

# 6" & 10" HORIZONTAL BIN UNLOADING AND HORIZONTAL POWER HEAD

## OWNER'S & OPERATOR'S MANUAL

Effective July 20, 2001

Publication No. 1022587



***Hutchinson/Mayrath***

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# **Hutchinson/Mayrath**

A Division of **GLOBAL Industries, Inc.**

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- 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 (power & wiring included).
  - 3) Unauthorized alterations 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, non-abrasive 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.

## 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 that 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 and be alert to the possibility of personal injury or death.



# BE ALERT! YOUR SAFETY IS INVOLVED.

## 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.

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## SERIAL NUMBER

To ensure efficient and prompt service, please furnish us with the model and serial number of your auger in all correspondence or other contact. (See page 9.)

# OPERATOR QUALIFICATIONS

Operation of this auger 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, they 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 augers. It is your responsibility to know what these regulations are in your own 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 the safe operation and servicing of all equipment with which the employee is, or will be involved."\*
- 3. Unqualified persons are to stay out of the work area.
- 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 of this auger. We include this sign off sheet for your convenience and personal record keeping.

DATE	EMPLOYER SIGNATURE	EMPLOYEE SIGNATURE

# MACHINE INSPECTION

After delivery of your new auger and/or completion of assembly and before each use, inspection of the machine is mandatory. This inspection should include, but not be limited to:

- 1. Check to see that all guards listed in the assembly instructions are in place and secured and functional.
- 2. Check all safety signs and replace any that are worn, missing or illegible. They are listed in the parts section. Safety signs may be obtained from your Dealer or ordered from the factory.
- 3. Are all fasteners tight?

## DESIGNATED WORK AREA

Before starting the auger, a designated work area should be established around it.

**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 area! Trespass into the work area by anyone not involved in the actual operation shall result in an immediate shutdown 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.**

## OPERATING PROCEDURES

The horizontal unloading kit includes a section of flanged tubing (with flight and stubs) which bolts to the flange on the unloading tube. The motor is mounted on top of the flanged tube. All mounts are designed to take the proper size motor. The head bearing is sealed and self-aligning. Drive parts include auger sheave and "B" belts for dependable service.

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.



**DO NOT enter the grain bin unless all power driven equipment has been shut down and locked out.**

## ELECTRIC MOTOR DRIVES

Always use a motor with required H.P. suggested in the chart on page 5. 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 Electrical Code and all local and state codes.

A magnetic starter should be used to protect your motor when starting and stopping. It should stop the motor in case of power interruption, conductor fault, low voltage, circuit interruption or motor overload. Then the motor must be restarted manually. Some motors have built-in thermal overload protection. If this type motor is used, use only those with manual reset.

**Reset and motor starting controls must be located so that the operator has full view of the entire operation.**



**A main power disconnect switch capable of being locked only in the OFF position shall be provided. This shall be locked whenever work is being done on the Horizontal Bin Unloading Auger.**

The horsepower recommendations are based on clean, dry shelled corn or wheat. High moisture grain (above 15%) will require greater power. The maximum possible capacity will be less with high moisture grain than with dry grain. Use chart on next page to determine size of motor required.

# OPERATING INSTRUCTIONS - CONT.

## ELECTRIC MOTOR DRIVES - CONT.

### HORSEPOWER REQUIREMENTS

Bin Dia.	6" BIN UNLOADER		8" BIN UNLOADER	
	Used With Standard Unloading Flight H.P.*	Used With Power Sweep Units H.P.*	Used With Standard Unloading Flight H.P.*	Used With Power Sweep Units H.P.*
14'-16'	3/4	3	1 1/2	3
17'-19'	1	3	2	3
20'-22'	1	3	2	5
23'-25'	1	3	3	5
26'-28'	1 1/2	5	3	5
29'-31'	2	5	5	5
32'-34'	2	5	5	5
35'-37'	2	5	5	5
41'-43'	-	-	5	7 1/2
47'-49'	-	-	5	7 1/2

\*For higher moisture grain (up to 25%) the next larger motor may be used as a maximum.

### FLIGHT SPEED INFORMATION

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

1. If the flight speed is too fast, excessive wear will result. (See chart below.)
2. If the flight speed is too slow and the auger flighting is permitted to "load-up", high torque will be required to turn the auger flighting, and damage to the auger can result. Use the bin well slide gate to control the amount of grain fed into the unloading tube. (See chart below.)



**Disconnect power before resetting motor overloads.  
Make certain electric motor is grounded.**

Model	*Motor Pulley Dia.	Drive Pulley Dia.	Recomm. Auger Speed	Max. Auger Speed	Min. Auger Speed
6" Std. and Power Well Units	3.5	12	510	700	450
8" Std. Bin Unloader	3.0	12	438	600	425
8" Power Head for Use w/Power Well	3.5	15	408	500	325

\*Motor pulleys are not furnished with the auger.

# OPERATING INSTRUCTIONS - CONT.

## START-UP INFORMATION

**Make certain everyone is clear before operating equipment.**

**The operator shall be aware of any unusual vibrations, noises and the loosening of any fasteners.**



**Keep all safety shields and devices in place.**

**Keep hands, feet and clothing away from moving parts.**

**Shut off and lock out power to adjust, service or clean.**

Start the electric motor that operates the auger. Then, begin to open the slide gate in the center bin well. Position the slide gate so grain flows from the auger. **Do not** overload the motor by opening the slide gate too far.

