10” x 36’ SWING-AWAY GEAR DRIVE PORTABLE AUGER

OWNER’S & OPERATOR’S MANUAL

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Model
H1036815L

Hutchinson/Mayrath
A Division of GLOBAL Industries, Inc.

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Limited Warranty: (a) For a period of (1) year after receipt of goods by the original consumer buyer, Hutchinson/Mayrath will supply free of charge replacement parts for parts that prove defective in workmanship or material. Defective parts must be returned freight prepaid to a specified Hutchinson/Mayrath location. Only Hutchinson/Mayrath original repair parts may be used for warranty repairs.
(b) This limited warranty does not extend to parts designed to wear in normal operation and be replaced periodically; or to damage caused by negligence, accident, abuse or improper installation or operation.
(c) GOODS NOT MANUFACTURED BY HUTCHINSON/MAYRATH CARRY ONLY THE MANUFACTURER'S WARRANTY.
(d) THIS UNDERTAKING IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Failure to follow the instructions contained in the Owner’s & Operator’s Manuals and the items listed below will result in the voiding of this limited warranty.

(1) Improper assembly, including failure to properly install all safety equipment.
(2) Improper installation.
(3) Unauthorized alternations of goods.
(4) Goods operated when obviously in need of repair.
(5) Use of unauthorized repair parts.
(6) Irresponsible operation.
(7) Used to handle materials other than free flowing, nonabrasive and dry materials, as intended.
(8) Damaged through abusive use or accident.

Limitation of Liability: BUYER AGREES THAT IN NO EVENT SHALL HUTCHINSON/MAYRATH HAVE LIABILITY FOR DIRECT DAMAGES THE EXCESS OF THE CONTRACT PRICE OF THE GOODS IN RESPECT OF WHICH CLAIM IS MADE. BUYER FURTHER AGREES THAT IN NO EVENT SHALL HUTCHINSON/MAYRATH ON ANY CLAIM OF ANY KIND HAVE LIABILITY FOR LOSS OF USE, LOSS OF PROFITS, OR FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.
SAFETY

GENERAL SAFETY STATEMENT

This manual was written with the safety of the operator and others who work with the equipment as our prime concern. The instructions presented will help the reader learn SAFE day to day work practices. We want you as our partner in safety.

It is your responsibility as an owner, operator or supervisor to know what specific safety requirements and precautions exist and to make these known to all other personnel working with the equipment or in the area, so that they too may safely perform their duties and avoid any potentially hazardous situations.

Please remember safety equipment provides important protection for persons around a grain handling system that is in operation. Be sure ALL safety shields and protection devices are installed and properly maintained. If any shields or guards are damaged or missing, contact your dealer to obtain the correct items.

Avoid any alterations of the equipment. Such alterations may create a dangerous situation where serious injury or death may occur.

SAFETY ALERT SYMBOL

The symbol shown below is used to call your attention to instructions concerning your personal safety.

Watch this symbol - it points out important safety precautions. It means - ATTENTION! Become alert! Your personal safety is involved! Read the message that follows the symbol when a warning is given, be alert to the possibility of personal injury or death.

SAFETY DECALS

Check to ensure all Safety Decals are present and in good condition. If a decal cannot easily be read for any reason, or has been painted over, replace the decal immediately. Safety decals are offered free of charge, and can be ordered through your Hutchinson/Mayrath dealer.

Refer to Page P-1 in the Parts List Section.
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OPERATOR QUALIFICATIONS

WARNING

Anyone who will operate or work around this machine shall first read this manual! This manual must be delivered with the equipment to its owner. Failure to read this manual and its safety instructions is a misuse of the equipment.

Operation of this auger shall be limited to competent and experienced persons. In addition, anyone who will operate or work around an auger must use good common sense. In order to be qualified, the operator must also know and meet all other requirements, such as:

1. Some regulations specify that no one under the age of 16 may operate power machinery. This includes this auger. It is your responsibility to know what these regulations are in your area or situation.

2. Current OSHA regulations state in part: “At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in safe operation and servicing of all equipment which the employee is, or will be involved with.”*

3. Unqualified persons are to stay out of the work area. See page 4.

4. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine.

*Federal Occupational Safety & Health Standards for Agriculture Subpart D, Section 1928.57 (a) (6).

SIGN-OFF SHEET

As a requirement of OSHA, it is necessary for the employer to train the employee in the safe operation and safety procedures with this auger. We include this sign off sheet for your convenience and personal record keeping.

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**DESIGNATED WORK AREA**

Before starting the auger, a designated work area should be established and properly marked around the work site. The following diagrams show the manufacturers designated work areas. These areas shall be marked off with colored ropes hung as portable barriers to define the designated work areas.

**WARNING!** Under no circumstances should persons not involved in the operation be allowed to trespass into the work area.

It shall be the duty of all operators to see that children and/or other persons stay out of the work areas! Entering the work area by anyone not involved in the actual operation, or trespass into a hazardous area by anyone, shall result in an immediate shut down by the operator.

It shall be the responsibility of all operators to see that the work area has secure footing, is clean and free of all debris, and tools which might cause accidental tripping and/or falling.

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**Designated Work Area When Loading Grain Bin**

- Be cautious of slippery surfaces.
- Make sure area is clear of tools, debris, or other items that may trip you or create a hazardous situation.

- It is good practice to tie the discharge end of the auger to the bin or structure to avoid possible wind damage.

- Portable barrier to mark designated boundry.
MACHINE INSPECTION

Our augers are well made and we are proud of our line of equipment. We would like you, as our customer, to do your part in using caution and good judgement in using our equipment, as well as any other machinery. After delivery of your new auger and/or completion of assembly and before each use, inspection of the machine is mandatory. Use the assembly instructions in this manual as a reference to determine that the auger is assembled properly. This inspection should include, but not be limited to:

1. Check to see that all shields listed in the assembly instructions are in place, secured and functional.
2. Check all safety signs (decals) and replace any that are worn, missing or illegible. Safety signs may be obtained free of charge from your dealer or ordered from the factory.
3. Check all fasteners; nuts, bolts, set screws etc. for tightness.
4. Check hopper winch and cable for security and operation.
5. Check oil levels in gearboxes (See the Lubrication and Maintenance Section in this manual for proper procedures).
6. Make sure clean-out door in bottom of inlet hopper and all inspection opening covers are shut and secured.

Obtain any needed replacement parts from your dealer and install before using the machine.

GENERAL AUGER INFORMATION

WARNING! During initial start-up and break-in period, the operator shall be aware of any unusual vibrations or noises that would indicate a need for service or repair.
Keep all safety shields and devices in place.
Keep hands, feet, and clothing away from moving parts.
The operator should have a full view of the auger work area and check that all personnel are free from designated work areas before adding power.

It is important to become familiar with the routine operating procedures before attempting start-up.

GENERAL INFORMATION (con't.)

IMPORTANT! The PTO Driveline is equipped with a CV joint (constant velocity joint), located at the auger end of the PTO driveline. The PTO Driveline should be operated in the horizontal position for the CV joint to work properly.

NOTE: The PTO Driveline is also equipped with a shear bolt at the tractor connection. The shear bolt protects the auger from damage if the auger becomes plugged or subjected to high loads (an extra shear bolt is supplied with the auger and is stored in the operator’s manual container located on the lower left side of the inlet hopper).

