10"
POWER SWEEP AUGER

OWNER'S & OPERATOR'S MANUAL

Effective July 30, 2011 **Publication No. 1030438**

MODEL NO'S.
Band-On Intermediate Wells
F/ 24' Dia. Bins - B13742P
F/ 27' Dia. Bins - B13752P
F/ 30' Dia. Bins - B13762P
F/ 33' Dia. Bins - B13772P
F/ 36' Dia. Bins - B13782P
F/ 39' Dia. Bins - B13792P
F/ 42' Dia. Bins - B13802P
F/ 48' Dia. Bins - B13812P

MODEL NO'S.
Weld-On Intermediate Wells
F/ 24' Dia. Bins - B13747P
F/ 27' Dia. Bins - B13757P
F/ 30' Dia. Bins - B13767P
F/ 33' Dia. Bins - B13777P
F/ 36' Dia. Bins - B13787P
F/ 39' Dia. Bins - B13797P
F/ 42' Dia. Bins - B13807P
F/ 48' Dia. Bins - B13817P

Hutchinson/Mayrath
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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.

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(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.

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SAFETY

GENERAL SAFETY STATEMENT

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

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

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

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

SAFETY ALERT SYMBOL

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

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

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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OPERATOR QUALIFICATIONS

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

1. Some regulations specify that no one under the age of 16 may operate power machinery. This includes this auger. It is your responsibility to know what these regulations are in your area or situation.
2. Current OSHA regulations state in part: “At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in safe operation and servicing of all equipment with which the employee is, or will be involved.”*
3. Unqualified persons are to stay out of the work area. See page 4.
4. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine.

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

SIGN-OFF SHEET

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

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. Use the assembly instructions in this manual as a reference to determine that the auger is assembled properly. This inspection should include, but not be limited to:

1. Check to see that all guards 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 are listed in the back of this manual). Safety signs may be obtained from your dealer or ordered from the factory.
3. Are all fasteners tight?
4. Check oil levels in gearboxes. See page 11 in the *Assembly Instructions* section for oil level information.

GENERAL INFORMATION

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 areas! Trespass into the work area by anyone not involved in the actual operation, or trespass into a hazardous area by anyone, shall result in an immediate shut down by the operator.

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

OPERATING PROCEDURES

OPERATING INSTRUCTIONS

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

The 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 table on next page to determine size of motor required.

HORSEPOWER REQUIREMENTS

Bin Diameter	Horizontal Head	25 Degree Head	Vertical Head
24 ft	7 1/2	10	10
27 ft	7 1/2	10	10
30 ft	7 1/2	10	15
33 ft	7 1/2	10	15
36 ft	10	10	15
39 ft	10	15	—
42 ft	10	15	—
48 ft	10	15	—

NOTE: Refer to the operator's manual for the particular style of unloading head being used for additional information.

FLIGHT SPEED INFORMATION

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

1. If the flight speed is too fast, excessive wear will result. (See table 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 unit can result. Use the bin well slide gate to control the amount of grain fed into the auger. (See table below.)

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

Model	Motor Pulley Diameter*	Driven Pulley Diameter	Recommended Auger Speed	Max. Auger Speed	Min. Auger Speed
10" Horizontal Unload	3.0"	15.0"	350 rpm	400 rpm	225 rpm
10" 25 Degree Unload	3.0"	15.0"	350 rpm	400 rpm	225 rpm
10" Vertical Unload	4.0"	12.0"	400 rpm horizontal auger	420 rpm horizontal auger	330 rpm horizontal auger

*** Motor pulleys are <u>not</u> furnished with the auger.**

OPERATING PROCEDURES

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.

Never enter the bin while the power sweep auger is in operation. Never attempt to control the operation of the sweep auger by pushing on the operating sweep auger with shovels, brooms or other devices. DO NOT attempt to restrain movement of the sweep auger by attaching ropes, bars or other devices to be held by an operator.

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 10). Visually inspect the auger periodically during operation. **DO NOT** leave the unit operating unattended.

IMPORTANT: BEFORE FILLING BIN

1. Close the center well and the intermediate well gates. Push the control pipes to close. (See Figure 5 on page 8).
2. Disconnect power to the sweep drive power head.
3. Position the sweep auger along side the intermediate wells.

BREAK-IN INFORMATION

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

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 unit can result. Use the bin well slide gates to control the amount of grain fed into the auger.

OPERATING CAPACITIES

The performance of augers can vary greatly due to operating 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.

FULL LOAD OPERATING PROCEDURES

Operation of the unload auger will generally include moving grain into or out of grain storage structures.

Grain will enter the auger through a dump hopper or through bin wells in grain bins.

There are flow control devices included with these components that should be used to control grain flow rates into the auger.

Do Not Enter the Bin if the Grain has Bridged or has not Flowed Normally out of the Bin such as shown in Figure's 1 and 2 Below.

The Grain May Suddenly Break Loose and Bury Causing Suffocation.

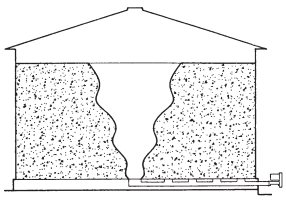


FIG. 1
(ABNORMAL FLOW)

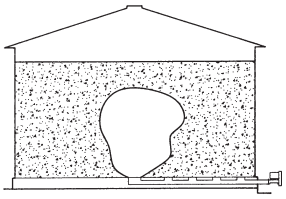


FIG. 2
("BRIDGING")

Do Not Enter the Grain Bin Unless All Power Driven Equipment has been Shut Down and Locked-Out.

Never Enter the Grain Bin Unless Monitored by Another Person.

If intermediate wells are being used, they should be opened **after** grain has stopped flowing into the center well and **before** the sweep auger is engaged (See Figure 4).

Shut down and lock out the unload auger before engaging the sweep auger.

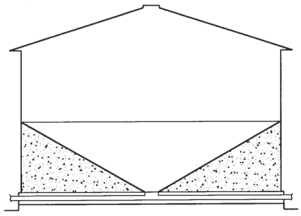


FIG. 3
(NORMAL FLOW)

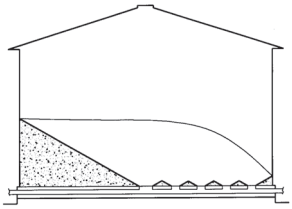
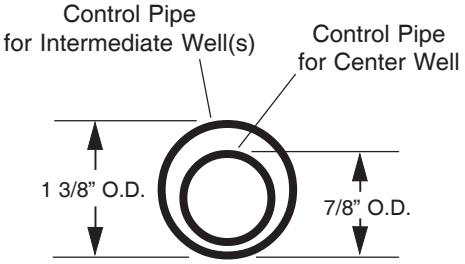


FIG. 4

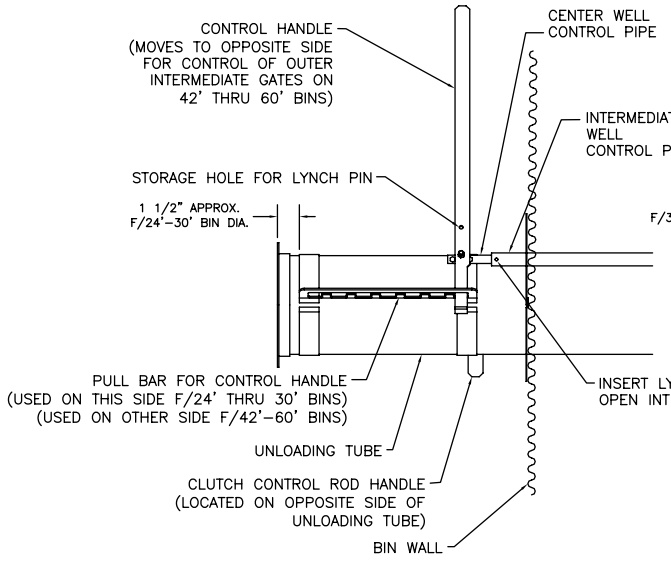
OPERATING PROCEDURES

NORMAL OPERATION

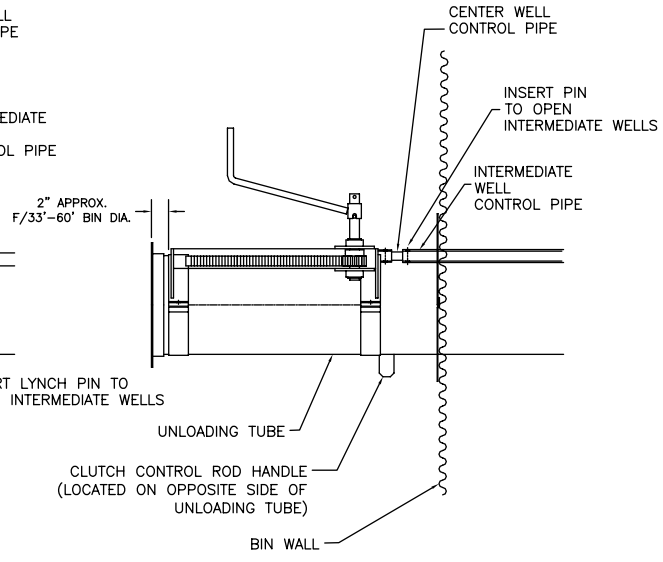
1. Start the unloading auger. The motor is located on the drive head on the power tube. A horsepower chart on Page 5 includes motor size and bin diameter.
2. Open the center well gate which is connected to the small pipe on the top side of the auger tube (make sure the lynch pin has not been inserted into the intermediate control pipe, See Figure 5). Open gradually until the desired flow is established. It should not be necessary to open the gate more than 3 to 6 inches. Always close the center well gate and allow the unloader to clean out before stopping the unloader. When restarting, open the center well gate to the previous position immediately after starting the unloader (when using the rack and pinion control, it will be necessary to rachet the handle 180 degrees as the handle gets close to the bin wall).

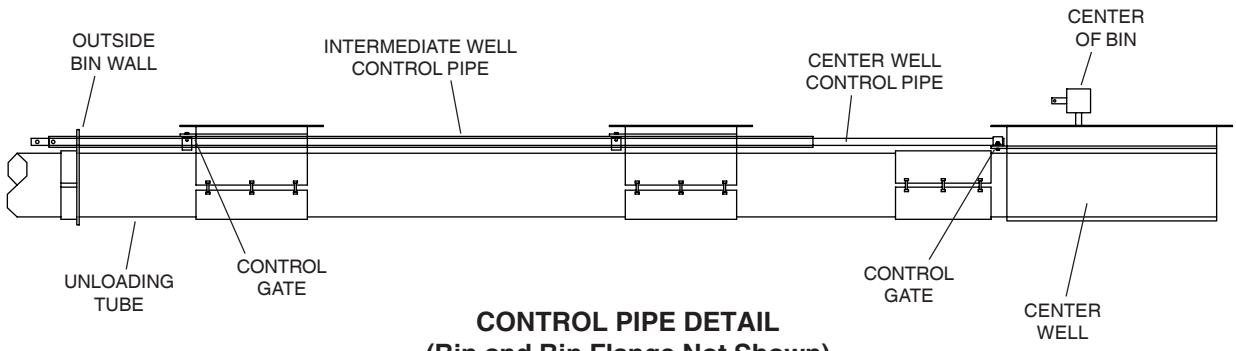


LEVER CONTROL



RACK & PINION CONTROL





CONTROL PIPE DETAIL
(Bin and Bin Flange Not Shown)

FIG. 5

NORMAL OPERATION - CONT.

3. When the natural gravity-flow of grain to the center well stops, the grain remaining should appear as in Figure 6.

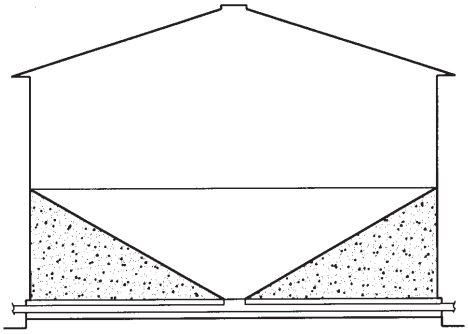


FIG. 6

4. Close the center well gate and insert the lynch pin through the intermediate well control pipe (See Figure 5 on previous page). Now you will be able to open the well(s). Open gradually until the desired flow is established. It should not be necessary to open the gates more than 2 to 4 inches.

NOTE: On 24' thru 39' diameter bins, this opens ***all*** the intermediate well gates. On 42' thru 48' diameter bins, a separate control rod handle opens the outside two or three intermediate well gates. The center well gate should always be connected to open at the same time as the intermediate well gates.

5. When grain flow stops, shut down the unloader and lock-out (the grain remaining should appear as in Figure 7).

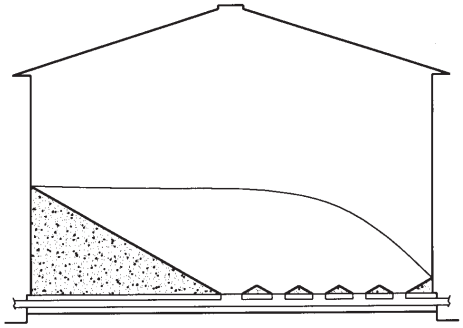


FIG. 7

6. With electric power to the Power Sweep motor locked-out, open a belt drive guard and rotate the large sheave by hand while pulling on the clutch control handle (the clutch control is the single pipe control at the lower left of the auger tube, the pipe will move as the clutch engages).

   Once the clutch is engaged, position the clutch handle on the appropriate side of the Positioning Lock Tab (this will ensure the clutch remains engaged while auger is in operation).

7. Next, restore the power and start the unloading auger motor (the sweep auger will start as the unloading auger is started).

   Open the center well full open to more readily receive grain from the sweep.

   The sweep auger will remain on the floor and clear most grain in one pass. A second pass will clear additional grain, before final clean-out.

8. Shut down the unloader and lock out the main power.

KEEP OUT of Bin While Sweep is in Operation.

Rapidly Traveling Sweep Auger.

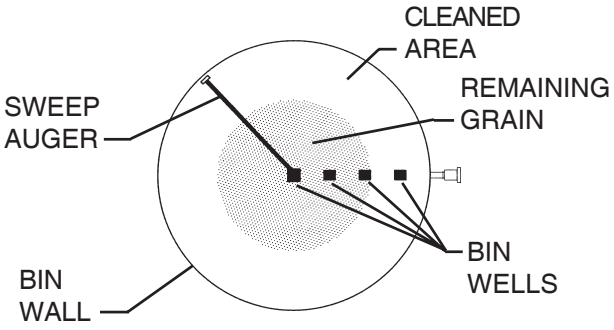
OPERATING PROCEDURES

FINAL CLEANOUT

The following procedure is recommended for cleaning the floor of the bin after the sweep auger has removed as much grain as possible.