During the operation of the auger, one person shall be in a position to monitor the operation. Inspect the drive before adding power and know how to shut down in an emergency. (See page 7.) Visually inspect the auger periodically during operation.

## BREAK-IN INFORMATION

Any screw conveyor when it is new or after it sets idle for a season should go through a "break-in" period. The auger should be run at partial capacity until the screw becomes polished and smooth before attempting full capacity. A failure will most likely occur when run full before it has "polished up". It is recommended that several hundred bushels of grain be augered at partial capacity.

Never operate the auger when 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 the auger to "freeze-up".

1. If the flight speed is in excess of what is recommended, excessive wear will result.
2. If the flight speed is slow and the auger flighting is permitted to "load up", high torque will be required to turn the auger flighting and damage to the auger can result. Use the bin well slide gate to control the amount of grain fed into the auger.

## OPERATING CAPACITIES

The results or capacities of screw conveyors or augers can vary greatly under varying conditions. Different materials, moisture content, amount of foreign matter, methods of feeding and speed all play a role in the performance of the auger. Twenty-five (25%) moisture could cut capacity back by as much as 40% under some conditions.

# OPERATING PROCEDURES

## FULL LOAD OPERATION



Observe work area restrictions.  
Make certain everyone is clear before operating equipment.

### TO START AUGER

1. Start electric motor before conveying grain.

### NORMAL OPERATION

1. Open the slide gate in the center bin well until full load. It is unlikely the slide gate can be opened fully without overloading the auger. Always close the slide gate to allow the auger to empty before stopping.
2. Remove all the grain that will flow into the center bin well before opening any intermediate wells.

### TO STOP AUGER

1. Close the slide gate to allow the auger to empty before stopping.
2. Shut off electric motor and lockout.

## SHUTDOWN

### A. NORMAL SHUTDOWN

Make certain that the bin well slide gates are closed to permit the unloading tube to clean out before stopping the unit. Before the operator leaves the work area, the power source shall be locked out.

### B. EMERGENCY SHUTDOWN

Should the auger be immediately shutdown under load - disconnect and lockout the power source. Close the bin wells.

**NOTE: Starting the unit under load may result in damage to the auger. Such damage is considered abuse of the equipment.**

Reconnect power source and clear auger gradually.



Whenever you must service or adjust your equipment, make sure to stop motor and lockout your power source!

## LOCKOUT

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

**IMPORTANT: Use a main power disconnect switch capable of being locked only in the off position.**

## CLEAN-UP

1. Check to see that all guards listed in the assembly instructions are in place and secured and functional.
2. Check all safety signs and replace any that are worn, missing or illegible. The safety signs are listed in the parts section of this manual. Safety signs may be obtained from your Hutchinson dealer or ordered from the factory.
3. Are all fasteners tight?

## **OPERATING INSTRUCTIONS - CONT.**

### **TROUBLE SHOOTING**

#### **AUGER VIBRATION**

Driving belt may be over tightened, putting head stub and flight in a bind. 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.

#### **LOW CAPACITY**

The auger may not be getting enough grain. Check to make sure the bin well slide gate is open.

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

#### **AUGER PLUGS**

The auger may be getting too much grain, causing "jamming" inside the housing.

The motor may be too small or wired improperly. (See HP requirements, page 5.)

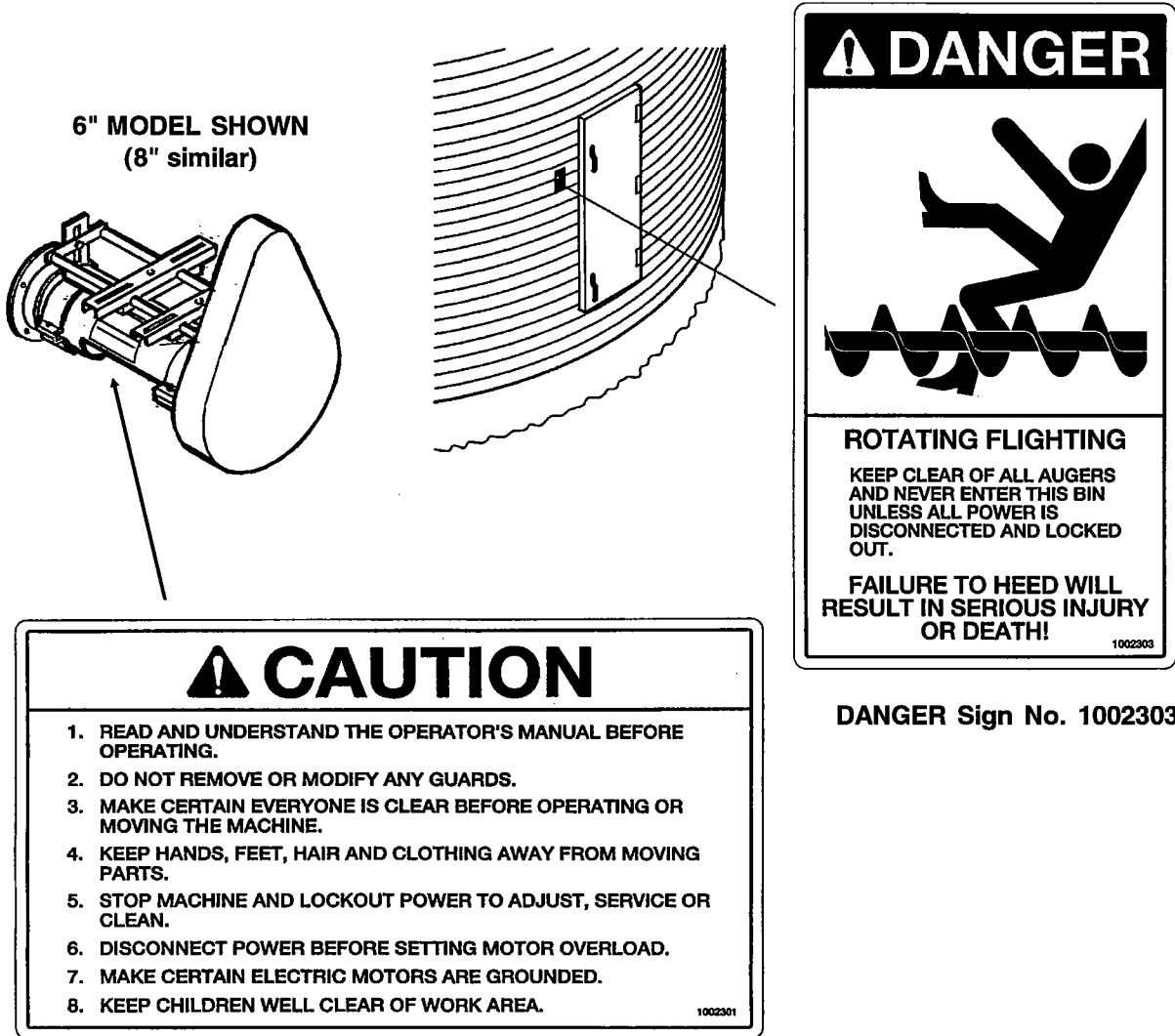
If wet grain or other hard-to-move material is being augered, use a larger size motor than recommended for normal use. (See footnote to HP chart, page 5.)

