winch from bottom side.



Important: Winch handle must be positioned on the left side of the auger (determine left by standing at the intake end, facing the discharge end).

2. Attach winch to winch mount with three 3/8" washer locknuts.

Note: If auger has more than 1 winch mount, use the bracket nearest the intake end.
3. Thread lift cable under and around roller on track shoe, then back to cable attach rod welded to lower end of track.

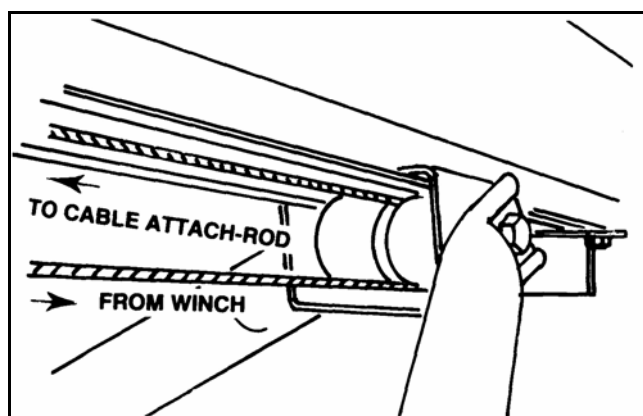


Figure 3.26

Note: On auger equipped with a lower angle-iron track stop, the cable must be threaded between track stop and auger tube so cable rests on top of the track stop (See Figure 3.27).

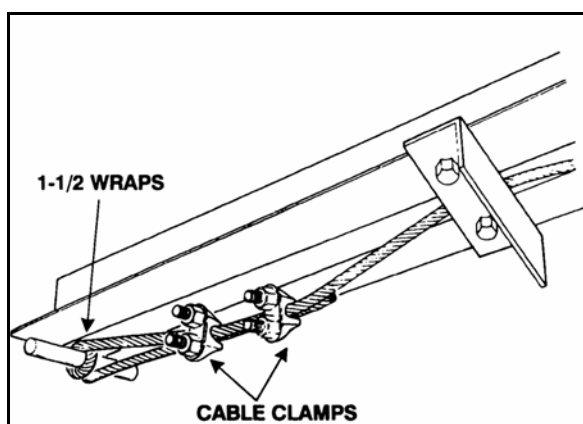


Figure 3.27

4. Wrap cable 1-1/2 times around the cable attach rod and secure with two 1/4" cable clamps. Position cable clamps as shown in Figure 3.27 and 3.28. Tighten clamps securely.

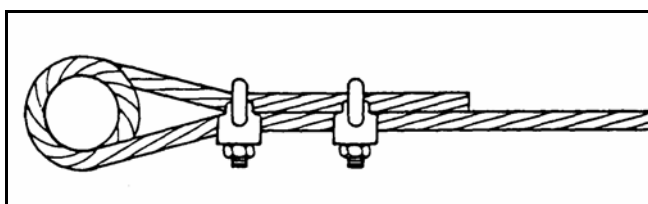



Figure 3.28

Note: Make certain cable is properly seated in cable groove before raising auger.

3.14.1. WINCH HANDLE

This auger may use one of several different winch models. Before installing handle on the main winch assembly, check the model number stamped on winch housing and follow the correct set of instructions.

CAUTION	
	Winch handle assembly must follow the instructions below. Improper assembly will result in sudden winch failure causing damage to equipment and/or personal injury.

MODEL K1051 & K1550

See Figure 3.29.

1. Slide handle over flat sides of input shaft.
2. Fasten with 1/2" locknut.

Important: *Do not remove or loosen the double locknut on the input shaft: it is an important part of the brake system of the winch.*

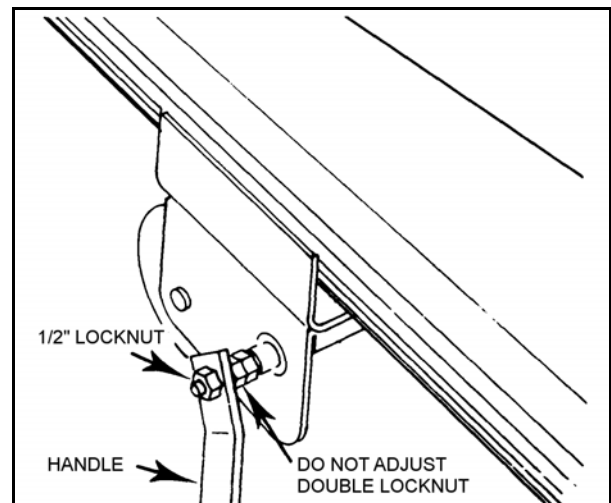


Figure 3.29

MODEL K2550

See Figure 3.30.