Whenever reference is made to the left, right, front or rear of the auger, it is always determined while standing at the inlet end looking towards the discharge end.

- Inspect the drive before adding power and know how to shutdown in an emergency (See Page 8).
- During operation of your auger, one person shall be in a position to monitor the operation.
- Visually inspect the auger periodically during operation, be aware of all adjustments and checks which should be performed.

The swing-out hopper must be in working position and securely attached to the inlet hopper before start-up.

- The 10" auger may be operated at speeds from 450 to 540 RPM’s. Auger flight speed in excess of recommended speed causes excessive wear.
- Do Not attempt full load operation at speeds below 450 RPM, as high torque requirements may damage the auger.

TRACTOR REQUIREMENTS

The swing-away auger was designed to use a tractor with the following:
1. 540 RPM Power Take-Off.
2. Adjustable Drawbar.

OPERATING CAPACITIES

The capacities of screw type conveyors or augers can vary greatly under varying conditions. Different materials, moisture content, amounts of foreign matter, angle of operation, methods of feeding and speed all play a role in the performance of the auger.

Roughly 4500 BPH (122 TPH) will be achieved augering reasonably dry grain. Maximum possible capacity will be less with high moisture grain (above 15%) than with dry grain.
SHUTDOWN/LOCKOUT

EMERGENCY SHUTDOWN
Should the auger be immediately shutdown under load, disconnect and lockout the power source. Clear as much grain from the hopper and auger as you can (use the clean-out door in the bottom of the inlet hopper). Reconnect the power source and run the auger to clear the grain. Never attempt to start when under load.

CAUTION! Starting the unit under load may result in damage to the auger. Such damage is considered abuse of the equipment and will not be warranted.

NORMAL SHUTDOWN
When shutting down the auger, make certain the hopper and auger are empty before stopping the unit. Before the operator leaves the work area, the power source shall be locked-out (See “Lockout”).

INTERMITTENT SHUTDOWN
When an auger is stopped and restarted while under full load, it may result in damage to the auger. Therefore, if intermittent operation is to be carried out, it is advisable to reduce the load level.

If an auger is kept from absolute filling, it will make start-up easier and will convey grain more efficiently.

LOCKOUT
If the operator must leave the work area, or whenever servicing or adjusting, the auger must be stopped and the power source turned off. Precaution should be taken to prevent anyone from operating the auger when the operator is absent from the work area.

TROUBLE SHOOTING

LOW CAPACITY
The main auger may not be getting enough grain. Check to see that the swing-out hopper intake has not bridged over restricting the flow.

The exposed flighting at the swing-out hopper intake should be covered with grain to achieve maximum capacity.

Check auger speed. Operating auger below recommended speed will result in low capacity.

FREQUENT SHEARING OF DRIVELINE

SHEAR BOLT
Reduce the flow of grain into the ground hopper.

Discharge of grain from main auger may be restricted, inspect inlet and discharge end of auger for damage.

Trouble Shooting (con’t.)

PLUGGING OF AUGER
The auger may getting too much grain where it is “jamming” inside the housing. Reduce grain flow into swing-out hopper.

If wet grain or other hard to move material is being augured, use a larger size motor than what is recommended for normal use.

Is the auger free of any foreign material such as sacks, tarp corners, etc. An auger plug at the discharge end will cause an auger plug at the intake end.

EXCESSIVE AUGER NOISE
Damage can occur to the auger flighting, thus causing noise. Damage usually occurs because of foreign material having been run through the auger. It may be necessary to remove the flighting for inspection.

Damage to the auger’s housing can occur which can cause interference with the rotating auger flight.

BREAK-IN INFORMATION

During the operation of your auger, one person shall be in a position to monitor the operation at all times.

Any screw conveyor when it is new, or after sitting idle for a season should go through a “break-in” period. The auger should be run at partial capacity until several hundred bushels of grain have been augured to polish the flighting and the tube. An auger with flighting that has not been polished in this manner requires greater horsepower to operate, damage to the drive and/or flighting can occur.

When the flight and tube are polished and smooth, the auger can be run full. Never run the auger empty for any length of time as excessive wear will result. If at all possible, do not stop or start the auger under load, especially before the flight and tube become well polished, as this may cause auger to “freeze-up.”

IMPORTANT! An auger should be frequently checked and serviced to operate freely. Keep all guards and shields in place, replace any that are damaged or missing.
TRANSPORT INFORMATION

Always observe safe driving and operating practices, and comply with your local and state regulations governing marking, towing and maximum width.

**WARNING!** Be alert of all overhead obstructions and electrical wires, failure to do so can result in electrocution.

Lower the auger well below the level of power lines before moving, maintain at least 10 feet of clearance (electrocution can occur without direct contact of power lines).

- Know the transport height of the auger before moving it.
- Plan your route to avoid overhead obstructions and power lines.
- Move the auger with a tractor to or from the work area. A pick-up truck or other suitable vehicle may be used for transporting the auger over great distances.
- Always transport your auger in the full down position. Swing-out hopper must be raised and in the transport position. Check ratchet on the winch to see it is locked to prevent lowering of the hopper during transport.
- The swing-out hopper safety chain must be hooked over the hanger on the lift arm.
- Hitch should be secured to tractor and jack stored in its transport position (make sure to attach hitch safety chain).
- **Avoid Sharp Turns!** It is possible for the hopper to hit the tractor tires or fenders.
- To prevent auger from upending, make sure all grain has been emptied from the auger before transporting.
- Before moving the auger, the operator should make sure all personnel are clear of the “Moving Auger Hazard Area” as shown below. **Never** allow persons to stand underneath or ride on the auger when it is being transported.

**IMPORTANT!** Overall transport height is with the auger fully lowered and attached to a vehicle with a drawbar height of 1’ 6” (257 mm).

**TRANSPORT HAZARD AREA**

The shaded area represents the hazard area to stay clear of.

**TRANSPORT HEIGHT**

To find the height of the auger with the intake end resting on the ground, just add the 1’-6” (257 mm) to the transport height.

**IMPORTANT!** Transport heights are figured with the auger attached to towing vehicles with a drawbar height of 1’-6” (257 mm).
ATTACH AUGER to TOWING VEHICLE

WARNING! Never stand between the tractor and auger when hitching unless all controls are in neutral and the brakes are locked.

1. Adjust the drawbar so there is 14" (356 mm) from the end of the tractor’s PTO output shaft to the center of the hitch pin (See Fig. 1 below). There should also be approximately 8" (203 mm) of spacing between the center of the output shaft and top of drawbar.

IMPORTANT! If the distance from the end of the shaft to the center of the hitch pin is shorter than what is recommended, the auger should not be raised. Damage to the PTO driveline, auger hopper assembly or tractor PTO may result when the PTO driveline bottoms out as it compresses.

2. Position the rear of the towing vehicle at the intake end of the auger. Using the jack, raise the auger hitch just high enough to attach it to the tow vehicles draw bar. Secure hitch clevis to tractor drawbar with hitch pin and keeper, or you can use a bolt with two nuts.

3. Fasten one end of a safety chain (not furnished) to the drawbar on the towing vehicle, and the other end to the loop anchor welded to the side of the augers hitch tube (See Fig. 1 below).

A clevis or similar type of intermediate support for the chain should be fastened to the hitch tube no farther than 6" (152 mm) from the hitch pin.