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

## SAFETY DECALS

Check components as specified below to insure that safety decals are present and in good condition. If a decal cannot be easily read for any reason or has been painted over, replace it immediately. Decals may be ordered through your dealer.

**DANGER** Sign No. 1002303 was supplied with the bin unloading equipment. This safety sign should be applied to the side of the bin near the opening, so it will be viewed by people entering into the bin or storage building.



**CAUTION** Sign No. 1002301

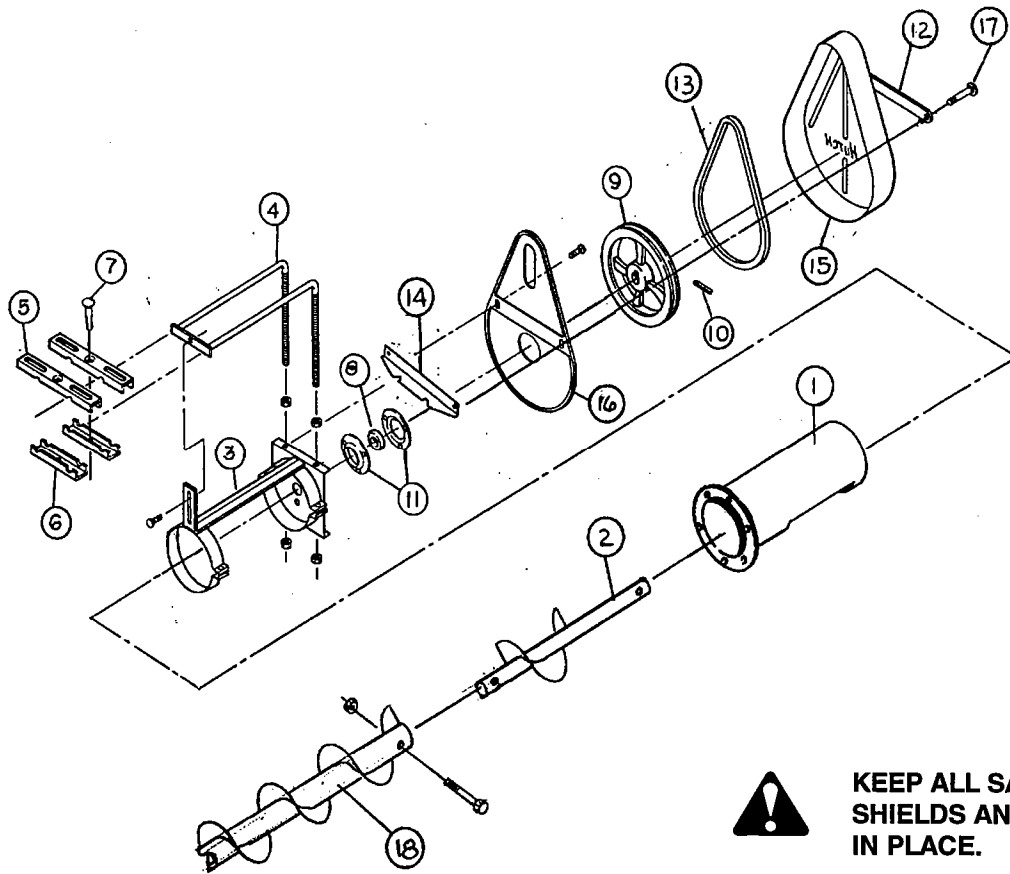
**DANGER** Sign No. 1002303

## SERIAL NUMBER

To insure efficient and prompt service, please furnish us with the model and serial number of your auger in all correspondence or other contacts. The serial plate is located on the motor mount frame.