1. Slide handle over flat sides of input shaft.
2. Fasten with 1/2" locknut.

Important: *Do not remove or loosen the locknut on brake side of winch: it is an important part of the brake system of the winch.*

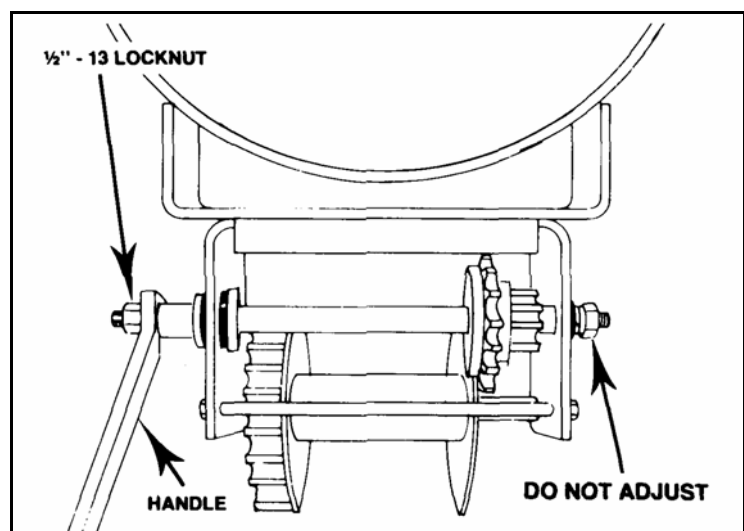



Figure 3.30

3.15. TRANSPORT SADDLE

Install transport saddle for the PTO driveline to auger tube about 3' (0.91 m) above gearbox assembly. Secure with two 7/16" x 1" bolts and locknuts.

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

Important: *Do not cover decals with gearbox or transport saddle. Replace any decal that is not clearly visible, available at no charge upon request.*

3.16. PLASTIC MANUAL HOLDER

1. Attach the manual container bracket to the top of the axle, centered between the two wheels, using a 3/8" x 2-1/2" U-bolt, two 3/8" washers, and two 3/8" locknuts. (See Figure 3.31)

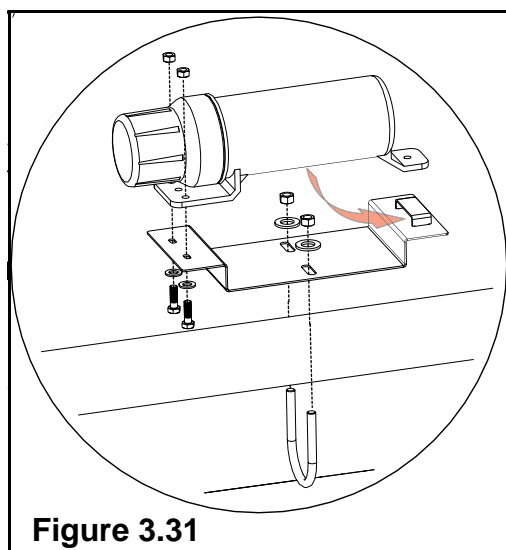


Figure 3.31

2. Slide the tab on the bottom of the manual container into the raised slot in the bracket.
3. Bolt the manual container to the bracket using two 1/4" x 3/4" bolts, two washers, and two 1/4" locknuts.