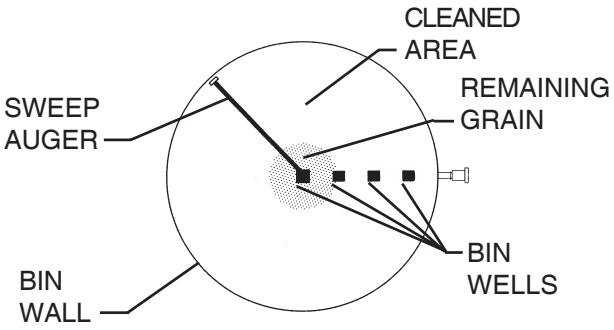
1. Clean (scoop and sweep by hand) the outer area of the floor into a circular pile towards the center of the bin. See Figure 8.

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



TOP VIEW OF BIN
FIG. 8

2. Get out of the bin.
3. After making sure everyone is outside the bin and clear of the equipment, start the unloading auger. In a short time, the circular pile towards the center of the bin will have been removed.
4. Stop the equipment and lock out.
5. Scoop and sweep by hand the remaining floor area to the center of the bin. See Figure 9.



TOP VIEW OF BIN
FIG. 9

6. Get out of the bin.
7. Repeat steps 3, 4, 5 and 6 until all grain has been removed from the bin.

Keep out of the bin while sweep is in operation. Rapidly traveling sweep auger. The sweep auger will move rapidly around the bin when the bin is nearly empty.

Stay clear of the under floor unloader at the bin wells. The underfloor unloader is exposed at these locations in the bin floor.

SHUTDOWN

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.

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 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 dealer or ordered from the factory.

LUBRICATION

1. Lubricate the sweep universal joint each time the grain bin has been emptied.
2. The gearboxes in the center bin well are lubricated at the factory. Check the oil level by removing the plug in the side of the gearboxes. The oil must be up to the plug level. Check oil level each time the bin has been emptied. Use SAE 90 weight multipurpose gear oil.
3. Add two ounces of multipurpose gun grease to the sweep end wheel drive chains during assembly and each time the bin has been emptied.

Never clean, adjust or lubricate a machine that is in operation.

TROUBLE SHOOTING

AUGER VIBRATION...

Driving belt may be overtightened, putting head stub and drive shaft in a bind.

LOW CAPACITY...

The unloading auger may not be getting enough grain. The bin well may have bridged over, restricting flow. The center well gate may not be open enough.

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

PLUGS...

The unloading auger may be getting too much grain, causing “jamming” inside the housing. Close the center well gate to restrict flow.

The drive motor may be too small or wired improperly.

Assure the auger is free of foreign material, such as sacks, tarp corners, etc. A plug of the discharge end of the auger will cause an unload auger plug.

SWEEP FLIGHT AND BACK SHIELD NOT MOVING...

Check clearance between back shield and bin floor for excessive drag. Adjust shield up to clear metal floor splices or cracks in concrete floors.

Check the sweep wheel. After extensive use, the wheel material may have worn down to where the wheel diameter is no longer large enough to move the sweep properly. Order replacement wheel or wheel parts from your dealer or the factory.

The grain may have gone out of condition due to moisture or insect activity and has become hard or caked. Stop the sweep auger and lock out the power before entering the bin to correct this or any other difficulty requiring bin entry.

CONCRETE TRENCH LAYOUT FOR 10" POWER SWEEPS

Concrete should not be poured around the unloading auger components. For installation of augers into grain bins with concrete floors, a pre-formed trench should be made in the floor that will accept the auger, wells and controls. See Figure 10 for the minimum trench dimensions and relative position of the trench to the center of the bin.

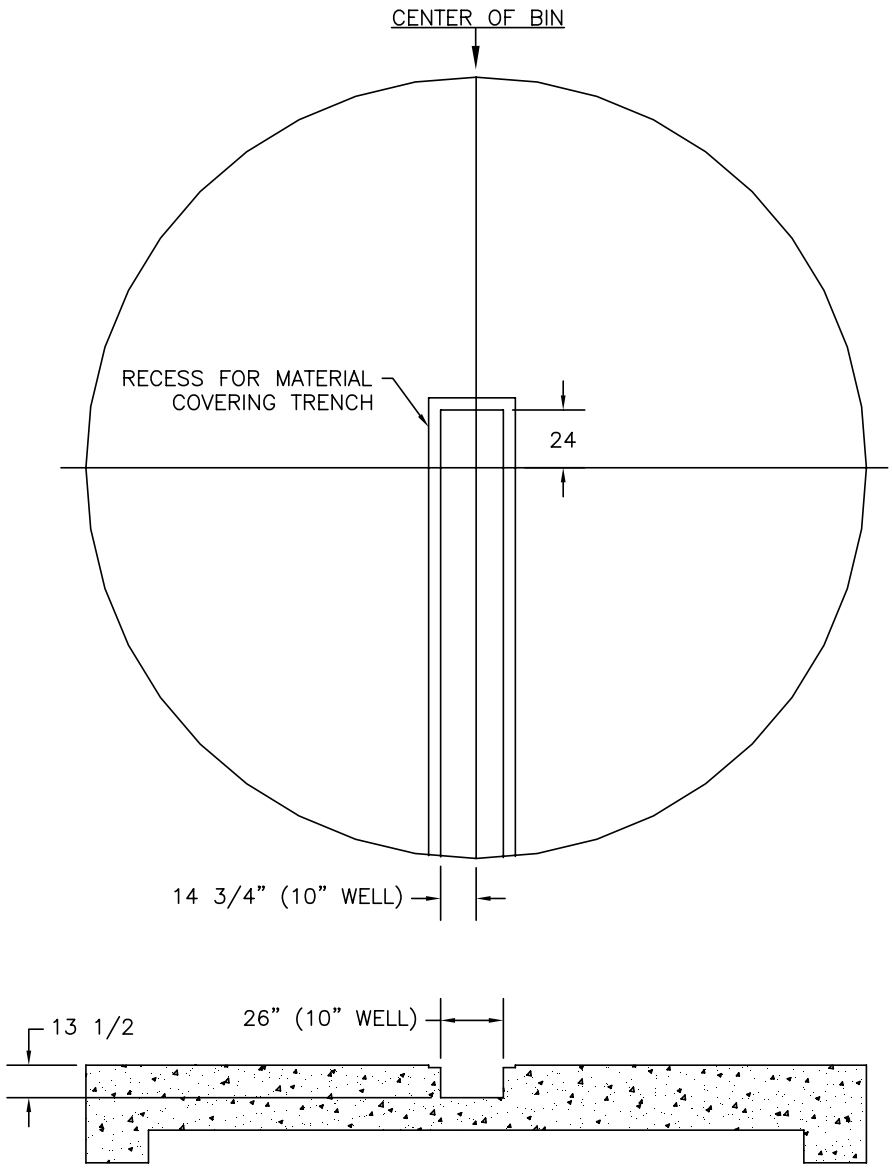


FIG. 10

NOTE: The off-set design of the center well requires that the trench be off-set also, so that the vertical shaft between the gearboxes is located in the center of the bin.

A recess should be formed around the outer top of the trench for material used to cover the trench. The depth required for this recess depends on thickness of material used to cover the trench, 1/4" thick steel plate is often used.

UNLOADING AUGER AND BIN WELLS

For bins with raised metal floors, it is necessary to cut openings in the floor for the center well and intermediate wells. Make sure the metal floor is at least 16" above the concrete base so there is space for the wells. It will be convenient to complete assembly of the bin floor as the unloading auger is being installed for better access to components under the floor.

1. Locate the center of the bin and make a cut-out in the bin floor for the center well (See Figure 11). Locate the vertical shaft of the top gearbox in the center of the bin. Place suitable supports under the center well to hold it in position.

TOP VIEW OF CUT-OUTS FOR CENTER WELL IN BIN FLOOR

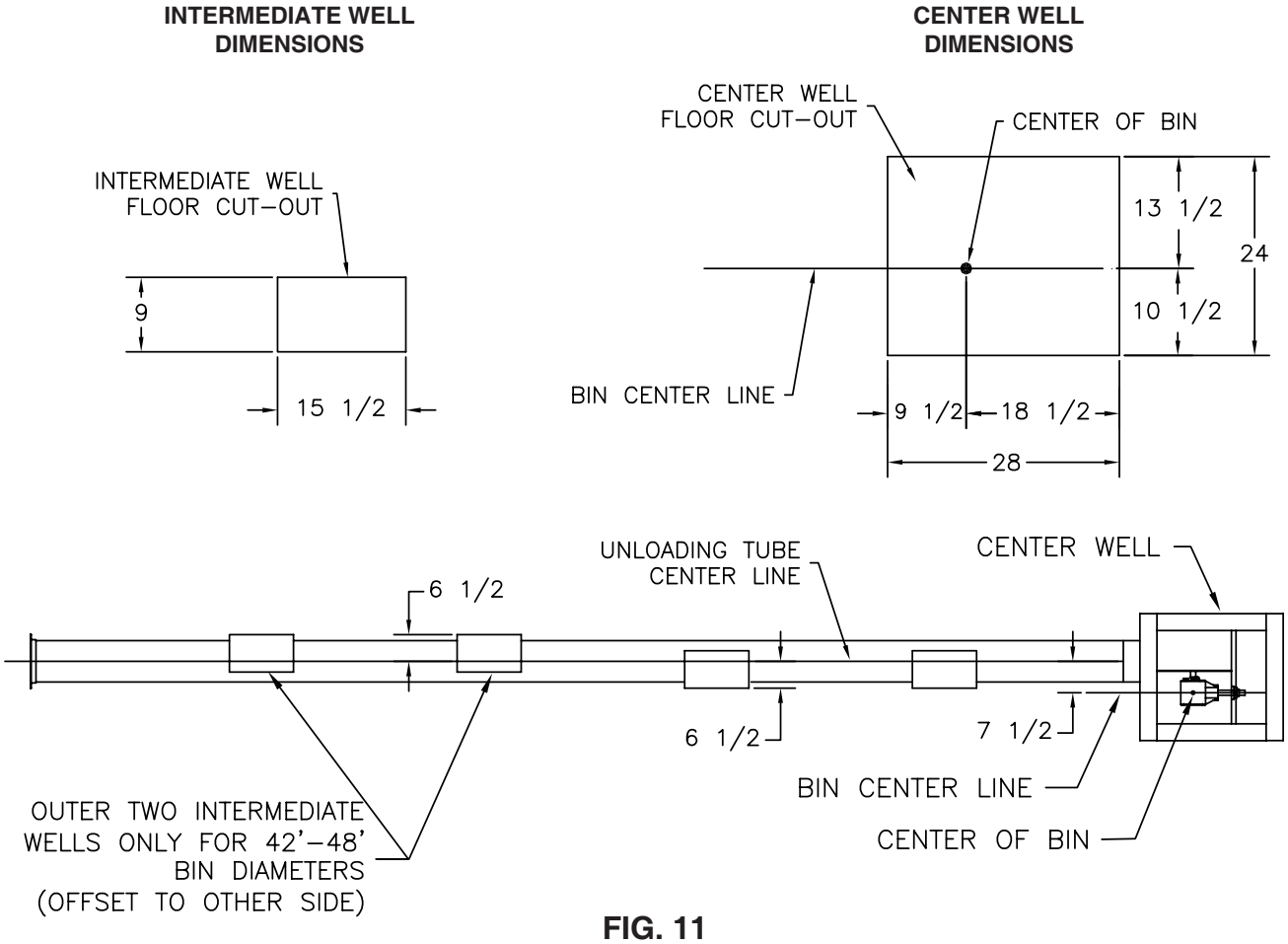


FIG. 11

ASSEMBLY INSTRUCTIONS

UNLOADING AUGER AND BIN WELLS - CONT.

2. Use the bin flange as a template to locate the opening in the bin wall for the unloading tube, and for the well control pipes and clutch rod.
   A. Cut an opening in the bin wall for the unloading tube. Locate the opening below the floor the same distance as the auger tube connection to the center bin well.
   B. For **all bin sizes**, cut a 1-1/2" diameter hole for the center and intermediate well pipes (See Figure 12).

      For bin diameters of **42' to 48' only,** cut a 1" diameter hole on the upper flange (left side of the unloading tube) for the outer intermediate well control pipes (See Figure 12).
   C. For **all bin sizes,** cut a 1" diameter hole for the clutch control pipe located lower left of the unloading tube. (See Figure 12).

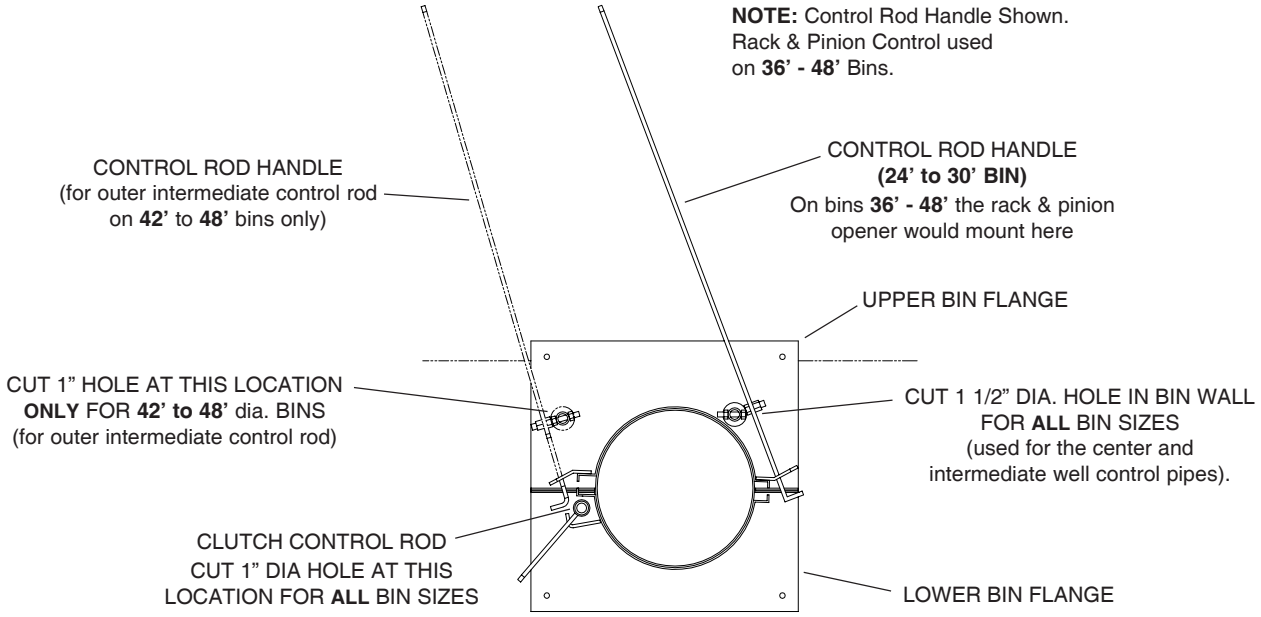


FIG. 12

3. Slide the unloading tube through the bin wall and connect it to the center well. Use a 12" long connecting band, 5/16 x 1 1/2" bolts and nuts (the unloading tube should be tight against the tube extending from the center well).