# ASSEMBLY INSTRUCTIONS - CONT.

## 6" HORIZONTAL BIN UNLOADER (1-BELT DRIVE)



**KEEP ALL SAFETY SHIELDS AND DEVICES IN PLACE.**

**NOTE:** Head plate (3) and rod assembly (4) have already been assembled at the factory.

1. Bolt head bearing (8) and retainers (11) to head plate assembly (3) with three 5/16" x 3/4" carriage bolts, lockwashers and nuts.
2. Install belt guard mounting angle (14) under top nuts on head plate assembly (3).
3. Slide head plate (3) over discharge end of auger housing (1) and tighten clamp bolts (5/16" x 1 1/2" hex head bolts and nuts).
4. Attach belt guard back cover (16) to belt guard mounting angle (14) using two 1/4" x 3/4" carriage bolts, flat washers and nuts.  
NOTE: Leave carriage bolts loose until motor, pulleys and belts are installed.
5. Install the 1B 12" pulley (9) onto head flight shaft (2) with 5/16" x 2" long roll pin (10).
6. Locate the head pulley (9) in as close as possible to the head plate. The pulley hub should be up next to the head bearing (touching). When everything is set, tighten lock collar on the head bearing.
7. Position motor mount straps (top) (5) and motor mount clips (bottom) (6) on rods (4) and clamp together with 3/8" x 2 1/2" carriage bolts and nuts.
8. Install electric motor on motor mount and pulley on motor. (Not furnished). Install B46 belt (13) and tighten belt with four adjusting nuts on rod assembly (4). Do not overtighten driving belt or result will be excessive vibration and flight shaft breakage at the bearing.
9. Tighten upper end of motor mount rod assembly (4) to slot in head plate assembly (3) using one 5/16" x 3/4" carriage bolt, flat washer, lockwasher and nuts.

# ASSEMBLY INSTRUCTION - CONT.

## 6" HORIZONTAL BIN UNLOADER

10. Adjust belt guard back cover so that the belts and pulleys will clear the belt guard when it is installed. Tighten carriage bolts securing belt guard back cover to belt guard mounting angle (14).
11. Attach belt guard (15) to mounting angle using clamp bar (12) and two 1/4" x 4 1/2" (17) hex head bolts and nuts.  
NOTE: Install belt guard so that its sides are inside of flange on belt guard back cover (16).
12. Bolt the horizontal bin unloading flight (18) to the head unloading flight (2) using two 3/8" x 1 3/4" long (grade 5) hex head bolts and nylon locknuts.