3.17. MODEL DECAL PLACEMENT

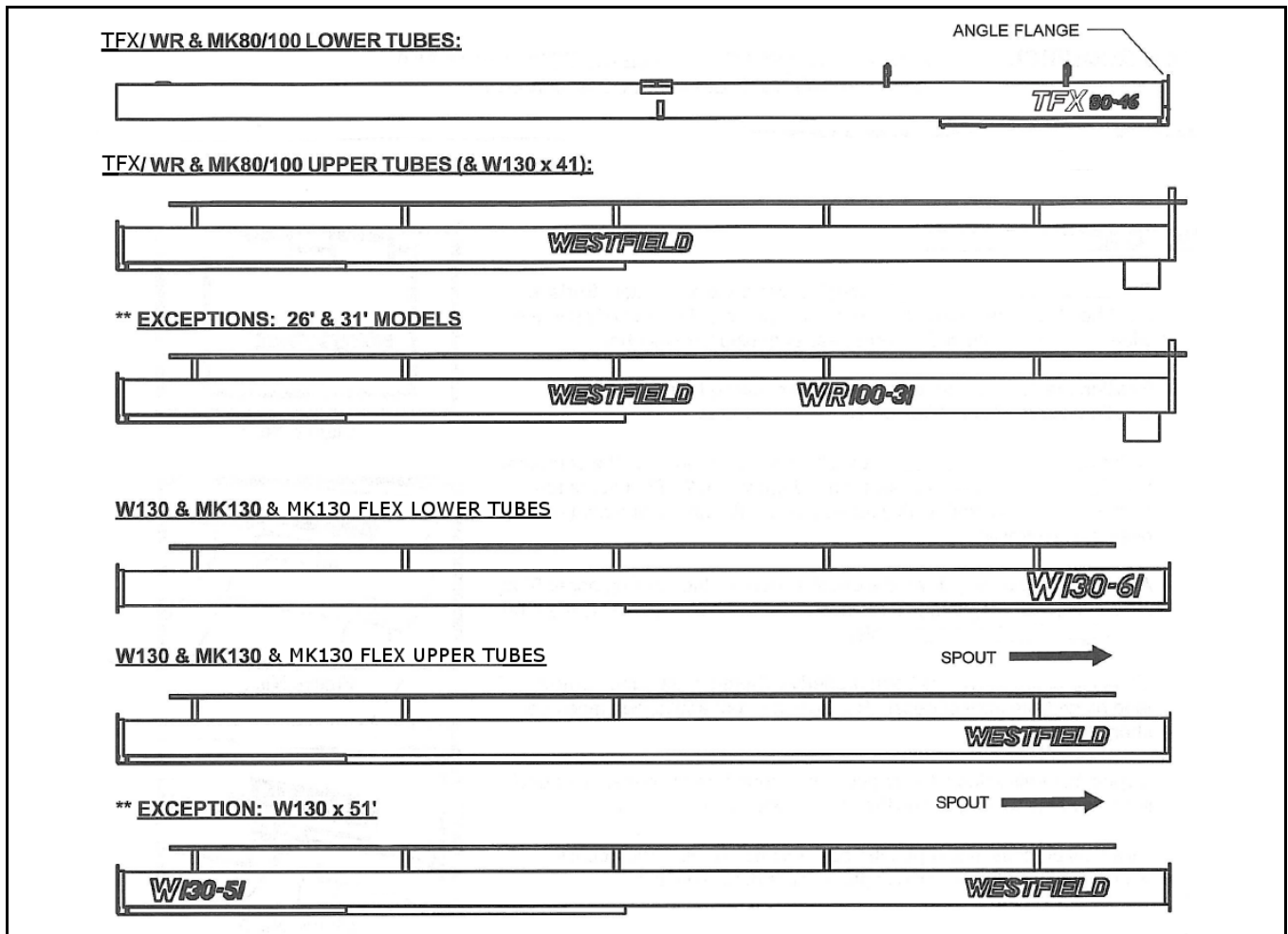


Figure 3.32

Important: Do not cover any existing safety or instruction decals with the model decals.

For most decal placement, follow the figure above. Apply decals to both sides of auger tube.

Lower Tubes: Place decals just below the angle flange, centered on the tube. Decals must be easily seen from the ground when auger assembly is complete. (For 36' augers, the model decal can be located in the center of the lower tube.)

Upper Tubes: Place Westfield decals in the center of the upper tube, where they are easily seen from the ground when auger assembly is complete. For the W130 & MK130 series, the Westfield decal is located at the top end of the upper middle tube.

