ROLLAWAY HOPPER for
8”, 10”, 12” W/LOW PROFILE HOPPER
and 12” W/STANDARD HOPPER

OWNER’S & OPERATOR’S
MANUAL

Effective September 25, 2017
Publication No. 1036294

MODEL NO’S.
8” - A82901F06 Electric Drive
8” - A82911F06 Hydraulic Drive
10” - A10901F06 Electric Drive
10” - A10911F06 Hydraulic Dive
12” - A1290L06 Electric Drive - LPH
12” - A1291F06 Electric Drive - STD

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POLICIES and PROCEDURES

Prices: Prices in effect at time of shipment will apply. Prices are subject to change without notice. All prices are F.O.B. Clay Center, Kansas. Orders shipped from locations other than Clay Center, Kansas will be subject to additional charges, such as back freight and/or additional freight.

Service Charge: A service charge will be assessed for all past due balances as permitted by state law not to exceed 1-1/2% per month.

Minimum Order: Processing and handling costs necessitate a minimum charge of $15.00 net on all orders.

Back Orders: Back orders will be shipped as they become available. Contact Hutchinson, Mayrath Customer Service for alternative shipping options or if cancellation is desired.

Damaged Goods: It is the consignee’s responsibility to check all shipments thoroughly upon receipt of goods. If any damage is discovered, it must be noted on the freight bill of lading before signing. The consignee must make necessary claims against the respective freight line. All damage claims must be submitted within 30 days of delivery receipt.

Shortages: All shortages must be noted at time of delivery. Shortages must be noted on the freight bill of lading before signing. Hutchinson, Mayrath must be advised of all concealed shortages upon discovery. Once notified of concealed shortages Hutchinson, Mayrath will advise corrective action to be taken.

Return of Goods: All returns must be approved by Hutchinson, Mayrath prior to shipment. All return requests will be issued a return authorization number. NO RETURNS WILL BE ACCEPTED WITHOUT A RETURN AUTHORIZATION NUMBER AND PRIOR AUTHORIZATION FROM THE FACTORY. All returns must be shipped prepaid. A 15% restocking charge will be applied to all returned merchandise. Custom Products may not be returned for credit. Only current products in new and salable condition may be returned. No safety devices may be returned for credit.

Modifications: It is the policy of Hutchinson, Mayrath to improve its product whenever possible and practical to do so. We reserve the right to make changes, improvements and modifications at any time without incurring the obligation to make such changes, improvements and modifications on any equipment sold previously.

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 IN 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 safety symbol shown is used throughout this manual to alert you to information about unsafe actions or situations, and will be followed by the word DANGER, WARNING, or CAUTION.

DANGER - Indicates immediate hazards that may result in severe injury or death. WARNING - Indicates unsafe actions or situations that may cause severe injury, death and/or major equipment or property damage. CAUTION - Indicates unsafe actions or situations that may cause injury, and/or minor property damage.

Watch this symbol - it points out important safety precautions. It means - ATTENTION! Become alert! Your safety and the safety of others 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, or ordered directly from the factory.
# TABLE OF CONTENTS

**POLICIES AND PROCEDURES** ......................................................... (Inside Front Cover)

**SAFETY** ................................................................................................. 1

- General Safety Statement ........................................................................ 1
- Safety Alert Symbol ............................................................................... 1
- Safety Decals ....................................................................................... 1

**TABLE OF CONTENTS** ............................................................................. 2

**GENERAL INFORMATION** ........................................................................ 3 - 6

- Operator Qualifications ........................................................................ 3
- Sign-Off Sheet .................................................................................... 3
- Machine Inspection ............................................................................. 4
- Break-In & Start-Up Information .......................................................... 4
- Designated Work Area ........................................................................ 4
- Electric Drive Power Requirements ....................................................... 5
- Flight Speed ...................................................................................... 5
- Hydraulic Drive Information ................................................................. 6
- Operating Procedures ........................................................................ 6-7
- Emergency Shutdown .......................................................................... 7
- Normal Shutdown ............................................................................. 7
- Intermittent Shutdown ....................................................................... 7
- Lockout, Electric and Hydraulic .......................................................... 7

**TROUBLE SHOOTING** ............................................................................. 8

**LUBRICATION and MAINTENANCE** ..................................................... 9 - 10

- Machine Information .......................................................................... 9
- Flight U-Joint ................................................................................... 9
- Flight Bearings .............................................................................. 9
- Undercarriage Axle ......................................................................... 10
- Undercarriage Tires ....................................................................... 10
- Drive Belt Adjustment .................................................................... 10
- Hydraulic Hoses and Components ...................................................... 10

**ASSEMBLY** ....................................................................................... 11 - 23

- Hopper and Incline Tube, 8" and 10" .............................................. 11
- Hopper and Incline Tube, 12" Standard ........................................... 12
- Hopper and Incline Tube, 12" Low Profile Hopper ....................... 13
- Rubber Belting Installation, 8", 10" and 12" Low Profile ............... 14
- Rubber Belting Installation, 12" Standard .................................... 14
- Undercarriage (all models) ............................................................... 15
- Hydraulic Drive Installation, 8" ..................................................... 16-17
- Hydraulic Drive Installation, 10" .................................................. 18-19
- Electric Drive Installation, 8" ......................................................... 20-21
- Electric Drive Installation, 10", 12" Standard and 12" Low Profile 22-23

**PARTS LIST TABLE of CONTENT** ...................................................... 24

**PARTS LISTS** .................................................................................... P-1 to P-8
GENERAL INFORMATION

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 portable auger hopper shall be limited to competent and experienced persons. In addition, anyone who will operate or work with this system 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 portable auger hoppers. 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.

*SFederal 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 portable auger hopper. We include this sign off sheet for your convenience and personal record keeping.

<table>
<thead>
<tr>
<th>Training Sign-Off Sheet</th>
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<tr>
<td>Date</td>
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MACHINE INSPECTION

Our portable auger hoppers 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 hopper 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 hopper 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.

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

DESIGNATED WORK AREA

Before starting the auger, a designated work area should be established and properly marked around the work site. This area shall be marked off with colored ropes, banners or other suitable material, which can be hung as portable barriers to mark the designated work area.

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 operator’s to see that children and/or other persons stay out of the work area. 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 shutdown by the operator.

It shall be the responsibility of all operator’s 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.

BREAK-IN & START-UP 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 shall have a full view of the work area and check that all personnel are free from designated work areas before adding power.

- Inspect the drive before adding power and know how to shutdown in an emergency (See Page 7).
- During operation of your equipment, one person shall be in a position to monitor the operation.
- Visually inspect the hopper periodically during operation, be aware of all adjustments and checks which should be performed.
- The hopper may be operated at speeds from 408 to 510 RPM’s (auger speed in excess of recommended RPM’S causes excessive wear).
- It is important to become familiar with the routine operating procedures before attempting start-up.