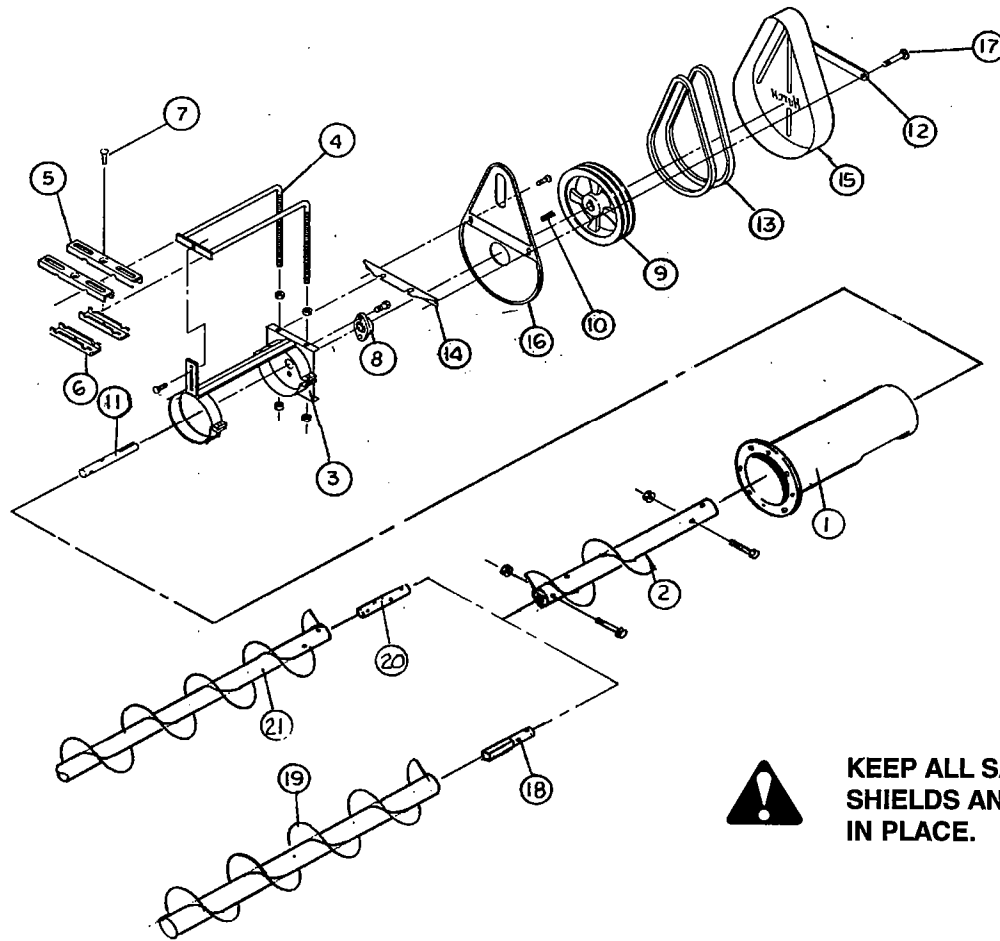
## PARTS LIST

### FOR 6" HORIZONTAL BIN UNLOADER USED WITH STANDARD BIN WELLS (1-BELT DRIVE)

REF. NO.	PART NO.	DESCRIPTION
1	6800C	16" long x 6" dia. Tube with Outlet and Flange
2	1022580	Head Unloading Flight 23 7/8" long (for Standard Bin Wells)
3	6329A	Head Plate Assembly
4	6319A	Motor Mount Rod Assembly
5	6853A	Top Motor Mount Strap
6	6854A	Bottom Motor Mount Clip
8	6390D	1" Bearing, with Lock Collar
9	40184	1B Groove Sheave 12" O.D. with 1" Bore
10	6386C	5/16" Roll Pin x 2" long
11	6383C	Bearing Retainer
12	6324C	Belt Guard Clamp Bar x 14" long
13	40115	B46 Belt
14	6308A	Belt Guard Mounting Angle x 14" long
15	50925A1	Belt Guard
16	50926A1	Belt Guard Back Cover
17	33038	Bolt 1/4" x 4 1/2" Hex Head
18	1022323	Bin Unloading Auger Flighting f/ 14'-16' Bin (8'-9" lg.)
18	1022324	Bin Unloading Auger Flighting f/ 17'-19' Bin (10'-9" lg.)
18	1022325	Bin Unloading Auger Flighting f/ 20'-22' Bin (11'-9" lg.)
18	1022326	Bin Unloading Auger Flighting f/ 23'-25' Bin (13'-3" lg.)
18	1022327	Bin Unloading Auger Flighting f/ 26'-28' Bin (14'-9" lg.)
18	1022328	Bin Unloading Auger Flighting f/ 29'-31' Bin (16'-4" lg.)
18	1022329	Bin Unloading Auger Flighting f/ 32'-34' Bin (18'-3" lg.)
18	1022330	Bin Unloading Auger Flighting f/ 35'-37' Bin (19'-3" lg.)

## ASSEMBLY INSTRUCTIONS - CONT.

### 6" HORIZONTAL BIN UNLOADER (2-BELT DRIVE) USED WITH STANDARD BIN WELLS AND POWER SWEEP BIN WELLS



**KEEP ALL SAFETY  
SHIELDS AND DEVICES  
IN PLACE.**

**NOTE:** The head plate (3) and rod assembly (4) have already been assembled at the factory.

1. Bolt head bearing (8) to head plate assembly (3) using 3/8" x 1" long hex head bolts with lockwashers and nuts.
2. Install belt guard mounting angle (14) under top nuts on head plate assembly (3).
3. Slide head plate (3) over discharge end of auger housing (1) and tighten clamp bolts (5/16" x 1 1/2" hex head bolts and nuts).
4. Attach belt guard back cover (16) to the belt guard mounting angle (14) using two 1/4" x 3/4" carriage bolts, flat washers and nuts.  
**NOTE:** Leave carriage bolts loose until motor, pulleys and belts are installed.
5. Bolt head stub (11) into the head flight (2) using two 3/8" x 1 3/4" long (grade 5) hex head bolts and locknuts.
6. Slide the head stub (11) through the head bearing (8) that is mounted on the head plate assembly (3). Install the 2B 12" pulley (8) into head stub (11) using 1/4" x 2" long square drive key (10). Locate the pulley (9) in as close as possible to the head bearing (8). When everything is set, tighten lock collar on the head bearing.

# ASSEMBLY INSTRUCTION - CONT.

## 6" HORIZONTAL BIN UNLOADER

7. Position motor mount straps (top) (5) and motor mount clips (bottom) (6) on rods (4) and clamp together with 3/8" x 2 1/2" carriage bolts and nuts.
8. Install electric motor on motor mount and pulley on motor. (Not furnished). Install B46 belt (13) and tighten belt with four adjusting nuts on rod assembly (4). Do not overtighten driving belt or result will be excessive vibration and flight shaft breakage at the bearing.
9. Tighten upper end of motor mount rod assembly (4) to slot in head plate assembly (3) using one 5/16" x 3/4" carriage bolt, flat washer, lock washer and nut.
10. Adjust belt guard back cover so that the belts and pulleys will clear the belt guard when it is installed. Tighten carriage bolts securing belt guard back cover to mounting angle (14).
11. Attach belt guard (15) to mounting angle using clamp bar (12) and two 1/4" x 4 1/2" hex head bolts (17) and nuts.  
NOTE: Install guard so that its sides are inside of flange on belt guard back cover (16).
12. For standard unloading flight, bolt round connecting stub (20) into head flight (2) and for power sweep unloading flight bolt square to round adapter (18) in the head flight (2) using two 3/8" x 1 3/4" long (grade 5) hex head bolts and locknuts.