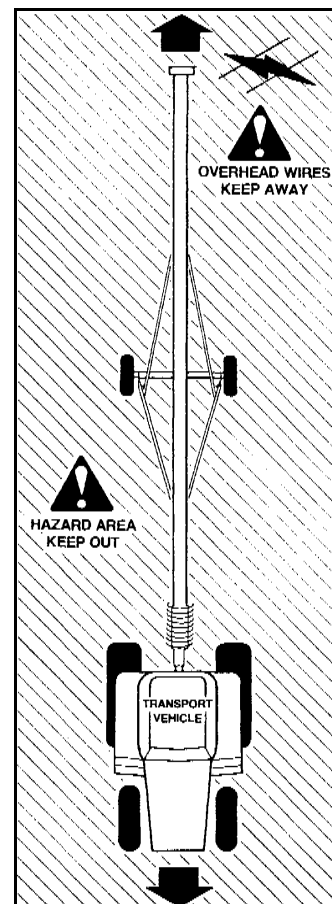
4. Transport & Placement



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

4.1. Transport & Placement Safety

- Transport auger in full down position with slight tension on cable.
- Properly place hitch pin and securely attach safety chain. Use a type of hitch pin that will not allow auger to separate from towing vehicle.
- Always attach an SMV (slow moving vehicle) sign before transporting auger. Equip the auger with the necessary lights for transportation where required by law. Always use hazard warning flashers on the tractor/towing vehicle when transporting unless prohibited by law.
- Always travel at a safe speed, never exceeding 15 mph (24 km/hr). Reduce speed on rough surfaces and be cautious when turning corners or meeting traffic.
- Before raising/lowering/moving 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 auger while transporting or placing auger.
- Do not transport auger on slopes greater than 20°.
- Wheels must be free to move when raising or lowering auger.
- Never attempt to move auger manually. To do so will result in serious injury.



- Disconnect PTO driveline from tractor before moving auger or tractor and secure in transport saddle (where applicable).
- When lowering the auger the track shoe may become stuck; if this happens, do not continue to turn the winch handle counter-clockwise because it will disengage the brake mechanism and create an unsafe condition. Too much slack in the cable may also cause the auger to drop suddenly.
- The winch must make 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 3 cable wraps on the winch drum.
- The winch is designed for manual operation only.

4.2. Transport Procedure

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

1. If auger is raised, place in full down position. The roller track shoe should be seated against the upper track stop with slight tension on the lift cable. Refer to "Lowering & Completion" on page 49.
2. Lock winch: turn handle clockwise until 2 clicks are heard.

Important: The winch must have a minimum of 3 wraps of cable on drum when auger is in transport position.

3. Place and secure hitch pin and safety chain. The safety chain should be threaded through handle on the lower tube and wrapped around auger tube before attaching to the towing vehicle (Figure 4.1).