   Attach the upper and lower bin flanges to the auger tube using 5/16 x 1 1/2" bolts and nuts.

   Drill an 11/32" dia hole through each of the holes at the four corners of the bin flange. Secure the flange to the bin wall using 5/16 x 1" bolts and nuts (attach the decal plate to the upper flange while securing it to the bin).

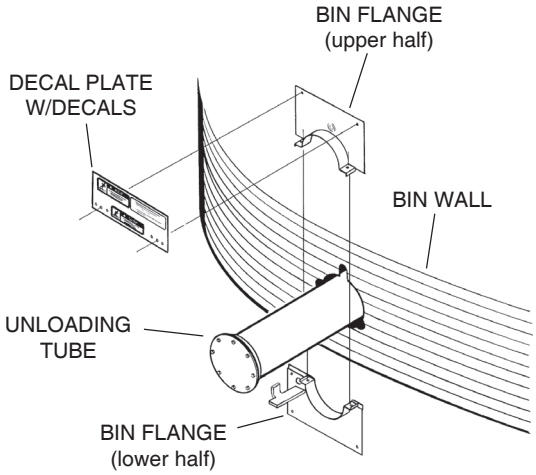


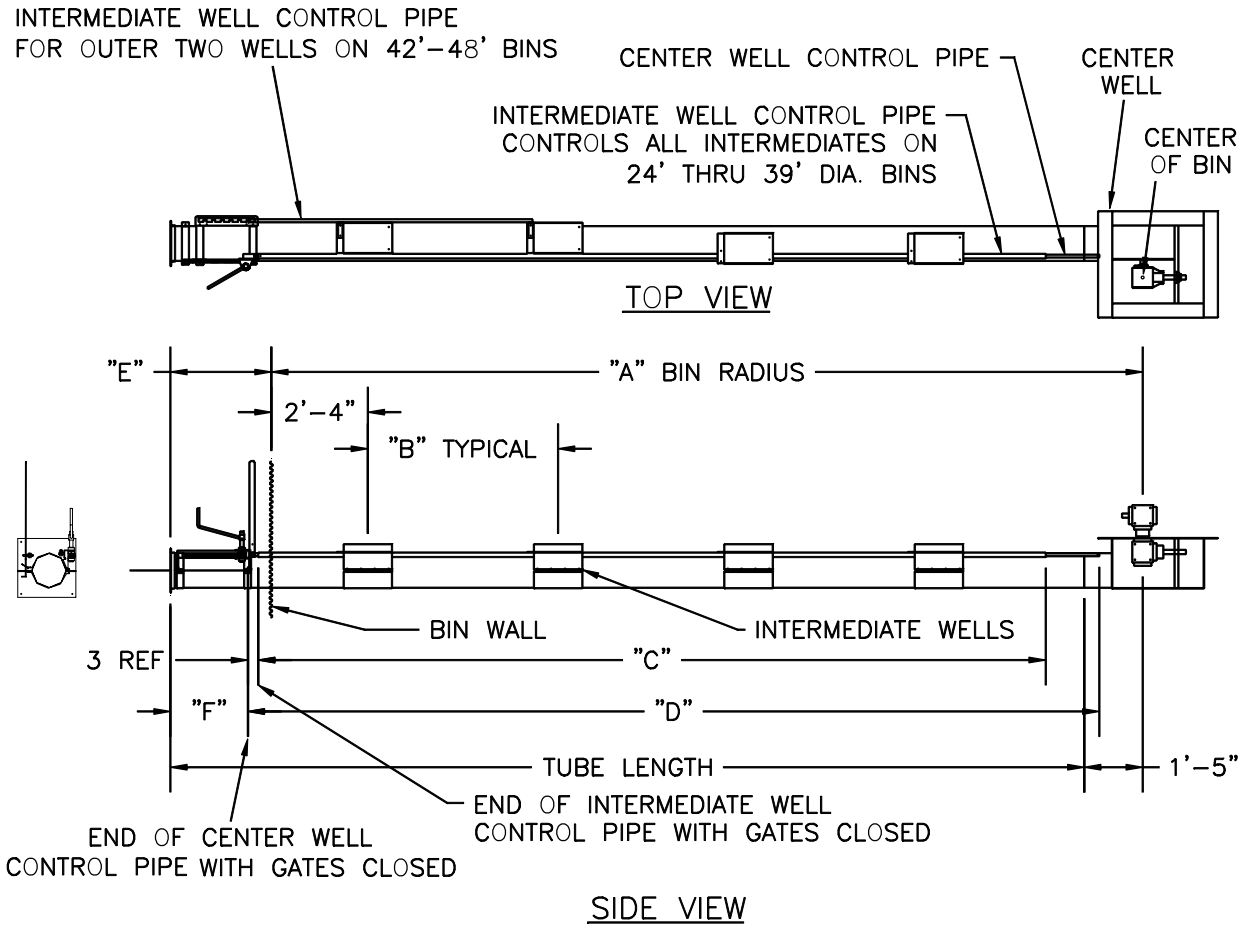
FIG. 13

UNLOADING AUGER AND BIN WELLS - CONT.

4. Cut openings in the bin floor for the intermediate wells (see Fig. 11 on Page 13 for dimensions). The number of wells depends on bin size (See Figure 14 and the table below).

   Place the intermediate wells directly over the unloading tube. Mark the tube and cut openings in the tube for each well (leave at least 1/2" of tube extending inside the well on all four sides). Make sure the inside of the tube is smooth where the cuts were made and retrieve all pieces of the cut material from inside the tube. Make sure the intermediate wells are positioned so the gates open towards the bin wall. Place support material under the unloading tube at each bin well.

Bin Dia.	Tube Length	Number of Intermediate Wells	Distance from Center of Bin to Wall (A)	Distance Between Int. Wells (B)	Length of Int. Well Control Pipe (C)	Length of Center Well Control Pipe (D)	Tube Extension Outside Bin (E)	Distance to End of Center Well Control Pipe (F)	Length of Clutch Control Pipe (Not Shown)
24ft	12'-6"	2	12'-0"	4'-8"	10'-0"	11'-6"	1'-11"	1'-4 1/2"	14'-6"
27 ft	14'-0"	2	13'-6"	5'-5"	11'-0"	13'-0"	1'-11"	1'-4 1/2"	16'-0"
30 ft	15'-6"	2	15'-0"	6'-2"	12'-0"	14'-6"	1'-11"	1'-4 1/2"	17'-6"
33 ft	17'-6"	3	16'-6"	4'-8"	14'-5"	16'-6"	2'-5"	1'-4 1/2"	19'-6"
36 ft	18'-6"	3	18'-0"	5'-2"	15'-6"	17'-6"	2'-5"	1'-10 1/2"	20'-6"
39 ft	20'-0"	3	19'-6"	5'-8"	16'-5"	19'-0"	2'-5"	1'-10 1/2"	22'-0"
42 ft	22'-0"	4	21'-0"	4'-7"	18'-3"	20'-6"	2'-5"	1'-10 1/2"	23'-6"
48 ft	25'-0"	4	24'-0"	5'-4"	21'-0"	23'-6"	2'-5"	1'-10 1/2"	26'-6"



ASSEMBLY INSTRUCTIONS

ASSEMBLY OF BIN WELLS TO UNLOAD AUGER

5. Install the unloading flight into the unloading tube with the square end towards the inside of the bin. Slide the flight onto the square drive shaft inside the center well.

   The end of the drive shaft is tapered to allow self-alignment as the flight is being installed (it may be necessary to rotate the flight a little in order for the squared ends to align).

6. For band-on intermediate wells, attach the intermediate bin well gate(s) to the 1 3/8" O.D. control rod (See Fig. 15).

   A. Slide the intermediate well gate(s) into the closed position.

   B. Check length of control rod by sliding it into position.

   C. Drill a 3/8: dia. hole through one side of the 1 3/8" O.D. control rod (the dimple of the control gate clamp will fit in this hole when clamped to the control gate).

   D. Fasten the control gate clamp to the control gate and control rod. Secure in place using two (2) 5/16 x 1" bolts lockwashers and nuts.

6A. For weld-on intermediate wells (See Fig. 15A).

   A. Adjust location of gate on the control rod using the setscrew in the locking collar, make sure the setscrew is tightened when finished.

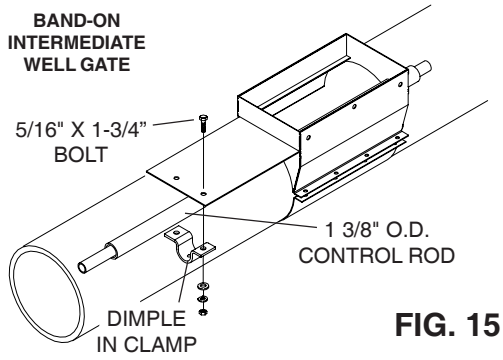


FIG. 15

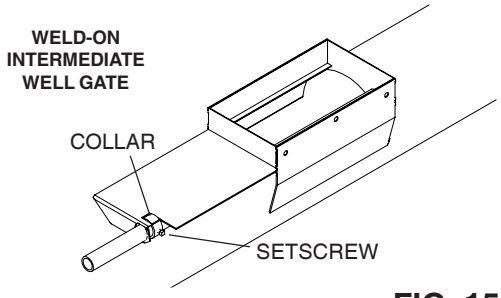


FIG. 15A

6B. On bin diameters of 42' to 48', the outer two intermediate well gates are attached to the 7/8" diameter control rod using 5/16 x 1 1/2" bolts to attach the rod to the pull bracket (See Fig. 16).

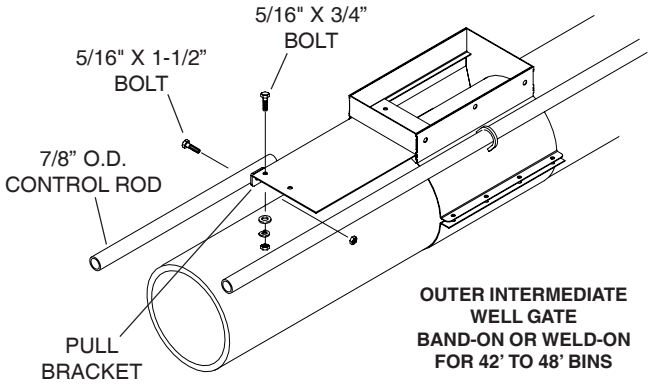


FIG. 16

7. Loosely attach control rod guide to auger tube using a 2" wide half-band and two 5/16 x 1 1/2" bolts and nuts (orient guide and tighten after well gate is attach to control rod.

7A. Attach center well gate to the 7/8" O.D. control pipe (See Fig 17 and procedures below).

   A. Slide gate into center well and install in the closed position.

   B. Check length of control pipe by sliding it through the control pipe of the intermediate well(s). When the control pipe is fastened to the gate, the center well control pipe should extend past the end of the intermediate well control pipe a minimum of 3" (See Fig. 17).

   C. Attach control gate to control pipe using two (2) 5/16 x 1 1/2" bolts and nylon locknuts.

   D. Position control pipe guide so it supports the control pipe (place far enough away from the center well so the gate can be opened completely). Tighten hardware.

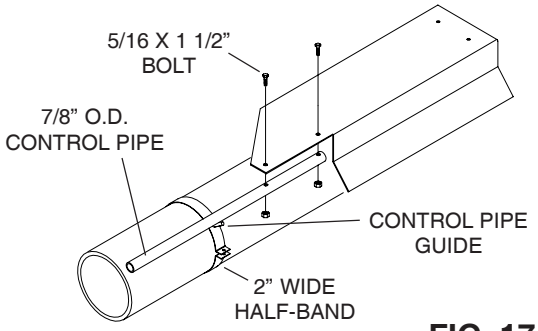


FIG. 17

ASSEMBLY OF BIN WELLS TO UNLOAD AUGER - CONT.

8. Install control rod handle and pull bar assembly onto the unloading tube (See Fig. 18), also reference Fig. 5 on Page 8 and Fig. 12 on Page 14.
   A. Attach control rod pull bar to the unloading auger housing using 10" x 2" half-bands and 5/16 x 1 1/2" bolts and nuts (position edge of half-band 4" from bin flange, See Fig. 18). **Insert bolts from the bottom and install nuts on top** (the bands may need to be rotated slightly to provide clearance between the half-band bolt heads and clutch handle).
   B. Install the control rod handle by inserting the bent end through the notched slot in the pull bar (the bent end of the handle should point away from the unloading tube). Slide the pivot tube attached to the handle, over the 7/8" control pipe and secure using two (2) 5/16 x 1 1/2" bolts and locknuts (the bolts will pass through the sides of the control pipe with the pivot tube sandwiched between them).
   C. Store the lynch pin in the extra hole on the handle. When it is necessary to open the inside intermediate well gates, the lynch pin will need to be installed through the holes in the intermediate and center well control pipes to lock them together.
   D. On **33' thru 48'** bins, install the rack and pinion handle assembly as shown in Fig. 18 using 10" x 2" wide half-bands (position edge of half-band 4" from bin flange). **Note:** On **42' to 48'** bins, the pull bar also needs to be mounted at the same time. The rack should be positioned vertical and aligned with the center well control pipe. Install the handle and secure using one 5/16 x 1 1/2" bolt and locknut.
   E. Check the operation of all the gates by separately pulling on each control pipe (the gates should slide freely).