4. Retract the hitch jack, rotate and pin jack into the transport position.

See Page 11 for information about unhitching the auger.
PLACEMENT OF AUGER for FILLING GRAIN BIN

CAUTION! Make sure entire area above auger and the path of travel is clear of overhead obstructions and electrical wires. Failure to do so can result in electrocution (maintain at least 10 feet of clearance from power lines, electrocution can occur without direct contact of the power lines).

To prevent tip-over when backing, avoid rolling over any obstructions and avoid steep slopes. If the auger is to be set on a slope, approach the bin uphill. Avoid moving the auger at right angles to a slope.

- Auger should be placed on as level a surface as possible (the wheels must be allowed to roll freely as the auger is being raised).
- The PTO Driveline furnished with the auger is equipped with a “Spring-Lock” coupler at the tractor end. This type coupler is spring loaded and will fit the standard 1 3/8” x 6 spline PTO output shaft on the tractor (See PTO information in the “Lubrication and Maintenance” Section in this manual).
- When positioning the auger into its working position, make sure to leave adequate room for the swing-out hopper to be deployed, as well as room enough for the loaded vehicles to reach the swing-out hopper.

STEP 1: Locate Auger Next to Bin
Move the auger into its working position with a towing vehicle. Locate the auger as close as possible to the bin (or other structure). Move auger slowly towards the bin with the towing vehicle - not by hand.

NOTE: Position the auger so auger and tractor will be in a straight line during grain conveying operations.

A. Once auger is in position, attach the auger PTO driveline to the tractor PTO output shaft. 

NOTE: Avoid turns while moving the auger when the PTO driveline is attached to the tractor. Maneuvering with PTO attached will result in driveline damage not covered by warranty.

STEP 2: Raise Auger
Using the hand winch, raise the auger only high enough to clear the top of the bin (when using the hand winch, observe the cable as it is winding onto the winch drum. The cable should roll up on the drum evenly, avoid cable buildup on one side of the drum).

STEP 3: Back into Position

A. Back auger slowly into working position with the towing vehicle (Never move auger by hand, always use a vehicle).

Do Not attempt to increase auger height by positioning its wheels on lumber, blocks, or any other means to raise its height.

B. Lower the auger until the discharge is directly over the opening.*

Place tractor in Park, set brake and chock auger wheels.

It is good practice to secure the discharge end of the auger to the bin or grain storage structure to prevent possible wind damage (remember to untie the auger before attempting to move).

* When discharging into a grain spreader, maintain at least 12” (305 mm) of space between the auger discharge and the spreader.
**DEPLOY SWING-OUT HOPPER**

Although the swing-out hopper can be used on either side of the main auger, it is advisable to make that determination during the assembly process so the hopper can be correctly mounted at that time.

**CAUTION!** Keep hands away from winch drum during operation. Do Not operate the PTO driveline when the swing-out hopper is in the transport position.

**RELOCATION OF AUGER**

When grain conveying is completed, the auger should be moved away from the bin and lowered. The auger can then be moved to a different bin for more conveying operations, or it can be cleaned up and stored.

**STEP 1: Raise Auger**

A. Empty all grain from the auger and clean up area.
B. Untie any anchors or remove all supports.
C. Place swing-out hopper in transport position (See information on Page 11).
D. Remove wheel chocks.
E. Using winch, raise the auger so the discharge spout clears the bin opening.

**STEP 2: Move Auger Away From Bin, Lower Auger**

A. Move auger away from bin. Lower the auger immediately after clearing bin, or storage structure. IMPORTANT! Lower the auger to full down position even if only relocating to another bin.
B. Disconnect the PTO driveline from the tractor and place driveline in storage hook (See Page 11).

**STEP 3: Move to Next Bin**

A. Move auger to next bin or storage site, or prepare the auger for storage. Follow machine inspection recommendations on Page 5 before operating the auger again.

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1. Lower the swing-out hopper by grasping the winch handle and turning handle clockwise, lift the hopper high enough to unhook the safety chain from the lift arm.
   After safety chain has been unhooked, turn the handle counter-clockwise and lower the hopper to the ground.
2. When hopper reaches the ground, unhook the cable from the hopper (hang the cable hook on part of the auger housing so it is out of the way).
3. Swing the hopper out to its operating position.
   IMPORTANT! The swing-out hopper should not be moved while the auger is in operation. Always have the hopper in operating position before engaging PTO.
UNHITCHING INSTRUCTIONS

WARNING! Never stand between the tractor and auger when hitching unless all controls are in neutral and the brakes are locked.

Never raise the intake end of the auger higher than necessary to attach to a towing vehicle. Weight is transferred rapidly to the head end when the inlet is raised, especially when the auger is in the raised position.

1. Remove PTO driveline from tractor output shaft and place driveline in storage hook (See Fig. 5).

2. The auger wheels should be chocked to prevent the auger from rolling.

3. Rotate jack down to its working position and pin into place. Raise jack high enough to remove the weight of the hitch from the drawbar.

4. Remove the safety chain and the hitch pin. Move tractor away from auger.

5. Open the clean-out door in the bottom of the main inlet auger to clean out excess grain and to allow for water to drain while the auger is in storage.

NOTE: When the tractor must be disconnected from the auger while the auger is in the raised position, tie the discharge end of the auger to the bin or structure to prevent possible wind damage.
RAISING SWING-OUT HOPPER TO TRANSPORT POSITION

1. To raise the swing-out hopper, allow all grain to discharge from the auger, disengage the PTO and lockout power sources.

2. Swing the Hopper along side the main auger.

3. Turn winch handle counterclockwise and pull enough cable from winch to attach the cable hook to the tab on front of the hopper (See Fig. 5).

4. Attach the hook to the lifting tab located on front of the hopper on each side of the coupler box. Use the outside tab (the tab farthest away from the main auger), so when the hopper is lifted, the hopper will rotate and be facing the main auger.

5. Turn the winch handle clockwise to raise the hopper (there should be a clicking sound when the handle is turned).

6. Raise the hopper until the safety hook is within a few inches of the lift arm pulley, then place the safety chain ring over the hanger welded to the lift arm and secure in place with the hair pin provided.

NOTE: Observe the cable as it is being wound onto the winch drum. The cable should roll up on the drum evenly, avoid cable buildup on one side of the drum.

NOTE: If mounting the swing-out hopper to the right hand side of the main auger, refer to the assembly instructions for correct mounting procedures.

Fig. 5

CAUTION! Keep hands away from winch drum during operation.

Hopper Shown Mounted on the Left Side of the Main Auger.
Use the Same Procedures With Hopper Mounted on the Right Side.

Winch used to Raise and Lower Swing-Out Hopper

Make Sure Swing-Out Hopper is in the Transport Position Before Towing or Moving the Main Auger.

Safety Chain Attached to Lift Arm

Attach Safety Hook to Outside Lifting Tab (the tab furthest away from main auger).

Using the Outside Lifting Tab Allows the Auger to Rotate into Transport Position with the Top side of the Hopper Facing towards the Main Auger.
GENERAL MAINTENANCE

For economical and efficient operation of your auger, maintain regular and correct lubrication as well as making sure fasteners are tight and components are functional and not damaged.

Neglect leads to reduced efficiency, excessive wear and needless down time. The following information will detail parts needing lubrication and other maintenance related information to help keep your auger in working condition.