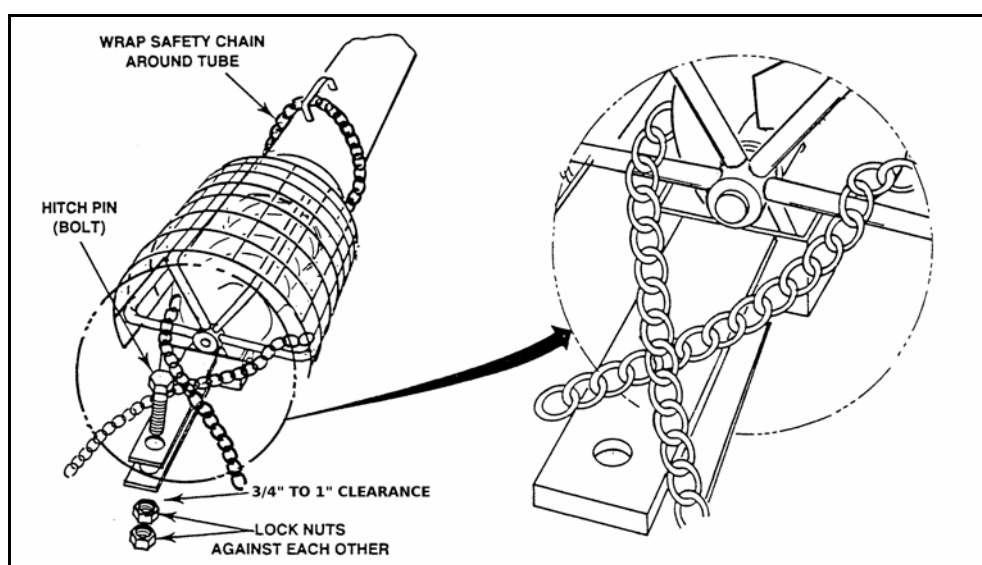


Figure 4.1

Important: Use a type of hitch pin (see Figure 4.1) that will not allow auger to separate from towing vehicle.

⚠ WARNING If auger wheels are partially or fully buried in snow or grain, failure to clear area around the wheels before moving may cause damage to the auger or result in serious injury.


4. Beware of overhead obstructions and electrical wires and devices. The PTO-SD augers have minimum clearances from 9' (2.74 m) to 15'6" (4.72 m) in normal transport position.
5. Refer to "Transport & Placement Safety" on page 11 for important safety information before towing.

4.3. Placement Procedure

1. Ensure towing hitch is in place and secure.

Important: Use a type of hitch pin (see Figure 4.1) that will not allow auger to separate from towing vehicle.


2. Before raising or positioning auger, make sure that entire area in line of travel, both on the ground and overhead, is clear of any obstructions or electrical wires.

 **WARNING** If auger wheels are partially or fully buried in snow or grain, failure to clear the area around the wheels before moving may cause damage to the auger or result in serious injury.

3. Ensure auger is on reasonably level ground when raising, lowering, or positioning.

Note: Make certain cable is properly seated in cable groove before raising auger. Refer to Figure 3.26.


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

 **NOTICE** Do not turn winch handle counter-clockwise except when lowering auger or severe damage to winch will occur.

Important: Winch must make clicking sound when raising auger. If clicking stops, retain grip on handle, lower auger fully, and repair ratchet.

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.

5. Move the auger into working position slowly. Do not unhitch and attempt to move auger by hand.

 **WARNING** Never attempt to increase height of auger by positioning wheels on number, blocks, or by any other means. To do so will result in damage to equipment and/or personal injury.

6. Once auger is in position, chock wheels on both sides and apply the park brake on the tractor (or chock its wheels as well) to prevent movement during operation.


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 it to upend. Ensure proper anchoring/support.

7. When operating auger in the raised position, rest the discharge end lightly on the bin roof, or tie to bin to prevent wind from toppling auger. When operating the auger in a freestanding position, anchor the intake end.

8. Anchor and/or support auger during operation.

- When lower half of auger empties of grain, the weight balance transfers to upper end of auger, which can cause upending.

9. See "Operation" on page 45 for correct lowering procedure.

 **CAUTION** Do not use auger as a hoist to raise any object regardless of weight. This will create an unsafe condition and will void warranty.

5. Operation



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

5.1. Operation Safety

- Have another trained person nearby who can shut down the auger in case of accident. Always work with a second trained person around augers.
- Do not operate with any of the safety guards removed.
- Keep body, hair, and clothing away from moving parts. Stay away from intake during operation.
- Inspect lift cable before using auger. Replace if frayed or damaged. Make sure it is seated properly in cable sheaves and cable clamps are secure.
- Operate auger on level ground free of debris. If ground is uneven, anchor the auger to prevent tipping or upending.
- Augers are not insulated. Keep away from electrical lines. Electrocution can occur without direct contact.
- Support the discharge end and/or anchor the intake end before operating to prevent upending.
- Do not use auger as a hoist.
- Empty auger before raising or lowering.
- Lower auger at completion of operation or when not in use. Auger could drop rapidly in case of cable break or hydraulic failure (where applicable).
- Keep the work area clean and tidy.
- Lock winch before operating auger.

