



MK/HX 10-36

Swing-Away Grain Auger Assembly & Operator's 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: 30549 R1

Revised: June 2021

Original Instructions

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

[illegible]

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1. Introduction

Congratulations. As the new owner of an AGI MK/HX Series 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 front cover to record your safety reviews.

Thank you.



2. Safety First

Safety First. Everyone knows about it. Most people practice it. Sadly, a few choose to ignore it. Safety should be a habit, something you practice every time you work with machinery. Safe working habits prevent 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. Further more, you must ensure that anyone working with or around the auger, is familiar with them. Failure to read this manual and/or non-compliance with correct safety procedures is a misuse of the equipment. Remember, a lack of knowledge serves only to endanger yourself and those around you.

TAKE THE TIME — BE ALERT — BE SAFE.

2.1. Safety Alert Symbol and Signal Words



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

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



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



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



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



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

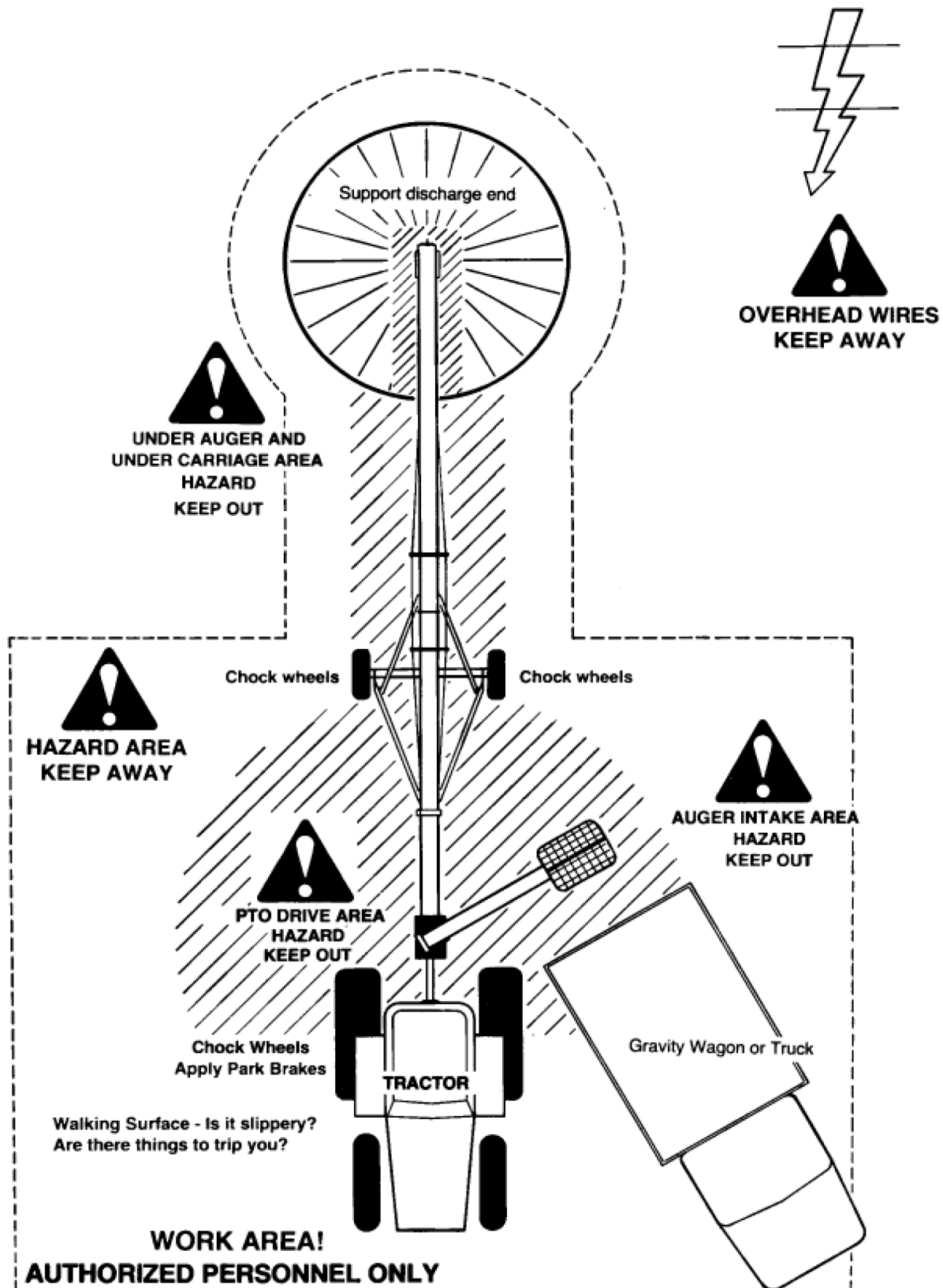
2.2. Operational Safety

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

- Keep children and untrained people away from auger work area (see [Figure 1](#)). The area around the 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 practice 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 roller and cable clamps are secure.
- Ensure that the auger is empty before raising or lowering.
- Augers are not insulated. Keep away from all electric lines. Electrocuting can occur without direct contact.
- Wear hearing protection when operating auger.

- Do not operate with **any** safety shield removed.
- **Never use a PTO driveline without a rotating shield in good working order. Also ensure shields on auger boot and tractor are in place.**
- **Be certain the PTO driveline is securely attached to the flighting shaft and to the tractor before operating.**
- Before starting tractor, be certain that power to the PTO is in the off position.
- Keep body, hair and clothing away from moving parts.
- Operate auger on level ground. Even though the auger is connected to the tractor during operation, tipping can occur.
- Anchor or support discharge end to further stabilize auger and prevent tipping.
- Keep away from the intake hopper during operation.
- Do not operate auger with the service or cleanout doors open or unlatched.
- Shut off and lock out all power to auger before servicing, cleaning or adjusting.
- Lower auger at completion of operation, or when not in use.
- Do not get on or beneath auger when raising or lowering intake hitch jack, or when auger is supported by hitch jack.

Figure 1. Work Area

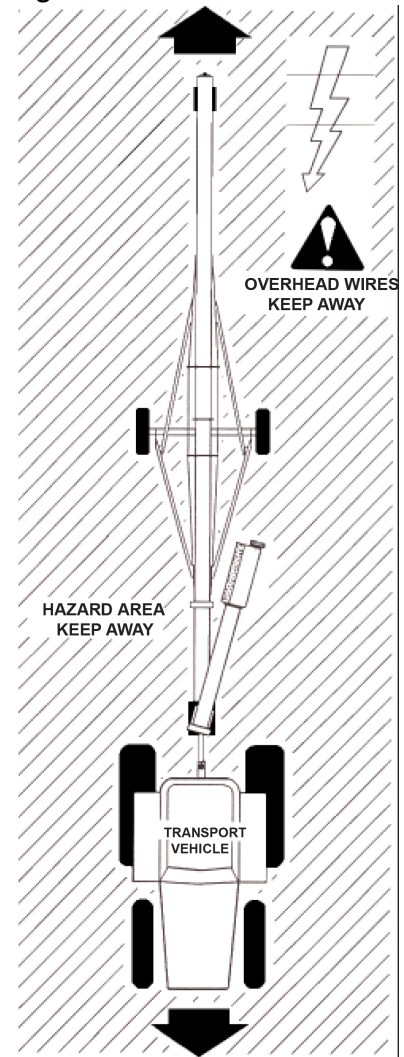


2.3. Transport and Placement Safety

The approach to transport and placement safety is no different from 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 the auger.
- Transport auger in the full down position with slight tension on the cable.
- Check the lift cable before each use and replace if frayed or damaged. Also check cable clamps.
- 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 the tractor.
- Always attach a SMV (Slow Moving Vehicle) sign before transporting auger.
- Equip the auger with the necessary lights for transportation where required by law.
- Raise intake feed hopper into transport position and lock hopper lift winch before transporting or moving auger. Intake feed side of hopper must face away from main auger when in transport position (see [Figure 40](#)).
- Before moving auger, make sure the area around the auger is clear of obstructions and/or unauthorized personnel. (see [Figure 2](#)).
- Use extreme caution in turning and cornering.
- Do not raise or lower auger until hazard area is clear.
- Do not permit anyone to stand on or beneath auger when raising or lowering.
- Wheels must be free to move when raising or lowering auger.
- Do not use auger as a hoist.
- 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 operate auger with the intake hopper in transport position. This will cause damage to u-joint.
- Do not transport auger on a slope greater than 20 degrees.
- Disconnect PTO driveline from tractor for transport or placement. Secure in transport saddle.

Figure 2.



2.4. Maintenance Safety

When performing maintenance on the MK/HX auger, understand and observe the following precautions.

- Shut down and lock out all power before attempting maintenance of any kind. If lock-out is impossible, disconnect the PTO driveline from tractor.
- Support auger tube before attempting maintenance on the undercarriage. Auger should be in full down position for maintenance.
- After maintenance is completed, replace and secure all safety shields, safety devices, service doors and cleanout covers.
- Keep decals clean. Replace any decal that is damaged or not clearly visible.
- Use only genuine AGI 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 AGI or your AGI dealer. Do not modify any auger components.

Figure 3. Safety Decal Locations

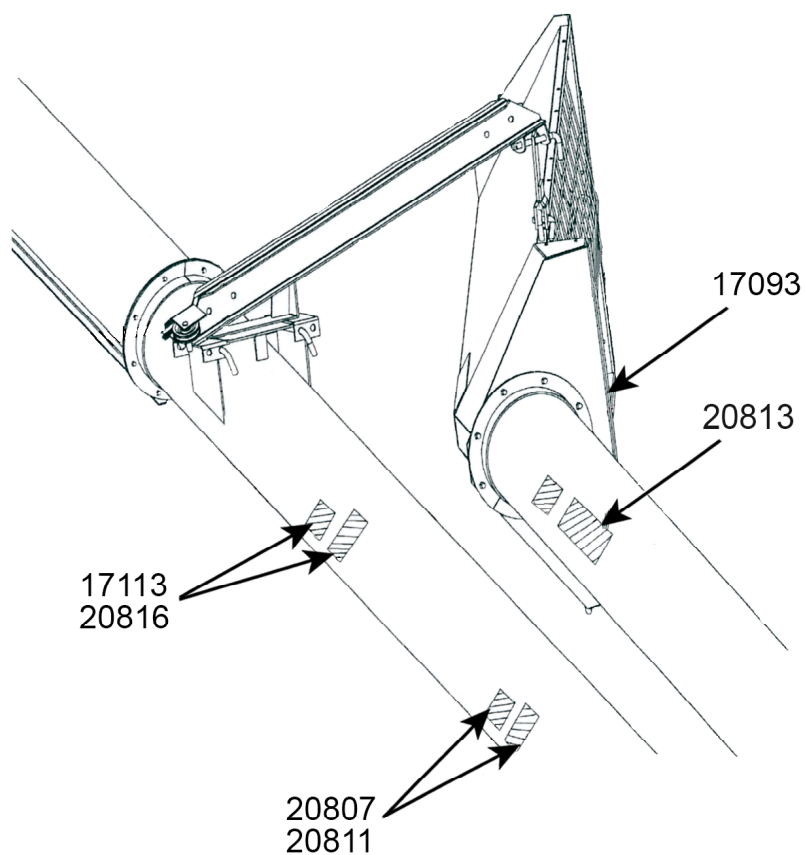


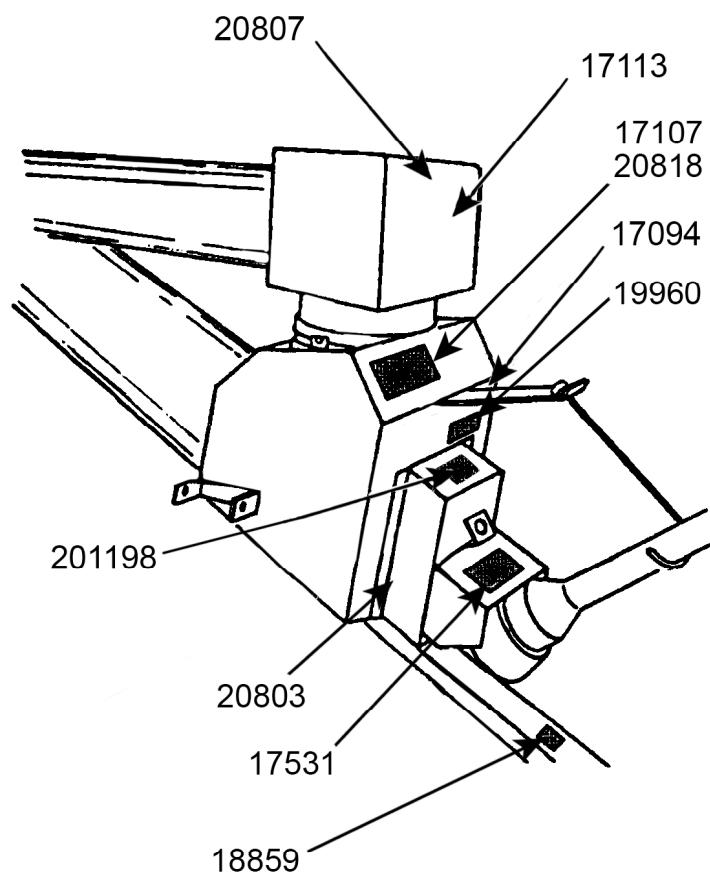
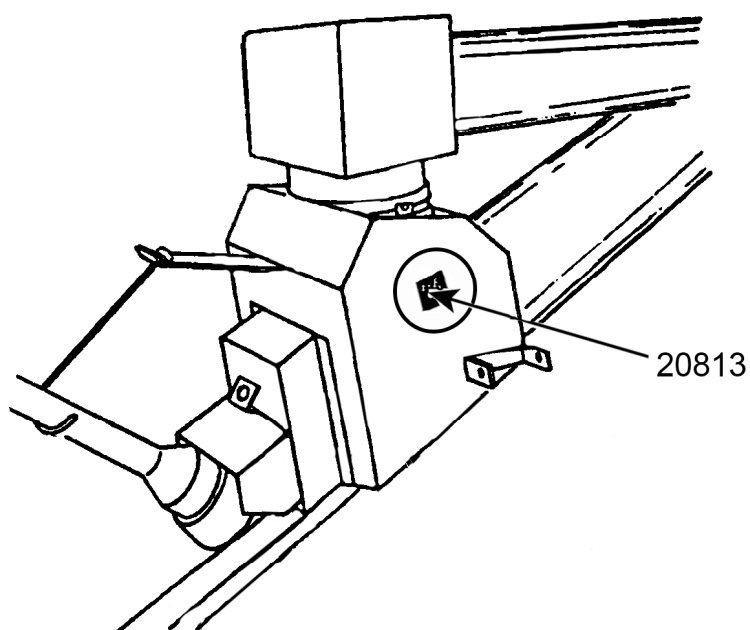
Figure 4. Safety Decal Locations**Figure 5. Safety Decal Locations**