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

When the housing has been polished and smooth, the hopper can be run at full capacity. Never operate the hopper empty for any length of time as excessive wear will result.

If at all possible, do not stop or start the hopper under load, especially before the housing becomes well polished, as this may cause it to “freeze-up.”

IMPORTANT! The hopper should be frequently checked and serviced to operate freely. Keep all guards and shields in place, replace any that are damaged or missing.
**ELECTRIC DRIVE POWER REQUIREMENTS**

The hopper can be operated using a hydraulic or an electric drive motor (see Page 6 for hydraulic motors). For electric motors, always use a motor with the required power recommended shown in the chart below. Use a motor that operates at 1750 RPM.

**Electric motors and controls shall be installed by a qualified electrician and must meet the standards set by the National Electric Code and all local and state codes.**

A magnetic starter should be used to protect your motor when starting or stopping. It should stop the motor in case of power interruption, conductor fault, low voltage, circuit interruption and/or motor overload. The motor should then be restarted manually.

A main power disconnect switch that can be locked only in the “Off” position shall be provided. This shall be locked whenever work is being done to the conveyor.

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**WARNING!** Shut off power and lockout whenever cleaning or servicing the hopper.

The reset and starting controls must be located so that the operator has full view of the entire operation. Disconnect power before resetting motor overloads.

Make certain electric motor is grounded.

A main power disconnect switch that can be locked in only the “Off” position shall be provided. This shall be locked whenever work is being done to the hopper and auger unit.

Do Not enter the grain bin unless all power driven equipment has been shutdown and locked out.

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The horsepower recommendations are based on reasonably dry grain. High moisture grain (above 15%) will require greater power if maximum capacity is to be maintained. The maximum possible capacity will be less with high moisture grain than with dry grain.

<table>
<thead>
<tr>
<th>Unit Size</th>
<th>Recommended Motor*</th>
<th>Motor Pulley</th>
<th>Drive Pulley</th>
<th>Auger Speed**</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8”</td>
<td>3 hp</td>
<td>3.5”</td>
<td>12” O.D.</td>
<td>510 RPM</td>
<td>2500 BPH</td>
</tr>
<tr>
<td>10”</td>
<td>5 hp</td>
<td>3.5”</td>
<td>15” O.D.</td>
<td>408 RPM</td>
<td>3600 BPH</td>
</tr>
<tr>
<td>12”</td>
<td>7 1/2 hp</td>
<td>3.5”</td>
<td>15” O.D.</td>
<td>408 RPM</td>
<td>4500 BPH</td>
</tr>
</tbody>
</table>

*Recommended motor size is based on clean, dry shelled corn or wheat. For higher moisture grain (up to 25%) the next larger motor may be used as a maximum.

**Auger speed in excess of recommended RPM should be avoided as excessive wear will result.

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**FLIGHT SPEED**

Proper flight speed is important for efficient operation of the equipment.

1. If the flight speed is faster than what is recommended, excessive wear will result.
2. If the flight speed is too slow, the auger flighting will “load up”. High torque will then be required to turn the auger flighting, possibly resulting in damage to the auger. Control the amount of grain fed into the hopper through external means (if changing the flight speed is not an option in your situation).
3. See the chart above for proper flight speeds.
HYDRAULIC DRIVE INFORMATION

WARNING! Do Not connect or disconnect hydraulic components when there is pressure within the system. Hydraulic systems are highly pressurized. Escaping hydraulic oil, even an invisible pin hole leak, can penetrate body tissue and cause serious injury.

Use a piece of wood or cardboard when looking for leaks. Never use the hands or other body parts. When reassembling, make absolutely certain that all connections are tight.

If injured by hydraulic oil escaping under pressure, see a doctor immediately. Serious infection or reaction can occur if medical attention is not received at once.

IMPORTANT! Use a tractor which has the proper hydraulic capacity (12 to 14 gallons per minute), with a hydraulic oil pressure of 1850 PSI.

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

Depending on the position of the tractor’s hydraulic control lever and which motor ports the hydraulic hoses are connected to, the hopper screw (flighting) may rotate either clockwise or counterclockwise.

It is important during start-up to be sure the hopper flight is rotating so the grain is being fed into the incline tube and out the discharge opening.

The hopper flight speed will vary with tractor engine speeds. Use the chart on Page 5 for recommended auger speed and adjust the tractor RPM accordingly.

Hydraulic motors are a good source of power, but like most things, proper installation is needed for trouble-free operation.

The motor provided will work adequately with most newer tractors (which have hydraulic pumps capable of supplying enough oil).

Restrictors in stock valves - 1/2" lines that supply the tractor outlets or quick couplers - may cause oil flow problems. Do Not speed up the tractor rpm's when this condition exists, doing so will result in excessive heat buildup which could damage the tractor or the hydraulic motor.

OPERATING PROCEDURES

WARNING! During the operation of the equipment, one person shall be in position to monitor the operation at all times.

Make certain everyone is clear of the work area before operating the equipment.

The operator shall be aware of any unusual vibrations or noises that would indicate the need for service or repair.

WARNING! Keep all safety shields and devices in place.

Keep hands, feet and clothing away from moving parts.

The operator shall have a full view of the entire work area and check that all personnel are clear of the designated work area before adding power.

Shut off power and lockout before attempting to adjust, service, clean or repair the hopper or any of its components.

Do Not feed too much grain into the hopper that it causes the auger to shutdown due to overload.

Check the following before adding power:

- All safety devices are in place and properly fastened.
- Drive belts are properly tightened and in good condition. Replace belts if they are cracked, frayed or damaged in any way.
- Check electrical cords to ensure they are in good condition. Replace if necessary.
- Ensure hopper is properly positioned and designated work area is clearly marked.
- Verify all drive component hardware is tight, i.e. motor mounts, pulleys, etc.
- If hydraulically driven, make sure all hoses are in good condition and all connections are tight.
OPERATING PROCEDURES (con’t.)

To Start Hopper Operation
Follow the safety guidelines and checklist as outlined in the previous column.
1. Electric Drive: Start the electric hopper motor before conveying grain. Make sure the auger is running properly.
   Hydraulic Drive: Start the hydraulic power source and verify auger is operating properly before conveying grain.
2. Gradually add grain to the hopper until desired flow has been established. Do Not overload the hopper. Too much grain can cause the auger to shut down due to overloading. This may result in damage to the hopper and/or the power source.

To Stop Hopper Operation
Electric & Hydraulic Drive
1. Stop the flow of grain going into the hopper. Let the hopper auger and incline tube empty itself of all grain.
2. Shutdown and lockout the power source (see “Shutdown and Lockout” information).
3. Before the operator leaves the work site, verify that the hopper is properly shutdown and locked out so no unauthorized personnel can restart the equipment.