WARNING! Keep all safety shields and devices in place.
Never clean, adjust or lubricate a machine that is in operation.

HEAD BEARING

The main auger head bearing is a self aligning, sealed ball bearing, which has been packed with grease at the factory and requires no lubrication.

There is no adjustment to be made to the bearing, but the bearing should be checked periodically to make sure the set screws in the lock collar are tight and the bolts securing the bearing are tight.

HOPPER BEARING & BRONZE BUSHING

A bronze bushing is located at the front of the swing-out hopper flight. This bearing does not require any maintenance, but should be checked periodically for wear and/or damage. Replace as necessary.

There is also a bearing on the rear side of the hopper that the flight tail stub is inserted into. Although this bearing requires no lubrication, check to make sure the setscrews in the lock collar and the bolts securing the bearing are tight.

Pulley bushings, axle tubes, and other parts that pivot or rotate can be periodically lubricated using a 10W30 automotive oil or a spray type lubricant.

Check that setscrews in the head bearing lock collar are tight against the shaft.

Check to see that all fasteners are tight.
GEARBOX LUBRICATION

IMPORTANT! Even under normal working conditions, oil will still dissipate. Check oil level in gearboxes periodically and maintain proper level.

- For checking oil level in upper gearbox, use the access door on the side of the spout (the access door on the front of the spout can also be opened).
- Remove the plug from the side of the gearbox to check oil level. The level must be up to the plug opening.

If additional oil is needed, add oil through the level check opening until the oil begins to leak from the opening. Replace plug and clean up any spilled oil.

Do Not add more oil than what is recommended. Additional oil may damage the seals.

For lubrication in normal operating temperatures, between 40° F to 120° F (4.4° C to 48.8° C), we recommend the use of non-foaming, multipurpose gear oil, SAE 90 weight.

For temperatures below 40° F (4.4° C) use SAE 80 weight oil. Use grade commercially available for automotive differentials. Extra additives may be of value in severe applications.

GEARBOX U-JOINTS

Two u-joints connect the incline tube gearbox to the inlet hopper gearbox.

- The u-joints should be lubricated approximately every 10 hours of operation with an SAE multipurpose type grease.
- To lubricate the upper u-joint, open the large access door on the head of the inclined hopper. The grease zerk can be reached with the swing-away hopper in any position, but it works best if the hopper is on the ground and rolled as close to the tractor as possible (this turns the open side of the u-joint with the zerk, more towards the access door).

If the hopper is hanging on the auger, the zerk will be accessible only from the back where it is not visible and must be engaged mostly by feel. A grease gun with a flexible rubber hose is a must.

- To lubricate the lower u-joint. Open the small access door on front of the inlet hopper. Rotate the auger until the grease zerk is accessible.

WARNING! Do Not operate unit with access doors open.
SWING-OUT HOPPER FLIGHT U-JOINT

- A u-joint connects the hopper and the inclined flight at the hopper elbow.
- The u-joint should be lubricated at approximately 10 hour intervals with an SAE multipurpose type grease.
- To lubricate the u-joint, remove the cover strap from the coupler box and raise the hinged cover. The flights may need to be rotated in order to have access to the grease zerk.
- Be sure to close the cover and replace the cover strap before unit operation.

WARNING! Do Not operate unit without hinged cover closed and strap properly installed.

UNDERCARRIAGE AXLE SPINDLE BEARING

Tapered roller bearings are standard on all augers and should be repacked with grease annually or as needed determined by usage.

1. Raise the undercarriage axle high enough to allow the tire to clear the ground, and support axle with jack stands or equivalent. Never rely solely on hydraulic or mechanical jacks for support, use jack stands or equivalent for support.

2. Remove the dust cover by prying around its edges.

3. Remove the cotter pin, slotted nut and flat washer from the end of the axle shaft. Carefully remove the hub and bearings from the shaft. Inspect all parts for wear or damage and replace as necessary.

4. When reassembling the hub, repack both bearing cones with grease and fill hub cavity 1/3 full.

5. Place inner bearing and seal into hub and carefully reinstall hub onto shaft (be careful not damage the lip of the seal).

6. Install outer bearing into hub and replace the flat washer and slotted nut. Tighten the slotted nut to seal the bearings until the hub binds as you rotate the hub.

Back off the slotted nut to the next slot and install a new 5/32” x 1 1/4” cotter pin. Replace dust cap.

WARNING! Do Not rely solely on hydraulic or mechanical jacks for support. Use jack stands or equivalent to support the axle tube.
PTO DRIVE LINE LUBRICATION

WARNING! Before engaging PTO, be sure the PTO driveline shaft shield turns freely on shaft.

The PTO driveline has five (5) fittings that require lubrication (See illustration below for location of fittings).

Lubricate all fittings with a good quality lithium based E.P. grease meeting the NLGI #2 Specifications and containing no more than 1% molybdenum disulfide (example: Shell Super Duty or equivalent).

An E.P. grease meeting the NLGI #2 Specifications and containing 3% molybdenum disulfide may be substituted in the telescoping and CV ball and socket members only (examples: Mobil Oil Co. - "Mobil Grease CMP;" Shell Oil Co. - "Retinax AM;" and Texaco - "Molytex EP" #0 and #2.

- The first lube interval should be 16 to 24 hours after initial start-up and operation, then follow the recommended schedule shown below.

NOTE: For lubrication of the u-joint on the auger end, loosen the four bolts that secure the PTO driveline shield to the gearbox and rotate shield up.

Replacement Parts are Not Lubricated
Replacement parts must be lubricated at the time of assembly. Depending on the replacement part, use the chart to determine the proper amount of grease to use for that particular location. After repaired location has been lubricated, follow the recommendations in the chart below for maintaining lubrication intervals.

PTO DRIVE LINE SHEAR BOLT

The PTO driveline is equipped with a shear bolt at the tractor connection. The shear bolt protects the auger from damage if the auger becomes plugged or subjected to high loads. If this scenario should occur, the shear bolt should "shear off" which would cause the driveline to the auger to suddenly stop (the tractor PTO will still be turning, but not the auger driveline).

It is important that the correct replacement bolt be of the same size and strength as the original. This is to ensure the shear device will function properly to help protect the operator and the auger.

Extra shear bolts are provided in the Operator's manual cannister.

PTO Driveline Lubrication Recommendations
After the first lube interval (first 16 to 24 hours of operation) the following schedule should be maintained.

<table>
<thead>
<tr>
<th>Interval</th>
<th>Location</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 hrs.</td>
<td>U-Joint Cross &amp; Bearing</td>
<td>1 Pump</td>
</tr>
<tr>
<td>8 hrs.</td>
<td>Telescoping Members</td>
<td>4–8 Pumps</td>
</tr>
<tr>
<td>4 hrs.</td>
<td>CV Ball &amp; Socket</td>
<td>1–2 Pumps</td>
</tr>
</tbody>
</table>

Shear Bolt Specifications

<table>
<thead>
<tr>
<th>Auger Size</th>
<th>Shear Bolt Size</th>
<th>Shear Bolt Grade</th>
<th>Replacement Shear Bolt Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>10&quot; Dia.</td>
<td>3/8–16 x 1&quot;</td>
<td>Grade 5</td>
<td>Part No. 1004779</td>
</tr>
</tbody>
</table>

Fig. 9
WINCH MAINTENANCE

The winches used with this unit are a friction type winch. Although the winches may be somewhat different in appearance, the way they function and their maintenance procedures are basically the same.