Table 1. Safety Decals



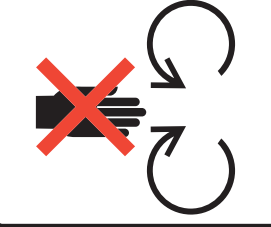
Part Number	Description
20813	<div data-bbox="362 275 1068 674">  </div> <div data-bbox="412 695 1018 735">ROTATING FLIGHTING HAZARD</div> <div data-bbox="391 758 911 795">To prevent death or serious injury:</div> <div data-bbox="391 816 1029 1241"> <ul style="list-style-type: none"> • KEEP AWAY from 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. </div>
20818	<div data-bbox="362 1346 630 1570">  </div> <div data-bbox="362 1591 630 1816">  </div> <div data-bbox="743 1346 963 1383">DANGER</div> <div data-bbox="691 1407 1016 1434">ROTATING PTO DRIVELINE</div> <div data-bbox="644 1449 972 1474">To prevent serious injury or death:</div> <div data-bbox="644 1480 1062 1787"> <ul style="list-style-type: none"> • Keep body, hair, and clothing away from rotating PTO driveline. • Do not operate equipment unless all driveline, tractor, and equipment shields are in place and in good working order. • Make certain the driveline shields turn freely on driveline. • Make certain the driveline is securely attached at both ends. • Do not exceed specified operating speed (see operator's manual). • Keep u-joint angles small and equal. Do not exceed maximum recommended length for PTO driveline. </div>

Table 1 Safety Decals (continued)



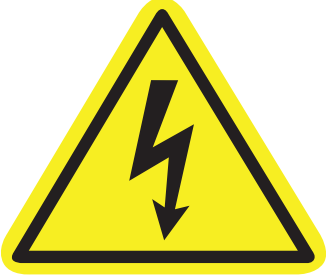
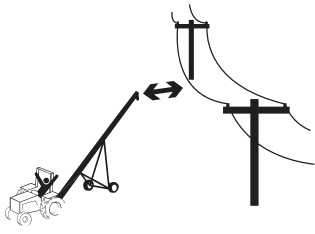

Part Number	Description
17094	<div style="border: 1px solid black; padding: 10px;"> <div style="background-color: red; color: white; text-align: center; padding: 5px;">  DANGER </div> <div style="padding: 10px;"> <p>ROTATING FLIGHTING INSIDE</p> <p>To prevent serious injury or death, do not operate auger unless swing-hopper is securely attached to boot.</p> </div> </div>
20816	<div style="border: 1px solid black; padding: 10px;"> <div style="background-color: red; color: white; text-align: center; padding: 5px;">  DANGER </div> <div style="display: flex; justify-content: space-around; align-items: center; padding: 10px;">   </div> <div style="padding: 10px;"> <p>ELECTROCUTION HAZARD</p> <p>To prevent death or serious injury:</p> <ul style="list-style-type: none"> • When operating or moving, keep equipment away from overhead power lines and devices. • Fully lower equipment before moving. <p>This equipment is not insulated.</p> <p>Electrocution can occur without direct contact.</p> </div> </div>
17113	<div style="border: 1px solid black; padding: 10px;"> <div style="background-color: orange; color: white; text-align: center; padding: 5px;">  WARNING </div> <div style="padding: 10px;"> <p>TRANSPORT HAZARD</p> <p>To prevent serious injury or death:</p> <ul style="list-style-type: none"> • Securely attach equipment to vehicle with correct pin and safety chains. • Use a tow vehicle to move equipment. </div> </div>

Table 1 Safety Decals (continued)


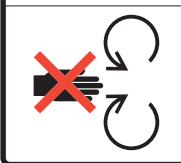

Part Number	Description
201198	<div data-bbox="358 275 537 436">  </div> <div data-bbox="358 443 537 604">  </div> <div data-bbox="553 275 1073 604"> <p style="text-align: center;"> WARNING</p> <p style="text-align: center;">ENTANGLEMENT HAZARD</p> <p>To prevent serious injury or death:</p> <ul style="list-style-type: none"> • Keep body, hair, and clothing away from rotating pulleys, belts, chains, and sprockets. • Do not operate with any guard removed or modified. Keep guards in good working order. • Shut off and lock out power source before inspecting or servicing machine. </div>

Table 1 Safety Decals (continued)

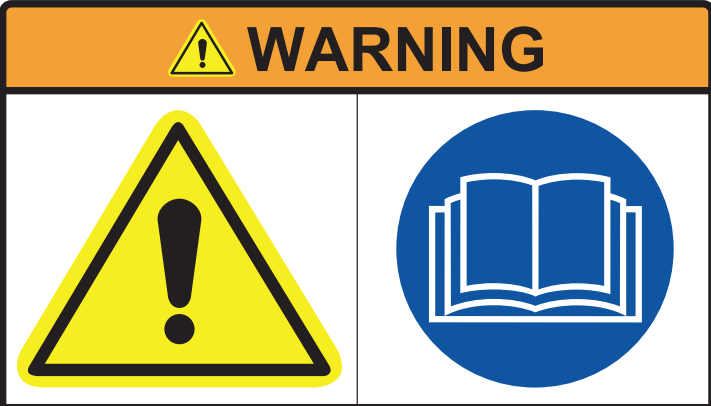
Part Number	Description
20807	<div data-bbox="362 275 1068 678">  <p>The decal features an orange header with a yellow exclamation mark icon and the word "WARNING" in bold black text. Below the header, there are two circular icons: a yellow triangle with a black exclamation mark on the left, and a blue circle with a white open book icon on the right.</p> </div> <p data-bbox="391 699 911 737">To prevent serious injury or death:</p> <ul data-bbox="391 758 1036 1612" style="list-style-type: none"> • Read and understand the manual before assembling, operating, or maintaining the equipment. • Only trained personnel may assemble, operate, or maintain the equipment. • Children and untrained personnel must be kept outside of the work area. • Do not modify the equipment. Keep in good working order. • If the manual, guards, or decals are missing or damaged, contact factory or representative for free replacements. • Lock out power before performing maintenance. • To prevent equipment collapse or upending, support equipment tube while disassembling certain components. • Follow grain storage structure manufacturer's warnings when loading and unloading. • Electric motors must be grounded. Disconnect power before resetting overloads.

Table 1 Safety Decals (continued)

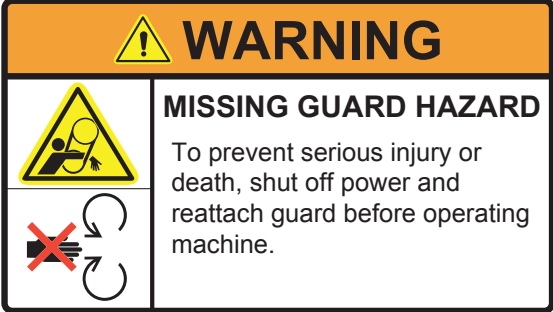
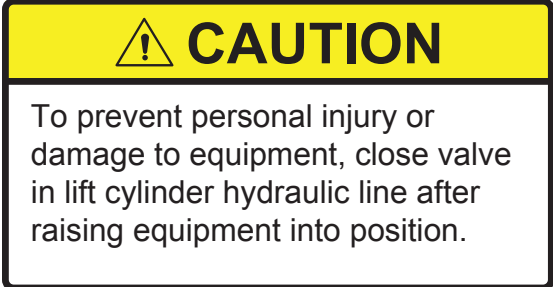

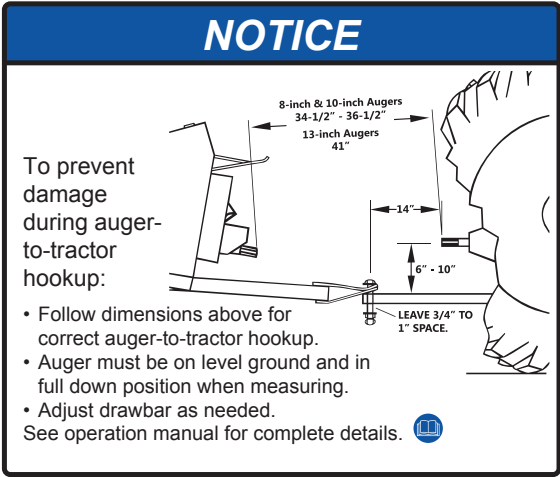

Part Number	Description
20803	 <p>MISSING GUARD HAZARD</p> <p>To prevent serious injury or death, shut off power and reattach guard before operating machine.</p>
17107	 <p>To prevent personal injury or damage to equipment, close valve in lift cylinder hydraulic line after raising equipment into position.</p>
18859	 <p>NOTICE</p> <p>Disconnect PTO driveline from tractor before moving equipment.</p> <p>If attached, driveline will bottom out, severely damaging the CV u-joint and lower flight shaft.</p> <p>See manual for maintenance.</p>

Table 1 Safety Decals (continued)

Part Number	Description
17531	<p>NOTICE</p>  <p>To prevent damage during auger-to-tractor hookup:</p> <ul style="list-style-type: none"> • Follow dimensions above for correct auger-to-tractor hookup. • Auger must be on level ground and in full down position when measuring. • Adjust drawbar as needed. <p>See operation manual for complete details. </p>
19960	<p>NOTICE</p> <p>To prevent damage, wheels must be free to move when raising or lowering equipment.</p> <p>When equipment is positioned, chock all wheels.</p>
17093	<p>NOTICE</p> <p>Lubricate angle drive after each 8 hours of use with high-temperature grease.</p>

3. Assembly

Before starting assembly of your new auger, please read the following instructions carefully and familiarize yourself with all the sub-assemblies and hardware making up the auger. Ensure that all parts are on hand, arranging them for easy access as required. Assembly should be carried out in a large open area with a level surface.

Important

These instructions are written on the assumption that two or more people will be available for the assembly procedure. Because of the weight, it is unwise to attempt assembly of auger alone.

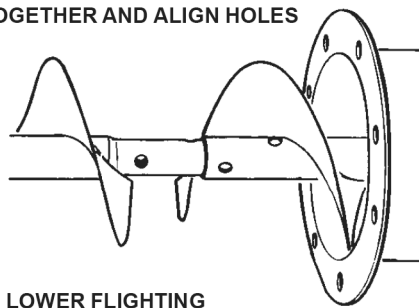
3.1. Tube and Flight Assembly

1. Align upper and lower tube sections on a flat surface or on a series of benches.
2. Slide lower flight shaft into upper flight shaft with flight ends butting together for continuous flow. Secure with two 1/2" x 2-3/4" grade 8 bolts and locknuts (see [Figure 6](#)).
3. Slide tube sections together and insert the eight 7/16" x 1" bolts and locknuts and tighten.

CAUTION Block tube sections to prevent rolling. Do not drop. Damage to equipment or personal injury will result.

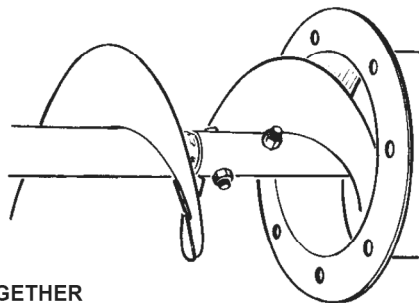
Figure 6.

1. PUSH TOGETHER AND ALIGN HOLES



LOWER FLIGHTING

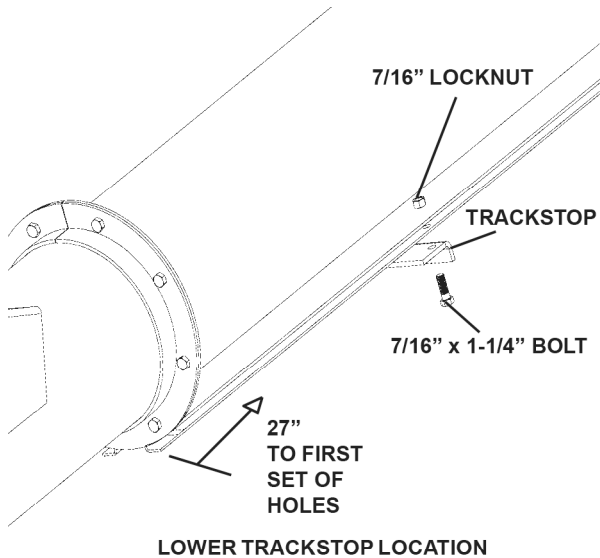
2. BOLT TOGETHER



3.2. Trackshoe and Trackstop

1. Slide the roller trackshoe onto track, then attach the lower trackstop to the correct position on track as shown in [Figure 7](#), using two 7/16" x 1-1/4" bolts and locknuts.

Figure 7.



2. Attach the upper trackstop to correct position as shown in [Figure 8](#), using two 7/16" x 1-1/4" bolts, locknuts and heavy flat washers. Make certain the washers are on top of track as shown in [Figure 8](#) and that the trackstop is centered on the track.
3. Slide trackshoe along full length of track to make certain there is no binding.

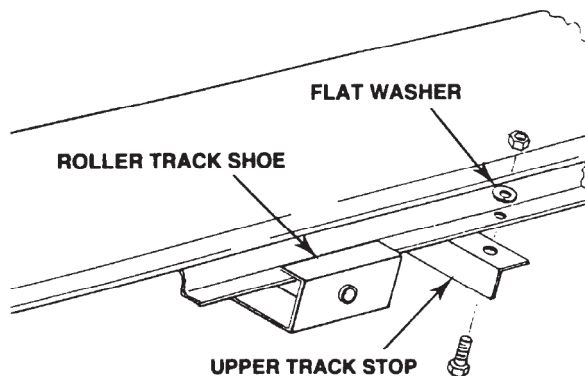


Figure 8.