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 incline tube as you can. 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 conveyor. 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 inlet tube 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

Warning! If the operator must leave the work area, or whenever servicing or adjusting, the conveyor must be stopped and the power source turned off and locked out. Precaution should be made to prevent anyone from starting or operating the conveyor when the operator is absent from the work area.

Electric Drive:
The power source shall have a main disconnect box that can be locked only in the “Off” position. This is what “shutdown and lockout” refers to, shut off the main power source and lock the handle or breaker switch in the “Off” position.

Hydraulic Drive:
Remove ignition key from tractor or remove coil wire to prevent unauthorized start-up of unit.
**AUGER VIBRATION**

Electric units, driving belt may be overtightened putting head stub and flight in a bind. Belts should have about 1/2" of deflection when belts are firmly pressed in the center of the span between the motor and auger sheaves. Make any necessary adjustments.

For hydraulic driven units, the auger may be surpassing the recommended speed thus causing the vibration. Check auger speed (RPM) and adjust accordingly.

For electric and hydraulic units, damage may have occurred to the auger flighting causing noise. Damage to the flight usually occurs because of foreign material having been run through the auger (it may be necessary to remove the flighting for inspection).

**LOW CAPACITY**

The hopper may not be getting enough grain. Check to make sure the intake has not bridged over restricting flow. Check for foreign material that may be covering the intake.

The exposed flighting in the hopper should be covered with grain to achieve maximum capacity.

Check auger speed (RPM). Speeds slower than the recommended speed will result in low capacity.

On hydraulic driven hopper units, motor may not be receiving the required amount of oil or is not getting adequate pressure.

**AUGER PLUGS**

The auger may be getting too much grain causing “jamming” inside the housing. Lower amount of grain being fed into the hopper.

The electric motor may be too small or wired improperly. Check recommended electric drive requirements on Page 5 for proper sized motor as determined by your application.

If wet grain or other hard-to-move material is being augered, use the next larger size motor than recommended for normal use.

Is the auger free of any foreign material, such as tarp corners, etc.? A plug of the discharge end can cause plugging at the intake end. Shutdown and lockout power source before removing any auger plugs.

**HOPPER NOT WORKING**

On hydraulic driven units, check routing of hydraulic hoses for proper attachment to tractor and for direction of hopper screw rotation.

On electric drive units, verify wiring has been properly connected and all connections are tight. Verify power source is turned on.

**IMPORTANT!** The hopper should be frequently checked and serviced to operate freely. Keep all guards and shields in place, replace any that are damaged or lost.

When the hopper has not been used for an extended period of time, it should be run partially full for several hundred bushels to polish the flighting. Greater horsepower is required during this “Break-In” period, so be careful not to overload the hopper as damage can occur to the flight or drive.
For economical and efficient operation of your auger, maintain regular and correct lubrication. Neglect leads to reduced efficiency, excessive wear and needless downtime.

The following will detail the parts needing lubrication and conditions which determine the frequency.

**FLIGHT U-JOINT**

The u-joint is located in the hopper elbow. It should be lubricated at approximately **ten (10) hour intervals** using an S.A.E. multipurpose type grease. To access the u-joint, remove the two nuts from the top of the connecting box and remove the access cover (See illustration below). Be sure to replace the cover **before** operating the unit.

**FLIGHT BEARINGS**

The hopper flight on the 8" & 10" units is supported by a bronze-with-graphite bearing at the front end of the hopper and a tail bearing at the rear. Neither bearing requires lubrication. If the bronze bearing wears and begins to spin inside the retainer, remove the old bearing and press in a new one. Frequently check the tail bearing for wear and to ensure the flangette retainers remain tight. Replace the bearing if it should become worn or damaged.

The 12" standard hopper has a bronze bearing at both ends of the flight. No lubrication is required, but if the bearing should begin to spin inside the retainer, remove the old bearing and press in a new one.

The 12" low profile hopper has a bronze bearing at the front of each hopper flight and 3 tail bearings at the rear. The three tail bearings are equipped with grease zerks and should be lubricated approximately **every ten (10) hours** of operation. Be sure to replace the chain guard before unit operation.

**WARNING!** Never clean, adjust or lubricate a machine that is in operation. Keep all safety shields and devices in place. Immediately replace any that are lost or damaged.
**UNDERCARRIAGE AXLE**

The axle on the undercarriage assembly has lubrication points on the hub of each wheel. Use an S.A.E. multipurpose type grease and lubricate once annually. The axles can be lubricated more frequently depending on use (See illustration below).

**UNDERCARRIAGE TIRES**

Keep tires properly inflated. Generally 25 to 30 PSI is sufficient to maintain proper care (30 PSI Max.). A good quality tire cleaner and rubber protectant should be used as well. Repair any leaks that may occur and replace tires should they become weathered, cracked and no longer remain inflated.

![Fig. 2](image)

**DRIVE BELT ADJUSTMENT & CARE**

For electric drive units, check drive belt tension periodically (make sure power source is shutdown and locked out before servicing or working on the auger). Replace any belts that are cracked, frayed or beginning to split. Proper belt tension should be about 1/2” of deflection when belts are pressed in the center of the span between the motor and drive sheave.

Check all hardware and fasteners on the belt guards and motor mounts before each use to ensure everything is properly secured.

**HYDRAULIC HOSES & COMPONENTS**

**WARNING!** Do Not connect or disconnect hydraulic components when there is pressure within the system. Hydraulic systems are highly pressurized. Escaping hydraulic oil, even an invisible pin hole leak, can penetrate body tissue and cause serious injury. Use a piece of wood or cardboard when looking for leaks. Never use the hands or other body parts. When reassembling, make absolutely certain that all connections are tight. If injured by hydraulic oil escaping under pressure, see a doctor immediately. Serious infection or reaction can occur if medical attention is not received at once.

Check hydraulic hoses for damage and replace as necessary. Check hydraulic connections to ensure they are tight and are not leaking.