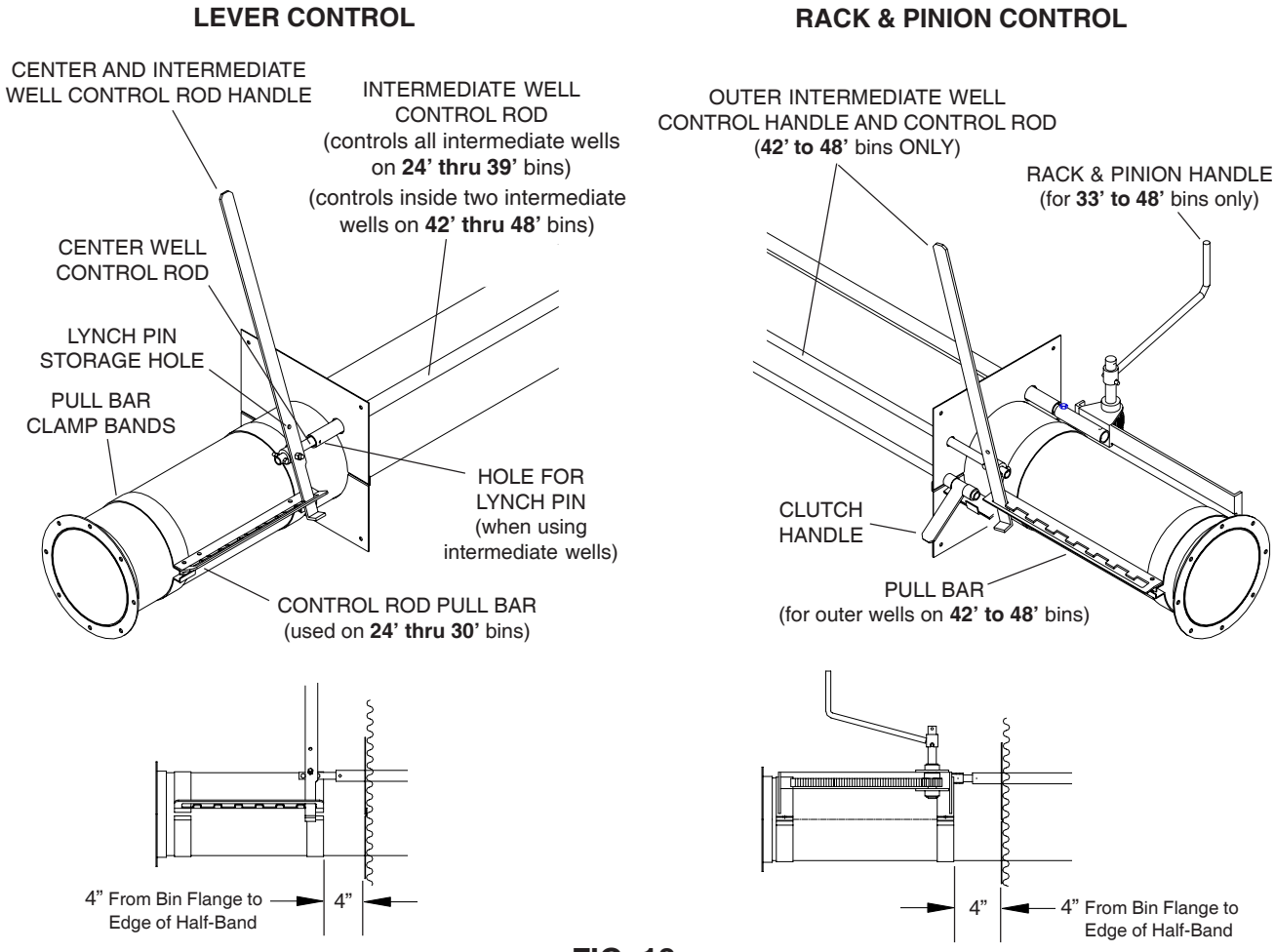


FIG. 18

0400509A 0400502A 0400502B

ASSEMBLY OF BIN WELLS TO UNLOAD AUGER - CONT.

9. Install control pipe for clutch to the center well (see illustration below).

   A. For intermediate bin wells that are welded to the unloading housing, the clutch control pipe guide brackets are already welded to the housing. For intermediate bin wells that use the band-on style wells, the clutch guides are welded to the bottom half-band (make sure the half-band is positioned properly so the guides are on the correct side of the unload housing).

   B. From the outside of the bin, slide the clutch control pipe through the lower bin flange and through the guide brackets on the intermediate and center wells. Insert control pipe into the collar at the lower rear of the center well (See Fig. 19 below). Secure the control pipe to the collar using one 5/16 x 1 3/4" bolt and nylon lock nut.

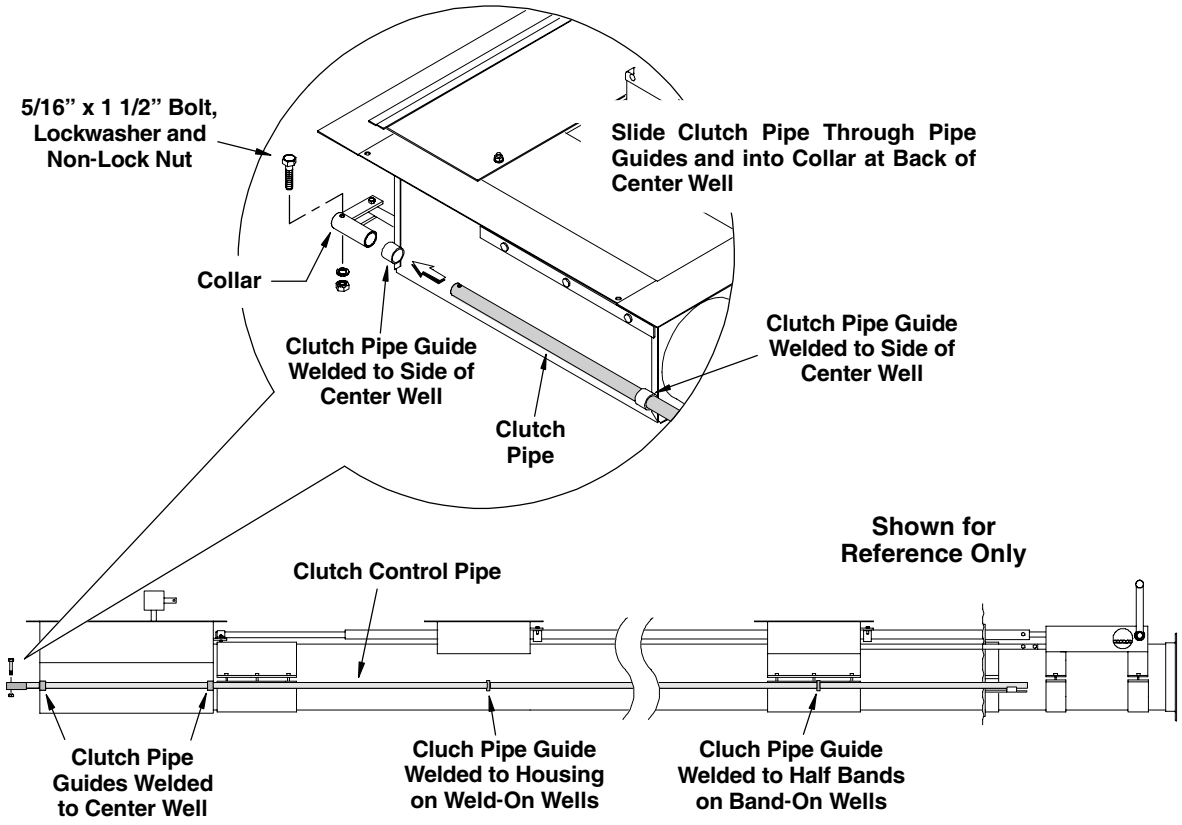


FIG. 19

ASSEMBLY OF BIN WELLS TO UNLOAD AUGER - CONT.

10. Attach the clutch control handle to the opposite end of the control rod by using a lock collar on both sides of the handle (See Fig. 20). Pull clutch control rod to fully engage the clutch in the center well, then position the handle on the outside of the positioning lock tab and tighten the lock collars on both sides of the handle. Leave about a 1/16" gap between the two clutch halves to prevent pressure on the clutch yoke assembly (See illustration below).

    Check operation of clutch by pulling the handle to engage the clutch and pushing the handle to disengage (control rod should slide freely). Lock the control rod into the engaged or disengaged position by positioning the handle on the appropriate side of the "positioning lock tab." **IMPORTANT! Make sure that when the clutch is engaged and handle is against the positioning lock tab, the clutch yoke is not being used to apply constant pressure against the clutch halves. Use locking collars on clutch handle to make any necessary adjustments. NOTE: If clutch yoke is applying pressure to the clutch halves, life expectency of the yoke will be decreased considerably resulting in premature failure.**

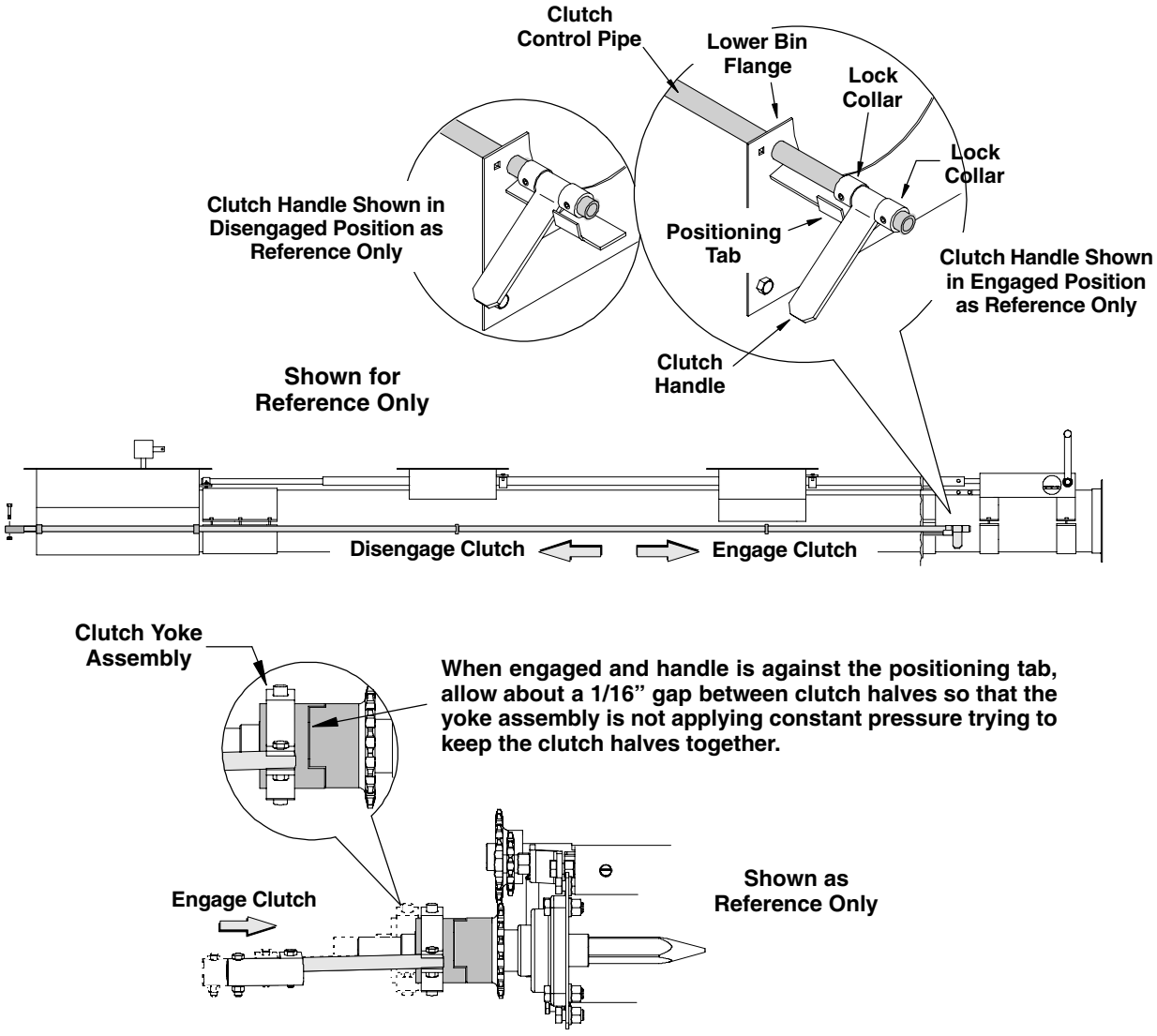


FIG. 20

SWEEP FLIGHT AND BACK SHIELD

11. Assemble the flight and shield to the sweep wheel (See Fig. 21). **(Note: if there are three (3) sections of flights and shields being used, the shield that measures 86-1/4" long, MUST be used in the middle).** Once assembled, add a multi-purpose grease to the sweep wheel drive enclosure (See the "Lubrication" Section on Page 11).
    A. Slide bushing (Ref. No. 2 in Fig. 21) onto the sweep wheel stub so that the hole in the bushing is closest to the wheel (align the bushing with the slot in the wheel stub).
    B. Slide the flight (Ref. no. 3) onto the bushing and sweep wheel stub. Note the two holes at the end of the flight shaft, using the hole closest to the end of the flight, bolt the flight, bushing and wheel stub together using a 3/8" x 2 1/2" bolt and nylon locknut.
    C. Fasten the shield (Ref. No. 4) to the sweep wheel using four (4) 5/16" x 3/4" bolts, flat washers and nylon locknuts.

12. If your sweep has more than one section, bolt sections of shields and flights together as follows:
    A. Install the flight stub (Ref. No. 6) into the end of the flight previously attached to the sweep wheel. Secure using two (2) 1/2" x 3" bolts and nylon locknuts.
    B. Slide the shield bearing hanger (Ref. No. 7) onto the flight stub and bolt the next section of flight to the stub using two (2) 1/2" x 3" bolts and nylon locknuts.
    C. Use four (4) 5/16 x 3/4" bolts, flat washers and nylon locknuts in the top and outside holes of the shield splice (Ref. No. 5) to attach it to the end of the shield previously bolted to the sweep wheel (the splice will mount to the auger side of the shield). Place the next length of shield on top of the splice and align the mounting holes, secure using four (4) 5/16" x 3/4" bolts, flat washers and nylon locknuts.
    D. Install the the shield bearing hanger bracket (Ref. No. 7) to the auger side of the shields and secure using four (4) 5/16 x 1" bolts, flatwashers and nylon locknuts.