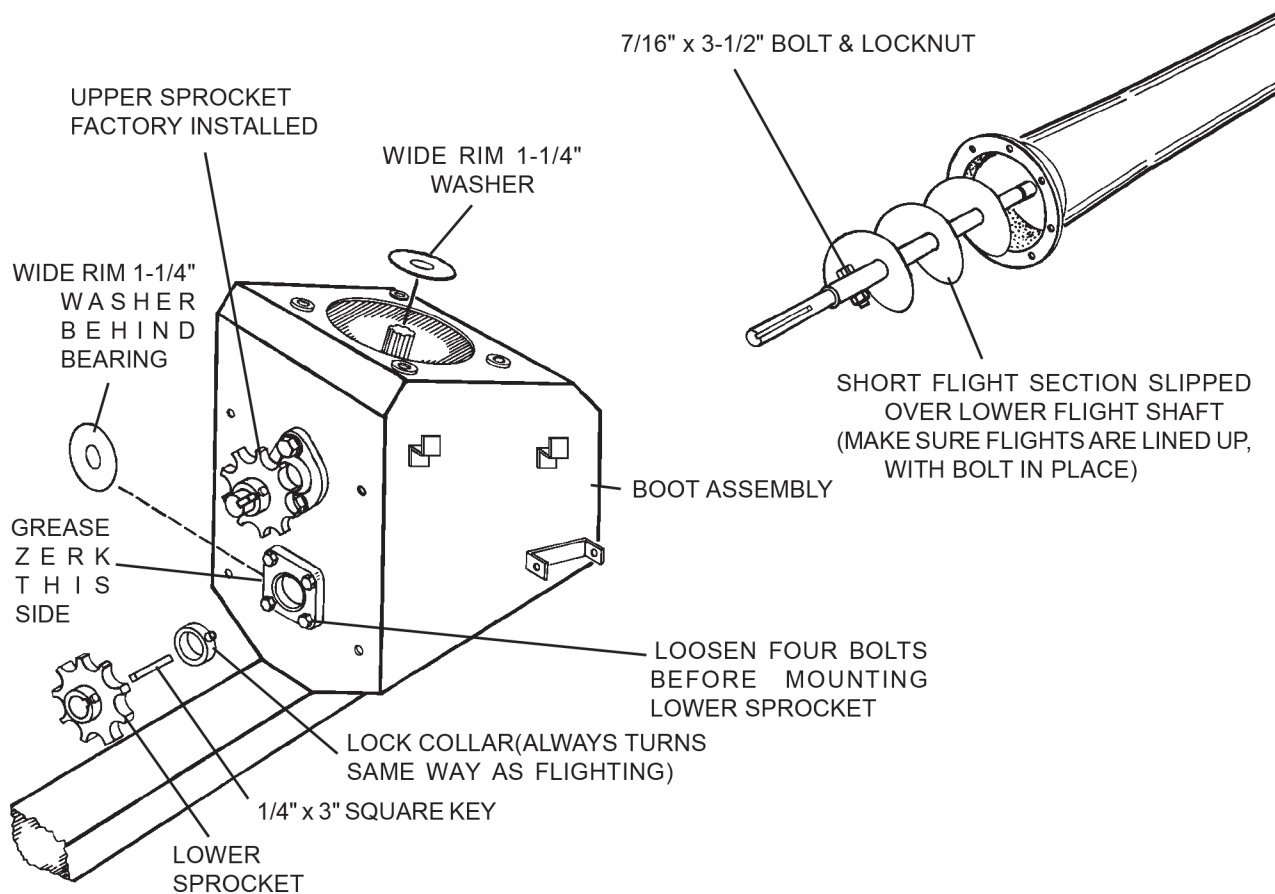
3.3. Boot Assembly

Note

The gearbox has been filled at the factory (half full) with EP90 gear oil. Before further assembly, check oil level to make certain the gearbox is half full as required. Add oil if necessary. Do not use grease.

1. Slide short flighting section onto lower flight shaft and tighten with 7/16" x 3-1/2" bolt and locknut as shown in [Figure 9](#). Make sure that flight ends butt together for continuous flow.
2. At upper end of auger tube, loosen setscrew and remove lock collar from upper bearing.
3. Slip boot over lower flighting shaft and attach to flange on lower tube with eight 7/16" x 1" bolts and locknuts. Tighten securely.
4. Slide wide rim 1-1/4" flat washer onto lower flight shaft.

Figure 9.



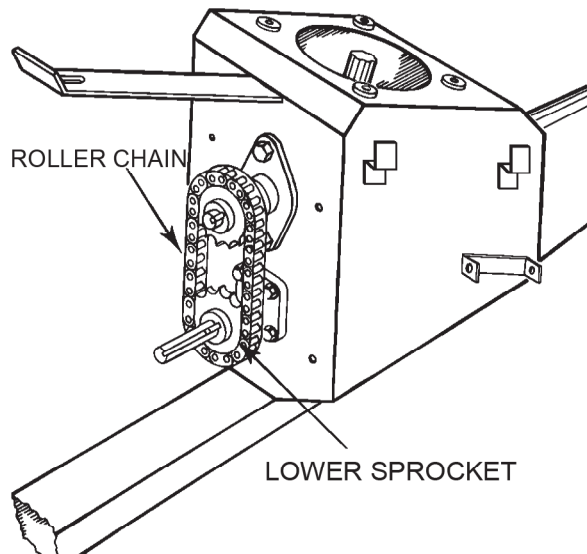
5. Install lower bearing using four 1/2" x 1-1/2" bolts and locknuts. Ensure grease zerk is positioned to left (standing behind boot, facing auger discharge). Seat flight shaft shoulder against washer and lower bearing. Secure lock collar and tighten setscrew on lower bearing first and then on the upper bearing.
6. Install 1/4" x 3" square key and sprocket onto flighting shaft. Align lower sprocket with upper sprocket and tighten setscrews.

Important

To prevent premature failure of the lower bearing, assemble in correct sequence, as follows:

- a. Remove lock collar from upper bearing.
 - b. Seat flight shaft shoulder against lower bearing.
 - c. Secure lock collar on lower bearing.
7. Loosen four bolts on lower bearing and install chain on sprockets. With chain in place and tensioned to about 1/4" deflection, retighten four bolts on bearing. Oil the chain lightly (see [Figure 10](#)).

Figure 10.



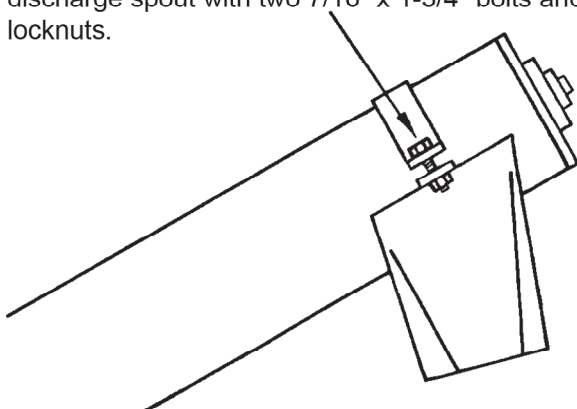
8. Secure lock collar and tighten setscrew on bearing at upper end of auger tube.

Note

Sprocket shield should be installed after [Section 3.7 – PTO \(CV\) Driveline Installation on page 26](#) for easier assembly of the CV-PTO driveline. See step 4 from that section.

Figure 11.

DISCHARGE SPOUT INSTALLATION: Attach discharge spout with two 7/16" x 1-3/4" bolts and locknuts.



3.4. Transport Undercarriage Assembly

To assemble undercarriage:

1. Fasten the lower reach arms to the axle with three 1/2" x 1-1/4" bolts and locknuts on each side.
2. Attach long crossmember to bottom of large frame brackets as shown, with two 7/16" x 1" bolts and locknuts.
3. Attach short crossmember to small frame brackets loosely with two 1/2" x 1-1/2" bolts and locknuts, sandwiching the flatbraces (B) between short crossmember and small frame brackets on each side. Leave this way until step no. 8. (See [Figure 15](#)).
4. Check that pressure of pre-inflated tires matches pressure indicated on the tire sidewall. Mount wheels on the hubs using four 1/2" x 1" wheel bolts in the pattern indicated on [Figure 13](#).
5. Fasten upper lift arms to lower reach arms with two 3/4" x 2" bolts and locknuts. DO NOT OVERTIGHTEN. Tighten snug only as these bolts act as pivot point.
6. Raise the discharge end of auger with a front end loader and a strong sling or chain, or block and tackle, as shown in [Figure 14](#). Height should be sufficient to clear undercarriage assembly.

Figure 12.

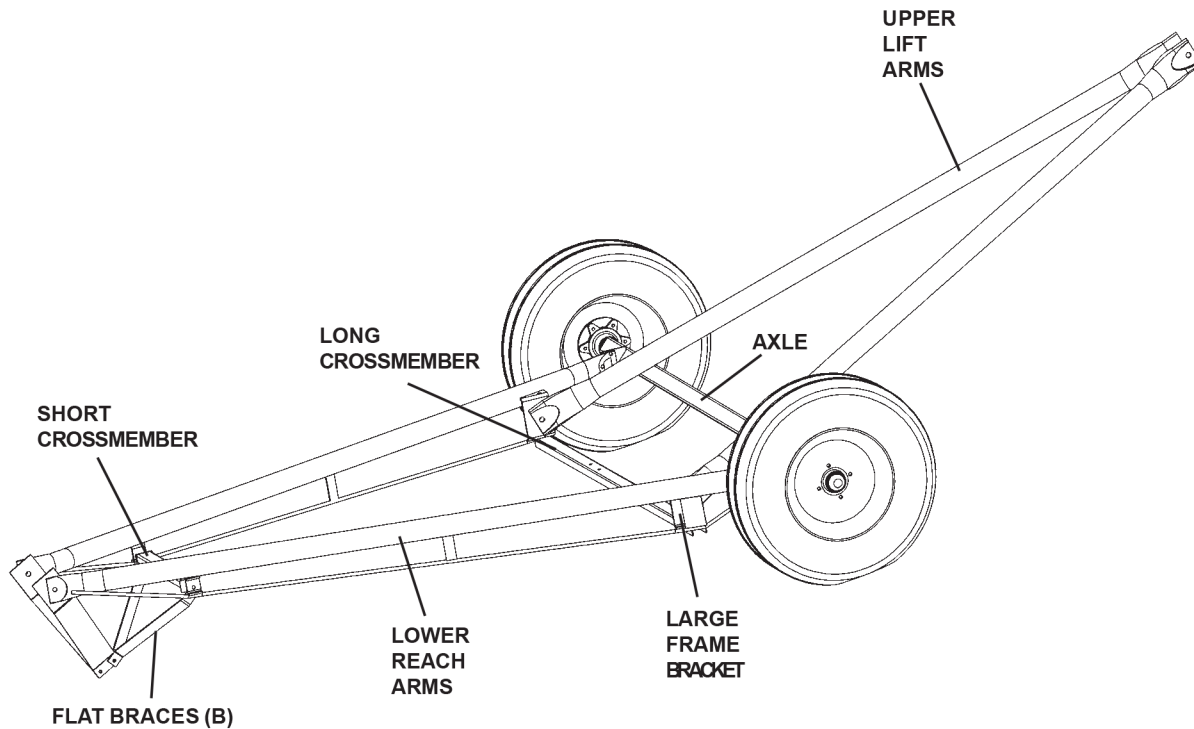
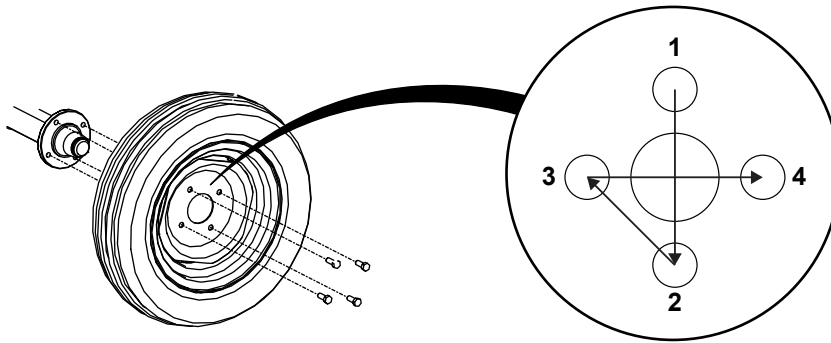
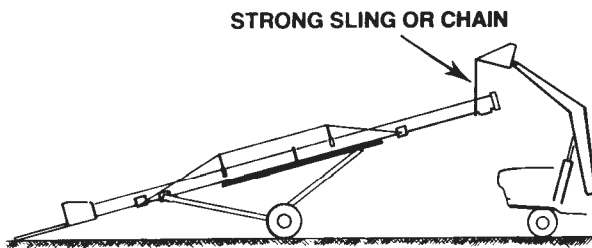


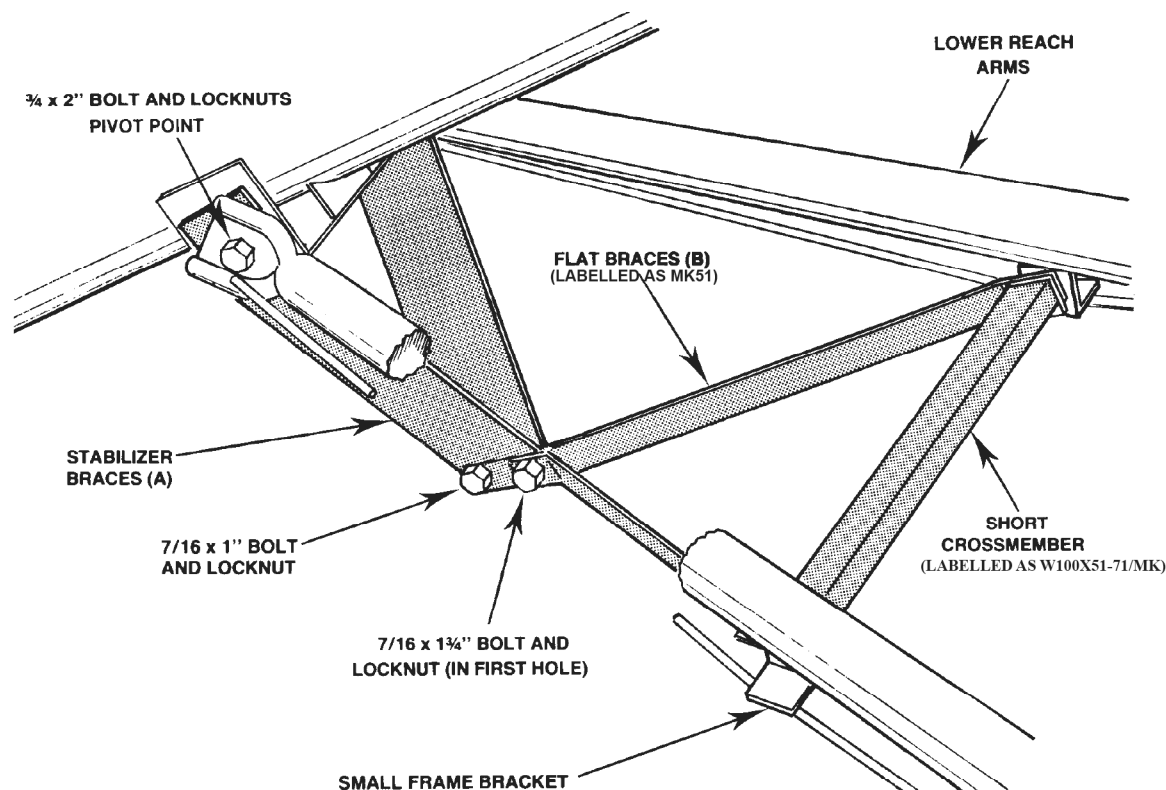
Figure 13. Assembling the Wheels

CAUTION Do not remove tube support until assembly at end of section has been completed.