Check all hardware and fasteners on motor and head plate before each use to ensure everything is properly secured.
1. Bolt the incline tail stub into lower end of incline flight. Secure the stub using four (4) rubber sleeves, and flat washers and two hex head bolts (See Fig. 3) and nylon locknuts (See illustration above). **IMPORTANT!** Tighten the bolts and nuts so the flat washers compress the rubber sleeve so there is about a 1/16" space between the washer and the flight tube. Do Not tighten so tight that the flat washers are against the tube.
   - **8" Models** - Use two 3/8" x 3" bolts
   - **10" Models** - Use two 7/16" x 3 1/2" bolts

2. Fasten one end of the u-joint to the incline tail stub using one bolt (See Fig. 3) and nylon locknut.
   - **8" Models** - Use one 5/16" x 2 1/2" bolt
   - **10" Models** - Use one 3/8" x 3" bolt

3. Remove the access cover from the top of the connecting box on the front of the hopper. Fasten the other end of the u-joint to the stub on the hopper flight using one bolt (See Fig. 3) and nylon locknut.
   - **8" Models** - Use one 5/16" x 2 1/2" bolt
   - **10" Models** - Use one 3/8" x 3" bolt

4. Attach the intake end of the incline tube to the front of the hopper connecting box. Secure using eight (8) bolts (See Fig. 3), sixteen (16) flat washers and eight nylon locknuts (bolt heads to the inside of the box).
   - **8" Models** - Use eight 5/16" x 1" bolts
   - **10" Models** - Use eight 3/8" x 1" bolts

5. Mount the hopper wheels to the hopper. Insert a 5/8" x 4" bolt through the wheel and thread on a 5/8" non-lock nut until finger tight. Attach the wheel and bolt to the outside of the hopper leg and secure using one 5/8" lock washer and non-lock nut **(place offset side of wheel hub against the hopper leg, See Fig. 3 above).**

**NOTE:** Depending on your application, the hopper wheels can be mounted to the sides of the hopper legs, or mounted on the rear side of the hopper legs as shown in the illustration above.
1. Bolt the incline tail stub into lower end of incline flight. Secure the stub using four (4) rubber sleeves, and flat washers and two 1/2” x 4” bolts and nylon locknuts (See illustration above). IMPORTANT! Tighten the bolts and nuts so the flat washers compress the rubber sleeve so there is about a 1/16” space between the washer and the flight tube. Do Not tighten so tight that the flat washers are against the tube.

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

3. Remove the access cover from the top of the connecting box on the front of the hopper. Fasten the other end of the u-joint to the stub on the hopper flight using one (1) 3/8” x 3” bolt and nylon locknut.

4. Attach the intake end of the incline tube to the front of the hopper connecting box. Secure using twelve (12) 3/8” x 1” bolts, flat washers, lock washers and non-lock nuts.

5. Mount the hopper wheels to the hopper. Insert a 5/8” x 4” bolt through the wheel and thread on a 5/8” non-lock nut until finger tight. Attach the wheel and bolt to the outside of the hopper leg and secure using one 5/8” lock washer and non-lock nut (place the offset side of the wheel hub against the hopper leg, as shown in Fig. 4 above).

NOTE: Depending on your application, the hopper wheels can be mounted to the sides of the hopper legs, or mounted on the rear side of the hopper legs as shown in the illustration above.
HOPPER & INCLINE TUBE ASSEMBLY

12” LOW PROFILE MODELS

1. Bolt the incline tail stub into lower end of incline flight. Secure the stub using four (4) rubber sleeves, and flat washers and two 1/2” x 4” bolts and nylon locknuts (See illustration above). IMPORTANT! Tighten the bolts and nuts so the flat washers compress the rubber sleeve so there is about a 1/16” space between the washer and the flight tube. Do Not tighten so tight that the flat washers are against the tube.

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

3. Position the incline tube at the front of the hopper. Align the coupler box on the end of the incline tube with the coupler box mount on front of the hopper (the box mount on the hopper will slide inside the coupler box on the incline tube).

   Slide a 1/2” flat washer onto each of the 1/2” x 1 1/2” bolts from the kit. From the inside of the hopper box mount, temporarily attach the incline tube to the hopper (It may be necessary to reposition the incline flight w/u-joint in order to make the connection).

4. Fasten the other end of the u-joint to the power shaft on the hopper using one (1) 3/8” x 3” bolt and nylon locknut. Finish securing the coupler box to the hopper with two more 1/2” flat washers and nylon locknuts. Do Not tighten the bolts completely, as the coupler box must be allowed to pivot.

5. Bolt the hinged cover to the top front of the hopper using three (3) 5/16” x 3/4” bolts, flat washers and nylon locknuts. Install the cover strap over the hinged cover and onto the 3/8” studs welded to the side of the coupler box. Fasten the strap into place using two 3/8” nylon locknuts. NOTE: When adjusting the angle between the incline tube and hopper, the 3/8” locknuts on the strap will need to be loosened to allow the cover to slide under the strap as the hopper and tube are being adjusted. Once desired position is obtained, the locknuts can be retightened.

6. Mount the hopper wheels to the front side and rear side of the hopper legs. Insert a 5/8” x 9 3/4” axle pin through the hopper wheel and slide on one of the 1” x 7/8” long spacers. Insert the pin through the lower mounting holes on the hopper legs and secure using the 2” long hair pins provided (place the offset side of the wheel hub against the hopper leg as shown in Fig. 5 above).

   NOTE: Depending on your application, the hopper wheels can be mounted to the sides of the hopper legs, or mounted on the rear and front side of the hopper legs as shown above.

Fig. 5
RUBBER BELTING INSTALLATION

8”, 10” & 12” LOW PROFILE MODELS

1. Install the rubber belting along the inside edge of the hopper. 8” and 10” models use twelve (12) belt clips and 1/4” x 3/4” bolts and nylon locknuts, 12” low profile models use fourteen (14) belt clips and 1/4” x 1” bolts and nylon locknuts. Loosely attach each clip to the holes positioned around the top portion of the hopper (the points of the clips should be facing up with the bolt heads to the inside).

2. Set the belting behind each clip so the edge of the belting is resting on the bolts (See illustration above). The belting does not go completely across the output end of the hopper. Keep the ends of the belting extended approximately 1” from the end of the clip and position belting evenly around the hopper and through the corners.

3. Tighten the bolts to where the clip points draw into the belting and the smooth edge of the clips are against the hopper side.

RUBBER BELTING INSTALLATION

12” STANDARD MODELS

1. Install the two pieces of rubber belting along the inside edge of the hopper. Use eight (8) support straps and secure using two (2) 1/4” x 3/4” bolts and nylon locknuts for each strap (bolt heads to the inside).

2. Fasten the belts together by overlapping the ends and securing the ends using two 1/4” x 3/4” bolts, flat washers and nylon locknuts at each connection (place flat washers under bolt head and nut).

Both pieces of belting have the same hole pattern punched in them. Use the lower set of holes on the back of the hopper and the upper set of holes for the front of the hopper (discharge end of hopper).
**ASSEMBLY PROCEDURES**

**UNDERCARRIAGE ASSEMBLY**

**IMPORTANT!** During undercarriage assembly, only tighten hardware finger tight until all the parts are properly aligned and adjusted.

1. Install the band-on brackets and half-bands to the incline tube and secure each band (finger tight) using two (2) 5/16" x 1 1/2" bolts and non-lock nuts. Begin by locating the first band approximately 28" away from the coupler box, position the next band approximately 18" up from the first.

2. Attach the lower support arms to the band-on bracket that is closest to the coupler box. Use one (1) 3/8" x 1" bolt, lock washer and non-lock nut for each support arm (the lower support arm only has one hole at each end, angle the support arm away from the bracket).