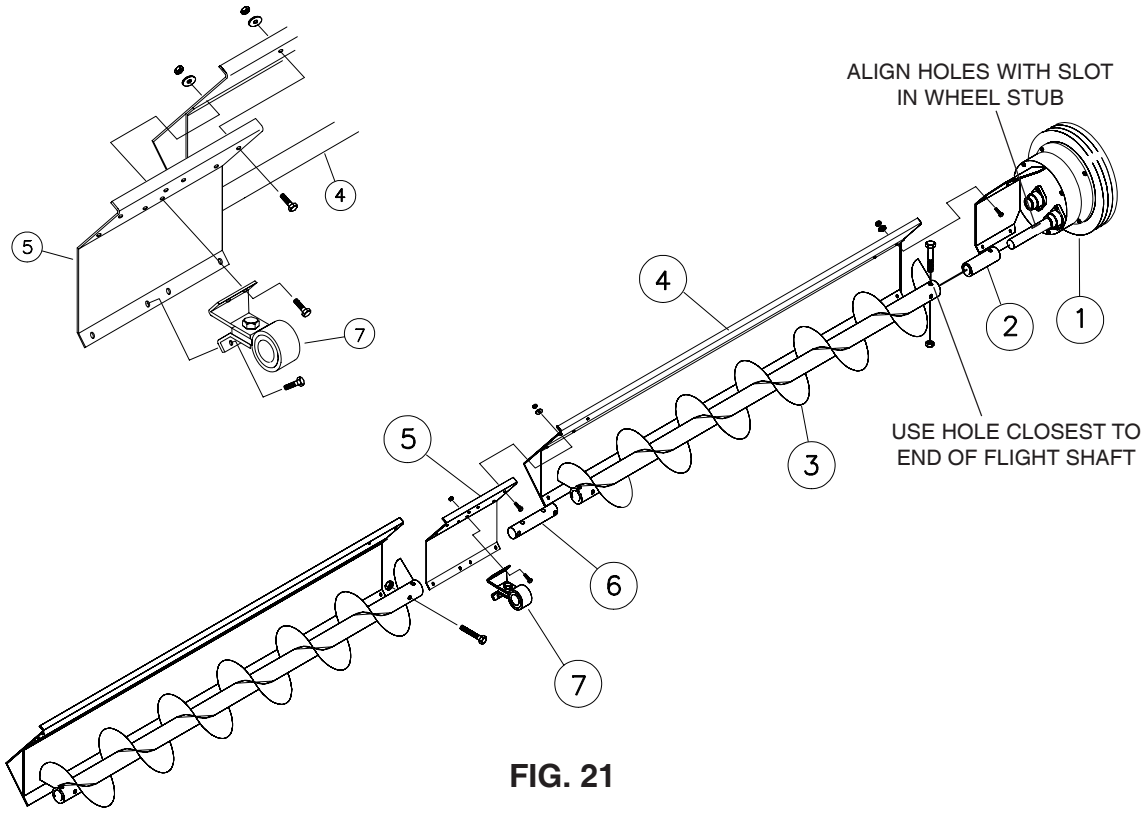


FIG. 21

SWEEP FLIGHT AND BACK SHIELD - CONT.

13. Attach the sweep shields and flight to the center well gearbox (See Fig. 22).

    A. Attach the sweep shield pivot bracket to the bracket mounted on the gearbox using one (1) 5/8 x 1 1/2" bolt and nylon locknut (the pivot bracket will mount to the outside of the gearbox bracket).

    B. Align the sweep flight with the stub on the gearbox and at the same time, position the sweep shield over the pivot bracket (the bracket will be positioned on the auger side of the sweep shield). Determine if adjustment is needed for the flight and shield to properly align with their respective mounting holes (the flight coupler at the sweep wheel end is slotted for adjustment, the pivot bracket has two sets of holes to assist with adjustment as well).

    C. Bolt the sweep shield to the pivot bracket using four (4) 3/8" x 1 1/4" carriage bolts, flat washers and nylon locknuts (the bolts will pass through from the auger side).

    Bolt the sweep flight to the gearbox stub using two (2) 1/2" x 3" bolts and nylon locknuts.

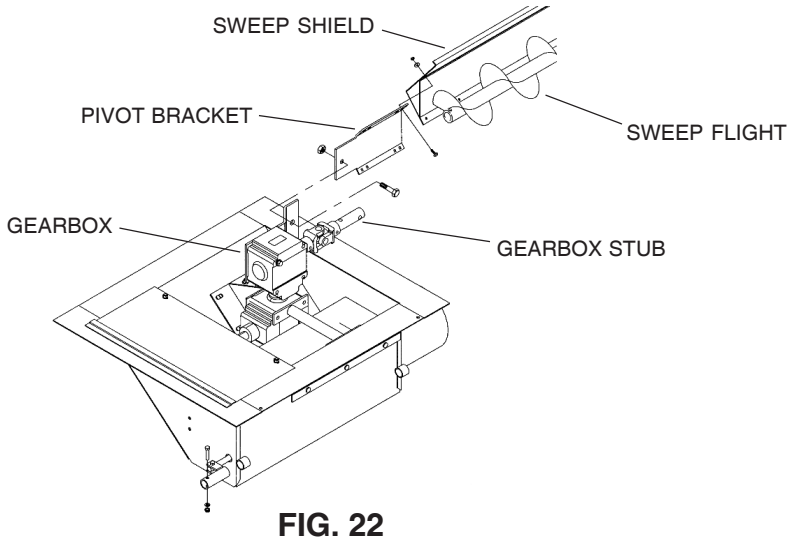


FIG. 22

14. If your sweep has multiple sweep sections, it will be necessary to create a "crown" at the mid-way point of the shields. After sweep shields have been installed, loosen the bolts on all shield splices and the bolt securing the pivot bracket to the gearbox.

    Place a spacer board under the shields at the mid-way point in order to achieve a 1" crown, then retighten the bolts (on 3 section sweep shields, the spacer board will be placed under the middle of the center shield, thus raising the entire length of the center shield to achieve the 1" crown).

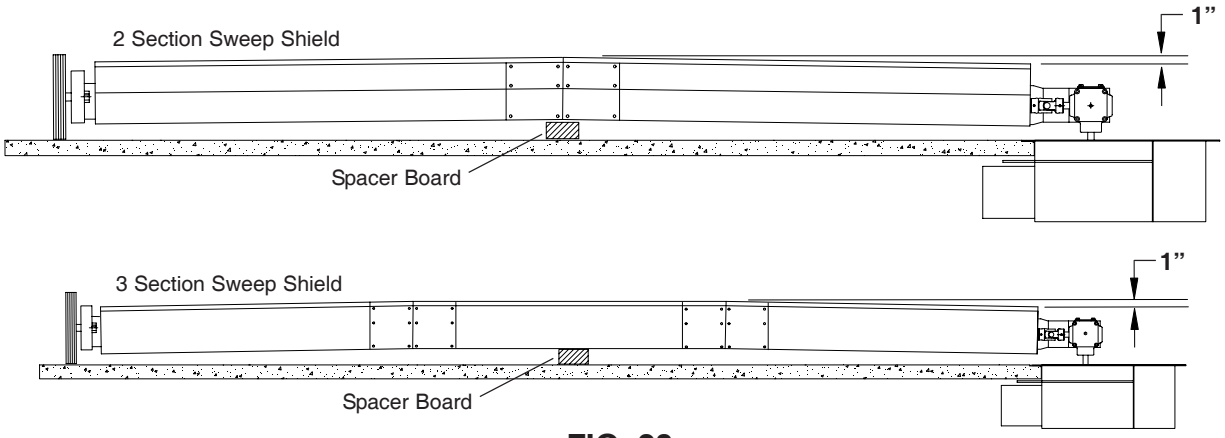


FIG. 23

BOLT KITS (BAND-ON WELLS, 10" AUGER)

BOLT KIT for 10" POWER SWEEP (2 SECTION) with PULL BAR OPENER

24' to 30' BIN DIAMETER

Part No.	Description	Qty.	Where Used
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	3	Connecting Band at Center Well
33151	Nut, non-lock, 5/16-18" PLT	3	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Bin Flange Clamp Bands
33151	Nut, non-lock, 5/16-18" PLT	2	
1002245	Bolt, Carriage, 5/16-18 x 1 1/2" G5 PLT	4	Sweep Shield to Pivot Bracket
33023	Washer, 5/16" flat PLT	4	
33135	Nut, nylon lock 5/16-18 PLT	4	
33276	Bolt HHCS 5/8-11 x 1 1/2" G5 PLT	1	Gearbox Bracket to Pivot Bracket
33139	Nut, nylon lock, 5/8-11 PLT	1	
33091	Bolt HHCS 1/2-13 x 3" G5 PLT	2	Sweep Flight to Gearbox Stub
33138	Nut, nylon lock, 1/2-13 PLT	2	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	4	Pull Bar Bracket to Half-Band
33151	Nut, non-lock, 5/16-18" PLT	4	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Control Handle Pivot Tube
33135	Nut, nylon lock 5/16-18 PLT	2	to Control Pipe
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Center Gate to Control Pipe
33135	Nut, nylon lock 5/16-18 PLT	2	
1024050	Pin, lynch .312 - 1 3/8" LG PLT	1	Intermediate Control Pipe to Center Control Pipe
33375	Bolt HHCS 3/8-16 x 2 1/2" G5 PLT	1	Sweep Flight to Sweep Wheel Stub
33136	Nut, nylon lock, 3/8-16 PLT	1	
4701-1	Bolt, 5/16-18 x 3/4" G5 PLT	4	Sweep Shield to Sweep Wheel Bracket
33023	Washer, 5/16" flat PLT	4	
33135	Nut, nylon lock 5/16-18 PLT	4	
33046	Bolt, 5/16-18 x 1" G5 PLT	4	Sweep Shields to Splice Plate
4701-1	Bolt, 5/16-18 x 3/4" G5 PLT	8	and Bearing Assembly
33135	Nut, nylon lock 5/16-18 PLT	12	
33023	Washer, flat 5/16 PLT	12	
33091	Bolt, 1/2-13 x 3" G5 PLT	4	Sweep Flights to Intermediate Stubs
33138	Nut, nylon lock 1/2-13 PLT	4	
1023968	Lock collar, 7/8" bore	2	Clutch Control Handle to Control Pipe
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Guide Weldment to Half-Band
33151	Nut, non-lock, 5/16-18" PLT	2	

BOLT KIT for 10" POWER SWEEP (2 SECTION) with RACK & PINION OPENER 33' to 39' BIN DIAMETER

Part No.	Description	Qty.	Where Used
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	3	Connecting Band at Center Well
33151	Nut, non-lock, 5/16-18" PLT	3	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Bin Flange Clamp Bands
33151	Nut, non-lock, 5/16-18" PLT	2	
1002245	Bolt, Carriage, 5/16-18 x 1 1/2" G5 PLT	4	Sweep Shield to Pivot Bracket
33023	Washer, 5/16" flat PLT	4	
33135	Nut, nylon lock 5/16-18 PLT	4	
33276	Bolt HHCS 5/8-11 x 1 1/2" G5 PLT	1	Gearbox Bracket to Pivot Bracket
33139	Nut, nylon lock, 5/8-11 PLT	1	
33091	Bolt HHCS 1/2-13 x 3" G5 PLT	2	Sweep Flight to Gearbox Stub
33138	Nut, nylon lock, 1/2-13 PLT	2	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	4	Rack & Pinion Ay. to Half-Band
33151	Nut, non-lock, 5/16-18" PLT	4	
1002215	Bolt, 5/16-18 x 1 3/4" all thread	1	Rack & Pinion Assembly
33135	Nut, nylon lock 5/16-18" PLT	1	to Control Pipe
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	1	Handle to Rack & Pinion Assembly
33135	Nut, nylon lock 5/16-18 PLT	1	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Center Gate to Control Pipe
33135	Nut, nylon lock 5/16-18 PLT	2	
1024050	Pin, lynch .312 - 1 3/8" LG PLT	1	Intermediate Control Pipe to Center Control Pipe
33375	Bolt HHCS 3/8-16 x 2 1/2" G5 PLT	1	Sweep Flight to Sweep Wheel Stub
33136	Nut, nylon lock, 3/8-16 PLT	1	
4701-1	Bolt, 5/16-18 x 3/4" G5 PLT	4	Sweep Shield to Sweep Wheel Bracket
33023	Washer, 5/16" flat PLT	4	
33135	Nut, nylon lock 5/16-18 PLT	4	
33046	Bolt, 5/16-18 x 1" G5 PLT	4	Sweep Shields to Splice Plate
4701-1	Bolt, 5/16-18 x 3/4" G5 PLT	8	and Bearing Assembly
33135	Nut, nylon lock 5/16-18 PLT	12	
33023	Washer, flat 5/16 PLT	12	
33091	Bolt, 1/2-13 x 3" G5 PLT	4	Sweep Flights to Intermediate Stubs
33138	Nut, nylon lock 1/2-13 PLT	4	
1023968	Lock collar, 7/8" bore	2	Clutch Control Handle to Control Pipe
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Guide Weldment to Half-Band
33151	Nut, non-lock, 5/16-18" PLT	2	

BOLT KITS (BAND-ON WELLS, 10" AUGER)

BOLT KIT for 10" POWER SWEEP (3 SECTION) with RACK & PINION OPENER

42' to 48' BIN DIAMETER

Part No.	Description	Qty.	Where Used
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	3	Connecting Band at Center Well
33151	Nut, non-lock, 5/16-18" PLT	3	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Bin Flange Clamp Bands
33151	Nut, non-lock, 5/16-18" PLT	2	
1002245	Bolt, Carriage, 5/16-18 x 1 1/2" G5 PLT	4	Sweep Shield to Pivot Bracket
33023	Washer, 5/16" flat PLT	4	
33135	Nut, nylon lock 5/16-18 PLT	4	
33276	Bolt HHCS 5/8-11 x 1 1/2" G5 PLT	1	Gearbox Bracket to Pivot Bracket
33139	Nut, nylon lock, 5/8-11 PLT	1	
33091	Bolt HHCS 1/2-13 x 3" G5 PLT	2	Sweep Flight to Gearbox Stub
33138	Nut, nylon lock, 1/2-13 PLT	2	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	4	Rack & Pinion Ay. to Half-Band
33151	Nut, non-lock, 5/16-18" PLT	4	
1002215	Bolt, 5/16-18 x 1 3/4" all thread	1	Rack & Pinion Assembly
33135	Nut, nylon lock 5/16-18" PLT	1	to Control Pipe
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	1	Handle to Rack & Pinion Assembly
33135	Nut, nylon lock 5/16-18 PLT	1	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Center Gate to Control Pipe
33135	Nut, nylon lock 5/16-18 PLT	2	
1024050	Pin, lynch .312 - 1 3/8" LG PLT	1	Intermediate Control Pipe to Center Control Pipe
33375	Bolt HHCS 3/8-16 x 2 1/2" G5 PLT	1	Sweep Flight to Sweep Wheel Stub
33136	Nut, nylon lock, 3/8-16 PLT	1	
4701-1	Bolt, 5/16-18 x 3/4" G5 PLT	4	Sweep Shield to Sweep Wheel Bracket
33023	Washer, 5/16" flat PLT	4	
33135	Nut, nylon lock 5/16-18 PLT	4	
33046	Bolt, 5/16-18 x 1" G5 PLT	8	Sweep Shields to Splice Plate
4701-1	Bolt, 5/16-18 x 3/4" G5 PLT	16	and Bearing Assembly
33135	Nut, nylon lock 5/16-18 PLT	24	
33023	Washer, flat 5/16 PLT	24	
33091	Bolt, 1/2-13 x 3" G5 PLT	8	Sweep Flights to Intermediate Stubs
33138	Nut, nylon lock 1/2-13 PLT	8	
1023968	Lock collar, 7/8" bore	2	Clutch Control Handle to Control Pipe
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Guide Weldment to Half-Band
33151	Nut, non-lock, 5/16-18" PLT	2	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Lever Handle Pivot Tube to
33151	Nut, non-lock, 5/16-18" PLT	2	Right Hand Control Pipe
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Pull Bracket to
33151	Nut, non-lock, 5/16-18" PLT	2	Right Hand Control Pipe