Figure 14.

7. Place undercarriage beneath tube assembly, then position stabilizer braces (A) as shown in [Figure 15](#) and attach lower reach arms to bracket welded on lower end of auger tube with two 3/4" x 2" bolts and locknuts. **DO NOT OVERTIGHTEN.** Tighten snug only as these bolts act as pivot points.
8. Fasten flat braces (B) to first set of holes (furthest from intake) on stabilizer braces (A) with one 7/16" x 1-3/4" bolt and locknut. Place one 7/16" x 1" bolt and locknut in other hole of stabilizer brace.
9. Attach upper lift arms to the roller trackshoe with one 3/4" x 6-1/2" bolt and locknut. **DO NOT OVERTIGHTEN.** Tighten snug only as this bolt acts as a pivot point.
10. Lower upper end of auger slowly until track shoe rests against upper trackstop.

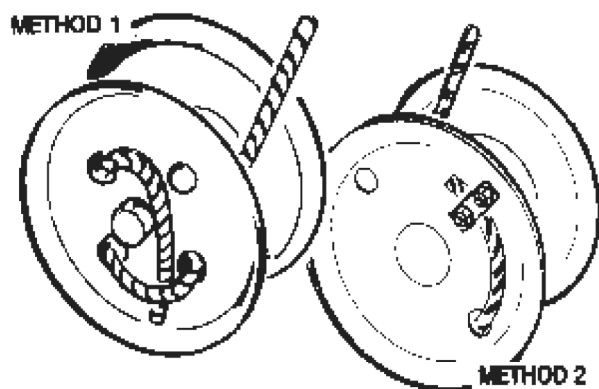
Figure 15.



3.5. Winch and Lift Cable Installation

1. Attach cable to winch using one of the two methods shown, depending on winch supplied (see [Figure 16](#)). If Method 2 is used, the nut must be on the outside of the drum to prevent damaging cable. Have about one inch of cable extending past the clamp.

Figure 16.



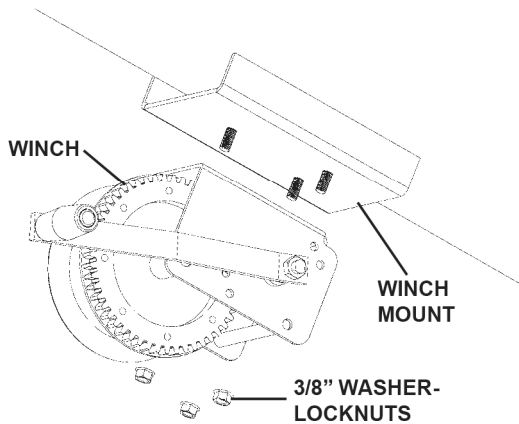
Important

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

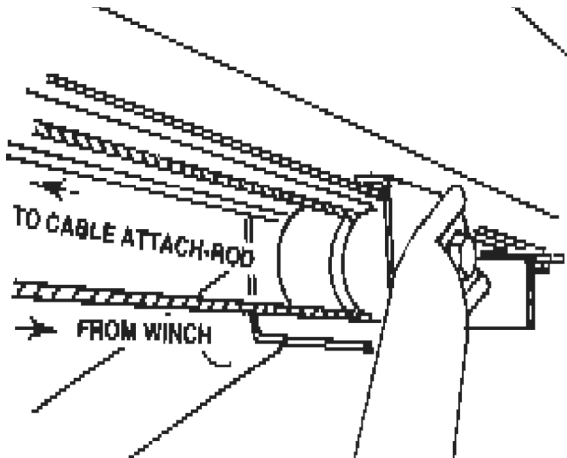
2. Attach winch to winch mount with three 3/8" washer-locknuts (see [Figure 17](#)).

Note

Winch handle must be positioned to the left side of the auger as determined when standing at the intake end facing the discharge end.

Figure 17.

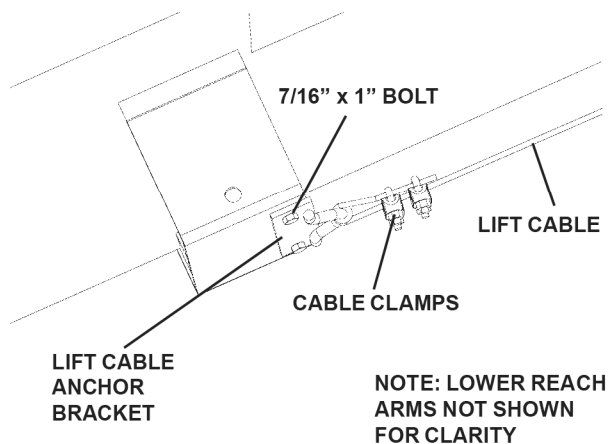
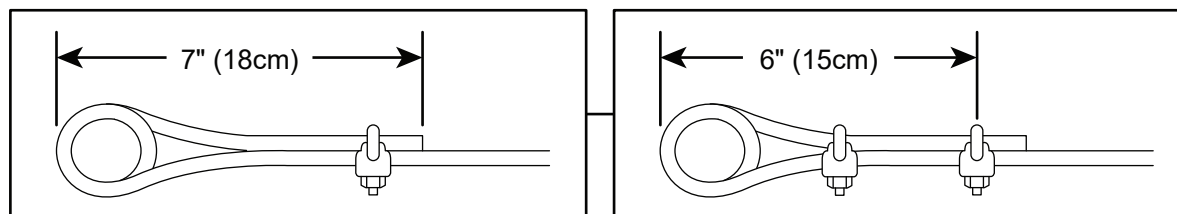
3. Attach lift cable anchor bracket to the mounting bracket on the lower tube with two 7/16" x 1" bolts and locknuts (see [Figure 19](#)).
4. Thread lift cable under and around roller on track shoe, then back to lift cable anchor bracket. The cable must be threaded between the lower trackstop and the auger tube.

Figure 18.

5. Wrap cable 1-1/2 times around the lift cable anchor bracket rod and double-back 7" (18 cm) of cable.
6. Secure the cable in place by installing and tightening two 1/4" cable clamps (see [Figure 19](#) and [Figure 20](#)).
 - a. Apply first clamp one base width from dead end of rope with the u-bolt over the dead end. Live end rests in clamp saddle. Tighten nuts evenly to recommended torque of 15 ft·lb.
 - b. Apply second clamp as close to loop as possible with the u-bolt over the dead end. Live end rests in clamp saddle. Apply tension and tighten nuts evenly to recommended torque of 15 ft·lb.

Note

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

Figure 19.**Figure 20.**

3.6. Winch Handle Assembly

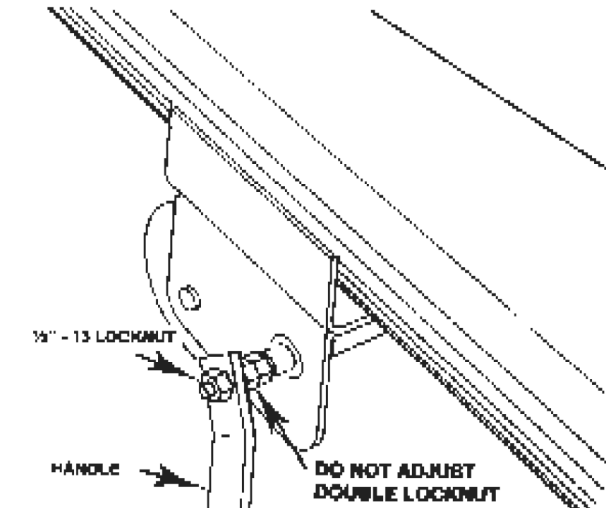
Important

Winch handle must be assembled as per instructions. Failure to do so will result in sudden winch failure causing damage to equipment and/or personal injury.

1. Slide handle over flat sides of input shaft.
2. Fasten with 1/2" - 13 Hex. locknut (see [Figure 21](#)).

Note

Do not remove or loosen the double locknut on input shaft as they are an important part of the brake system of the winch.

Figure 21.

3.7. PTO (CV) Driveline Installation

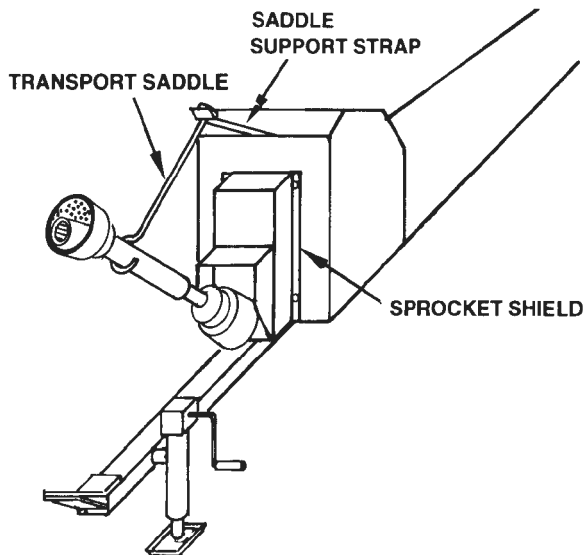
1. Clean PTO driveline and flighting shaft ends of any paint or dirt before assembly.
2. Slide plain end of PTO driveline onto flighting shaft. Make sure that the 5/16" dia. holes for the roll pin are lined up.

⚠ CAUTION Protect your eyes when performing this operation.

3. Carefully tap in 5/16" roll pin. Tighten setscrew.
4. Install sprocket shield on boot using four 5/16" x 3/4" bolts.
5. Slide PTO transport saddle through support strap on boot and rest PTO driveline in it until connected to tractor (see [Figure 22](#)).

⚠ CAUTION

- Never use a PTO driveline without a rotating shield in good working order.
- Disconnect PTO driveline from tractor during transport and placement.

Figure 22.

3.8. Standard Intake Hopper Assembly

Note

The gearbox has been filled at the factory (half full) with EP90 gear oil. Before further assembly, check oil level to make certain the gearbox is half full as required. Add oil if necessary. Do not use grease.

1. Remove access covers, then clean paint and dirt from flight shaft end. Insert Woodruff key into flight shaft end as shown in [Figure 23](#).
2. Raise hopper tube to correct angle (22.5°), then bring hopper and tube section together, carefully sliding the flightshaft end with Woodruff key into the angle drive. Connect the hopper and tube section with eight, 7/16" x 1" bolts and locknuts.

Important

To prevent damage, you must maintain correct angle when inserting flight shaft end into angle drive until tube is secured to the hopper section. Allowing tube or hopper to drop will bend the flight shaft end causing it to bind in the angle drive.

3. Thoroughly lubricate the angle drive, then replace access doors. Keep angle drive well lubricated. Use high temperature grease.

Note

After connecting the hopper and tube sections, check whether the angle drive is properly aligned. You should be able to rotate the hopper flight by hand if the angle drive is aligned. If it appears not to be aligned, see maintenance section for correct procedure. The angle drive will require a break-in period of at least 2 to 3 loads.

4. Clean wheel axles on hopper bottom of any paint and dirt.
5. Install the two wheels to hopper bottom with a washer and cotter pin each (see [Figure 24](#)).
6. Install rubber extension on inside hopper lip with twenty 5/16" x 3/4" bolts and washer locknuts, eight long and two short flat iron straps with bow facing inward.

Figure 23.

