

# 6", 8" and 10" Bin Sweep Auger





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#### **Product Information**

- 1. The bin sweep auger includes a motor mount and drive assembly, auger, auger shield assembly and rubber end wheel.
- 2. The unit will operate only in a round grain bin equipped with a center bin well in the bin floor.



NEVER enter a grain bin unless ALL power driven equipment has been shut down. Disconnect and lock out power before entering the bin or servicing the equipment.

#### **General Information**

- 1. We reserve the right to change, improve and modify products at any time without obligation to make changes, improvements and modifications on equipment sold previously.
- 2. This new bin sweep auger has been engineered and manufactured to give years of dependable service. The care and maintenance of this equipment will affect the satisfaction and service obtained. By following the instructions and suggestions recommended, the owner should receive quality service for many years. If additional information or assistance should be required, please contact your dealer or the manufacturer.
- 3. It is important to check both the quantity of parts and their descriptions with the packing list enclosed within each package. All claims for freight damage or shortage must be made by the consignee within ten (10) days from the date of the occurrence of freight damage. The consignee should accept the shipment after noting the damage or loss.

#### **Electric Motor Drives**



Electrical controls and wiring should be installed by a qualified electrician. The motor disconnect switches and conductor cables should comply with the National Electrical Code and any local codes which apply. Reset and motor starting stations should be located so that the operator can see that all personnel are clear of the equipment.

**NOTE:** Use an electric motor that operates at 1750 RPM. Use a 2-1/2" (6.35 cm) motor pulley for a recommended auger speed of 625 RPM. Motor pulleys are not furnished with the auger.

**NOTE:** Use an electric motor that operates at 1750 RPM. Use a 3" (7.62 cm) motor pulley for a recommended auger speed of 525 RPM. Motor pulleys are not furnished with the auger.

**NOTE:** The horsepower recommendations are for augering reasonably dry grain. High moisture grain (greater than 15%) will require greater power for maximum capacity. The maximum capacity will be less with high moisture grain than with dry grain.

- 1. A magnetic starter should be used to protect the motor when starting and stopping. It should stop the motor in case of power interruption, conductor fault, low voltage, circuit interruption or motor overload. The motor must be restarted manually. Some motors have built-in thermal overload protection. If this is the type of motor being used, use only those with a manual reset.
- 2. The motor starting controls must be located outside the bin. They must NEVER be installed on the bin sweep auger inside the bin.

## **Electric Motor Drives (Continued)**

- 3. Disconnect and lock out the power before resetting motor overloads.
- 4. Disconnect and lock out the power before entering the bin.
- 5. Disconnect and lock out the power before servicing the equipment.
- 6. Position the reset and motor starting controls so that the operators have full view of the equipment working.



There should ALWAYS be two (2) people in the work area.

7. Make sure electric motors are grounded.

**NOTE**: A main power disconnect switch capable of being locked only in the OFF position should be used. It should be locked whenever work is being done on the bin sweep auger.

## **Safety Guidelines**

Safety guidelines are general-to-specific safety rules that must be followed at all times. This manual is written to help you understand safe operating procedures and problems that can be encountered by the operator and other personnel when using this equipment. Read and save these instructions.

As owner or operator, you are responsible for understanding the requirements, hazards, and precautions that exist and to inform others as required. Unqualified persons must stay out of the work area at all times.

Alterations must not be made to the equipment. Alterations can produce dangerous situations resulting in SERIOUS INJURY or DEATH.

This equipment must be installed in accordance with the current installation codes and applicable regulations, which must be carefully followed in all cases. Authorities having jurisdiction must be consulted before installations are made.

When necessary, you must consider the installation location relative to electrical, fuel and water utilities.

Personnel operating or working around equipment must read this manual. This manual must be delivered with equipment to its owner. Failure to read this manual and its safety instructions is a misuse of the equipment.

ST-0001-4

## **Cautionary Symbols Definitions**

Cautionary symbols appear in this manual and on product decals. The symbols alert the user of potential safety hazards, prohibited activities and mandatory actions. To help you recognize this information, we use the symbols that are defined below.