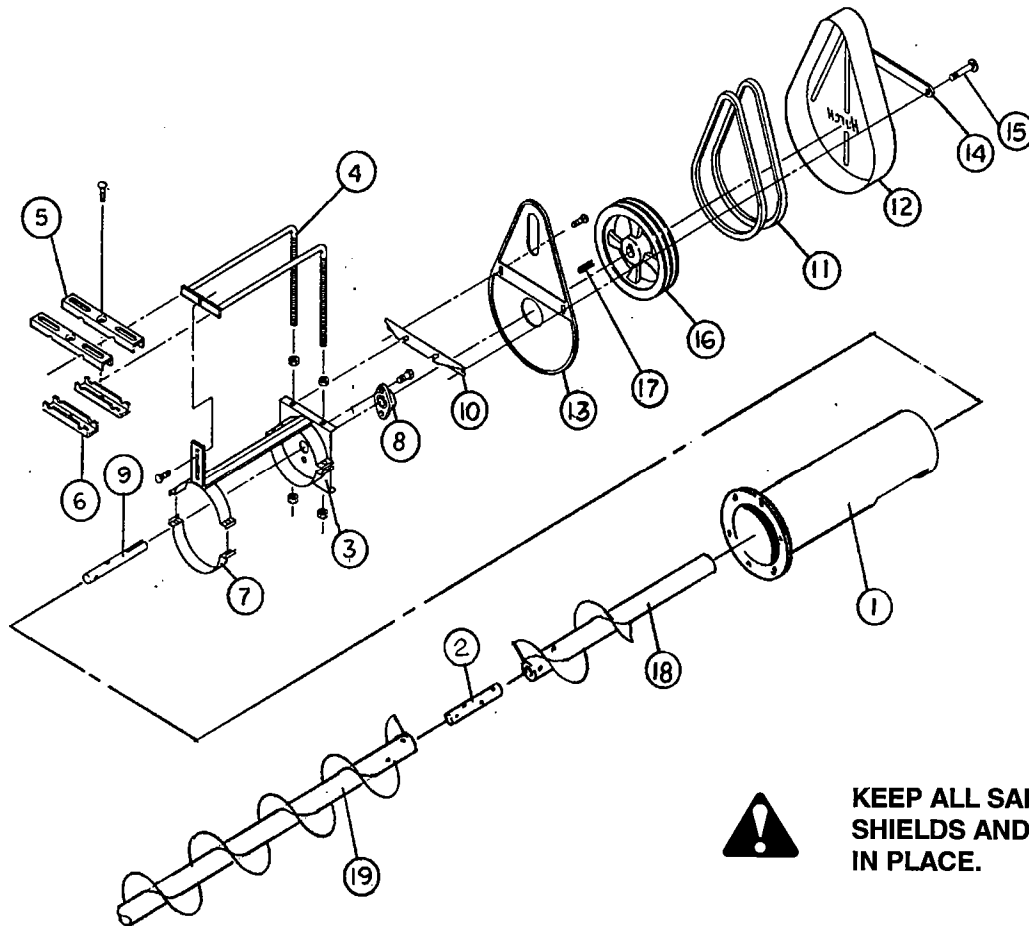
## PARTS LIST

### FOR 6" HORIZONTAL BIN UNLOADER (2-BELT DRIVE) USED WITH STANDARD WELLS AND WITH POWER WELLS

REF. NO.	PART NO.	DESCRIPTION
1	6800C	16" long x 6" dia. Tube with Outlet and Flange
2	6814P	Head Unloading Flight 15" long
3	1703C	Head Plate Assembly
4	6319A	Motor Mount Rod Assembly
5	6853A	Top Motor Mount Strap
6	6854A	Bottom Motor Mount Clip
8	6818D	1" Bearing, 2-hole flange with Lock Collar
9	40115	2B Groove Sheave 12" O.D. with 1" Bore
10	4045A1	Square Drive Key 1/4" x 2" long
11	6332G	Head Stub 1" x 10" long
12	6324C	Belt Guard Clamp Bar x 14" long
13	40115	B46 Belt
14	6308A	Belt Guard Mounting Angle x 14" long
15	50925A1	Belt Guard
16	50926A1	Belt Guard Back Cover
17	33038	Bolt 1/4" x 4 1/2" Hex Head
18	6840D	Square to Round Adapter 1" x 9 3/4" lg.
19	6801P	Bin Unloading Auger Flighting f/ 14'-16' Bin (10'-3/4" lg.)
19	6802P	Bin Unloading Auger Flighting f/ 17'-19' Bin (12'-3/4" lg.)
19	6803P	Bin Unloading Auger Flighting f/ 20'-22' Bin (13'-3/4" lg.)
19	6804P	Bin Unloading Auger Flighting f/ 23'-25' Bin (14'-6 3/4" lg.)
19	6805P	Bin Unloading Auger Flighting f/ 26'-28' Bin (16'-3/4" lg.)
19	6806P	Bin Unloading Auger Flighting f/ 29'-31' Bin (17'-6 3/4" lg.)
20	1722C	Connecting Stub for Standard Bin Flight
21	---	Refer to Ref. 18 on page 11 for Unloading Flight used with Standard Bin Wells

# ASSEMBLY INSTRUCTIONS - CONT.

## 8" HORIZONTAL BIN UNLOADER



**KEEP ALL SAFETY SHIELDS AND DEVICES IN PLACE.**

**NOTE:** Head plate (3) and rod assembly (4) have already been assembled at the factory.

1. Bolt two-hole flange bearing (8) to head plate assembly (3) using two 7/16" x 1 1/4" hex head bolts, lockwashers and nuts.
2. Install belt guard mounting angle (10) under top nuts on head plate assembly.
3. Slide head plate (3) over discharge end and tighten clamps (7) using four 5/16" x 1 1/2" hex head bolts and nuts.
4. Attach belt guard back (13) to belt guard mounting angle (10) using two 1/4" x 3/4" carriage bolts, flat washers and nuts.  
NOTE: Leave carriage bolts loose until motor, pulleys and belts are installed.
5. Bolt head stub (9) into head flight (18) using two 7/16" x 2 1/2" long (grade 5) hex head bolts and locknuts.
6. Slide head drive stub (9) through bearing enough to install 12" pulley (16) on stub with 1/4" x 2" square drive key (17). Tighten lock collar on bearing (8).
7. Position motor mount straps (top) (5) and motor mount clips (bottom) (6) on rods (4) and clamp together with two 3/8" x 2 1/2" carriage bolts and nuts.
8. Install electric motor on motor mount and pulley on motor. (Not furnished). Install B48 belts (11) and tighten belts with four adjusting nuts on rod assembly (4). Do not overtighten driving belt or result will be excessive vibration and flight shaft breakage at the bearing.