   Attach the upper support arms to the band-on bracket closest to the discharge end of the incline tube. Use one (1) 3/8" x 1" bolt, lock washer and non-lock nut for each arm.

3. Align the two holes at the bottom of the upper arm support with the mounting tabs on the axle tube (position support arms to the inside of the tabs). Insert one 3/8" x 1" bolt through the top holes and secure each with a 3/8" lock washer and non-lock nut, Do not tighten at this time.

4. Install a 3/8" x 1 1/2" bolt through the bottom holes and attach the lower support arms to this bolt and secure using a 3/8" lock washer and non-lock nut (the bottom bolt will pass through the mount tab on the axle tube, the upper support arm, and the lower support arm (See illustration below). Tighten hardware until snug.

5. Slide the axle shaft into the axle tube (the axle shaft was shipped attached to the top of the hopper screen).

   Install a 3/4" flat washer onto the shaft, then slide on the wheel & tire assembly (valve stem to the outside). Secure wheels with another 3/4" flat washer and a 3/16" x 1 1/2" cotter pin.

6. Slide the undercarriage assembly up and down the incline tube until the hopper is sitting level with the ground (if necessary loosen the appropriate hardware on the support arms to help properly position the hopper). Once positioned, tighten all hardware.

---

**Fig. 8**

- **5/16" x 1 1/2" Bolt & Non-Lock Nut**
- **First Band Approx. 28" from Coupler Box**
- **Upper Support Arm**
- **Incline Tube**
- **Half Band**
- **Band-On Bracket**
- **Support Arms Angled Away from Brackets**
- **Axle Shaft & Axle Tube**
- **3/8" x 1 1/2" Bolt, Lock Washer & Non-Lock Nut**
- **Mounting Tab on Axle Tube**
- **Lower Support Arm**
- **shown as Reference Only**

---

7/09 0401444 1036294-15
HYDRAULIC DRIVE INSTALLATION

8" MODELS

WARNING! Do Not connect or disconnect hydraulic components when there is pressure within the system. Hydraulic systems are highly pressurized. Escaping hydraulic oil, even an invisible pin hole leak, can penetrate body tissue and cause serious injury. Use a piece of wood or cardboard when looking for leaks. Never use the hands or other body parts. When reassembling, make absolutely certain that all connections are tight. If injured by hydraulic oil escaping under pressure, see a doctor immediately. Serious infection or reaction can occur if medical attention is not received at once.

1. Bolt the head stub into the end of the flight using two 7/16" x 2 1/2" bolts and nylon locknuts.

2. Fasten the head bearing and flangettes to the outside of the head plate and secure using three (3) 5/16" x 3/4" carriage bolts and nylon locknuts (bolt heads will be on the inside of the head plate, do not tighten the bolts completely at this time). The angles on the head plate will face towards the discharge end as shown below.

3. Slide the head bearing and plate assembly onto the head stub and attach the plate to the incline tube flange using four (4) 3/8" x 1" bolts and nylon locknuts. NOTE: Use only the two upper and lower slotted holes in the head plate for now, the two holes on the sides will be used to fasten the motor mount when it is installed (the top and bottom holes in the flange will not be used).

4. Once the head plate has been attached, tighten the three carriage bolts securing the head bearing and tighten the bearing lock collar into place.

![Diagram of 8" Hydraulic Drive Installation](image)

Fig. 9
HYDRAULIC DRIVE INSTALLATION

8" MODELS (con’t.)

5. Insert the 1/4" x 1 1/4" square key into the keyway on the end of the head stub. Locate the flex coupler half with the roll pin holes drilled through the hub section. Slide this coupler half onto the end of the head stub and install the 3/8" x 2" roll pin (the flex coupler hub should be against the head bearing lock collar). Tighten the setscrew on the flex coupler to secure square key into place.

6. Attach the hydraulic motor to the outside of the motor mount as shown below. Secure the motor using four (4) 3/8" x 3/4" bolts and lock washers.

7. Slide the other flex coupler half onto the hydraulic motor shaft and secure using the key that was supplied with the motor, and the setscrew in the coupler.

8. Bolt the hydraulic motor and mount assembly to the head plate using four 1/2" x 1" bolts and nylon locknuts (the motor mount will bolt to the top and bottom sides of the head plate). Do not secure the hinged doors closed at this time.

9. Loosen the set screw in the coupler half that is on the hydraulic motor shaft. Position the coupler half so there is an 1/8" gap between both coupler halves. Install the coupler chain around the halves and secure the chain using the connecting links provided. Check to make sure the 1/8" gap is still valid and retighten the setscrew to secure the coupler half to the motor shaft.

10. Using two 3/8" x 1" bolts and nylon locknuts, secure the hinged doors to the head plate (and housing flange).

11. Apply a thin coat of clean hydraulic oil to the o-rings on the hose ends. Connect the hoses to the ports in the motor (do not use any type of thread sealant or tape on the o-ring end of the hoses). 

**NOTE:** The tractor connection fitting is not provided, obtain this fitting locally. The hose end the fitting will be connected to is a 1/2” male pipe thread.

12. Check all fittings, hose connections and fastening hardware to ensure everything is tight and properly assembled.
HYDRAULIC DRIVE INSTALLATION

10” MODELS

1. Bolt the head stub into the end of the flight using two 7/16” x 3” bolts and nylon locknuts.

2. Fasten the head bearing and flangettes to the outside of the head plate and secure using three (3) 5/16” x 3/4” carriage bolts and nylon locknuts (bolt heads will be on the inside of the head plate, do not tighten the bolts completely at this time). The angles on the head plate will face towards the discharge end as shown below.

3. Slide the head bearing and plate assembly onto the head stub and attach the plate to the incline tube flange using six (6) 3/8” x 1” bolts and nylon locknuts. NOTE: Do Not install the bolts in the holes on each side of the flange, these holes will be used to secure the hinged doors on the motor mount after it is installed.

4. Once the head plate has been attached, tighten the three carriage bolts securing the head bearing and tighten the bearing lock collar into place.

WARNING! Do Not connect or disconnect hydraulic components when there is pressure within the system. Hydraulic systems are highly pressurized. Escaping hydraulic oil, even an invisible pin hole leak, can penetrate body tissue and cause serious injury.

Use a piece of wood or cardboard when looking for leaks. Never use the hands or other body parts. When reassembling, make absolutely certain that all connections are tight. If injured by hydraulic oil escaping under pressure, see a doctor immediately. Serious infection or reaction can occur if medical attention is not received at once.
5. Insert the 1/4" x 1 1/4" square key into the keyway on the end of the head stub. Locate the flex coupler half with the roll pin holes drilled through the hub section. Slide this coupler half onto the end of the head stub and install the 3/8" x 2" roll pin (the flex coupler hub should be against the head bearing lock collar). Tighten the setscrew on the flex coupler to secure square key into place.