1. **Lubrication.** All gears must be clean and lubricated (auto-type grease) to insure proper and safe operation. All shafts, bushings and ratchet parts must be clean and wet with oil to insure proper and safe operation (use a 10W-30 automotive oil).

2. **Brake Disc.** Brake disc wear for the hopper lift winch can be inspected by removing the handle retainer assembly, the handle and the brake disc cover. The main auger winch has no cover and can be visually inspected as is.
   
   Brake disc should be replaced if the thickness is less than 1/16” (2 mm), or if they are cracked or broken. **Do Not use oil or grease on fiber brake faces.**

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- If brake disc mechanism operates intermittently or erratically, brake disc inspection should be performed immediately. Replace any worn or broken parts before further operation.

3. **Brake Ratchet Mechanism.** Check ratchet operation by listening for “clicking sound” when cable is reeled in (handle turned clockwise). When the cable is reeled out, there is no clicking sound.
   
   The brake ratchet parts for the hopper lift winch can be inspected for wear and unsafe conditions by removing the handle retainer assembly, handle and disc cover.
   
   The main auger winch does not have a cover and can therefore be visually inspected as is.
AUGER LAYOUT

Choose an area on open level ground accessible to chain hoist or other lifting devices where the auger can be laid out in full length.

It will be convenient for assembly if the auger is placed on stands or saw horses. If your auger is equipped with the internal bearings option, refer to the instructions following the auger layout section for assembly procedures.

Do Not lift the entire weight of the auger from the extreme end, find a balance point towards the center and lift from there. Use a sling completely around the auger housing when lifting.

![WARNING! Do Not rely solely on hydraulic or mechanical jacks or the hoist for support. Always use jack stands or equivalent for support. Keep hands, legs and other body parts out from under the auger when auger is in the raised position. Some parts are heavy, use assistance with lifting and assembling these parts.]

1. Place main auger tube and flight onto support stands. Install the end cap, and bearing to the discharge end of the auger (See Fig. 10).

2. Bolt the 2-hole flange bearing to the head plate using two (2) 1/2” x 1 1/2” bolts and nylon locknuts. Do Not tighten completely at this time (it will be easier to align the head plate and bearing with the housing as they are being slid onto the flight stub).

3. Align the four mounting holes around the lip of the head plate with the holes in the auger housing. Slide the head plate and bearing into the auger housing and onto the head stub of the flight shaft.

4. Secure the head plate to the auger housing using four (4) 3/8 x 1” bolts and nylon locknuts.

5. Bolt the head cover onto the head plate using two (2) 5/16” x 3/4” bolts and nylon locknuts.

![Support Main Auger Tube and Flight][Inlet End - Main Auger Tube and Flight - Discharge End][Support][Inlet End][Main Auger Tube and Flight][Discharge End][Support][Support][Support]

Place main auger and flight on appropriate support stands.

Install End Bearing and Cap.
If Internal Bearings are Being Used, Install Them at this Time (see the assembly instructions for internal bearings on Page 19).
**OPTIONAL INTERNAL FLIGHT BEARINGS**

If your auger is equipped with the optional internal bearing accessory, use the following instructions for proper assembly procedures.

Since the auger is already on the support stands, it would be beneficial to install the internal bearings at this time.

The internal bearings are shipped loose and need to be properly secured. A special "bearing positioning tool" has been provided to help position the bearing hangers during assembly.

1. Insert the double bended end of the positioning bar through the slot in the top of the tube and hook the bearing stem. Rotate the stem upward as far as possible (See Fig. 11).

2. Remove the positioning bar and insert the single bent end into the slot. Hook the bearing hanger stem and pulling it upward, rotate it completely upright (See Fig. 11).

3. Position the bearing hanger so the mounting hole is visible through the slot in the tube. Secure the bearing hanger using one mounting plate and one (1) 5/8" x 1 1/2" bolt and lock washer.

Before tightening the mounting bolt, adjust the bearing hanger so it is centered between the flights (See Fig. 12). This can be done by sliding the hanger back and forth in the slot to determine the approximate center (there should be an equal distance of space between each end of the flight and the bearing).

Once the hanger has been centered, tighten the mounting bolt.

4. Repeat these procedures for the remaining bearing hangers being used.
INLET HOPPER ASSEMBLY

CAUTION! Some of the inlet parts are heavy, use assistance when lifting and assembling these items.

When reference is made to the left, right, front or rear of the auger, it will always be determined by standing at the inlet end and looking towards the discharge end. The main auger and flight will attach to the front side of the inlet hopper. During the assembly process it is recommended to have the hopper supported at the same height as the main auger.

1. Position the inlet hopper at the inlet end of the main auger. Guide the end of the auger flight through the opening at the front of the hopper. Attach the main auger housing flange to the inlet hopper and secure using fifteen (15) 3/8” x 1” bolts and nylon locknuts (See Fig. 12).

2. Prepare the gearbox for installation. Remove the square head plug from the gearbox neck and replace with the vented plug provided. Install the large rubber washer onto the top shaft of the gearbox.

3. Place the filler plate over the gearbox output shaft and place gearbox into its mounting position at the rear of the hopper. Insert the gearbox output shaft into the end of the auger flight. Secure using two (2) 1/2” x 3 1/2” bolts and stover type locknuts.

4. Position the gearbox mounting angles along side the gearbox and attach the angles to the hopper. Secure the angles and the filler plate using four (4) 3/8” x 1 1/2” carriage bolts, 5/8” O.D. bushings, 1” O.D. flat washers and nylon locknuts, Do Not tighten at this time.

Attach the mounting angles to the gearbox using four (4) 3/8” x 3/4” bolts and lockwashers, Do Not tighten at this time.

5. Use pry bar and block to lift the gearbox so the rubber washer is tight between the gearbox and hopper. Now, tighten the bolts securing the gearbox mounting angles and filler plate.

6. Install the covers to the hopper using 5/16” x 3/4” bolts and nylon locknuts. Covers should be snug, but still be able to rotate in order to open them. Use 5/16” wing nuts to hold covers closed.

Fig. 12
PTO DRIVELINE/SHIELD and JACK ASSEMBLY

**CAUTION!** Before engaging PTO, be sure that the PTO driveline shields turn freely on the shaft.

1. Fasten the PTO driveline to the gearbox input shaft using the 1/4” x 1 1/2” drive key (See Fig. 13). Tighten setscrews to secure driveline to input shaft.

**IMPORTANT!** For the setscrews in the PTO driveline yoke to properly engage on the input shaft, slide the driveline onto the input shaft until the setscrew will sit on the flat portion of the gearbox input shaft. **Do Not** extend the input shaft beyond the inside end of the yoke.

2. Bolt the driveline shield to the gearbox using four (4) 3/8” x 3/4” thumb head bolts.

3. Attach driveline hanger bracket to inlet hopper using two (2) 3/8” x 1” bolts and nylon locknuts. Fasten the support hook to the hanger bracket using one (1) 3/8” x 1 1/4” bolt and nylon locknut (snug the support hook only enough that will still allow it to be moved into position when required). Tilt the PTO driveline up and swing the support hook under the driveline to support the weight of the driveline while in the storage position.