This symbol indicates an imminently hazardous situation which, if not avoided, will result in serious injury or death.



This symbol indicates a potentially hazardous situation which, if not avoided, **can result in serious injury or death.** 



This symbol indicates a potentially hazardous situation which, if not avoided, **can result in minor or moderate injury.** 



This symbol is used to address practices not related to personal injury.



This symbol indicates a general hazard.



This symbol indicates a prohibited activity.



This symbol indicates a mandatory action.

ST-0005-2

## **Safety Cautions**

#### **Use Personal Protective Equipment**

Use appropriate personal protective equipment:

Eye Protection



Respiratory Protection



Foot Protection



Hearing Protection



Head Protection



Fall Protection



Hand Protection



- Wear clothing appropriate to the job.
- Remove all jewelry.
- Tie long hair up and back.

ST-0004-1

## **Follow Safety Instructions**

- Carefully read all safety messages in this manual and safety signs on your machine. Keep signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from the manufacturer.
- Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.
- If you do not understand any part of this manual or need assistance, contact your dealer.



ST-0002-1

#### **Maintain Equipment and Work Area**

- Understand service procedures before doing work. Keep area clean and dry.
- Never service equipment while it is operating. Keep hands, feet, and clothing away from moving parts.
- Keep your equipment in proper working condition. Replace worn or broken parts immediately.



ST-0003-1

#### **Operate Motor Properly**

- All electrical connections must be made in accordance with applicable local codes (National Electrical Code for the US, Canadian Electric Code, or EN60204 along with applicable European Directives for Europe). Make sure equipment and bins are properly grounded.
- Lock-out power before resetting motor overloads.
- Do not repetitively stop and start the drive in order to free a plugged condition. Jogging the drive in this manner can damage the equipment and drive components.



ST-0009-3

#### **Rotating Auger Hazard**

- Keep clear of rotating augers and moving parts.
- Do not remove or modify guards or covers.
- Lock-out power source before making adjustments, cleaning, or maintaining equipment.
- Failure to follow these precautions will result in serious injury or death.





ST-0037-1

## **Stay Clear of Hoisted Equipment**

- Always use proper lifting or hoisting equipment when assembling or disassembling equipment.
- Do not walk or stand under hoisted equipment.
- Always use sturdy and stable supports when needed for installation. Not following these safety precautions creates the risk of falling equipment, which can crush personnel and cause serious injury or death.



ST-0047-1

#### **Stay Clear of Rotating Parts**

- Do not enter the bin while the equipment is in operation.
- Entanglement in rotating augers will cause serious injury or death.
- Keep all guards and covers in place at all times.
- Lock-out power source before making adjustments, cleaning, or maintaining equipment.



ST-0008-2

#### **Use Unload Equipment Properly**

- Do not operate this equipment alone. Make sure someone nearby is aware of the proper shut down sequence in the event of an emergency.
- Do not allow any person intoxicated or under the influence of drugs to operate this equipment. All operators must be adequately rested and prepared to perform all functions of operating the equipment.
- Do not start equipment until all persons are clear of the work area and safety guards are in place.
- Do not allow anyone inside a bin, truck, or wagon which is being unloaded by an auger. Flowing grain can trap and suffocate in seconds.
- Use ample overhead lighting after sunset to light the work area.
- Always use caution to not hit the auger when positioning the load.
- Do not leave equipment operating while unattended.
- Be aware of pinch points, which can trap or catch objects and cause injury.
- Be sure all equipment is locked in position before operating.
- Always lock out all power sources to the equipment when unloading is finished.