6. Attach the hydraulic motor to the outside of the motor mount as shown below. Secure the motor using two (2) 1/2" x 1 3/4" bolts and nylon locknuts.

7. Slide the other flex coupler half onto the hydraulic motor shaft and secure using the key that was supplied with the motor, and the setscrew in the coupler.

8. Bolt the hydraulic motor and mount assembly to the head plate using four 1/2" x 1" bolts and nylon locknuts (the motor mount will bolt to the top and bottom sides of the head plate). Do not secure the hinged doors closed at this time.

9. Loosen the set screw in the coupler half that is on the hydraulic motor shaft. Position the coupler half so there is an 1/8" gap between both coupler halves. Install the coupler chain around the halves and secure the chain using the connecting links provided. Check to make sure the 1/8" gap is still valid and retighten the setscrew to secure the coupler half to the motor shaft.

10. Using two 3/8" x 1" bolts and nylon locknuts, secure the hinged doors to the head plate (and housing flange).

11. Apply a thin coat of clean hydraulic oil to the o-rings on the hose ends. Connect the hoses to the ports in the motor (do not use any type of thread sealant or tape on the o-ring end of the hoses).

NOTE: The tractor connection fitting is not provided, obtain this fitting locally. The hose end the fitting will be connected to is a 1/2" male pipe thread.

12. Check all fittings, hose connections and fastening hardware to ensure everything is tight and properly assembled.
ASSEMBLY PROCEDURES

ELECTRIC DRIVE INSTALLATION

8" MODELS

The assembly instructions below will show a number in parenthesis ( ), this number refers to the item shown in the assembly illustration.

1. Install the head stub (Ref. 1) into the end of the incline flight and secure using two 7/16" x 2 1/2" bolts and nylon locknuts.

2. Bolt the head bearing (Ref. 2) to the head plate (Ref. 3) using two 7/16" x 1 1/2" bolts and nylon locknuts.

   Slide the head plate/bearing assembly onto the head stub and secure the head plate to the incline tube flange using eight 5/16" x 1" bolts, flat washers and nylon locknuts (use sixteen flat washers, one under bolt head and one under nylon locknut). Once properly secured, tighten the locking collar on the bearing.

3. Attach the belt guard back (Ref. 4) to the head plate using the four square holes that are farthest away from the large round hole in the center of the guard. Secure using four 3/8" x 3/4" carriage bolts and nylon locknuts.

4. Install the 1/4" x 2" square key (ref. 5) into the keyway on the end of the head stub.

   Slide the sheave (Ref. 6) onto the head stub until the sheave is as close as possible to the head bearing without contacting the bearing. Tighten the setscrews to secure sheave to head stub.

Fig. 13
5. Attach the motor mount support plate (Ref. 7) to the head plate using four 1/2” x 1” bolts and nylon locknuts (make sure the bolt heads are to the inside and the nuts on the outside).

6. Thread a 5/8” non-lock nut (Ref. 8) onto the threaded adjustment rod (Ref. 9) until the nut contacts the head of the rod. Install the threaded rod into the nut welded on the support plate, thread the rod all the way down.

7. Attach the motor mount (Ref. 10) to the support plate using the 5/8” x 13 1/8” pivot pin (Ref. 11) and cotter pins.

8. Install the electric motor and the motor pulley. Note: The motor pulley, motor and its mounting hardware are not furnished. Refer to Page 5 for information on motor and motor pulley size required. Use the chart below to determine mounting holes for motor location.

9. Install the belt (Ref. 12) around the sheave and motor pulley. Using a straight edge placed on the face of the pulleys, align the belt and secure motor pulley to motor shaft.

10. Tighten the belt using the 5/8” threaded adjustment rod. Once belt is tight, use the 5/8” nut to lock adjustment rod into place (belt tension should be approximately 1/2” of deflection when firmly pressing the belt in the center of the span between the sheave and motor pulley).

11. Slide four tinnerman nuts (Ref. 13) over the holes around the lip of the belt guard back (Ref. 4). Thread a wing bolt into each of the tinnerman nuts leaving about a 1/4” space between the wing bolt and nut.

12. Install the belt guard (Ref. 14) by holding the bottom portion of the guard away from the belt guard back while sliding the slots on the top part of the guard between the wing bolt and tinnerman nut. Once the top part of the guard is in position, swing the bottom portion of the guard down, align the slots between the wing bolts and tinnerman nuts and push into position. Tighten the wing bolts to secure belt guard in place.

---

**Table: Motor Mounting Information**

<table>
<thead>
<tr>
<th>8” Model Motor Size</th>
<th>Motor Frame Size</th>
<th>Bolt Dia. Req’d.</th>
<th>Mount in Holes Marked (•)</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td>A1   A2   A3   A4</td>
<td></td>
</tr>
<tr>
<td>3 hp</td>
<td>182T</td>
<td>3/8”  •    •    •    •</td>
<td></td>
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</tbody>
</table>

---

The motor pulley, the motor and its mounting hardware are not furnished.

Motor Mount

Motor Mount Support Plate

Head Plate

Belt Guard

Drive Belt

Adjusting Rod for Belt Tension

Motor Pulley (not furnished)

Front View

Shown as Reference Only

Side View

Shown as Reference Only
ASSEMBLY PROCEDURES

ELECTRIC DRIVE INSTALLATION

10” & 12” MODELS

The assembly instructions below will show a number in parenthesis ( ), this number refers to the item shown in the assembly illustration.

1. Install the head stub (Ref. 1) into the end of the incline flight and secure using two 7/16” x 3” bolts and nylon locknuts for 10” Models (two 1/2” x 4” bolts and nylon locknuts for 12” Models).

2. Bolt the head bearing (Ref. 2) to the head plate (Ref. 3) using four 1/2” x 1 1/2” bolts, lock washers and non-lock nuts.
   Slide the head plate/bearing assembly onto the head stub and secure the head plate to the incline tube flange using eight 3/8” x 1” bolts, flat washers and nylon locknuts (use sixteen flat washers, one under bolt head and one under nylon locknut).
   Once properly secured, tighten the locking collar on the bearing.

3. Attach the motor mount supports (Ref. 4) and belt guard brackets (Ref. 7) to the head plate. Secure using four 1/2” x 1 1/4” bolts, lock washers and non-lock nuts (use the holes at the front of the motor mount support when attaching to the head plate).
   NOTE: The guard brackets mount on the outside of the motor mount support. Make certain the motor mount support is arranged so the pivot shaft holes are on the right-hand side (as seen when looking from the intake end towards the discharge end).

4. Thread the adjusting rod (Ref. 9) down through the top of the motor mount support until it extends only two to three inches above the top of the support (final adjustment will be made after the motor has been mounted.
   Install the 3/4” non-lock nut (Ref. 8) to the bottom of the adjusting rod. The nut will be used to lock the adjusting rod in place after final adjustment has been made.