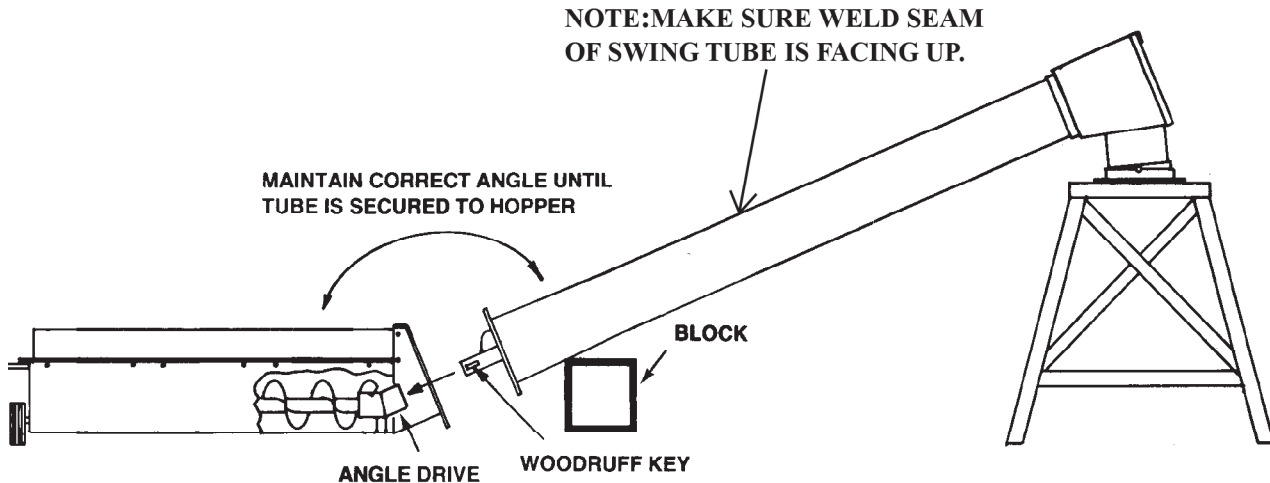
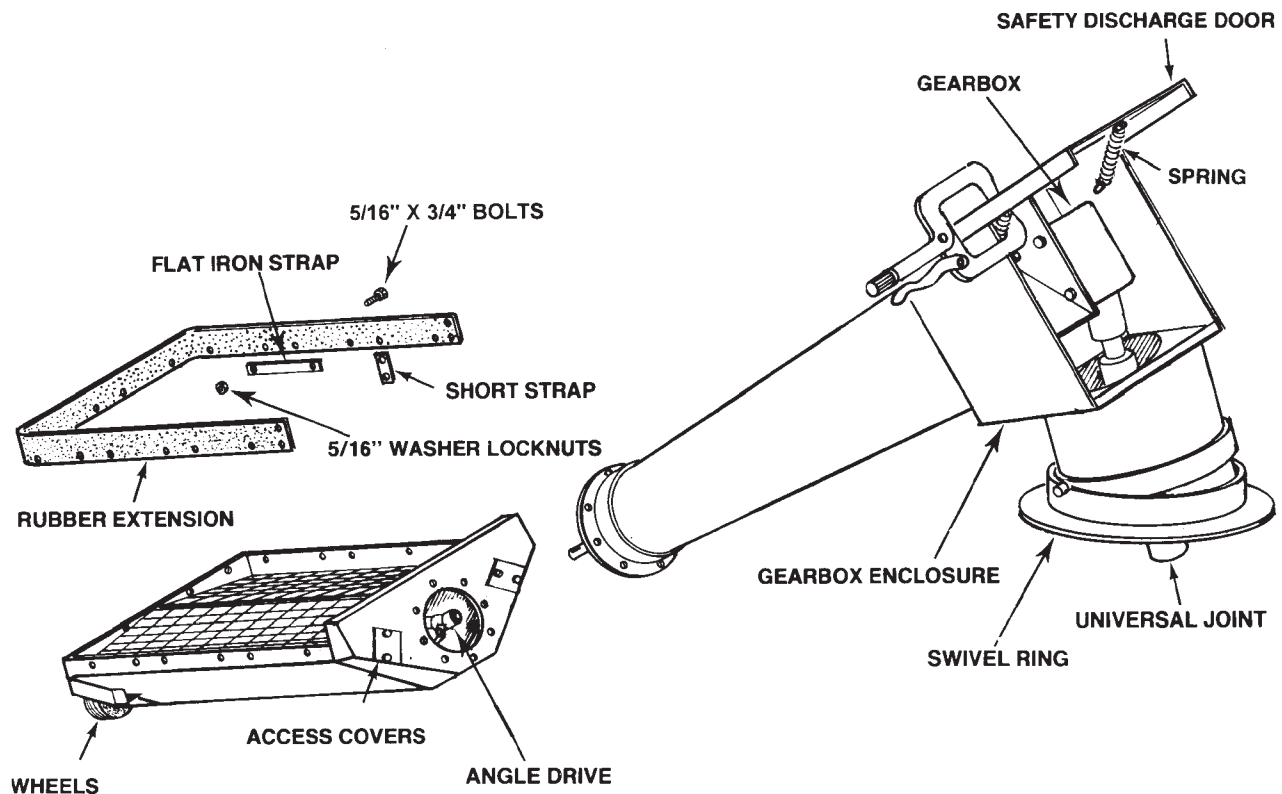
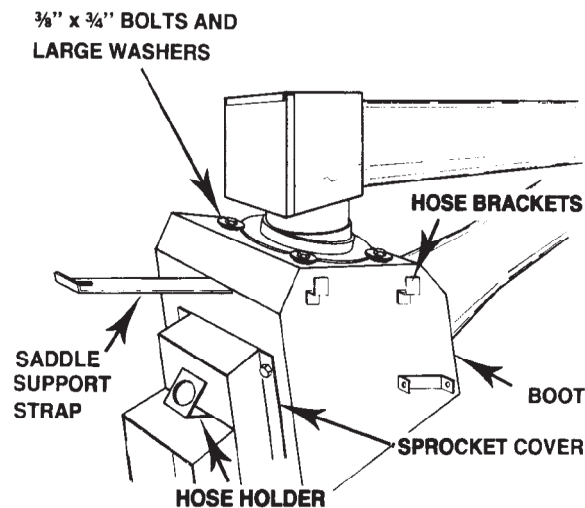


Figure 24.



7. To connect the intake hopper to the auger boot, the safety discharge door must be opened. This door is held in place internally with two springs. To open, pull the door down and then up and over the gearbox enclosure. Hold open with a C-clamp vise grip.
8. Check that the u-joint spline and spline on lower gearbox are clean, then apply a light film of grease on splined shaft.
9. Slide wide rim 1-1/4" flat washer over splined shaft on lower gearbox as shown in [Figure 9 on page 19](#).

10. As the intake hopper is lowered onto the boot, the splined universal joint must be guided onto the splined shaft. Once positioned, swivel ring should be resting flat on the boot surface and inside the four spacer nuts.
11. Install four large washers with 3/8" x 3/4" bolts to keep the intake hopper in place on the boot (see [Figure 25](#)).

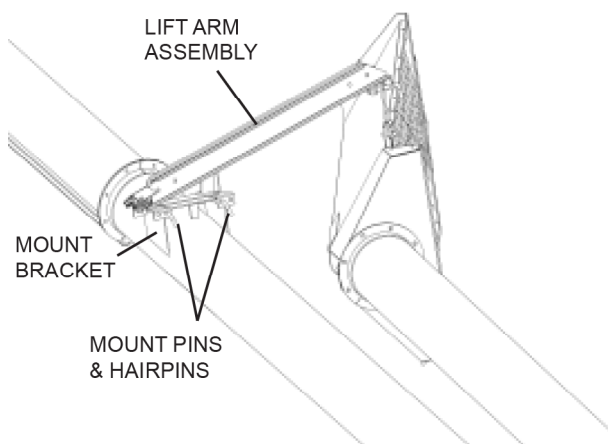
Figure 25.

12. Lubricate the universal joint and then close the safety discharge door.

KEEP IT CLOSED DURING OPERATION

3.9. Hopper Lift Arm/Winch Assembly

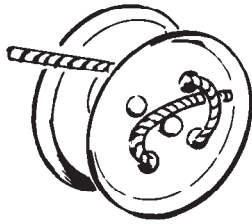
1. After selecting side of hopper operation, secure the hopper lift arm assembly to mount bracket on top of lower auger tube as shown with two mount pins and hairpins.

Figure 26.

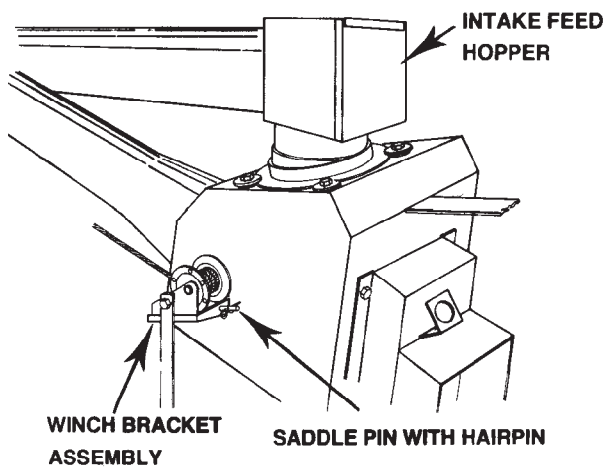
2. Thread cable through hopper lift arm assembly as shown and attach to winch (see [Figure 27](#)).

Note

Intake feed side of hopper must face away from main auger when in transport.

Figure 27.

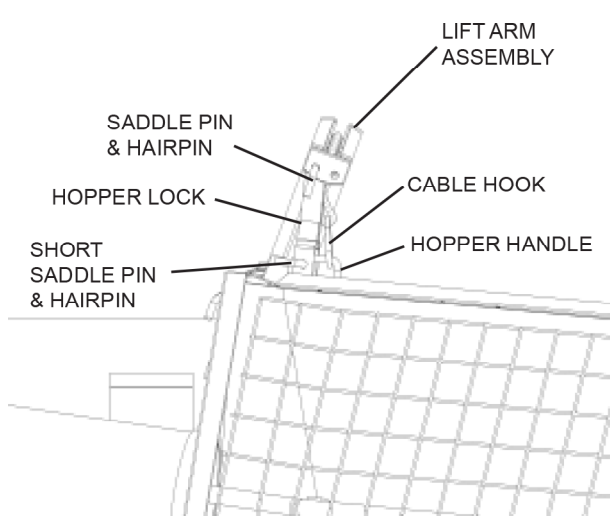
3. Install winch and winch bracket assembly to auger boot (opposite to side of hopper operation) with one saddle pin and a hair pin (see [Figure 28](#)).

Figure 28.

4. To place hopper into transport, attach cable hook to the handle on the side of the hopper, then fully raise hopper with intake side facing away from the main auger as shown. Secure hopper to lift arm with the hopper lock and the saddle pins and hairpins provided (see [Figure 29](#)).

Note

To change side of intake feed hopper operation raise auger hitch with jack and disconnect tractor. Swing intake feed hopper to opposite side of auger. Reverse the position of the hopper lift arm assembly and move the winch to the other side of the boot (opposite intake feed hopper, see [Figure 26](#)). Reconnect to tractor.

Figure 29.

3.10. Hitch Jack Installation

Jack is attached to the auger by means of a pin at the pivot point.

1. Elevate the auger boot (intake end) approximately 2 feet with a front-end loader and sling and install the jack in a vertical position and secure it with pin supplied.
2. Place a board beneath jack before setting it on the ground. Then lower auger until jack is seated. Remove front-end loader from auger.

Note

Jack can be rotated 90° for transport or operation.

CAUTION

Jack is designed for raising or lowering auger hitch only. Do not get on or beneath auger while supported by or while jack is being operated.

3.11. Auger/Tractor Hook Up

WARNING

- Auger must be hooked up to tractor for all operations. Including transport, raising, placement and augering grain.
- Disconnect PTO driveline from tractor for transport and placement.

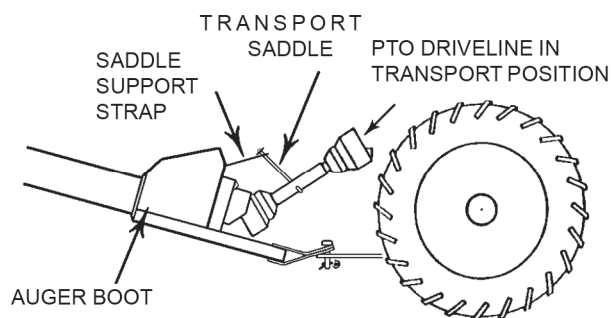
PTO Driveline/Drawbar

The final stage of the MK/HX assembly is attaching the auger to the tractor. Since the auger and tractor become an integral unit during transport, placement and operation, the configuration of and measurements between the tractor drawbar and the tractor PTO driveline become very important.

Figure 32 illustrates the ideal measurements. Most tractors fall into this range. Please note that dimension (B) may range from 6 to 10 inches with 8 inches being ideal. If dimensions (A) and (B) on your tractor are as shown, then dimension (C), which is critical, will be correct. Should (A) and (B) vary on your tractor from the recommended dimensions, consult Table 2 for potential problems and their solutions.

Note

Disconnect PTO driveline from tractor for transport and placement (see [Figure 30](#)).

Figure 30.**Hitch Pin**

When attaching the MK/HX auger to your tractor, you must leave space between the bottom of the tractor drawbar and the top of the securing device on the hitch pin.

Note that the securing device may be two nuts locked against each other or a washer and sturdy hair pin. The space should be about 3/4" to 1" as shown in [Figure 31](#).

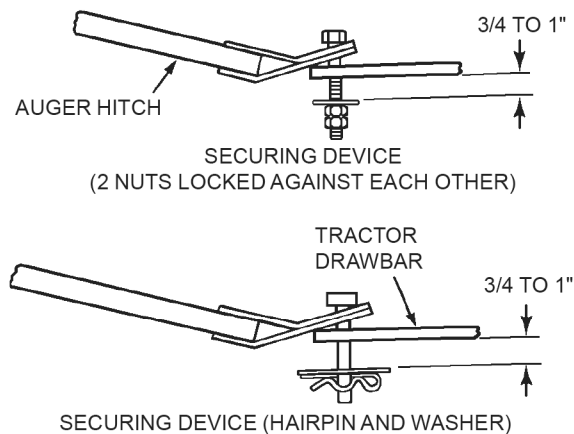
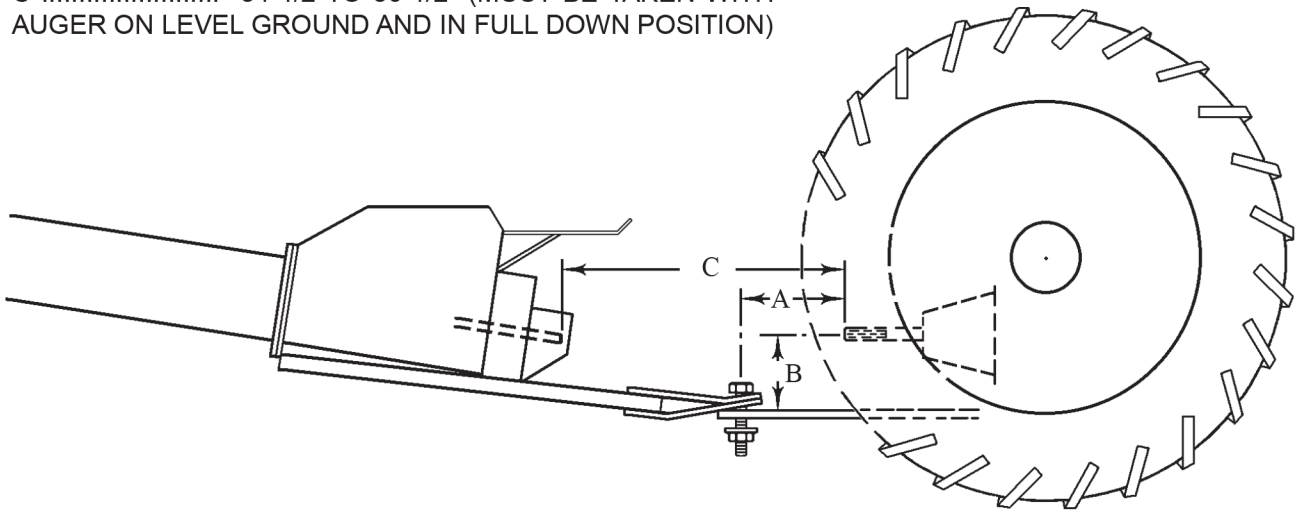
Figure 31.