ST-0051-1

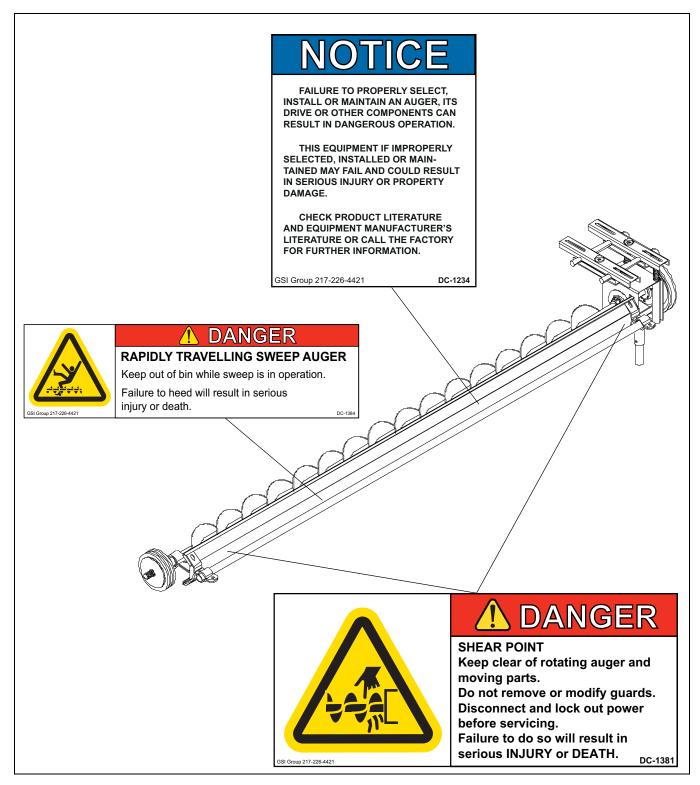
# **Safety Sign-Off Sheet**

Below is a sign-off sheet that can be used to verify that all personnel have read and understood the safety instructions. This sign-off sheet is provided for your convenience and personal record keeping.

Date	Employee Name	Supervisor Name

ST-0007

The images below show the location of the decals and safety signs which should appear on the auger.



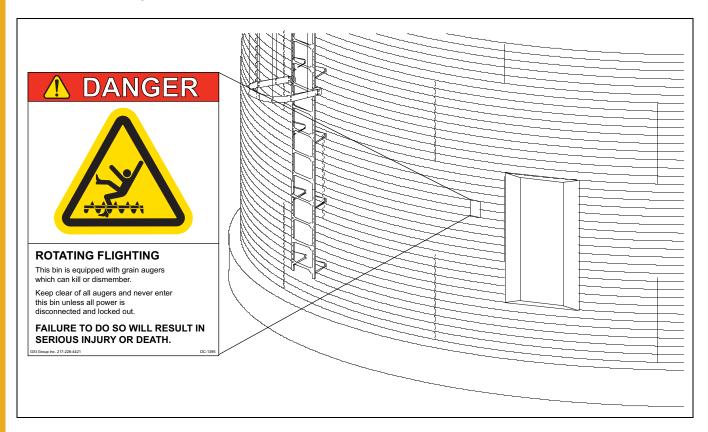
**NOTE**: Please remember safety signs provide important safety information for people working near bin unloading equipment that is in operation.

Any safety signs that are worn, missing, illegible or painted over should be replaced immediately. Obtain FREE replacements by contacting your dealer.

#### 3. Safety Decals

- A. DANGER Sign No. DC-1395 was supplied with your bin unloading equipment. This safety sign should be applied to the side of the bin near the bin opening, so it will be viewed by people entering into the bin storage building. Do not cover any safety signs or any other signs that are already there.
- B. If the safety sign location suggested is not in full view because of equipment modifications, other equipment in the area or any reason, then locate the safety sign in a more suitable location.
- C. Be certain the surface is clean, dry and free of dirt and oil. Peel paper backing from decals and stick into place. The adhesive backing will bond on contact.

**NOTE:** Please remember, safety signs provide important safety information for people working near bin unloading equipment that is in operation.



**NOTE:** If the Safety Sign cannot be easily read for any reason or has been painted over, replace it immediately. Additional Safety Signs may be obtained free of charge from the dealer, distributor or ordered from the factory.

Order SAFETY SIGN NO. DC-1395.

## Install the Motor Mount on the Flighting Drive End

- 1. Assemble the flange bearings on each side of the motor mount assembly, using 5/16" x 3/4" carriage bolts with lock washers and nuts.
- 2. Tighten the carriage bolts and nuts.