BOLT KIT for 10" POWER SWEEP (2 SECTION) with PULL BAR OPENER

24' to 30' BIN DIAMETER

Part No.	Description	Qty.	Where Used
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	3	Connecting Band at Center Well
33151	Nut, non-lock, 5/16-18" PLT	3	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Bin Flange Clamp Bands
33151	Nut, non-lock, 5/16-18" PLT	2	
1002245	Bolt, Carriage, 5/16-18 x 1 1/2" G5 PLT	4	Sweep Shield to Pivot Bracket
33023	Washer, 5/16" flat PLT	4	
33135	Nut, nylon lock 5/16-18 PLT	4	
33276	Bolt HHCS 5/8-11 x 1 1/2" G5 PLT	1	Gearbox Bracket to Pivot Bracket
33139	Nut, nylon lock, 5/8-11 PLT	1	
33091	Bolt HHCS 1/2-13 x 3" G5 PLT	2	Sweep Flight to Gearbox Stub
33138	Nut, nylon lock, 1/2-13 PLT	2	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	4	Pull Bar Bracket to Half-Band
33151	Nut, non-lock, 5/16-18" PLT	4	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Handle Pivot Tube to Control Pipe
33135	Nut, nylon lock 5/16-18 PLT	2	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Center Gate to Control Pipe
33135	Nut, nylon lock 5/16-18 PLT	2	
1024050	Pin, lynch .312 - 1 3/8" LG PLT	1	Intermediate Control Pipe to Center Control Pipe
33375	Bolt HHCS 3/8-16 x 2 1/2" G5 PLT	1	Sweep Flight to Sweep Wheel Stub
33136	Nut, nylon lock, 3/8-16 PLT	1	
4701-1	Bolt, 5/16-18 x 3/4" G5 PLT	4	Sweep Shield to Sweep Wheel Bracket
33023	Washer, 5/16" flat PLT	4	
33135	Nut, nylon lock 5/16-18 PLT	4	
33046	Bolt, 5/16-18 x 1" G5 PLT	4	Sweep Shields to Splice Plate and Bearing Assembly
4701-1	Bolt, 5/16-18 x 3/4" G5 PLT	8	
33135	Nut, nylon lock 5/16-18 PLT	12	
33023	Washer, flat 5/16 PLT	12	
33091	Bolt, 1/2-13 x 3" G5 PLT	4	Sweep Flights to Intermediate Stubs
33138	Nut, nylon lock 1/2-13 PLT	4	
1023968	Lock collar, 7/8" bore	2	Clutch Control Handle to Control Pipe
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Guide Weldment to Half-Band
33151	Nut, non-lock, 5/16-18" PLT	2	
33309	Bolt, 3/8-16 x 3/4" G5 PLT	8	End Cap to Auger Housing
D1149	Nut, non-lock, 3/8-16" PLT	8	

BOLT KITS (WELD-ON WELLS, 10" AUGER)

BOLT KIT for 10" POWER SWEEP (2 SECTION) with RACK & PINION OPENER

33' to 39' BIN DIAMETER

Part No.	Description	Qty.	Where Used
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	3	Connecting Band at Center Well
33151	Nut, non-lock, 5/16-18" PLT	3	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Bin Flange Clamp Bands
33151	Nut, non-lock, 5/16-18" PLT	2	
1002245	Bolt, Carriage, 5/16-18 x 1 1/2" G5 PLT	4	Sweep Shield to Pivot Bracket
33023	Washer, 5/16" flat PLT	4	
33135	Nut, nylon lock 5/16-18 PLT	4	
33276	Bolt HHCS 5/8-11 x 1 1/2" G5 PLT	1	Gearbox Bracket to Pivot Bracket
33139	Nut, nylon lock, 5/8-11 PLT	1	
33091	Bolt HHCS 1/2-13 x 3" G5 PLT	2	Sweep Flight to Gearbox Stub
33138	Nut, nylon lock, 1/2-13 PLT	2	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	4	Rack & Pinion Ay. to Half-Band
33151	Nut, non-lock, 5/16-18" PLT	4	
1002215	Bolt, 5/16-18 x 1 3/4" all thread	1	Rack & Pinion Assembly
33135	Nut, nylon lock 5/16-18" PLT	1	to Control Pipe
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	1	Handle to Rack & Pinion Assembly
33135	Nut, nylon lock 5/16-18 PLT	1	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Center Gate to Control Pipe
33135	Nut, nylon lock 5/16-18 PLT	2	
1024050	Pin, lynch .312 - 1 3/8" LG PLT	1	Intermediate Control Pipe to Center Control Pipe
33375	Bolt HHCS 3/8-16 x 2 1/2" G5 PLT	1	Sweep Flight to Sweep Wheel Stub
33136	Nut, nylon lock, 3/8-16 PLT	1	
4701-1	Bolt, 5/16-18 x 3/4" G5 PLT	4	Sweep Shield to Sweep Wheel Bracket
33023	Washer, 5/16" flat PLT	4	
33135	Nut, nylon lock 5/16-18 PLT	4	
33046	Bolt, 5/16-18 x 1" G5 PLT	4	Sweep Shields to Splice Plate
4701-1	Bolt, 5/16-18 x 3/4" G5 PLT	8	and Bearing Assembly
33135	Nut, nylon lock 5/16-18 PLT	12	
33023	Washer, flat 5/16 PLT	12	
33091	Bolt, 1/2-13 x 3" G5 PLT	4	Sweep Flights to Intermediate Stubs
33138	Nut, nylon lock 1/2-13 PLT	4	
1023968	Lock collar, 7/8" bore	2	Clutch Control Handle to Control Pipe
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Guide Weldment to Half-Band
33151	Nut, non-lock, 5/16-18" PLT	2	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	End Cap to Auger Housing
33151	Nut, non-lock, 5/16-18" PLT	2	

BOLT KIT for 10" POWER SWEEP (3 SECTION) with RACK & PINION OPENER 42' to 48' BIN DIAMETER

Part No.	Description	Qty.	Where Used
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	3	Connecting Band at Center Well
33151	Nut, non-lock, 5/16-18" PLT	3	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Bin Flange Clamp Bands
33151	Nut, non-lock, 5/16-18" PLT	2	
1002245	Bolt, Carriage, 5/16-18 x 1 1/2" G5 PLT	4	Sweep Shield to Pivot Bracket
33023	Washer, 5/16" flat PLT	4	
33135	Nut, nylon lock 5/16-18 PLT	4	
33276	Bolt HHCS 5/8-11 x 1 1/2" G5 PLT	1	Gearbox Bracket to Pivot Bracket
33139	Nut, nylon lock, 5/8-11 PLT	1	
33091	Bolt HHCS 1/2-13 x 3" G5 PLT	2	Sweep Flight to Gearbox Stub
33138	Nut, nylon lock, 1/2-13 PLT	2	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	4	Rack & Pinion Assembly
33151	Nut, non-lock, 5/16-18" PLT	4	to Half-Bands
1002215	Bolt, 5/16-18 x 1 3/4" all thread	1	Rack & Pinion Assembly
33135	Nut, nylon lock 5/16-18" PLT	1	to Control Pipe
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	1	Handle to Rack & Pinion Assembly
33135	Nut, nylon lock 5/16-18 PLT	1	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Center Gate to Control Pipe
33135	Nut, nylon lock 5/16-18 PLT	2	
1024050	Pin, lynch .312 - 1 3/8" LG PLT	1	Intermediate Control Pipe to Center Control Pipe
33375	Bolt HHCS 3/8-16 x 2 1/2" G5 PLT	1	Sweep Flight to Sweep Wheel Stub
33136	Nut, nylon lock, 3/8-16 PLT	1	
4701-1	Bolt, 5/16-18 x 3/4" G5 PLT	4	Sweep Shield to Sweep Wheel Bracket
33023	Washer, 5/16" flat PLT	4	
33135	Nut, nylon lock 5/16-18 PLT	4	
33046	Bolt, 5/16-18 x 1" G5 PLT	8	Sweep Shields to Splice Plate
4701-1	Bolt, 5/16-18 x 3/4" G5 PLT	16	and Bearing Assembly
33135	Nut, nylon lock 5/16-18 PLT	24	
33023	Washer, flat 5/16 PLT	24	
33091	Bolt, 1/2-13 x 3" G5 PLT	8	Sweep Flights to Intermediate Stubs
33138	Nut, nylon lock 1/2-13 PLT	8	
1023968	Lock collar, 7/8" bore	2	Clutch Control Handle to Control Pipe
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Guide Weldment to Half-Band
33151	Nut, non-lock, 5/16-18" PLT	2	
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Lever Handle Pivot Tube to
33151	Nut, non-lock, 5/16-18" PLT	2	Right Hand Control Pipe
4736	Bolt, 5/16-18 x 1 1/2" HHCS G5 PLT	2	Pull Brackets to
33151	Nut, non-lock, 5/16-18" PLT	2	Right Hand Control Pipe
33309	Bolt, 3/8-16 x 3/4" HHCS G5 PLT	8	End Caps to Auger Housing
D1149	Nut, non-lock, 3/8-16" PLT	8	

PARTS LIST

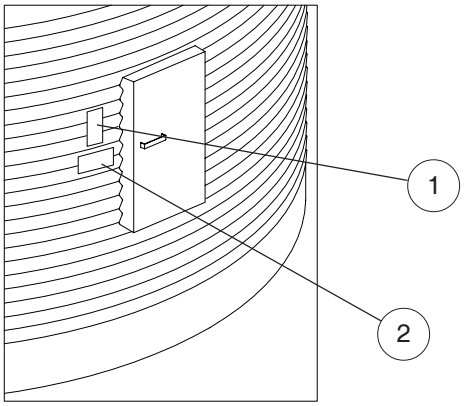
10” Sweep Auger
Parts List and Parts Identification Index

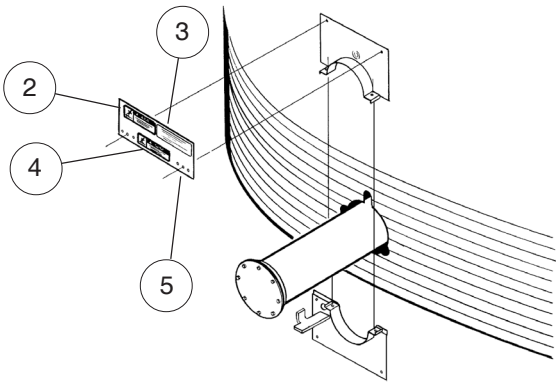
PARTS LIST

SAFETY DECALS

Check components as specified below to ensure 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 you dealer.

"DANGER" Decal No's. 100203 and 100204 were supplied with the bin unloading equipment. These safety signs should be applied to the side of the bin, near the bin opening, so they can be viewed by people entering into the bin or storage building.





1

PART NO. 1002303

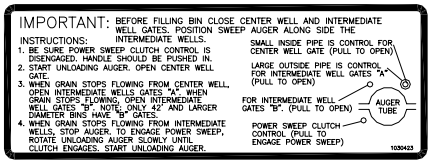
2

PART NO. 1002304

3

PART NO. 1002305

4

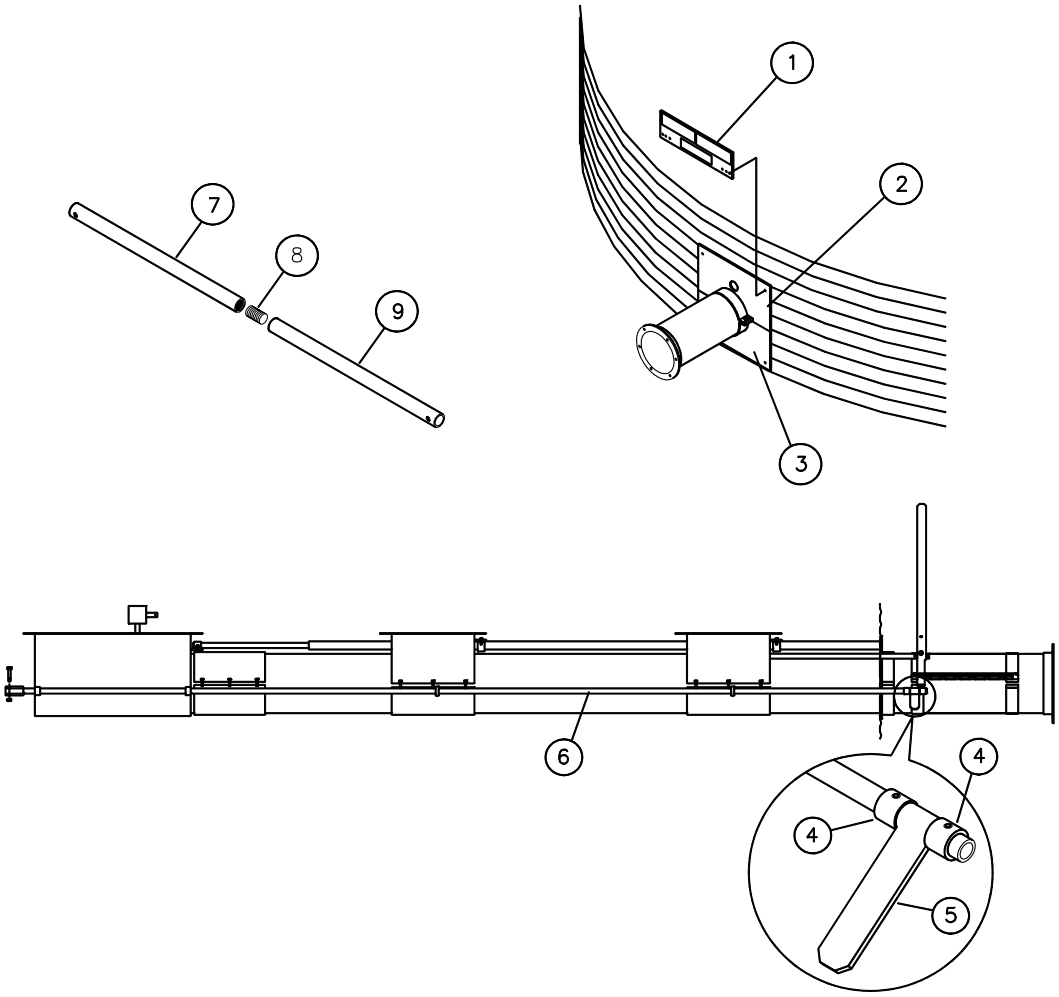


PART NO. 1030423

REF. #	PART #	DESCRIPTION	SIZE
1	1002303	DANGER - Rotating Flighting	4" x 7"
2	1002304	DANGER - Keep Out of Bin (Rapidly Traveling Sweep Auger)	1-3/4" x 7-1/2"
3	1002305	DANGER - Keep Out of Bin (Unloading Operations)	2-3/4" x 7-1/2"
4	1030423	IMPORTANT - Before Filling Bin	2-3/4" x 7-1/2"
5	1024114	Decal Plate	