4. Attach the jack to the hitch tube. Secure into place using the pin attached to the jack.

5. Snap the operator’s manual cannister into place on the bottom left side of the hopper.

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**Fig. 13**

When assembling the PTO driveline onto the Gearbox Input Shaft, make sure the setscrew is seated over the flat portion of the shaft.
UNDERCARRIAGE ASSEMBLY

WARNING! Do Not rely solely on hydraulic or mechanical jacks, or the hoist for support. Always use jack stands or equivalent for support. Keep hands, legs and other body parts out from under the auger when auger is in the raised position. Some parts are heavy, use assistance with lifting and assembling these parts.

Try to assemble the undercarriage next to the main auger and inlet hopper assembly, this will allow for minimal movement of the main auger assembly when attaching it to the undercarriage.

The hubs, bearings, seals and spindles are assembled at the factory and are pressure packed with grease at that time. Refer to the “Lubrication and Maintenance” Section in this manual for disassembly and maintenance procedures.

TIRE and HUB to AXLE TUBE

1. Lay the undercarriage out so the undercarriage trolley is at the discharge end of the auger.
2. Raise and support the undercarriage axle tube just high enough to allow the installation of the wheel and tire.
   Slide the hub and spindle assembly’s into the undercarriage axle tube and secure each hub to the axle tube using one (1) 1/2” x 3” bolt and nylon locknut (See Fig. 14).
   Mount the tire and rim. Secure each tire and rim to the hubs using the provided lug bolts.

TROLLEY TO TRACK ASSEMBLY

1. A track assembly is welded to the bottom side of the auger housing. The trolley on the end of the undercarriage will slide onto this track.
   Lift the auger assembly and position the discharge end above the trolley located on the end of the undercarriage (See Fig. 15).
   Align the trolley with the track and carefully slide the trolley onto the track (See Fig’s. 15 & 16). Slide the trolley back far enough to allow the stop angle to be fastened to the track.
2. Secure the stop angle to the end of the track using two (2) 1/2” x 1 1/2” bolts, lock washers and non-lock nuts (See Fig’s. 15 & 16).
UNDERCARRIAGE TO MAIN AUGER

Wrap a chain or heavy duty strap around the trolley and the stop angle to prevent the undercarriage from sliding during the following assembly procedure.

1. Attach the opposite end (lower arms) of the undercarriage to the mount bracket near the inlet end of the auger housing (See Fig. 16). You may need to raise both the auger and the lower arms of the undercarriage to get the mounting ears to line up.

   Secure the lower arms to the mount bracket using two (2) 3/4” x 2 1/2” bolts, flat washer, bushing and nylon locknut.

   Temporarily wrap a chain around the trolley and stop angle to keep the auger from sliding during the assembly process.

   As Viewed Looking from Discharge End Towards Inlet

   As Viewed Looking from Discharge End Towards Inlet

   3/4” x 2 1/2” Bolt, Flat Washer, Bushing and Nylon Locknut

   Slide Trolley onto the Track, Install Stop Angle, Then Attach the Lower Arms.

   After Trolley has been Attached to the Track, Slide the Trolley Back Far Enough to Install the Stop Angle onto the End of the Track.

   Temporarily wrap a chain around the trolley and stop angle to keep the auger from sliding during the assembly process.

Fig. 16
INSTALL WINCH AND CABLE
For additional winch information, follow the instructions and precautions listed in the material supplied by the winch manufacturer.

CAUTION! Keep hands away from winch drum during winch operation. Never fully extend the cable, always keep three complete wraps of cable around the winch drum. Never operate the winch with wet or oily hands, always use a firm grip on the handle.

WINCH and CABLE ASSEMBLY
1. Install the handle onto the winch. Align the slot in the handle with the winch pinion shaft and slide handle onto shaft. Secure the handle using the nut provided with the winch. Do Not remove the two existing nuts already on the winch shaft.

2. Attach the 1/4" x 40' cable to the winch drum so the cable will wrap under the winch drum when turning the winch handle clockwise (See Fig. 17).

3. Insert the cable from inside the drum through one of the round holes on the side of the drum until the cable extends approximately 1" (25.4 mm) past the two square holes in the drum. Clamp the cable to the outside of the drum with the cable keeper and secure using two 3/16" x 3/4" carriage bolts, lock washers and non-lock nuts.

MOUNT WINCH to MAIN AUGER
The winch will attach to a mount plate welded on the bottom of the main auger housing. The mount plate is located between, the inlet hopper and the plate the undercarriage lower arms are attached to.

1. Attach the winch to the mount plate using three (3) 3/8" x 3/4" bolts, lock washers and non-lock nuts. Position the winch so the cable will unroll from the winch drum towards the discharge end of the auger.
INSTALL WINCH and CABLE (con’t.)

Route Winch Cable

1. Route the cable up to the pulley on the trolley, around the pulley and back down to the cable anchor welded at the lower end of the trolley track. After the cable has been routed around the trolley pulley, insert a cotter pin through the hole in the pulley assembly (this will prevent the cable from becoming dislodged from the pulley). Wrap cable around the anchor and pull cable tight enough to keep the cable taut at the winch end. Turn the winch handle clockwise until the winch drum has three complete wraps around it.

Keeping the cable snug, secure it to the anchor using two (2) u-bolt cable clamps. **IMPORTANT!** Secure the clamp’s u-bolt against the loose end of the cable (See illustration below).

Always keep slight tension on the lift cable, even during storage and transporting. Having tension on the cable, will give the cable a less likely chance of unraveling or getting twisted on the winch drum.
**ASSEMBLY INSTRUCTIONS**

**SWING-OUT HOPPER LIFT ARM, CABLE and WINCH ASSEMBLY**

The lift arm for the swing-out hopper can be mounted on either the left or the right side of the main auger, depending on which side of the auger you want to position the swing-out hopper.

The illustration below shows the hopper being used on the left side of the main auger. Installation for the left or right side is basically the same except when routing the hopper lift cable, this will be noted in the assembly instructions.

1. Insert the lift arm into the mounting tube (install the lift arm from either the left or right side). Secure the lift arm using one (1) 3/32" x 2" long washer-head pin and hair pin.

2. The clevis pulley needs to be assembled as it is installed into position. Hook the clevis plates onto the clevis-anchor welded to the underside of the main auger housing (either left or right side). Assemble the bushing and cable pulley between the clevis plates and secure using one (1) 1/2" x 2" bolt and nylon locknut (See Fig. 20). Make sure the clevis plates are captured on the anchor and cannot come off.

3. Fasten the winch mount plate to the inlet hopper using two (2) 3/8" x 1 1/4" bolts, and nylon locknuts (See the illustration below).

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![Diagram of SWING-OUT HOPPER LIFT ARM, CABLE and WINCH ASSEMBLY](image-url)
ASSEMBLY INSTRUCTIONS

SWING-OUT HOPPER LIFT ARM, CABLE and WINCH ASSEMBLY (con’t.)

ASSEMBLE WINCH HANDLE

1. Insert the winch handle onto the threaded brake assembly shaft. Thread the handle on to the point of engagement (touching) of the brake pad. Insert the bolt through the lock washer; flat washer; spacer and spring (the spring will fit over the top of the spacer). Recheck to insure proper order of assembly (See Fig. 20 on previous page). Install the retainer assembly into the threaded end of the brake shaft and tighten bolt securely.