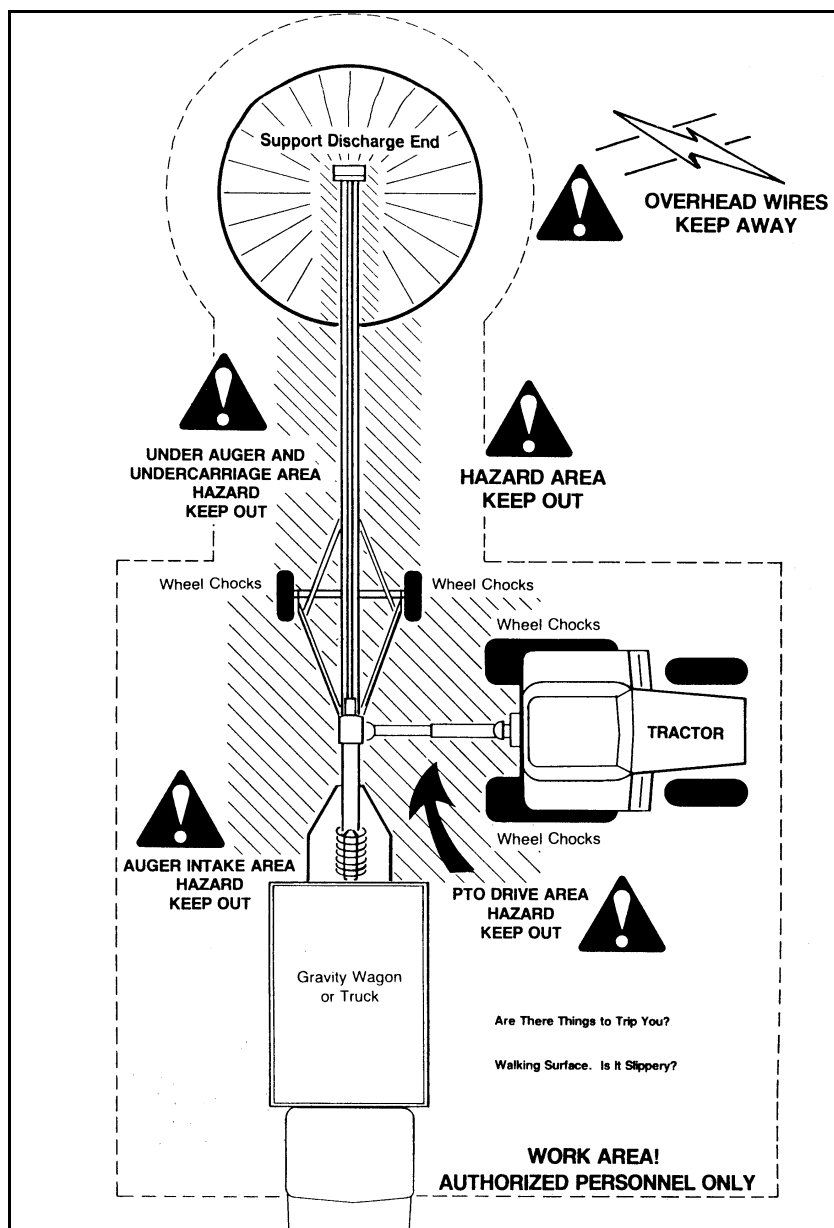


Figure 5.1

5.2. Pre-Operational Checklist

Before operating auger each time, the operator must confirm the following:


- All fasteners are secure as per assembly instructions.
- PTO driveline is connected and secure.
- PTO driveline shield rotates freely.
- PTO driveline is not exceeding the maximum operating length of 80" (2032 mm) or maximum angle of 15°.
- Lift cable is not frayed or damaged.
- Lift cable is properly seated in cable sheaves.
- Cable clamps are secure.
- Tube alignment is reasonably straight.
- Auger wheels are chocked, and if necessary, tractor wheels are chocked or the parking brake has been engaged.
- Intake area and discharge spout are free of obstructions.
- Proper maintenance has been performed.

5.3. Operation Procedure

5.3.1. Start-Up & Break-in

1. Properly place auger and complete the pre-operational checklist at the beginning of this chapter. If everything is satisfactory, prepare for a 30-minute operation at half speed.
2. Correctly position portable grain hopper secure it to the auger with both straps (where applicable).