PARTS LIST

BIN FLANGE &
CLUTCH CONTROL COMPONENTS

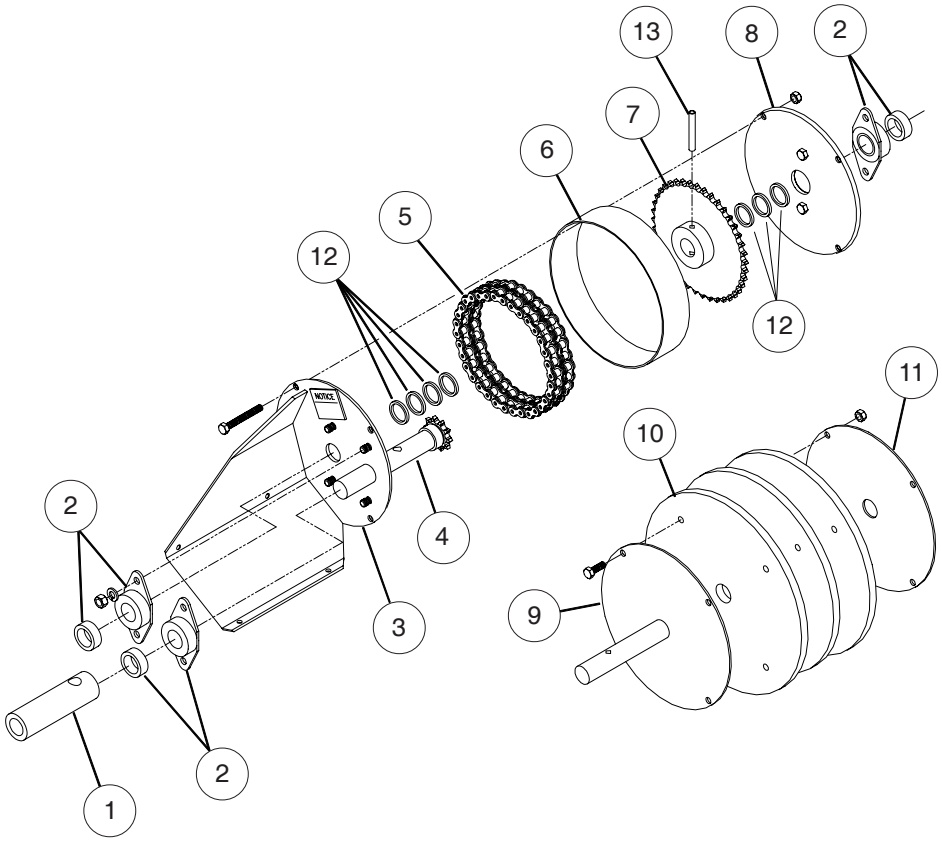


REF. #	PART #	DESCRIPTION
1	1030422	Decal Plate
2	1030355	Upper Bin Flange
3	1030352	Lower Bin Flange
4	1023968	Lock Collar, 7/8” bore
5	1023974	Handle for Clutch Control Pipe
6	- - -	One Piece Control Pipe (7/8” O.D.)
(6)	1023994	14’- 6” long f/24’ Bin
(6)	1023995	16’- 0” long f/27’ Bin
(6)	1023996	17’- 6” long f/30’ Bin
(6)	1023997	19’- 6” long f/33’ Bin
(6)	1023998	20’- 6” long f/36’ Bin

REF. #	PART #	DESCRIPTION
7	1023999	Control Pipe x 21’-0” long f/39’ - 48’ Bin
8	41089	Threaded Rod Connector
9	52165	Control Pipe x 1’-0” long f/39’ Bin
(9)	52166	Control Pipe x 2’-6” long f/42’ Bin
(9)	52167	Control Pipe x 5’-6” long f/48’ Bin

REDUCTION SWEEP WHEEL

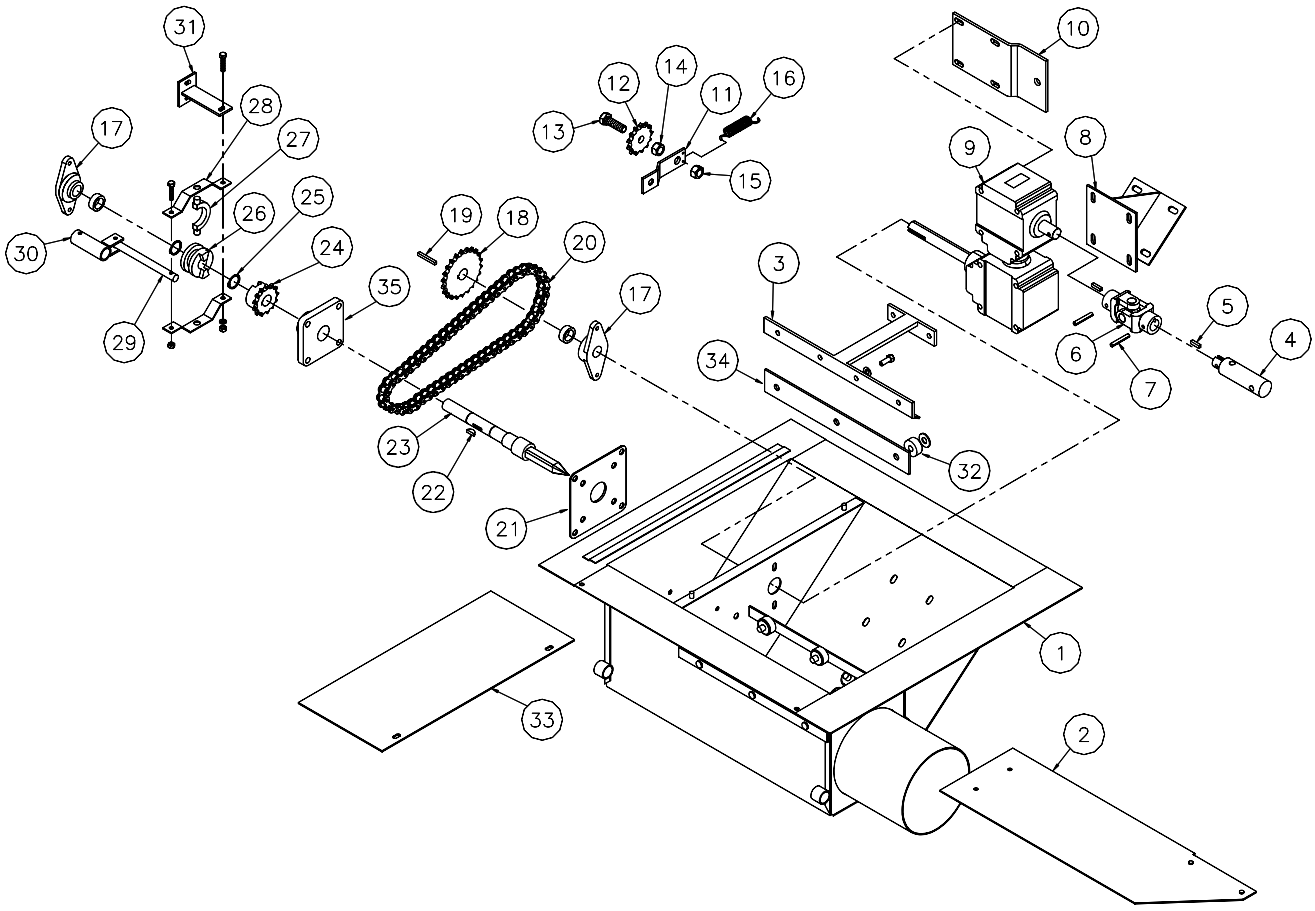
RATIO: 4 TO 1



REF. #	DESCRIPTION	PART NO.
1	Bushing, 1” I.D. x 1 1/2” O.D. x 4 3/8” long	1015477
2	Two-Hole Flange Bearing, 1” Bore	1015064
3	Inner Drive Housing	1030081
4	Sprocket/Shaft Weldment	1015106
5	#40 Double Roller Chain w/Link, 40 pitch	1015105
6	Housing Ring with 1/4” NPT zerk	1015051
7	Sprocket, #40 x 40 tooth	1015059
8	Outer Drive Housing	1030078
9	Inner Disk Plate	1030077
10	Rubber Disk, 13” O.D.	1017550
11	Outer Disk Plate	1017546
12	1” Nominal x 10 ga. Washer	035594
13	Roll Pin, 5/16” x 2” long	6386C

PARTS LIST

CENTER WELL COMPONENTS

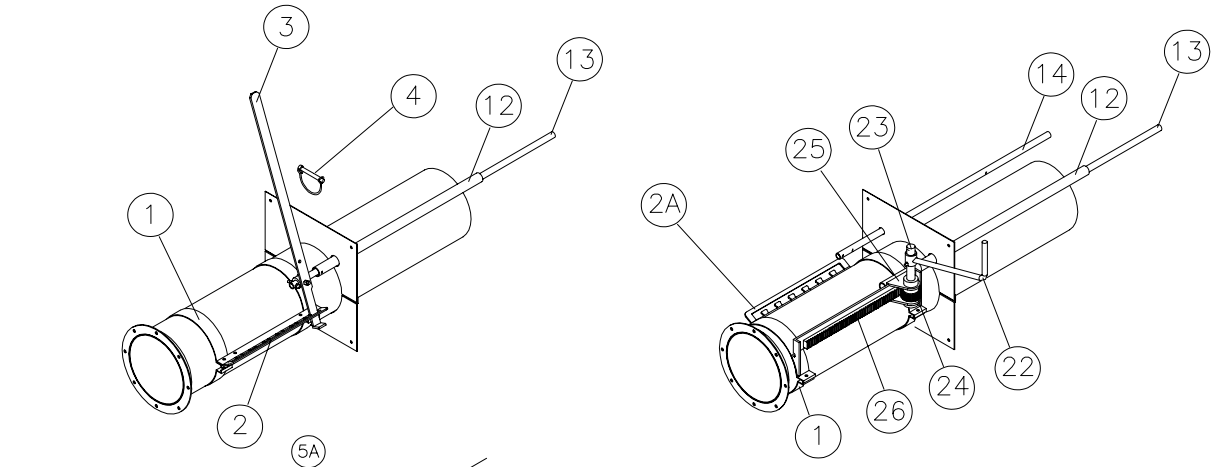


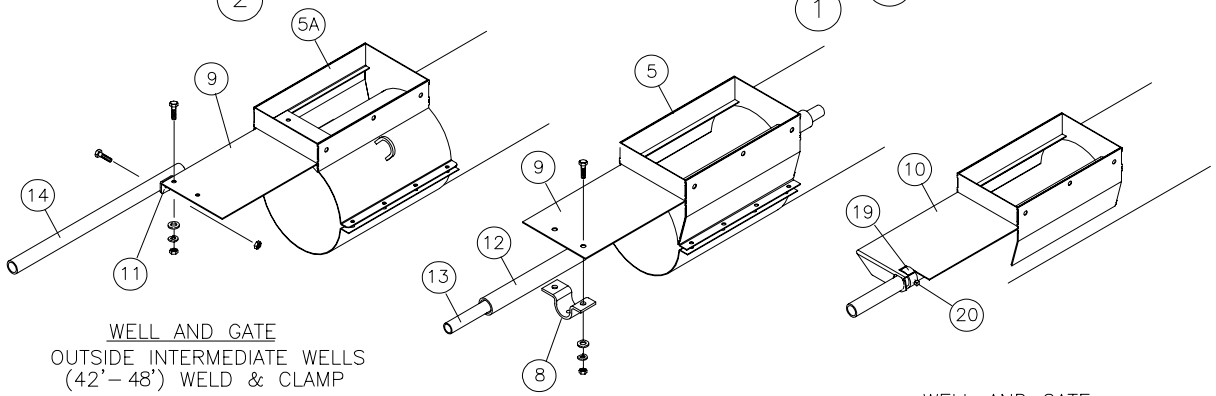
CENTER WELL COMPONENTS - CONT.

REF. #	PART #	DESCRIPTION
1	1030252	Center Well Weldment, 10”
2	1030257	Center Well Slide Gate
3	1023933	Lateral Gearbox Support Bracket
4	1016684	Stub for Sweep Flight
5	4020A1	1/4" Square Key x 1" long
6	1013677	Universal Joint
7	6386C	5/16" x 1" long roll pin
8	1015014	Gearbox Bracket Weldment
9	1015211-3	Double Gearbox Assembly
10	1016617	Shield Bracket for Gearbox
11	1005850	Idler Sprocket Arm
12	6821P	Idler Sprocket, #50 x 5/8" Bore
13	33244	Bolt, 5/8" x 2" long HHCS
14	D1170	Nut, 5/8" Non-lock
15	1005111	Nut, 5/8" Side Depress Lock
16	6823P	Spring for Idler Sprocket x 5" long
17	6818D	Bearing, 2 Hole Flange, 1" Bore w/Lock Collar
18	6331G	Sprocket, 22 tooth, #50 x 1" Bore
19	8371C	1/4" Square Key x 1-1/2" long
20	3210A1	#50 Roller Chain x 48 Pitch
21	1030254	Bearing Mount Plate
22	8826G	Key, woodruff #21, 1/4 x 1 1/4” long
23	1030255	Clutch Shaft, 1" dia. x 14-3/4" long
24	1018151	Female Clutch Sprocket, #50 x 18 tooth
25	420015	Truarc Key Ring #5160-90
26	6812P	Male Clutch, Sliding Jaw
27	6828F	Clutch Yoke
28	6828P	Clutch Yoke Bracket
29	6827P	Clutch Control Rod, 5/8" dia. x 6-5/8" long
30	62212	Clutch Control Clevis
31	6826P	Clutch Bracket Weldment
32	51867	Plastic Roller (1-1/2" O.D. x 1/2" I.D.)
33	553411	Cover Door
34	1023940	Plastic Side Guide
35	8370C	Flange Bearing, 4-Hole with 1” Bore

PARTS LIST

UNLOADING TUBE COMPONENTS

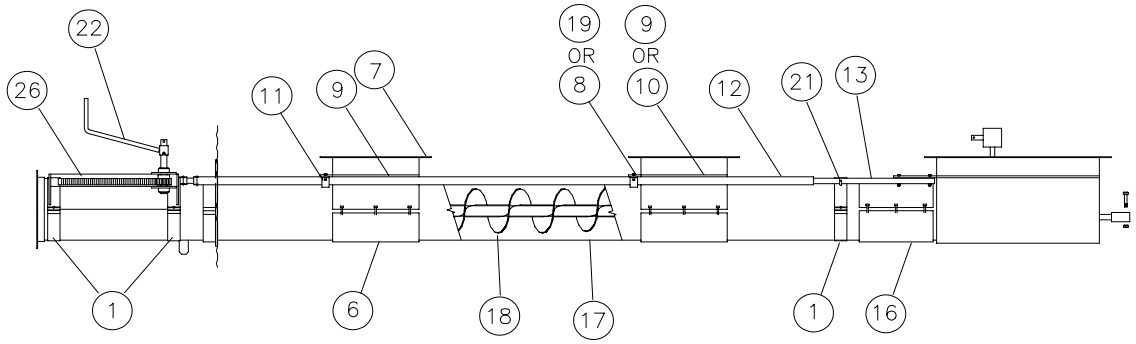




WELL AND GATE
OUTSIDE INTERMEDIATE WELLS
(42'– 48') WELD & CLAMP
TO TUBE STYLES

WELL AND GATE
INSIDE INTERMEDIATE WELLS
CLAMP TO TUBE STYLE

WELL AND GATE
INSIDE INTERMEDIATE WELLS
WELDED TO TUBE STYLE



UNLOADING TUBE COMPONENTS - CONT.