2. Attach the 3/16” dia. x 26’ long cable to the winch drum so the cable will wrap under the winch drum when turning the winch handle clockwise. Insert the cable from inside the drum through one of the round holes on the side of the drum until the cable extends approximately 1” (25.4 mm) past the two square holes in the drum (See Fig. 21 below).

3. Clamp the cable to the outside of the drum with the cable keeper and secure using two 3/16” x 3/4” carriage bolts, lock washers and non-lock nuts.

CAUTION! The cable keeper alone will not hold the weight of the hopper. There should be enough cable so that when the swing-out hopper is all the way down, there are at least three complete wraps of cable still around the winch drum.

Never let the cable all the way out. Always keep a minimum of three (3) turns of cable on the drum.

4. Attach the winch to the mount plate previously installed. Secure winch using two (2) 3/8” x 1” bolts, flat washers and nylon locknuts (the flat washers will be used on each side of the mount plate where there is slotted hole, See Fig. 20 on previous page).

5. Route the cable from the winch, through the clevis anchor pulley and up through the lift arm pulley. If installing on the right hand side the cable will route through the main auger winch mount plate, then through the clevis anchor pulley (See Fig. 20 on the previous page).

6. Attach the cable hook to the end of the cable using two (2) 3/16” cable clamps (secure the u-bolt portion of the cable clamp against the loose end of the cable, See Fig. 20 on previous page).

IMPORTANT! Do Not attach the lift cable directly to the safety chain.

7. Pull the cable tight and turn the winch handle in the clockwise direction and wind the cable onto the winch drum. Observe the cable as it is winding onto the drum. The cable should roll up on the drum evenly, avoid buildup on one side of the drum.

Make sure there is enough cable length to lower and attach to the hopper when it is resting on the ground, and make sure there are always a minimum of three complete wraps of cable on the winch drum. If the cable is too short to reach the hopper, a different length of cable will need to be used.

If you wanted to switch the hopper from one side of the auger to the other you will need to relocate the clevis anchor pulley and reroute the cable.

• Remove the cable hook and safety chain from the end of the cable. Reroute the cable as necessary.

• When relocating the clevis anchor pulley, disassemble the pulley, then reassemble and attach it to the opposite side of the clevis anchor.

• Move the lift arm to the opposite side of the mount tube.
**SWING-OUT HOPPER and INCLINE TUBE ASSEMBLY**

**INSTALL HOPPER WHEELS**
1. Mount the wheels to the hopper as shown in the illustration below.
   Remove the paint and apply grease to the swing-out hopper wheel shafts. Fasten the hopper wheels to the wheel shafts using two (2) 5/8” i.d. flat washers and one (1) 3/16” x 1 1/2” cotter pin as shown in Fig 22 below.

**FASTEN HOPPER TO INCLINE TUBE**
1. Bolt the incline tail stub into the incline flight using two (2) 7/16” x 3 1/2” bolts, four (4) rubber bushings, four (4) flat washers and two (2) nylon locknuts.

   **IMPORTANT!** Tighten the locknuts so the flat washers are firmly against the rubber sleeves. Do Not tighten so tight that the flat washers are against the flight tube, leave a 1/16” (1.6 mm) gap between the flat washer and the flight tube.

2. Fasten a u-joint to the incline tail stub using one (1) 3/8” x 3” bolt and nylon locknut.

3. Attach the incline tube and flight to the hopper. Connect the opposite end of the u-joint to the flight bearing stub located at the front of the hopper. Secure the u-joint using one (1) 3/8” x 3 1/2” bolt and nylon locknut.

4. Fasten the coupler box, located at the lower end of the incline tube, to the front of the swing-out hopper. Secure using two (2) 1/2” x 1 1/14” bolts, flat washers and nylon locknuts. Install bolts from the inside of the box, one flat washer on the bolt head side, one flat washer on the nut side.
   Do Not tighten completely, the coupler box must be allowed to pivot.

5. Attach the hinged cover to the top of the coupler box using two (2) 5/16” x 3/4” bolts, flat washers and nylon locknuts. Install the cover strap over the lid and secure using two (2) 3/8” nylon locknuts (strap attaches to threaded studs welded to side of coupler box). Do Not tighten completely, the hinged cover must be able to slide under the strap when the incline tube is tilted at different angles.
ATTACH RUBBER BELTING to HOPPER

1. The rubber belting will be installed to the inside of the swing-away hopper using the holes positioned around the upper portion of the hopper.
Loosely install the twelve (12) attachment clips using the holes positioned around the upper portion of the hopper (bolt heads and clips to the inside)
Secure each clip using two (2) 1/4" x 1" bolts and nylon locknuts (See Fig. 23). **NOTE:** the points on the clips must face up.

2. Set the belting between the clips and side of the hopper, with the edge of the belt resting on top of the bolts (the belting will not go completely around the hopper; a small gap will be left at the incline tube end). Position the belting evenly around the hopper with approximately 1" (25.4 mm) of belt extending past each of the two clips at the incline tube end. Tighten the bolts and nuts to where the clip points draw into the belting and the smooth edge of the clips is in contact with the side of the hopper.
ASSEMBLY INSTRUCTIONS

Swing-away Hopper and Incline tube Assembly (con’t)

INCLINE TUBE to MAIN INLET HOPPER

1. Open the hinged cover located on front of the incline tube spout assembly.
   Remove the square-head solid plug from the top of the gearbox. Replace the plug with the provided vent plug (See Fig. 25).

2. Install a u-joint assembly to the gearbox in the spout and to the gearbox attached to the lower rear of the inlet hopper (the u-joint with the solid shaft will attach to the lower gearbox, the u-joint with the tubing should attach to the gearbox in the spout). Use a 1/4” woodruff key, 5/16” x 2 1/2” bolt, and side depress locknut to make the attachments.

3. Lift the downspout end of the incline tube assembly with a sling and position directly over the opening of the main inlet hopper. Lower carefully and align the u-joint shaft with the u-joint tube. Continue to lower until the spout flange rests on top of the inlet hopper.

4. Secure spout flange to top of the hopper using four (4) 2” O.D. flat washers and nylon locknuts. Do Not tighten completely, the spout must be allowed to rotate on top of the hopper.

DEALER/ASSEMBLER NOTICE

The assembly of the swing-away hopper and main auger is complete if all the applicable assembly steps in this manual have been followed. Before delivery to the owner it is good practice to check the following.

• Be sure all safety shields and devices are installed properly.
• Check all safety decals to see that they are clean and legible. If any are missing, damaged, painted over, etc. replace them (safety decals can be obtained free of charge from your dealer or direct from the factory).
• Check all bolt and fasteners to see that they are tight and secured properly.
• Check that the Operator’s Manual container (with Operator’s Manual inside) is attached to the inlet hopper.

TO the OWNER

Use the assembly instructions in this manual as a reference to determine that the auger is assembled properly.