Important: Anchoring and/or support auger during operation. When 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 the PTO.

3. 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.

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. Upon completion of initial run, shut down auger (see "Shutdown" on page 48 for further instruction).
5. Lock out tractor and conduct a complete inspection of auger following the checklist at the beginning of this chapter.

After the initial start-up and inspection, the auger should be shut down and inspected at least three more times during the first 10 hours of operation.

Keep operation of empty auger to a minimum, as this results in excessive wear.

Once auger is broken in, the checklist should be a part of the daily routine before operating auger.

5.3.2. Operating with a Full Load

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 operation for abnormal noises or vibrations.
3. Shut off all power before making adjustments, servicing, or clearing the machine.

USE OF GRAIN SPREADERS: Many grain spreaders cannot handle the large capacity of some augers. Some augers plug, causing damage to the flighting and other drive components. This type of damage is not covered by warranty. Hints on how to avoid this...

- Get a larger spreader, if available.
- Remove the spreader.
- Make sure spreader is turned on.
- Center auger spout on spreader.
- Do not lower auger spout into spreader.
- Suspend the spreader from bin ceiling leaving extra room for excess grain to flow over the spreader.

BIN LEVEL INDICATORS: These augers are fast and bins fill up quickly. A full bin will cause auger to plug, which can damage the flighting and other drive components. Installing quality grain-level indicators on your bins will allow you to monitor bin filling and help prevent damage to your auger.

5.3.3. Shutdown

Normal Shutdown:

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

Emergency / Full-Tube Restart:

1. If the auger is shut down for an emergency, lock out tractor before correcting the problem.
 - If the problem is plugging, clear as much of the grain as possible using a piece of wood, wet/dry vac, or other tool before restarting auger. **Do not reach in and use your hands** even if the tractor has been locked out.
2. If auger tube is full of grain, do not restart at full speed. Engage PTO at low rpm, gradually increasing power until normal operating speed is reached.

NOTICE Starting the auger when there is grain blockage will result in damage.

5.3.4. Lowering & Completion

After operation:

1. Clean entire work area.
2. Remove all supports and chocks.
3. Move auger out of working position and lower fully (see Lowering procedure below).
4. Clean out auger (see Clean out procedure below).
5. Prepare for transport and placement or storage (see appropriate chapters for more information).

Lowering:

1. **For PTO drives:** Disconnect driveline from tractor before lowering.
2. Ensure area beneath auger is clear.
3. Turn winch counterclockwise to lower (no clicking sound when lowering).
 - Use a firm grip on handle. Do not release unless ratchet pawl is fully engaged.
 - The winch is designed for manual operation only.
 - When lowering, 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. If this happens, winch in slack cable and correct problem.
4. After lowering, turn handle clockwise until you hear 2 clicks to lock brake.



WARNING

Do not leave auger in raised position when not in use. Auger could drop rapidly due to a cable break. High winds may also upset auger.

Clean out:

1. Shut off tractor engine and lock out power.
2. Manually clean out grain with a piece of wood, vacuum cleaner, or other tool. Do not use hands.
3. 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.

6. Maintenance & Storage

WARNING Before continuing, ensure you have read and understand the relevant information in the safety section. Safety information is provided to help prevent serious injury, death, or property damage.

Proper maintenance habits on the PTO-SD auger mean a longer life, better efficiency, and safer operation.

6.1. GENERAL MAINTENANCE PROCEDURES

Please follow the guidelines below.