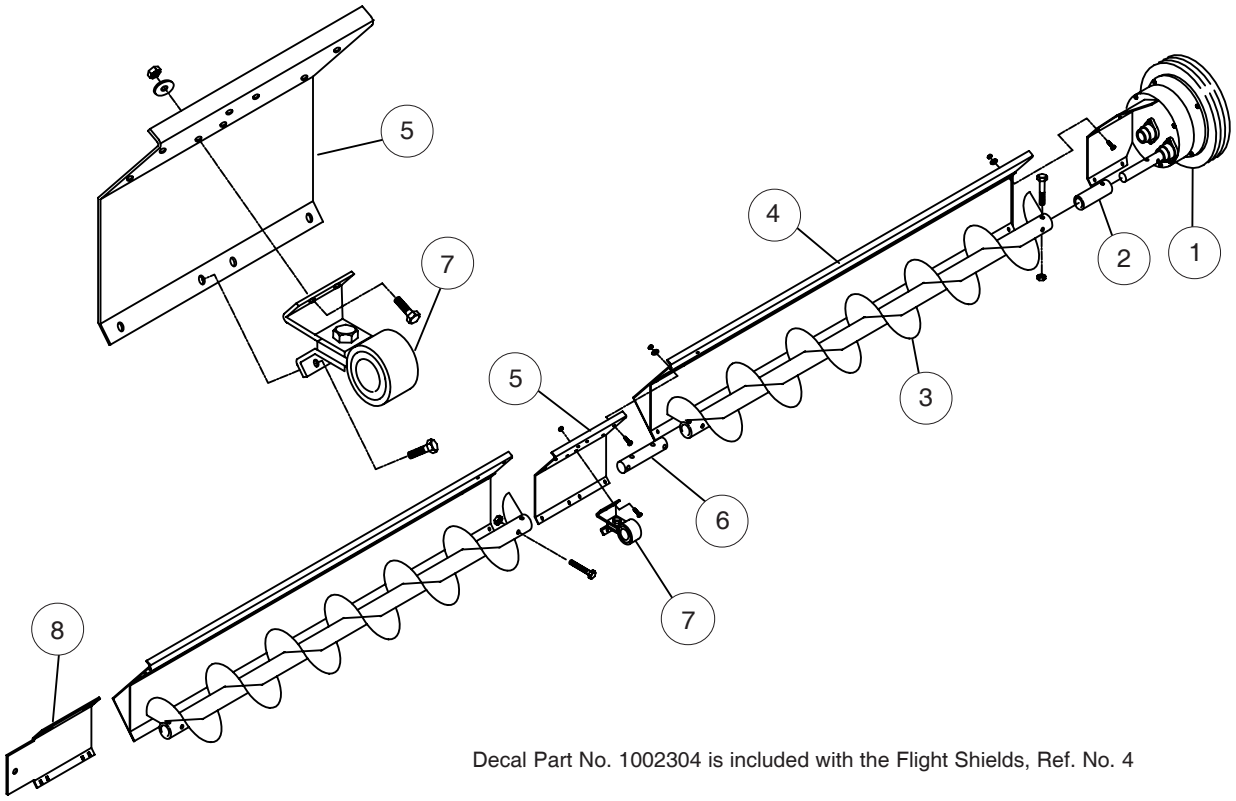
REF. #	PART #	DESCRIPTION
1	5035A1	Half-Band, 10” galv. x 2” wide
2	1022413	Pull Bar (24’-30’ Bins)
2A	1023964	Pull Bar (42’-48’ Bins)
3	1022410	Control Handle
4	1016747	Lynch Pin
5	1030260	10” Intermediate Bin Well Wldmnt. (band-on style)
5A	1030263	Outer 10” Intermediate Well (band-on, f/42’-48’ bins)
6	1015003	10” Back Band Wldmnt.
7	1014743	10” Top Flange
8	552406	Clamp f/Intermediate Well Gate (band-on)
9	1023914	10” Intermediate Well Gate (f/band-on wells and outer two wells of weld-on wells)
10	1030306	10” Intermediate Well Gate (f/weld-on wells excluding outer two intermediate wells)
11	1023971	Pull Bracket (f/outer two well gates on 42’-48’ bins)
12	- - -	**Control Pipe (1 3/8” O. D.) f/intermediate Well Gate**
(12)	1016729	10’-10” long
(12)	1016962	11’-0” long
(12)	1016963	12”-0” long
(12)	1016964	14’-5” long
(12)	1016965	15’-6” long
(12)	1016730	16’-5” long
(12)	1014629	18’-3” long
(12)	1016732	21’-0” long
13	- - -	**Control Pipe, (7/8” O.D.) f/Center Well Gate**
(13)	1024022	11’-6” long
(13)	1024023	13’-0” long
(13)	1024024	14’-6” long
(13)	1024025	16’-6” long
(13)	1024026	17’-6” long
(13)	1024027	19’-0” long
(13)	1024028	20’-6” long
(13)	1024029*	21’-0” long (f/48’-48’ bins)
(13)	1024030*	2’-6” long (f/48’ bins)

* Two piece pipe w/connector
order two pipes with connector #41089

REF. #	PART #	DESCRIPTION
14	---	**Control Pipe (7/8” O.D.) f/outer Intermediate Well Gates**
(14)	1024040	7’-2 1/2” long (f/42’ bin)
(14)	1024041	7’-11 1/2” long (f/48’ bin)
16	5161B1	10” Connecting Band x 12” long
17	- - -	**Unloading Tube (band-on wells)**
(17)	6396A91	Unload Tube f/24’ Bin, 12’-6” lg
(17)	6397A91	Unload Tube f/27’ Bin, 14’ lg
(17)	6398A91	Unload Tube f/30’ Bin, 15’-6” lg
(17)	11834	Unload Tube f/33’ Bin, 17’-6” lg
(17)	1025000	Unload Tube f/36’ Bin, 19’-0” lg
(17)	1024060	Unload Tube f/39’ Bin, 20’-6” lg
(17)	6400A91	Unload Tube f/42’ Bin, 22’-0” lg
(17)	6401A91	Unload Tube f/48’ Bin, 25’-0” lg
17	- - -	**Unloading Tube (weld-on wells)**
(17)	1030272	Unload Tube f/24’ Bin, 12’-6” lg
(17)	1030273	Unload Tube f/27’ Bin, 14’ lg
(17)	1030274	Unload Tube f/30’ Bin, 15’-6” lg
(17)	1030275	Unload Tube f/33’ Bin, 17’-6” lg
(17)	1030276	Unload Tube f/36’ Bin, 18’-6” lg
(17)	1030277	Unload Tube f/39’ Bin, 20’-0” lg
(17)	1030278	Unload Tube f/42’ Bin, 22’-0” lg
(17)	1030279	Unload Tube f/48’ Bin, 25’-0” lg
18	- - -	**Unloading Flight**
(18)	1030264	Unload Flight f/24’ Bin, 14’-6 3/4” lg
(18)	1030265	Unload Flight f/27’ Bin, 16’-3/4” lg
(18)	1030266	Unload Flight f/30’ Bin, 17’-6 3/4” lg
(18)	1030267	Unload Flight f/33’ Bin, 19’-6 3/4” lg
(18)	1030268	Unload Flight f/36’ Bin, 21’-3/4” lg
(18)	1030269	Unload Flight f/39’ Bin, 22’-6 3/4” lg
(18)	1030270	Unload Flight f/42’ Bin, 24’-3/4” lg
(18)	1030271	Unload Flight f/48’ Bin, 27’-3/4” lg
19	1018220	Collar for Control Pipe
20	1018221	Setscrew
21	1023978	Control Pipe Guide
22	1023962	Handle for Rack & Pinion
23	1023963	Shaft for Rack & Pinion
24	1023967	Spur Gear, 22T x 1” Bore
25	1023957	U-bracket for Spur gear
26	1023959	Rack Weldment for Rack & Pinion

PARTS LIST

SWEEP SHIELD & SHIELD COMPONENTS

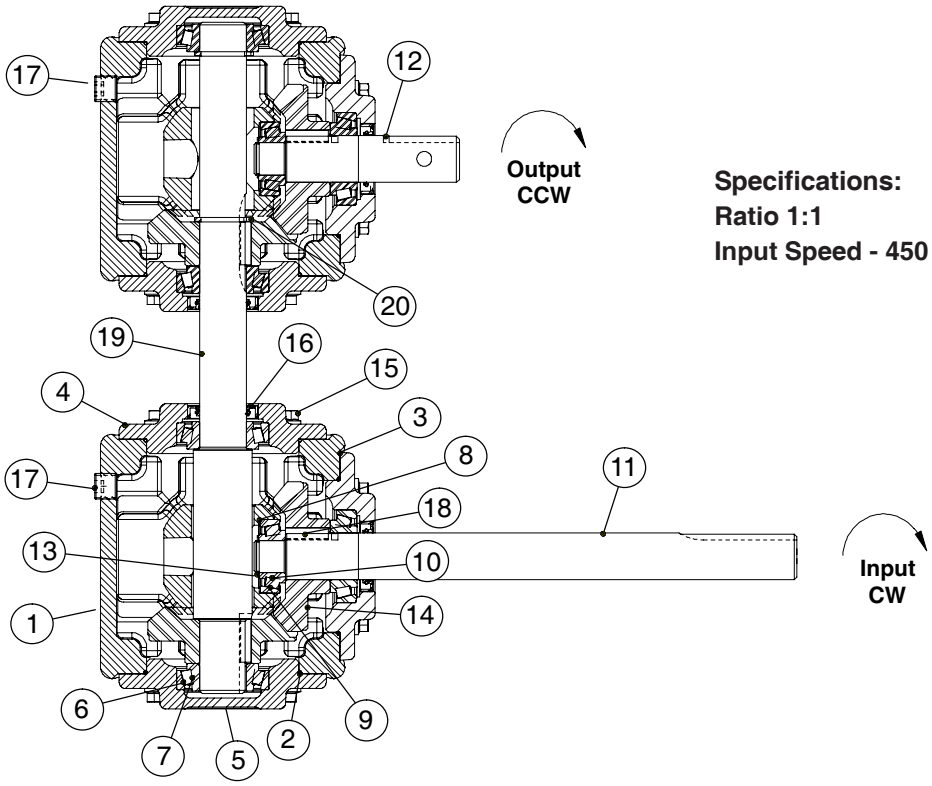


Decal Part No. 1002304 is included with the Flight Shields, Ref. No. 4

REF. #	PART #	DESCRIPTION
1	1030082	Enclosed Sweep Wheel Assy.
2	1015477	Bushing, Sweep Wheel Flight
3	1016708	Flight (4'-4" long)
(3)	1017705	Flight (5'-6" long)
(3)	1017607	Flight (7'-0" long)
(3)	1017709	Flight (8'-6" long)
(3)	5342H	Flight (5'-10" long)
(3)	1016622	Flight (7'-4" long)
(3)	5345H	Flight (8'-10" long)
4	1030060	Flight Shield w/decal (53 1/8" long)
(4)	1030061	Flight Shield w/decal (67 1/8" long)
(4)	1030062	Flight Shield w/decal (71 1/8" long)
(4)	1030063	Flight Shield w/decal (85 1/8" long)
(4)	1030064	Flight Shield w/decal (86 1/4" long)
(4)	1030065	Flight Shield w/decal (89 1/8" long)
(4)	1030066	Flight Shield w/decal (103 1/8" long)
(4)	1030103	Flight Shield w/decal (107 1/8" long)
5	1030045	Shield Splice Plate
6	1045D	Stub, 1 1/2" x 11 1/2" long
7	1030096	Shield Bearing Assy.
--	1051D	Bronze Bushing, 1 1/2" I.D.
8	1030042	Shield to Gearbox Attachment Plate

GEARBOX

COMPLETE PART NO. 1015211-3



Specifications:
Ratio 1:1
Input Speed - 450 RPM's

Part No's. shown are Weasler Part No's.

Ref. No.	Part No.	Description
	70-06072	Housing, Machined
	28-21000	O-Ring
	19-15203	Gasket Kit
	70-16041	End Cap, Machined
	70-16039	End Cap, Machined
	12-20104	Bearing Cup (L44610)
	12-20105	Bearing Cone (L44643)
	19-15201	Shim Kit
	12-20106	Bearing Cup (LM11710)
	12-20107	Bearing Cone (LM11749)

Ref. No.	Part No.	Description
	09-70024	Shaft, Input
	09-70025	Shaft, Output
	24-15249	Retaining Ring
	71-06047	Gear, 19 teeth / DP6
	11-20439	Bolt, 5/16-18 x 7/8" G5
	28-11002	Seal (1.00 x 1.50 x .276)
	11-81029	Pipe Plug, 1/4-18 NPT
	11-61015	Key, 1/4" sq. x 0.92" long
	09-70026	Shaft, Cross
	24-15247	Retaining Ring

Order Weasler Parts at:
Weasler Engineering Inc.
P.O. Box 558
West Bend, WI 53095
ph: 262-338-2161

Hutchinson/Mayrath

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