Figure 32.

- A 14"
 B 6 TO 10"
 C 34-1/2 TO 36-1/2" (MUST BE TAKEN WITH
 AUGER ON LEVEL GROUND AND IN FULL DOWN POSITION)



RAISE TRACTOR DRAWBAR IF NECESSARY
 TO MAINTAIN (B) DIMENSION OF 6 TO 10".

Note

Disconnect PTO driveline from tractor for transport and placement.

Table 2.

PROBLEM	SOLUTION
If (A) is shorter than 14 inches, dimension (C) will be less than the recommended 34-1/2" to 36-1/2". This will allow the PTO driveline to bottom out when auger is in raised position. This will cause damage to the PTO driveline, the bearing or the boot housing.	Pull out or lengthen the tractor drawbar as needed to make (C) the correct distance of 34-1/2 to 36-1/2 inches with auger in full down position.
If (A) is longer than 14 inches, dimension (C) may be more than the recommended 34-1/2" to 36-1/2". This will allow the PTO driveline to separate from auger in lowered position. This will cause damage to equipment and/or injury to personnel.	Shorten the distance (C) to the recommended 34-1/2" to 36-1/2" by attaching hitch to the tractor drawbar at a point closer to the tractor PTO shaft.
If (B) is more than 10": The angle of the u-joints on the PTO driveline becomes too severe in the raised position. Distance (C) between the tractor PTO shaft and the auger input shaft shortens more quickly when the auger is being raised. This will allow the PTO driveline to bottom out before auger is fully raised and will cause damage to the PTO driveline, the flight shaft, the bearing and the boot.	Raise the tractor drawbar until dimension (B) is within the recommended 6" to 10".

3.12. Optional Low Profile Hopper Assembly

Note

The gearbox has been filled at the factory (half full) with EP90 gear oil. Before further assembly, check oil level to make certain the gearbox is half full as required. Add oil if necessary. Do not use grease.

1. Attach the pivot-connector to appropriate 10" holes in hopper with two 5/8" x 1-1/2" bolts and locknuts (see [Figure 34](#)). DO NOT OVERTIGHTEN, tighten snug only as these bolts act as pivot points.
2. Loosely secure the service door with the two square latch-washers and 3/8" locknuts.

Note

These must be tightened securely after hopper assembly is completed.

3. Clean dirt and paint from inside u-joint and flight shaft end, then insert Woodruff key.
4. Raise and support hopper tube at about 50" under spout. Open service door on hopper, then bring tube and hopper together guiding flight shaft into u-joint (see [Figure 33](#)).
5. Secure tube to pivot-connector on hopper with 7/16" x 1" bolts and locknuts.
6. Tighten setscrews on u-joints, then close and secure the service door.
7. Attach the rubber extension to inside of hopper lip with 5/16" x 3/4" bolts and washer locknuts and flat iron straps provided (see [Figure 34](#)).

Note

To attach the rubber extension to end of hopper, remove the two 5/16" washer locknuts that secure the chain drive shield.

8. Attach the four pneumatic wheels to the four hopper corners with the axle pins and hairpins. The offset portion of the wheel must rest against the hopper. You have a choice of three height settings (see [Figure 34](#)).
9. To connect the intake hopper to the auger boot, the safety discharge door must be opened. This door is held in place internally with two springs. To open, pull the door down and then up and over the gearbox enclosure. Hold open with C-clamp vise grip.
10. Place wide rim 1-1/4" washer shield over splined shaft on lower gear box. Check that the u-joint spline and splined shaft on lower gear box are clean, then apply a light film of grease on this splined shaft.
11. As the intake hopper is lowered onto the boot, the splined universal joint must be guided onto the splined shaft. Once positioned, swivel ring should be resting flat on the boot surface and inside the four spacer nuts.
12. Install four large washers with 3/8" x 3/4" bolts to keep the intake hopper in place on the boot (see [Figure 36](#)).
13. Lubricate the universal joint and then close the safety discharge door. **KEEP IT CLOSED DURING OPERATION.**

Figure 33.

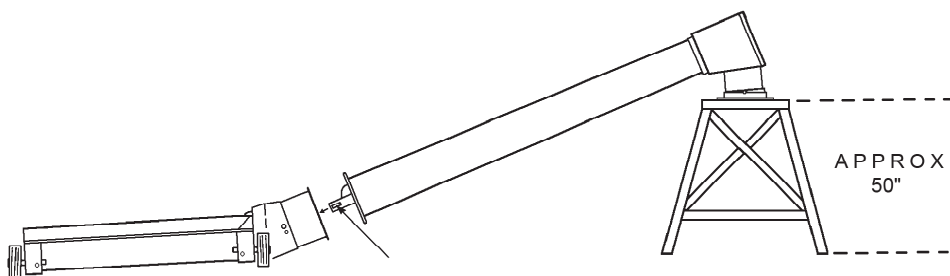


Figure 34.

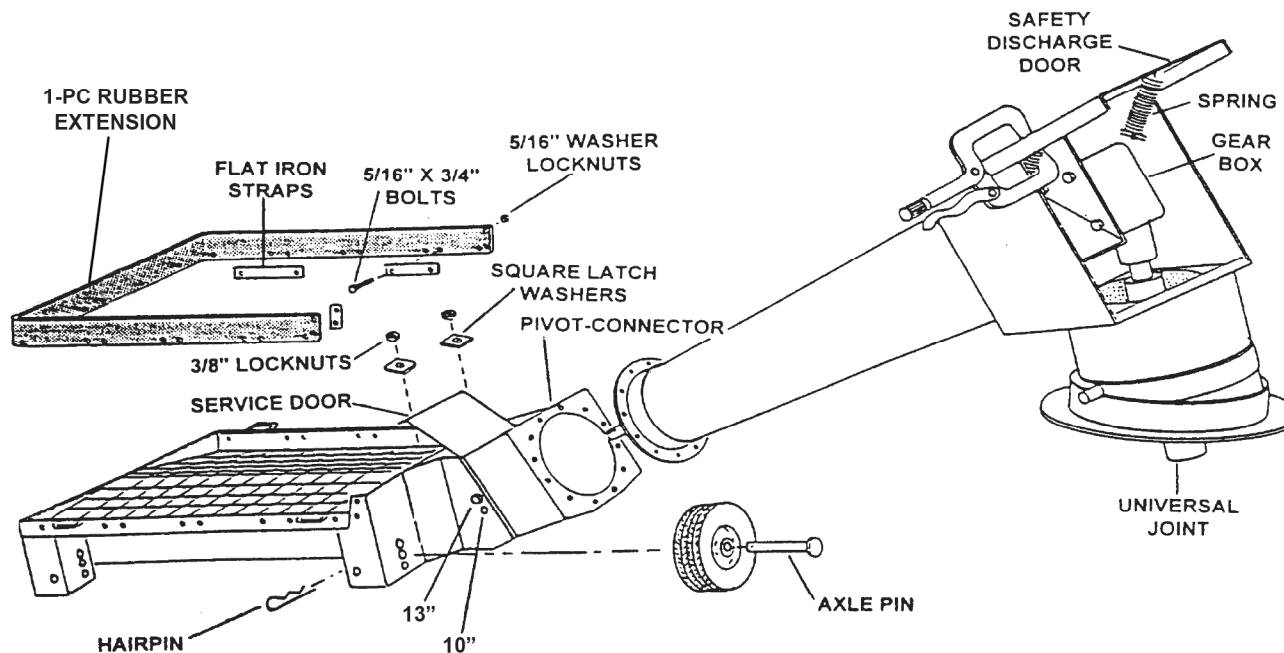
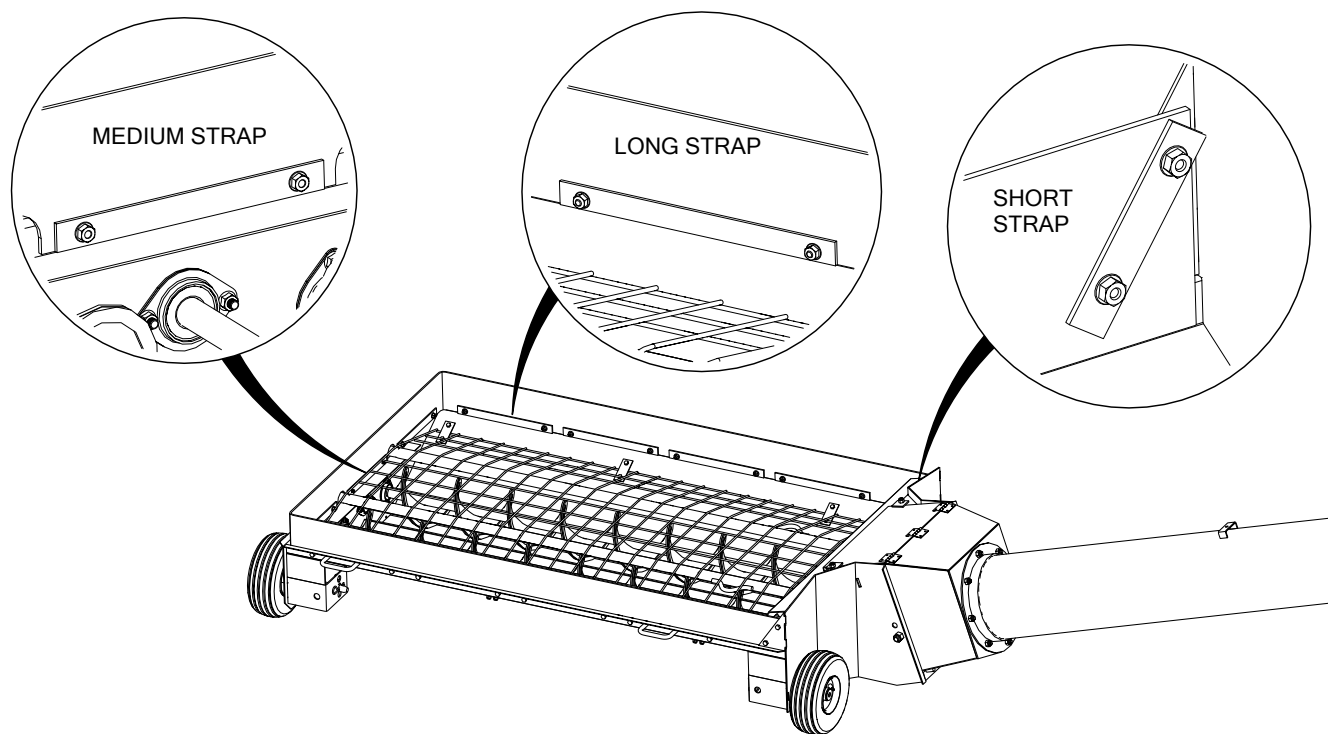
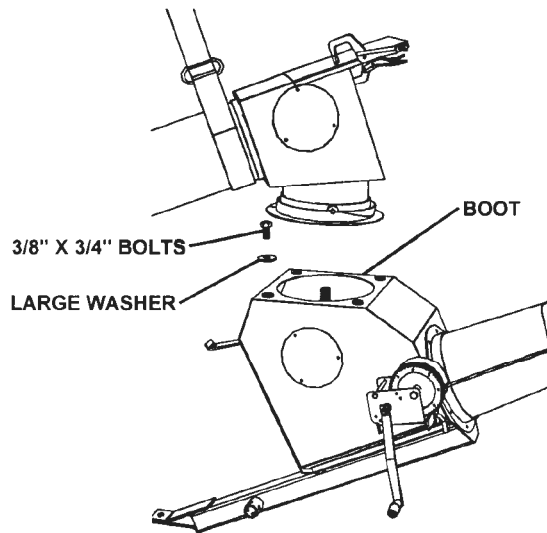


Figure 35.



Rotating Flighting Inside.

- Do not operate auger with the service or cleanout door open or unlatched.
- Shut off and lockout power to adjust, service or clean.
- Use stick or other tool to clean out. Failure to heed will result in serious injury or death.

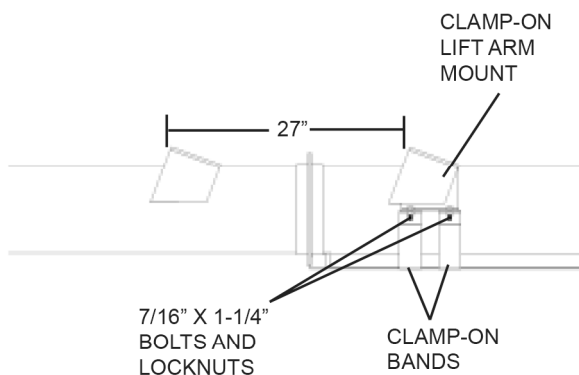
Figure 36.

3.13. Low Profile Hopper Lift Arm Assembly

Note

The low profile hopper requires a different lift arm mounting point. This is achieved by using a clamp-on mount on the upper tube.