5. Position the motor mount plate (Ref. 5) over the motor mount support and align the pivot shaft holes.
   Install the pivot shaft (Ref. 6) through the holes and secure each end of the shaft with a 3/16” x 1 1/2” cotter pin.
   When properly installed, the left-hand side of the motor mount plate will rest on top of the adjustment rod, the right-hand side will be secured with the pivot shaft.
6. Attach the belt guard (Ref. 10) to the belt guard mount brackets using four 5/16” x 1” bolts, flat washers, lock washers and non-lock nuts (use the top mounting holes in the guard).

7. Insert the 3/8” x 3” key (Ref. 11) into the keyway on the end of the head stub and slide the sheave (Ref. 12) onto the shaft. Position the hub of the sheave as close to the head bearing as possible without contacting the bearing. Tighten the setscrews to lock the sheave into place.

8. Install the electric motor onto the motor mount plate using the mounting holes shown in the illustration below (the motor, its mounting hardware and the motor pulley are not furnished). IMPORTANT! make sure to use the proper size and speed motor to ensure satisfactory auger operation. See horsepower requirements on Page 5.

9. Install the motor pulley onto the motor shaft. Use a straight edge on the face of both the motor pulley and the auger sheave for proper alignment.

10. Install the drive belts (Ref. 13) and using the threaded adjustment rod, tighten the belts until proper tension has been achieved. There should be about 1/2" of deflection in each belt as it is firmly pressed in the center of the span between the pulley and sheave.

11. Once the belts are properly tensioned, tighten the 3/4” non-lock nut, on the bottom side of the motor mount plate, tight against the bottom of the plate to lock the adjustment rod into place.

<table>
<thead>
<tr>
<th>Motor Size HP</th>
<th>Motor Frame Size</th>
<th>Bolt Dia. Req’d.</th>
<th>Mount in Holes Marked (+)</th>
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</table>
## Parts List Table of Contents

<table>
<thead>
<tr>
<th>Category</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Decals</td>
<td>P-1</td>
</tr>
<tr>
<td>Hopper, Incline Tube &amp; Undercarriage</td>
<td>P-2 to P-5</td>
</tr>
<tr>
<td>8&quot; &amp; 10&quot; Roll-Away with Low Profile Hopper</td>
<td>P-2 to P-3</td>
</tr>
<tr>
<td>12&quot; Roll-Away with Standard Hopper</td>
<td>P-4</td>
</tr>
<tr>
<td>12&quot; Roll-Away with Low Profile Hopper</td>
<td>P-5</td>
</tr>
<tr>
<td>Hydraulic Drive Components</td>
<td>P-6</td>
</tr>
<tr>
<td>8&quot; and 10&quot; Models Only</td>
<td>P-6</td>
</tr>
<tr>
<td>Electric Drive Components</td>
<td>P-7 to P-8</td>
</tr>
<tr>
<td>8&quot; Models</td>
<td>P-7</td>
</tr>
<tr>
<td>10&quot; Models</td>
<td>P-8</td>
</tr>
<tr>
<td>12&quot; Standard Hopper Models</td>
<td>P-8</td>
</tr>
<tr>
<td>12&quot; Low Profile Hopper Models</td>
<td>P-8</td>
</tr>
</tbody>
</table>
SAFETY DECALS

Check all safety decals and replace any that are worn, missing or illegible. Safety decals can be obtained free of charge from your dealer or ordered directly from the factory. Hutchinson/Mayrath, 1-800-523-6993.

<table>
<thead>
<tr>
<th>REF. NO.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1001974</td>
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</tr>
<tr>
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<td>Caution Decal, General Statement</td>
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HOPPER, INCLINE TUBE & UNDERCARRIAGE COMPONENTS

8" & 10" Roll-Away with Low Profile Hopper
## HOPPER, INCLINE TUBE & UNDERCARRIAGE COMPONENTS

8" & 10" Roll-Away with Low Profile Hopper

<table>
<thead>
<tr>
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<tbody>
<tr>
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<td>Swing-Out Hopper for 10&quot; Models</td>
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<tr>
<td>9</td>
<td>6340A</td>
<td>U-Joint, 1&quot; Bore x 5&quot; long - 6N (8&quot; Models)</td>
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<tr>
<td></td>
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<td>Incline Flight Stub, 1&quot; x 6&quot; for 8&quot; Models</td>
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<td>1013684</td>
<td>Incline Flight Stub, 1 1/4&quot; x 5 3/4&quot; for 10&quot; Models</td>
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<td>12</td>
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<td>Incline Flight for 10&quot; Models</td>
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<tr>
<td>14</td>
<td>1005889</td>
<td>Rubber Sleeve</td>
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<tr>
<td>15</td>
<td>62967</td>
<td>Undercarriage Mount for 8&quot; Models</td>
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<td>62968</td>
<td>Undercarriage Mount for 10&quot; Models</td>
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<td>16</td>
<td>5033A1</td>
<td>Half Band for 8&quot; Models</td>
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<tr>
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<td>Half Band for 10&quot; Models</td>
</tr>
<tr>
<td>17</td>
<td>54944</td>
<td>Brace, Undercarriage (Upper 3-Hole)</td>
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<td>18</td>
<td>54945</td>
<td>Brace, Undercarriage (Lower 2-Hole)</td>
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<tr>
<td>19</td>
<td>1014387</td>
<td>Axle Weldment</td>
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<td>20</td>
<td>1014386</td>
<td>Axle Rod</td>
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<tr>
<td>21</td>
<td>54008</td>
<td>Flangette, Bearing (8&quot; Models)</td>
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<td>Flangette, Bearing (10&quot; Models)</td>
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<td>22</td>
<td>6382C</td>
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<td>23</td>
<td>1024827</td>
<td>Tail Stub, 1.65&quot; to 1&quot; x 7 3/8&quot; (8&quot; Models)</td>
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<td>1027506</td>
<td>Tail Stub, 1.25&quot; x 7 3/4&quot; (10&quot; Models)</td>
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PARTS LIST