# ASSEMBLY INSTRUCTION - CONT.

## 8" HORIZONTAL BIN UNLOADER

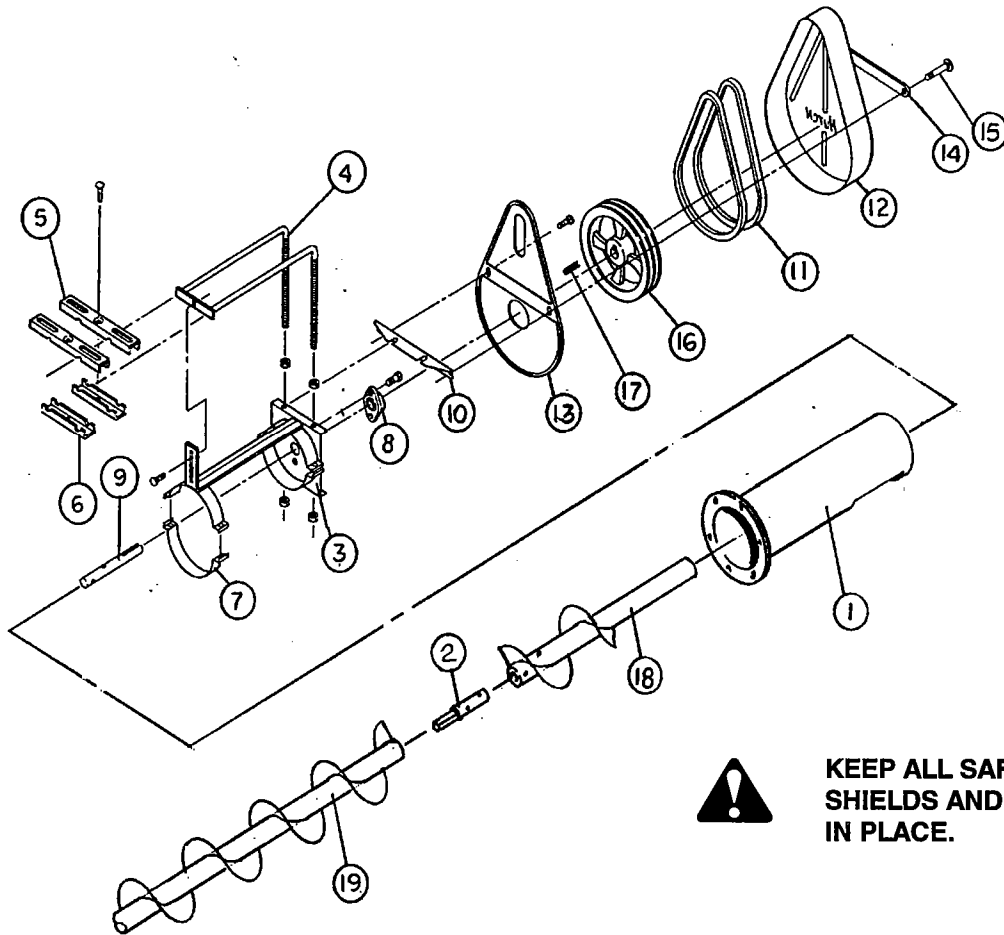
9. Adjust belt guard back so that the belts and pulleys will clear the belt guard when it is installed. Tighten carriage bolts securing belt guard back to belt guard mounting angle (10).
10. Attach belt guard (12) to mounting angle using clamp bar (14) and two 1/4" x 4 1/2" hex head bolts (15) and nuts.  
NOTE: Install belt guard so that its sides are inside of flange on belt guard back.
11. ON STANDARD BIN WELL UNITS:  
Use connecting stub (2) to fasten head flight (18) and unloading flight (19) together. Use (4) 7/16" x 2 1/2" long (grade 5) bolts and locknuts to fasten connecting stub to flights.

## PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
1	8801C	24" long x 8" dia. Tube with Outlet and Flange
2	8320A	Round Connecting Stub
3	8324A	Head Plate Assembly
4	8318A	Motor Mount Rod Assembly
5	6853A	Top Motor Mount Strap
6	6854A	Bottom Motor Mount Clip
7	5033A1	8" Half Band, 2" wide
8	8325A	2-hole Flange Bearing with Lock Collar, 1 1/4" Bore
9	8379D	Head Stub, 1 1/4" x 9 1/2" long
10	6308A	Belt Guard Mounting Angle
11	40116	B48 Belt
12	50925A1	Belt Guard
13	50926A1	Belt Guard Back
14	6324C	Belt Guard Clamp Bar (14" lg.)
15	33038	Bolt 1/4" x 4 1/2" Hex Head
16	40152	2B Groove Sheave 12" O.D w/1 1/4" Bore (2-Belt Drive)
16	40150	1B Groove Sheave 12" O.D. w/1 1/4" Bore (1-Belt Drive)
17	4045A1	Square Key 1/14" x 2" long
18	630468	Head Flight 23" long
19	8831D	Bin Unloading Auger Flighting f/14'-16' Bin (8'-10" lg.)
19	8832D	Bin Unloading Auger Flighting f/17'-19' Bin (10'-10" lg.)
19	8833D	Bin Unloading Auger Flighting f/20'-22' Bin (11'-10" lg.)
19	8834D	Bin Unloading Auger Flighting f/23'-25' Bin (13'-4" lg.)
19	8835D	Bin Unloading Auger Flighting f/26'-28' Bin (14'-10" lg.)
19	8836D	Bin Unloading Auger Flighting f/29'-31' Bin (16'-4" lg.)
19	12153	Bin Unloading Auger Flighting f/32'-34' Bin (18'-4" lg.)
19	8838D	Bin Unloading Auger Flighting f/35'-37' Bin (19'-4" lg.)
19	1022402	Bin Unloading Auger Flighting f/41'-43' Bin (22'-10" lg.)
19	1022403	Bin Unloading Auger Flighting f/47'-49' Bin (25'-10" lg.)