1. Place the clamp-on hopper lift arm mount on the upper tube.
2. Attach the two bands to the lift arm mount using four 7/16" x 1-1/4" bolts and locknuts (see [Figure 37](#)).

Figure 37.

3. Position the clamp-on mount a distance of 27" from the standard hopper lift arm mount located on the lower tube and tighten all bolts (see [Figure 37](#)).
4. Attach the hopper lift arm to the clamp-on mount as described in [Section 3.9 – Hopper Lift Arm/Winch Assembly on page 29](#).

3.14. Plastic Manual Holder Installation

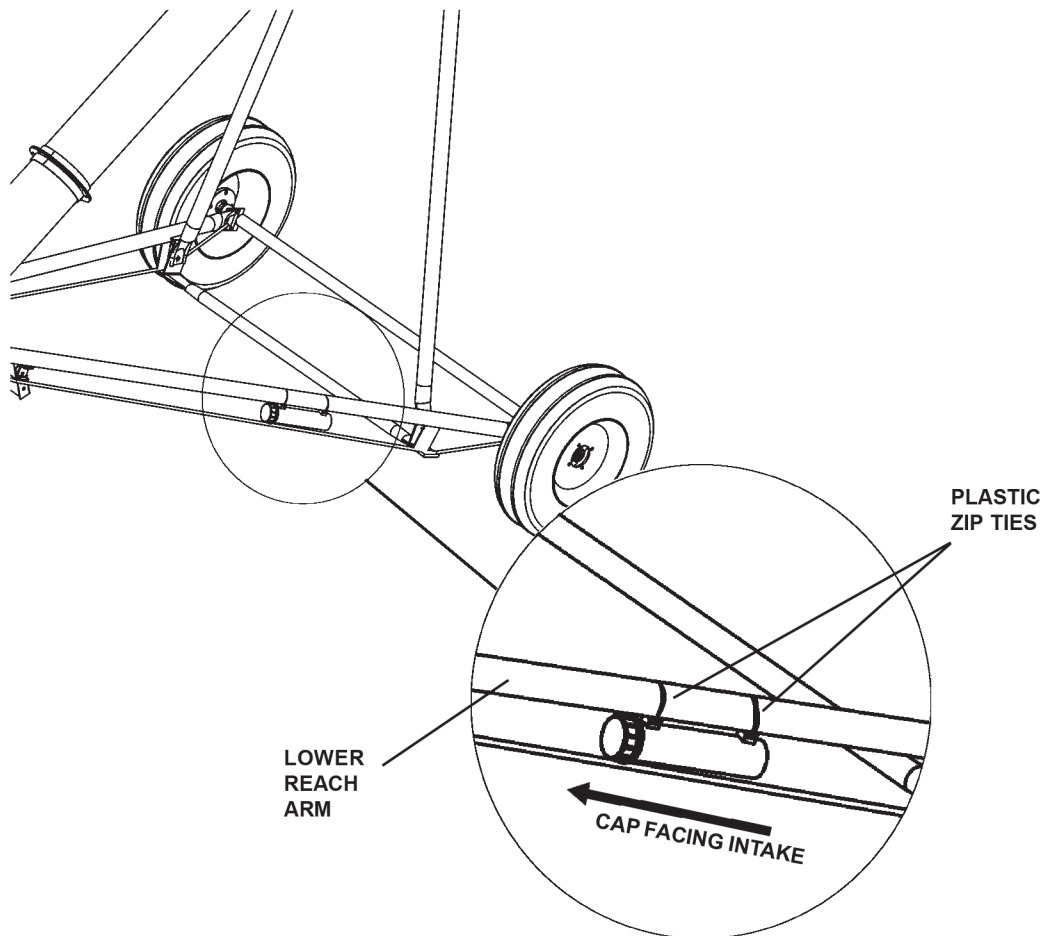
Before beginning this installation, ensure that all winch/auger lift controls are locked in place. Tractor should be shut down and locked out (where applicable).

1. Locate the best place on your auger for the installation of the manual holder. We suggest attaching the holder onto the lower frame arms, as shown in [Figure 38](#). The manual holder should be accessible at all times, regardless of frame position (up or down).
2. Orient the manual holder so that the cap is facing up (towards the intake end), as shown. Using the plastic zip ties supplied, attach the manual holder onto the lower reach arms. Tighten the zip ties, securing the holder in place.

Note

Where possible, attach the zip ties around a frame brace tab, to prevent the manual holder from slipping down the lower frame arms.

Figure 38.



4. Transport

The MK/HX 10-36 Grain Auger is designed to be transported and/or operated without unhitching unit from tractor. We strongly advise that all safety precautions be observed before transporting auger.

⚠ CAUTION

- Keep children and all unauthorized personnel away.
- Attach a SMV sign before transporting auger on a public road.
- 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 ride on the auger when it is being transported.
- Always tow auger in the lowered position.
- Disconnect PTO driveline from tractor for transport and placement.

4.1. Pre-Transport Checklist

Before transporting auger, ensure that:

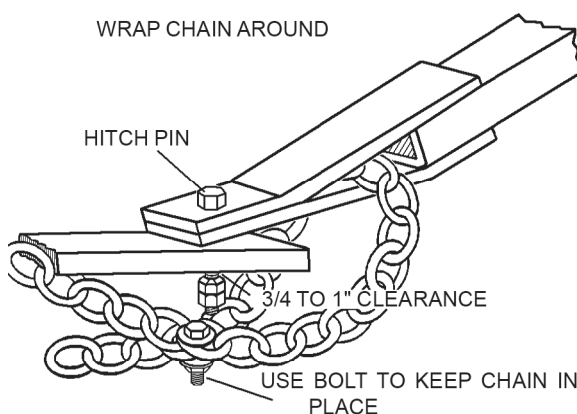
1. Auger is in full-down position with PTO driveline disconnected from tractor. The roller trackshoe should be seated against the upper trackstop with slight tension on the lift cable.

Important

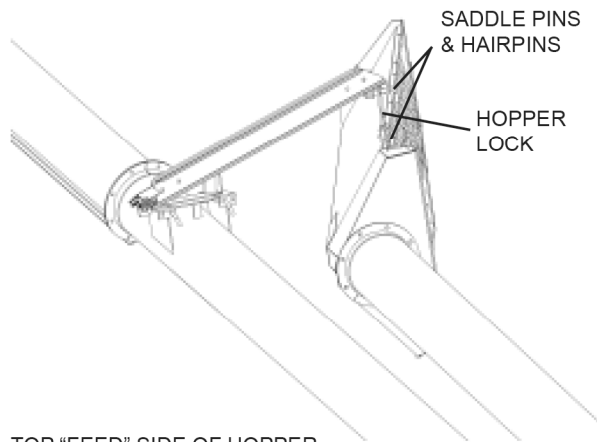
Winch must be in locked position. To lock, turn handle clockwise until two clicks are heard. Check lift cable before each use. Replace if frayed or damaged.

2. Make certain that the hitch pin and safety chain are in place and secure. Place safety chain through clevis welded to auger hitch tube and bolt together before attaching to tractor (see [Figure 39](#)).

Figure 39.



3. Ensure that the intake feed hopper is raised into transport position and secured with hopper lock in place with saddle pins and hairpins (see [Figure 40](#) and [Figure 29 on page 31](#)). DO NOT OPERATE AUGER WITH INTAKE HOPPER IN TRANSPORT POSITION. THIS WILL DAMAGE THE U-JOINT.

Figure 40.

TOP "FEED" SIDE OF HOPPER
MUST FACE AWAY FROM
MAIN AUGER WHEN IN
TRANSPORT POSITION

4. Ensure that the swivel jack (on side of hitch) is in transport position and locked.

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.

Important

Intake feed side of hopper must face away from main auger when in transport (see [Figure 40](#)).

4.2. Transport Procedure

When transporting the auger, remember to:

1. Ensure that all unauthorized personnel are clear of transport zone (see [Figure 2 on page 8](#)).
2. Be alert to overhead obstructions and electrical wires and devices. The MK/HX 10–36 auger has a minimum clearance of 12'0" (3.66 m), with auger hitch at 16".

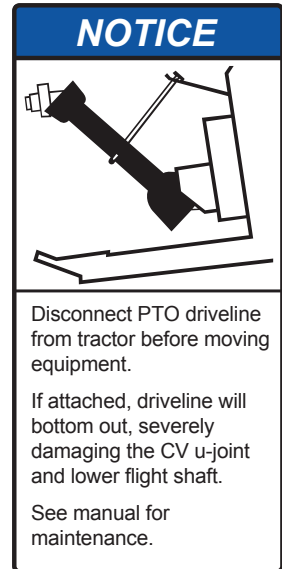


Electrocution hazard

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. Do not transport auger at speeds greater than 15 mph (24 km/h).
4. Observe all regulations concerning marking, towing, and maximum width.
5. Equip the auger with the necessary lights where required by law.
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.

CAUTION

- Keep children and all unauthorized personnel away.
- Ensure that area is clear before raising or lowering auger.
- Do not attempt to move auger by hand.
- Always chock wheels after positioning auger for operation.

5.1. Pre-Placement Procedure

Before positioning the auger for operation, the following steps are recommended:

1. Ensure that the towing hitch is in place and secured.

PTO driveline must be disconnected from tractor for placement.

Note

We recommend that a type of hitch pin be used that will not allow auger to separate from tractor (see [Figure 31 on page 32](#)). Hitch pin must have proper clearance.

2. Ensure that the auger is on reasonably level ground when raising or lowering or when positioning.

WARNING

Auger must be hooked up to tractor for all operations, including transport, raising, placement, and augering grain.
Never attempt to move auger manually. To do so will result in serious injury.

Important

Auger could topple if ground is too uneven, damaging equipment and/or causing injury.

3. 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.
4. Disconnect PTO driveline from tractor and secure in transport saddle.

If the auger must be raised for positioning, the procedure is as follows:

DANGER

Watch for overhead electrical wires. Electrocutation can occur without direct contact. Failure to heed this warning will result in serious injury or death.

Important

Wheels must be free to move when raising or lowering auger.

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.

1. Check that the area above and around auger is clear.
2. Raise auger to the desired height by turning the winch handle clockwise.

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.

5.2. Placement Procedure

1. Move the auger into working position slowly, making sure that all persons are clear of the hazard zone (see [Figure 1 on page 7](#)). DO NOT UNHITCH AND ATTEMPT TO MOVE THE AUGER BY HAND.

Important

When positioning the MK/HX auger, the PTO driveline must be disconnected from the tractor and placed in the transport saddle to prevent damage to auger and PTO driveline (see [Figure 30 on page 32](#)).

2. Once auger is in position, wheels should be chocked on both sides as well as applying the park brake on tractor (or chocking its wheels) to prevent movement during operation.
3. Fully lower hopper to the ground and remove lift cable from the hopper.
4. See [Section 6.7 – Lowering Procedure on page 47](#) for correct lowering procedure.

**WARNING**

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

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.

**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.

6. Operation

The MK/HX 10–36 auger requires that operators follow the checklist before each start-up and that safety procedures are observed at all times. To do otherwise is endangering life and limb, and is a misuse of the equipment.

CAUTION

- Keep all children and unauthorized personnel clear of work area.
- Do not operate auger with any safety shields removed.
- Do not operate auger with any service, clean-out or access door open or unlatched or with safety discharge door open.
- Always have another person nearby to shut down auger in case of accident.
- Wear hearing protection during operation.
- Keep body, hair and clothing away from any moving parts.
- Shut down and lock out all power before servicing, cleaning, or adjusting auger.

6.1. Pre-Operational Checklist

Before operating auger for the first time, and each time thereafter, the operator must follow the checklist, which should confirm the following:

- All fasteners are secured as per assembly instructions.
- Lift cable is not frayed or damaged.
- Lift cable is properly seated in track roller.
- Cable clamps are secure.
- PTO driveline is connected and secure.
- PTO driveline shield rotates freely.
- Clean-out and service doors and access covers are in place and secure and safety discharge door is closed.
- All safety shields are in place and secure.
- Tube alignment is reasonably straight.
- Intake hopper and discharge spout are free of obstructions.
- Auger wheels are chocked and tractor wheels are chocked or parking brake is applied.
- A second qualified person is present during operation.
- Operators are aware of safety precautions.
- Proper maintenance is performed.
- Tractor and auger are in line or as close to being in line as possible.

6.2. Auger Drive and Lockout

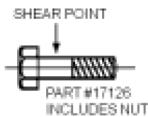
A: PTO Driveline

1. Ensure that the PTO driveline is securely attached to the flighting shaft and to the tractor.
2. Do not use a PTO driveline without a rotating shield that is in good working order.
3. Be certain that safety shields are in place and secure on tractor and auger.
4. The maximum operating length of the PTO driveline from end to end is 40-5/8". Do not exceed this length.

Note

If shearbolt in the PTO driveline fails, shutdown and lock out tractor to replace bolt.

The MK/HX 10-36 uses a 5/16" x 1" grade 8 bolt — through shank shear (as per drawing).



5. Be sure the PTO drive on tractor is in the OFF position before starting the tractor.
6. Stay clear of the PTO hazard area (see [Figure 1 on page 7](#)).

Lockout and/or Shutdown

1. Shut off engine and remove ignition key or coil wire from tractor.
2. If step 1 is not possible, remove PTO driveline from tractor.

6.3. Start Up and Break In

Start up and break in procedure for the MK/HX 10-36 auger is as follows:

Note

The angle drive requires a break-in period of at least 2 or 3 loads of grain.

1. Ensure that you have completed the pre-operational checklist in [Section 6.1 – Pre-Operational Checklist on page 43](#).
2. If everything is satisfactory, prepare for a 60 minute operation at half speed.
3. Ensure that the intake hopper is correctly positioned.
4. Ensure that the PTO drive on the tractor is in the OFF position.

CAUTION

Do not start auger until area is clear of all unauthorized personnel. Always work with a second person during operations.

Auger must be hooked up to tractor for all operations, including transport, raising, placement and augering of grain. Disconnect PTO driveline from tractor for transport and placement.

Important

When starting auger for the first time, be prepared for an emergency shutdown in case of excessive vibration or noise. Note that the auger may run rough until tube is polished.