HOPPER, INCLINE TUBE & UNDERCARRIAGE COMPONENTS

12” Roll-Away with Standard Hopper

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<tr>
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<th>PART NO.</th>
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<th>REF. NO.</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
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<tr>
<td>1</td>
<td>1031519</td>
<td>Swing-Out Hopper</td>
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<td>Incline Flight Stub, 2” to 1 1/4” x 6 1/2”</td>
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<td>Hopper Flight, 1/4” flighting, 52 1/4” lg.</td>
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<td>Incline Tube</td>
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<td>1034698</td>
<td>Top Cover, Connecting Box</td>
<td>13</td>
<td>1014358</td>
<td>Incline Flight</td>
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<td>1010384</td>
<td>Bearing Stub</td>
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<td>1051D</td>
<td>Bronze Bushing (w/brng. hngr.)</td>
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<td>5269A1</td>
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<td>Rubber Belting</td>
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<td>Brace, Undercarriage (Upper 3-Hole)</td>
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<td>7</td>
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<td>Retainer, Rubber Belting</td>
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<td>8</td>
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<td>Rubber Wheel, 8 1/4” O.D. x 5/8” Bore</td>
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<td>Axle Weldment</td>
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<td>9</td>
<td>1014J</td>
<td>U-Joint, 1 1/4” Bore x 7” long - 12N</td>
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<td>1014386</td>
<td>Axle Rod</td>
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<td>800209</td>
<td>Wheel, Undercarriage</td>
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**HOPPER, INCLINE TUBE & UNDERCARRIAGE COMPONENTS**

12” Roll-Away with Low Profile Hopper

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<th>PART NO.</th>
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<tbody>
<tr>
<td>1016272</td>
<td>Hopper Belting (6” x 161”)</td>
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<tr>
<td>1016263</td>
<td>Chain Guard</td>
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<tr>
<td>1022373</td>
<td>Tire, 10.25” x 3.25” hub w/5/8” bore</td>
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<tr>
<td>1016145</td>
<td>Low Profile Hopper</td>
</tr>
<tr>
<td>1016154</td>
<td>Coupler Box Lid</td>
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<tr>
<td>1016205</td>
<td>Stub Shaft, Flight</td>
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<tr>
<td>1016703</td>
<td>Flight, 1/4” x 7” O.D. 1.9T x 64” lg.</td>
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<tr>
<td>1025314</td>
<td>Power Shaft</td>
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<tr>
<td>1016204</td>
<td>U-Joint, 50° C.V.</td>
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<tr>
<td>1016140</td>
<td>Flight Support Bearing</td>
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<td>6303D</td>
<td>Bronze Bushing, 1” (w/sppt brng)</td>
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<tr>
<td>1016150</td>
<td>Lid Strap</td>
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<td>1013680</td>
<td>Belt Retainer Clip, 9”</td>
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<tr>
<td>1016602</td>
<td>Belt Retainer Clip, 5”</td>
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<tr>
<td>1016578</td>
<td>Hopper Wheel Axle</td>
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<tr>
<td>635164</td>
<td>Hair Pin, .094” dia. x 2” long</td>
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<tr>
<td>4020A1</td>
<td>Key, .250” x 1” long</td>
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<tr>
<td>6815D</td>
<td>Sprocket, #50 15T (1” bore)</td>
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**Reference**

Incline Flight Stub (Item No. 24)
HYDRAULIC DRIVE COMPONENTS

8” & 10” Models Only

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<tr>
<td>1</td>
<td>1032474</td>
<td>Head Plate f/8”</td>
<td>6</td>
<td>3146A91</td>
<td>Chain, Flex Coupler f/8”</td>
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<td>Head Plate f/10”</td>
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<td>41478</td>
<td>Chain, Flex Coupler f/10”</td>
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<tr>
<td>2</td>
<td>1004173</td>
<td>Head Stub f/8”</td>
<td></td>
<td>41478</td>
<td>Flex Coupler Half f/8”</td>
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<td>1009873</td>
<td>Head Stub f/10”</td>
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<td>(for head stub)</td>
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<td>3</td>
<td>3029A2</td>
<td>Head Bearing Flangette f/8”</td>
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<td>Flex Coupler Half f/10”</td>
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<td>4</td>
<td>3027A1</td>
<td>Head Bearing f/8”</td>
<td>8</td>
<td>6318C</td>
<td>Roll Pin, 3/8” x 2” (f/8” &amp;10”)</td>
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<td>3027A1</td>
<td>Head Bearing f/10”</td>
<td>9</td>
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<td>Motor Mount f/8”</td>
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<td>3198A1</td>
<td>Flex Coupler Half f/8”</td>
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<td>Hydraulic Motor f/8”</td>
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<td>3200A1</td>
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<td>41464</td>
<td>Hydraulic Motor f/10”</td>
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<td>(for motor shaft)</td>
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<td>420030</td>
<td>Hydraulic Hose</td>
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The hydraulic hoses are 1/2” x 72” with 7/8-14 O-Ring fitting on motor connection end and 1/2” male pipe thread for tractor connection (tractor connection fittings are not furnished).

Hydraulic Motor - 8” Models, Char-Lynn Model 101-1011 H-Series, 6.2 cu.in. w/7/8-14 O-ring ports
Hydraulic Motor - 10” Models, Parker Model 113A-071-AS-O-F, 110A Series, 7.1 cu.in. w/7/8-14 O-ring ports
ELECTRIC DRIVE COMPONENTS

8" Models

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<tr>
<th>REF. NO.</th>
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<td>1027804</td>
<td>Head Plate</td>
<td>11</td>
<td>1042145</td>
<td>Pivot Shaft (motor mount plate)</td>
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<td>4</td>
<td>1027782</td>
<td>Belt Guard Back</td>
<td>12</td>
<td>40117</td>
<td>Belt, B-50</td>
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<td>4045A1</td>
<td>Key, 1/4&quot; sq. x 2&quot; long</td>
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<td>Nut, Tinnerman, 1/4-20</td>
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<td>40150</td>
<td>Sheave, 12&quot; 1-belt, 1 1/4&quot; bore</td>
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<td>Belt Guard</td>
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<td>7</td>
<td>1042262</td>
<td>Motor Mount Support</td>
<td>15</td>
<td>1013131</td>
<td>Wing Bolt, 1/4-20 x 1/2&quot;</td>
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<td>8</td>
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<td>Nut, 5/8-11 non-lock</td>
<td>16</td>
<td>33161</td>
<td>Cotter pin, 1/8&quot; x 1&quot;</td>
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ELECTRIC DRIVE COMPONENTS

10", 12" Standard and 12" Low Profile Models

When reference in the parts list is made to the 12" Models, it includes both the Standard and the Low Profile Models.

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<tr>
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<td>4</td>
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<td>Motor Mount Support f/ 10&quot; Models</td>
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<td>Pivot Shaft, Motor Mount, f/ 10&quot; Models</td>
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<tr>
<td>10</td>
<td>1009101</td>
<td>Belt Guard f/ 10&quot; Models</td>
</tr>
</tbody>
</table>
| 11       | 1038D    | Key, 1/4" sq x 2" lg (f/ 10"
| 12       | 40158    | Sheave, 2-B, 15" w/1 1/4" bore (for 10" models) |
| 13       | 40122    | Belt, B-62 f/ 10" & 12" Models |
| 14       | 3337A1   | Cotter Pin, 3/16" x 1 1/2" (10" & 12" models) |

7/09 0401461 1036294-P8