Area	Maintenance Procedure	Frequency
General	While auger is in use, observe the “Pre-Operational Check-list” on page 47.	Daily
General	Check all operating, lifting, and transport components. Replace damaged or worn parts before using auger. For replacement instructions, see Assembly Section	Regularly
Lift Cable	Check and replace if frayed or damaged. Make sure cable clamps are secure.	Periodically
Wheel Hubs	Repack with lithium-based grease.	Every 2–3 years
Tire Pressure	Check with a pressure gauge. Pressure should be maintained according to sidewall recommendations.	Monthly, or if it seems low
PTO Driveline	Lubricate both universal joints.	After every 8 hours of operation
	Lubricate the center portion of the driveline (grease fitting is beneath shield) on a yearly basis.	Yearly
Upper Chain Drive	Fill enclosed upper drive housing to plug level with grease. WR60: 550 g (20 oz) WR80 x 26’–51’: 750 g (26 oz) WR80 x 56’–71’: 900 g (32 oz) WR100: 1100 g (40 oz) For continuous use in extreme cold, semi-fluid arctic grease or heavy oil may be used.	Regularly
Drive Chain Adjustment	Maintain 1/4” - 1/2” (0.64 cm - 1.27 cm) chain deflection. To adjust, loosen bolts on top bearing in the upper drive housing, adjust chain to proper tension, and re-tighten bolts	Regularly
Intake Bushing	Lubricate.	Daily
Gearbox	Maintain oil level at half full (center of cross shaft) with EP90 lube oil. Gearbox should be level when checking or refilling Do not overfill	Oil must be added to gearbox before operating, and then regularly as needed

Area	Maintenance Procedure	Frequency
Winch Note: Service winch with auger in fully lowered position and cable slack.	Keep a film of grease on gears.	Regularly
	Oil the ratchet pawl pivot, bushings, and pinion threads. Do not get oil or grease on brake discs.	Occasionally
	Replace brake discs if less than 1/16" thick.	As required
	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	Regularly
Truss Cables	Adjust to keep auger tube reasonably straight.	As necessary

6.2. GENERAL STORAGE PROCEDURES

TO PROTECT AUGER IN STORAGE DURING THE OFF-SEASON:

1. Lower the auger to full down position with slight tension on the cable.
2. Lubricate all grease fittings according to the maintenance procedure.
3. Inspect auger for damage and note any repairs required. Order replacement parts from your dealer.
4. Check tire pressure and inflate if necessary. See tire sidewall for recommendations.
5. Clean and re-lubricate spline on PTO driveline. Cover PTO driveline with plastic bag to protect it from the weather and place in the transport saddle.
6. Tow auger to storage area. Park and chock wheels.

CAUTION	
	Support discharge end of auger before removing or replacing any parts on the undercarriage.

TO PREPARE AUGER FOR USE AFTER STORAGE:

1. Check tire pressure and inflate if necessary. See tire sidewall for recommendations.
2. Tow auger to work site.
3. Remove cover from spline of PTO driveline and re-lubricate.
4. Check oil level in gearbox and refill if necessary (half full only).
5. Replace any damaged parts and decals.
6. Conduct general maintenance procedures before using auger.
7. Before raising auger after storage, make certain cable is in good condition, replacing it if frayed or damaged. Also make sure cable is properly seated in roller track and that cable clamps are secure.
8. On augers equipped with lubricated upper drive, check level of lubrication annually and add as needed. Refill to plug level.

Note: *Use only genuine Westfield replacement parts or equivalent. Replacement parts such as intake guards, pulley guards, 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.*

7. Troubleshooting



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

This chapter covers possible causes and solutions to problems you may encounter. If you encounter a problem that is difficult to solve, even after having read this chapter, please contact your local Wheatheart dealer or distributor. Before contacting them, please have this operation manual and your machine's serial number handy.



WARNING

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

Problem	Possible Cause	Remedy
Excessive noise or vibration. *Remember to follow proper break-in procedures—auger may run rough until tube is polished. If noise is extreme from outset or continuous after several loads of grade are fed, continue with troubleshooting below	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.
	Truss cables incorrectly adjusted.	Support end of auger and adjust cables so auger is flat or curves slightly upwards.
	Flighting peeled back due to plugging.	Inspect spout end of auger for flight condition. Remove and replace flight 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 flight 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 tube.	Visually inspect for cloth or trash wrapped around flighting, or buildup of gum from oily crops such as flax or canola.
Shear bolts fail repeatedly.	Incorrect shear bolt type.	Replace with correct part number. Wheatheart 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 (bearing, gearbox, etc.).	See Maintenance Section.

Problem	Possible Cause	Remedy
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 more appropriate.
	Bent flighting.	
	Flighting allowed to wear beyond normal point of replacement.	When flighting becomes razor-thin at intake, replacement is critical. Since flight material is double thickness at welded lap joints, high spots on flight occur and can accelerate spot tube wear.

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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