# ASSEMBLY INSTRUCTIONS - CONT.

## 8" HORIZONTAL BIN UNLOADING KIT USED WITH POWER SWEEP BIN WELL



**KEEP ALL SAFETY  
SHIELDS AND DEVICES  
IN PLACE.**

**NOTE:** Head plate (3) and rod assembly (4) have already been assembled at the factory.

1. Bolt two-hole flange bearing (8) to head plate assembly (3) using two 7/16" x 1 1/4" hex head bolts, lockwashers and nuts.
2. Install belt guard mounting angle (10) under top nuts on head plate assembly.
3. Slide head plate (3) over discharge end and tighten clamps (7) using four 5/16" x 1 1/2" hex head bolts and nuts.
4. Attach belt guard back (13) to belt guard mounting angle (10) using two 1/4" x 3/4" carriage bolts, flat washers and nuts.  
NOTE: Leave carriage bolts loose until motor, pulleys and belts are installed.
5. Bolt head stub (9) into head flight (18) using two 7/16" x 2 1/2" long (grade 5) hex head bolts and locknuts.
6. Slide head drive stub (9) through bearing enough to install 15" O.D. 2-groove pulley (16) on stub with 1/4" x 2" square drive key (17). Tighten lock collar on bearing (8).
7. Position motor mount straps (top) (5) and motor mount clips (bottom) (6) on rods (4) and clamp together with two 3/8" x 2 1/2" carriage bolts and nuts.
8. Install electric motor on motor mount and pulley on motor. (Not furnished). Install B57 belts (11) and tighten belts with four adjusting nuts on rod assembly (4). Do not overtighten driving belt or result will be excessive vibration and flight shaft breakage at the bearing.

# ASSEMBLY INSTRUCTION - CONT.

## 8" HORIZONTAL BIN UNLOADER USED WITH POWER SWEEP BIN WELLS

9. Adjust belt guard back so that the belts and pulleys will clear the belt guard when it is installed. Tighten carriage bolts securing belt guard back to belt guard mounting angle (10).
10. Attach belt guard (12) to mounting angle using clamp bar (14) and two 1/4" x 5 1/2" hex head bolts (15) and nuts.  
NOTE: Install belt guard so that its sides are inside of flange on belt guard back.
11. ON POWER WELL UNITS:  
Use square to round stub (2) to connect head flight (18) and unloading flight (19) together. Use (2) 7/16" x 2 1/2" long (grade 5) bolts and locknuts to fasten connecting stub to head flight.

## PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
1	8801C	24" long x 8" dia. Tube with Outlet and Flange
2	1018917	Square to Round Adapter 1" x 7 1/2" lg. f/Power Sweep <u>only</u>
3	8324A	Head Plate Assembly
4	8318A	Motor Mount Rod Assembly
5	6853A	Top Motor Mount Strap
6	6854A	Bottom Motor Mount Clip
7	5033A1	8" Half Band, 2" wide
8	8325A	2-hole Flange Bearing with Lock Collar, 1 1/4" Bore
9	8326A	Head Stub, 1 1/4" x 10 1/2" long
10	50732A1	Belt Guard Mounting Angle
11	40120	B57 Belt
12	6743A1	Belt Guard
13	50734A1	Belt Guard Back
14	4307C	Belt Guard Clamp Bar (15 1/2" lg.)
15	1002212	Bolt 1/4" x 5 1/2" Hex Head
16	40158	2B Groove Sheave 15" O.D. with 1 1/4" Bore
17	4045A1	Square Key 1/4" x 2" lg.
18	630468	Head Flight 23" lg.
19	8801P	Unloading Flight f/ 14'-16' Bin (10'-3/4" lg.)
19	8802P	Unloading Flight f/ 17'-19' Bin (12'-3/4" lg.)
19	8803P	Unloading Flight f/ 20'-22' Bin (13'-3/4" lg.)
19	8804P	Unloading Flightif/ 23'-25' Bin (14'-6 3/4" lg.)
19	8805P	Unloading Flight f/ 26'-28' Bin (16'-3/4" lg.)
19	8806P	Unloading Flight f/ 29'-31' Bin (17'-6 3/4" lg.)
19	62728	Unloading Flight f/32'-34' Bin (19'-6 3/4" lg.)
19	8808P	Unloading Flight for 35'-37' Bin (20'-6 3/4" lg.)
19	8809P	Unloading Flight for 38'-40' Bin (22'-3/4" lg.)
19	8810P	Unloading Flight for 41'-43' Bin (24'-3/4" lg.)
19	8811P	Unloading Flight for 47'-49' Bin (27'-3/4" lg.)







## ***Hutchinson/Mayrath***

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