Fig. 25

Do Not tighten the 2” flat washer tight against the spout flange. The spout must be allowed to rotate.
SAFETY DECALS

**PARTS LIST**

### SAFETY DECALS

<table>
<thead>
<tr>
<th>PART NO.</th>
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<tr>
<td>1</td>
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<td>DANGER, Upending Hazard</td>
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<td>2</td>
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<td>DANGER, Rotating Auger</td>
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<td>3</td>
<td>1005324</td>
<td>DANGER, Stop if Any Guards...</td>
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<td>DANGER, Power Lines</td>
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<td>CAUTION, General Statement</td>
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<td>NOTICE, Do Not Attach PTO</td>
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<td>DANGER, Do Not Attempt...</td>
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<td>CAUTION, Rotating Handle</td>
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<td>1001987</td>
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### MAIN AUGER COMPONENTS

#### HEAD BEARING

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<td>Main Auger Housing (Mayrath Decal)</td>
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<td>2</td>
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<td>Flight, 425&quot; (2.3 m), 7 ga.</td>
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<td>Flight, 425&quot; (2.3 m), 1/4&quot;</td>
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<td>Main Auger Housing f/Internal Bearings (Mayrath Decal)</td>
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#### HEAD BEARING COMPONENTS

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<td>Nut, Nylon Lock, 1/2-13, PLT</td>
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<td>Bolt, 3/8-16 x 1&quot; G5 PLT</td>
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### UNDERCARRIAGE, TIRES & WHEEL HUB

#### Parts List

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<td>Stop Angle, for Trolley Track</td>
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<td>1007970</td>
<td>Tire &amp; Rim (4-Bolt)</td>
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<td>1001002</td>
<td>Spindle</td>
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<td>90174</td>
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<td>8</td>
<td>3148R1</td>
<td>Inner Bearing Cup</td>
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<td>Outer Bearing Cup (Timken No. LM11910)</td>
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<td>Inner Cone Bearing (Timken No. LM67048)</td>
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<td>Outer Cone Bearing (Timken No. LM11949)</td>
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<td>106250</td>
<td>Slotted Nut, 5/8-18 UNF</td>
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<td>Cotter Pin, 5/32&quot; x 1 1/14&quot;</td>
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<td>15</td>
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<td>Dust Cap</td>
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<td>Lug Bolt</td>
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<td>33111</td>
<td>Bolt, 3/4-10 x 2 1/2&quot; G5 PLT</td>
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<td>Nut, 3/4-10 Nylon Lock, PLT</td>
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<td>Bushing</td>
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<td>Nut, 1/2-13 Non-lock, PLT</td>
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<tr>
<td>25</td>
<td>D1143</td>
<td>Lock Washer, 1/2&quot; PLT</td>
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*Indented parts names indicate these parts are included in the previous assembly.*

---

*Main Auger Shown as Reference Only*

*The Inner and Outer Bearing Cups are furnished with the hub.*

---

*Tire to Hub Assembly*
**PARTS LIST**

**INLET HOPPER, PTO, JACK**

*and LOWER GEARBOX*

<table>
<thead>
<tr>
<th>REF. NO.</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1</td>
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<td>PTO Drive Assembly, 14-R</td>
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<td>Key, 1/4&quot; square x 1 1/2&quot; long</td>
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<td>Shield, PTO Driveline</td>
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<td>1010466</td>
<td>Hook, PTO Driveline Storage</td>
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<td>1004287</td>
<td>Cannister, Operator's Manual</td>
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<td>6</td>
<td>1011213</td>
<td>Bracket, PTO Driveline</td>
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<td>1013465-L</td>
<td>Inlet Hopper</td>
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<td>8</td>
<td>1027698</td>
<td>U-Joint Assembly</td>
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<td>9</td>
<td>1013526</td>
<td>Cover, Grease Zerk Access</td>
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<td>1013675</td>
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<td>1025343</td>
<td>Gearbox Mounting Angle</td>
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<td>Lower Gearbox Assembly</td>
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<td>1013423</td>
<td>Cover Plate</td>
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<td>1004738</td>
<td>Clean-out cover</td>
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<td>15</td>
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<td>Jack Assembly</td>
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<td>Woodruff key (No. 809)</td>
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<table>
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<td>Washer, 1&quot; x 13/32&quot; I.D. x 1/4&quot; Galv.</td>
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<td>Bolt, 3/8-16 x 1&quot; G5 PLT</td>
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<td>Nut, 3/8-16 Nylon Lock, PLT</td>
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<td>Bolt, 3/8-16 x 3/4&quot; thumb head, G5 PLT</td>
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<td>Bolt, 3/8-16 x 1 1/4&quot; G5 PLT</td>
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<td>4836</td>
<td>Bolt, Carriage 3/8-16 x 1 1/2&quot; G5 PLT</td>
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<td>Bolt, 3/8-16 x 3/4&quot; G5, PLT</td>
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<td>Bolt, 1/2-13 x 3 1/2&quot; G8 BLK</td>
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<td>Nut, 1/2-13 Stover Lock, PLT</td>
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<td>Vent Plug</td>
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<td>1002217*</td>
<td>Bolt, 5/16-18 x 2 1/2&quot; G5 PLT</td>
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<td>1004782*</td>
<td>Lock Nut, 5/16-18 Side Depress PLT</td>
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<td>Nut, 5/16-18 Nylon Lock, PLT</td>
</tr>
</tbody>
</table>

* Not Illustrated.
PTO DRIVELINE
Manufactured by Weasler

Specifications:
U-Joint Type – 14R
Auger End – 1 1/4" Bore with 1/4" Key Seat
Tractor End – 1 3/8" – 6B Spline
Category 3 – 50 degree

Replacement Parts are Not Lubricated.
Replacement parts must be lubricated at the
time of assembly. Refer to the “Lubrication”
Section in this manual for proper procedures.

NOTE: Repair parts for PTO drivelines
can also be purchased directly from:
Weasler Engineering Inc.
West Bend, WI 53095
Ph: 414–338–2161

* Shear Bolt Kit includes: Six (6) 3/8-16 x 1" Grade 5 Bolts and Locknuts.
GEARBOX

Lower Gearbox Mounted on Main Inlet Hopper

This gearbox is purchased from Weasler. The word “China” will be inscribed on the gearbox housing.

Specifications:
Ratio 1:1
Input Shaft – 1 1/2" Dia.
Output Shaft – 1 1/4" Dia.

The complete Gearbox can also be purchased.
Order Part No. 1012163–1
### PARTS LIST

#### SWING-OUT HOPPER
#### LIFT COMPONENTS

<table>
<thead>
<tr>
<th>REF. NO.</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1</td>
<td>1033077</td>
<td>Lift Arm Weldment w/Pulley</td>
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<tr>
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<td>Cable, Hopper Lift, 3/16&quot; x 26'</td>
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<td>3</td>
<td>1005365</td>
<td>Hopper Hook w/Chain</td>
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<td>5321C</td>
<td>Clamp, 3/16&quot; Cable</td>
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<td>Washer Head Pin, 1/2&quot; x 3 1/8&quot; long</td>
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<td>Pulley Bushing, 1&quot; x 9/16&quot;</td>
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* Not Illustrated.

The Illustration Shows Hopper Mounted on Left Side of Main Auger.
## Parts List

### Swing-out hopper components

**Assembly View of Incline Flight & Stub**

Remove Paint and Apply Grease to the Wheel Shafts

<table>
<thead>
<tr>
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<th>PART NO.</th>
<th>REF. NO.</th>
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<td>Lid w/Hinge</td>
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<td>Rubber Belt</td>
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<td>U-Joint (1 1/4&quot; Bore x 5&quot; long) (6N)</td>
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<td>Swivel Spout</td>
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<td>* 90040</td>
<td>31</td>
<td>4533</td>
<td>Snap Fastener for Spout Door</td>
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</table>

* Not Illustrated.