5. Start tractor and **idle at low RPM**. Slowly engage PTO drive.

6. Gradually begin feeding grain into hopper bringing auger speed up to about 300 RPM. Do not overfeed the hopper on initial loads, keep feed of grain at about half capacity. After auger tube is polished and runs fairly smoothly, proceed to unload at full speed of 540 RPM.
7. Upon completion of initial run, **slow auger down** until empty of grain and stop.
8. Lock out tractor and conduct a complete inspection of auger following the checklist in [Section 6.1 – Pre-Operational Checklist on page 43](#).
9. After the initial start-up and inspection, auger should be shut down and inspected at least three more times during the first ten hours of operation.
10. Once auger is broken in, the checklist should be a part of the daily routine before operating the auger.
11. Do not run empty auger at high speed, as this results in excessive wear.

After Break-In: Maintain auger speed of 300 to 540 RPM under normal use for maximum efficiency and to reduce chance of plugging.

6.4. Full Load Procedures

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

1. Observe the work area hazard zone (see [Figure 1 on page 7](#)).
2. 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.
3. Monitor the auger during the actual operation for abnormal noises or vibrations.
4. Shut off all power before making adjustments, servicing, or cleaning machine.

CAUTION

- Make certain everyone is clear before operating machine.
- Keep all safety shields and devices in place and secure.
- Keep hands, feet, hair and clothing away from moving parts.
- Do not exceed 540 RPM on the PTO.
- Do not remove or open cleanout doors while auger is in operation. Do not operate if cleanout doors are removed.

Note

Reduce volume of feed to intake hopper should grain overflow through safety discharge door. This indicates the main auger is loaded beyond its capacity. Auger capacity will decrease at steeper elevations.

Note

Engage and disengage PTO drive with tractor engine at idle speed. This will reduce stress on drive components and on shear bolts.

WARNING

Keep safety discharge door in place while operating auger. Failure to heed will result in serious injury or death.

6.5. Normal/Emergency Shutdown

The steps for a **normal shutdown** are:

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.

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

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

Important

Starting the auger under load may result in damage to 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 plugging, clear as much of the grain as possible, using a piece of wood, vacuum cleaner or other tool (not your hands), before restarting auger. **DO NOT REACH IN AND USE YOUR HANDS.** (See [Section 6.2 – Auger Drive and Lockout on page 44](#) for lockout procedure)

Note

If clean out covers or safety doors have been opened or removed, close or replace them before restarting the unit. Operating the auger with covers removed or doors open is dangerous.



DANGER Rotating Flighting Inside

Do not operate auger with the service or cleanout door open or unlatched.

Shut off and lockout power to adjust, service or clean.

Use stick or other tool to clean out. Failure to heed will result in serious injury or death.

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 supports and chocks.
3. After ensuring that area is clear of all unauthorized personnel, move auger out of working position and lower fully. (See [Section 6.7 – Lowering Procedure on page 47](#) for lowering procedure)

The proper steps for **clean-out** of the auger are:

1. Disengage PTO, lower auger into transport position, shut off tractor engine and lock out power. **Disconnect PTO driveline from tractor before raising or lowering auger.**
2. If necessary open clean-out door on the boot and manually clean out grain, using piece of wood, vacuum cleaner or other tool. **DO NOT USE HANDS.** Replace clean-out cover.
3. Winch intake feed hopper into transport position and clean out grain, using piece of wood or other tool.



CAUTION Do not leave auger in raised position. Auger could drop rapidly in case of cable break. High winds may also upset auger.

When lowering auger, never continue to turn handle counter-clockwise if the cable does not keep moving out under load. This will create an unsafe condition. When this occurs, winch in slack cable and correct problem.

6.7. Lowering Procedure

To lower auger you must:

1. Raise the intake feed hopper. DO NOT ATTEMPT TO LIFT BY HAND.
2. Disconnect PTO driveline from tractor before lowering.
3. Ensure that area beneath auger is clear.
4. Turn winch counter-clockwise to lower auger.

Important

There will be no clicking sound when lowering auger. After lowering auger, turn handle clockwise until you hear two clicks to lock brake.

5. After auger is fully lowered, raise the intake feed hopper into full transport position.

Important

Do not operate auger with intake feed hopper in transport position. This will damage the universal joint.

Important

Wheels must be free to move when raising or lowering auger.



DANGER Before moving auger out of position, look out for electrical wires and obstructions overhead. Electrocutation can occur without direct contact. Failure to heed this warning will result in serious injury or death.

7. Maintenance & Storage

Proper maintenance on the MK/HX 10-36 auger means a longer life for the machine and a safer and more efficient operation.

⚠ CAUTION

- Keep children away when performing maintenance.
- Before performing any maintenance, ensure that power is shut down and locked out.
- Where possible, perform maintenance with auger in full down position.
- Replace all shields.

7.1. General Maintenance Procedure

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

1. Observe the checklist in [Section 6.1 – Pre-Operational Checklist on page 43](#) 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. Intake Hopper Angle Drive — Lubricate the angle-drive after every 8 hours of operation. Use high temperature grease.

Note

If the angle drive in hopper runs hot AFTER an appropriate break-in period, this may mean the angle drive is not properly aligned. To correct, first lock out power, then loosen bolts securing the angle drive and adjust or shim up until the flight can fairly easily be rotated by hand.

4. **Lift Cable** — Check and replace if frayed or damaged. Make certain that cable clamps are secure.
5. **Wheel Hubs** — Repack every two or three years with lithium based grease.
6. **Tire Pressure** — Check with a pressure gauge monthly or when pressure seems low. We recommend that pressure be maintained at 18 to 24 PSI (124 — 165 kPa).
7. **Hopper Lift Cable** — Check and replace if frayed or damaged.
8. **Hopper Lift Cable Pulleys** — Oil lightly several times a year for easier raising of hopper.
9. **Winch** — Keep a film of grease on gears. Occasionally oil the bushings, drum shaft and ratchet. Take care not to get oil or grease on brake discs. Replace brake discs if less than 1/16" thick. Service winch with auger in fully lowered position and cable slack.
10. **PTO Driveline** — Lubricate all FIVE grease fittings regularly with good quality LITHIUM SOAP BASE E.P. GREASE meeting the NLGI #2 specifications and containing no more than 1% molybdenum disulfide. (Example: SHELL SUPER DUTY or EQUIVALENT)

Grease fittings No. 2 and 3 can be reached through hole in implement end portion of the driveline shield.

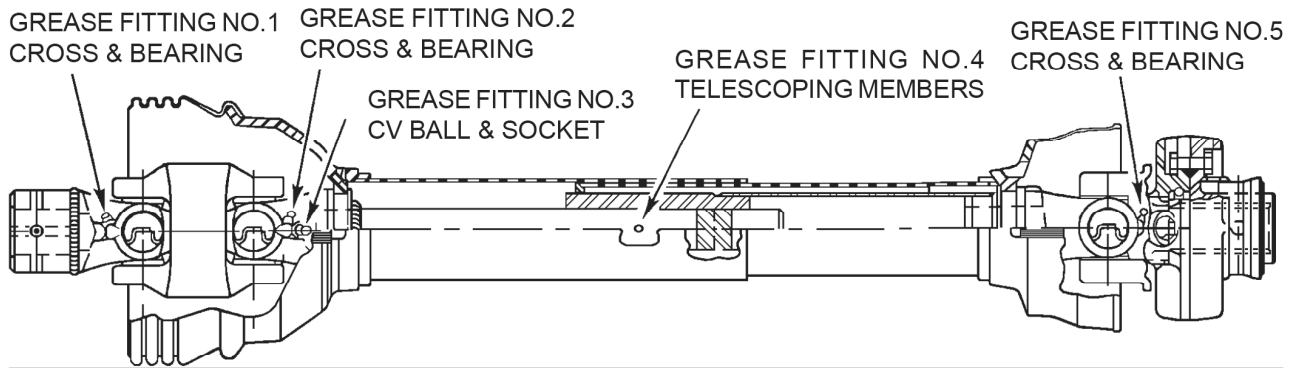
Grease fitting No. 4 can be reached through hole in center portion of the driveline shield.

The first lube interval should be 16–24 hours of operation after initial start-up, then follow the schedule.

LUBE RECOMMENDATIONS

INTERVAL	LOCATION	AMOUNT
8 HRS.**	CROSS & BEARING	1 PUMP
8 HRS.	TELESCOPING MEMBERS	4–8 PUMPS
8 HRS.**	CV BALL & SOCKET	1–2 PUMPS

** Constant angle applications must have lube interval of 4 hours.

**CAUTION!! REPLACEMENT PARTS ARE NOT LUBRICATED**

Replacement parts must be lubricated at time of assembly. Use amount listed above per location, then follow lube recommendations outlined above for lubing intervals.

Ensure that the setscrews and shear-bolt are tight.

How to service Mechanical Drive System:

1. **Bottom Chain Drive:** Keep drive chain tension adjusted to about 1/4" deflection by loosening the four bolts on lower bearing, then retighten. Oil chain frequently enough to keep film of oil on chain (this can be done through hole in top of sprocket shield). **REPLACE SPROCKET SHIELD AFTER MAINTENANCE.**
2. **Universal Joint:** Flip up safety discharge door and lubricate grease fitting in the u-joint every 8 hours of operation. Check setscrews and retighten if necessary.
3. **Gearboxes:** Check oil levels in both gearboxes at least once a year, depending on use. Gearboxes should be half full with EP90 lube oil. Fill as needed, you may need a flexible funnel.

If you notice excessive loss of oil, check more frequently and repair problem. Each gearbox requires 355 ml or 12-1/2 fluid ounces. Do not overfill, half full only.

A. Upper Gearbox — flip up safety discharge door or open round service door and service gearbox as required.

B. Lower Gearbox — open round service door and service gearbox as required.

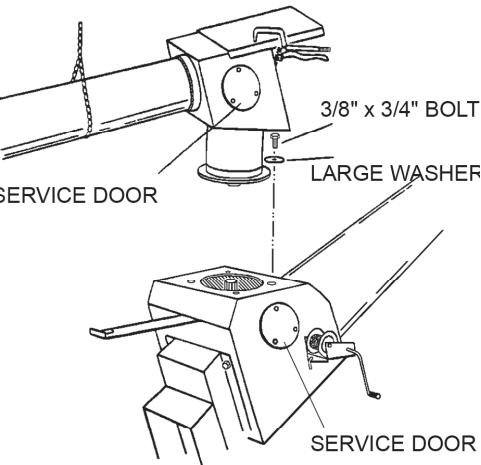
For more extensive servicing or repairs, remove hopper from boot assembly by removing the 3/8" x 3/4" bolts and large washers. Lift hopper with front-end loader or other secure method (see [Figure 41](#)).

At this time also check and retighten setscrews and connecting bolts. Clean and lightly grease the splined shaft. Reattach hopper to boot assembly as per instructions in [Section 3.8 – Standard Intake Hopper Assembly on page 27](#).



WARNING Do not operate auger with intake hopper not in place. Replace and secure service doors before operating auger.

Figure 41.

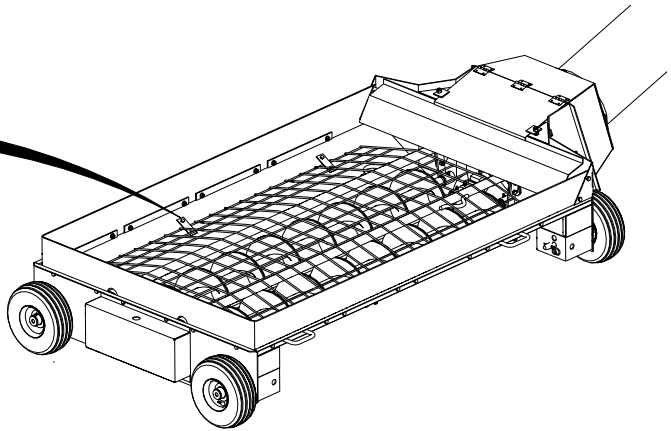
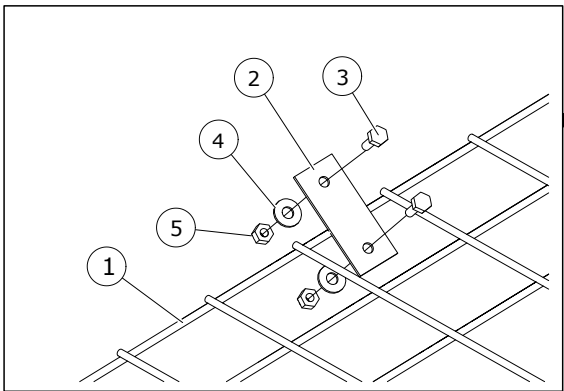


4. **Bearing:** Lubricate grease fitting on lower flight bearing. REPLACE SPROCKET SHIELD AFTER MAINTENANCE.

7.2. Removable Hopper Mesh Guard

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

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



1	Mesh Guard	4	Flat Washer, 1/4"
2	Mesh Strap	5	Locknut, 1/4"
3	Bolt, 1/4" x 3/4"		

WARNING Install hopper mesh prior to operation of the auger.

7.3. General Storage Procedure

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

1. Lower the auger to full down position with slight tension on the cable.
2. Lubricate all grease fittings per maintenance procedure.
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 re-lubricate the spline on PTO driveline. Cover PTO driveline with a plastic bag to protect it from the weather and place it in the transport saddle.
6. Tow auger to storage area. Park and chock wheels.

**DANGER**

Watch for overhead electrical wires. Electrocutation can occur without direct contact. Failure to heed this warning will result in serious injury or death.

**CAUTION**

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

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

1. Check tire pressure and inflate to 24 PSI (165 kPa) if necessary.
2. Tow auger to worksite, being mindful of electrical wires overhead.
3. Remove waterproofing from spline of PTO driveline and re-lubricate.
4. Replace any damaged parts and decals.
5. Conduct general maintenance procedure before using auger.
6. Before raising auger after storage, make certain cable is in good condition, replacing it if frayed or damaged. In addition, ensure that cable is properly seated in roller track and that cable clamps are secure.

Use only genuine AGI 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 AGI or your AGI dealer. Do not modify any auger components.

AGI Limited Warranty

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

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

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






WARRANTY VOID IF NOT REGISTERED

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



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Please include the part number listed on the cover page in your message.