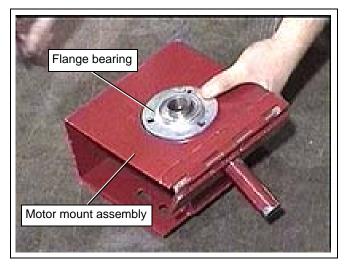




Figure 4A

Figure 4B

- 3. Place a lock collar onto the shaft. Do not tighten.
- 4. Place the motor mount assembly onto the shaft making sure that the hinge of the motor mount assembly is facing outward.

**NOTE:** The bearing and motor mount assembly is placed on the end of the flighting shaft that is the longest without flight.



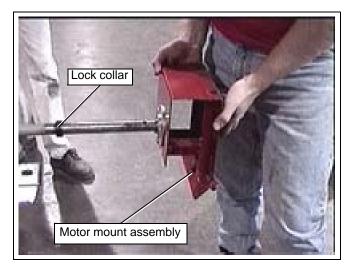


Figure 4C

Figure 4D

# Install the Motor Mount on the Flighting Drive End (Continued)

5. Place the outer lock collar onto the shaft. This lock collar will be located on the opposite side of the motor mount assembly as the first one. Do not tighten the collar.

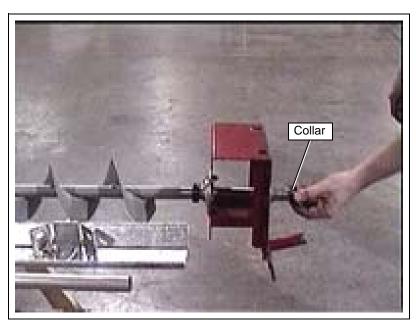


Figure 4E

## **Install the Pulley**

1. Place the pulley onto the shaft making sure that the stub of the pulley is facing inward toward the motor mount assembly.

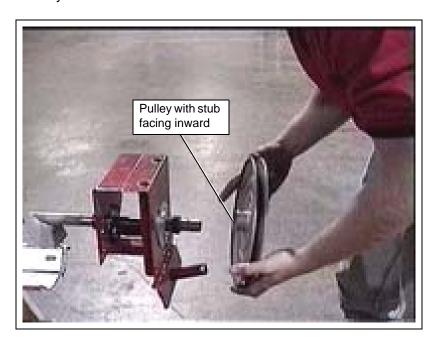


Figure 4F

# **Install the Pulley (Continued)**

2. Turn the pulley wheel so that the roll pin hole on the pulley shaft and the roll pin hole on the tube align.

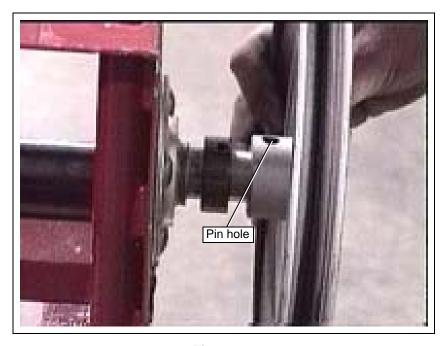


Figure 4G

3. Insert a 5/16" x 2" roll pin into pin hole located on the pulley stub. Drive the roll pin, with a hammer and a punch, equally through both sides of pulley.

**NOTE:** It may be necessary to pre-start the roll pin. The pulley is separate from the shaft as seen in Figure 4H corner picture.

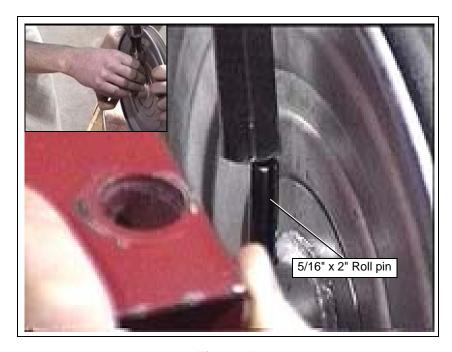


Figure 4H

## Position the Motor Mount Assembly and Tighten the Lock Collars

1. Slide the motor mount assembly toward the pulley until there is an 1/8" to 1/4" gap between each.

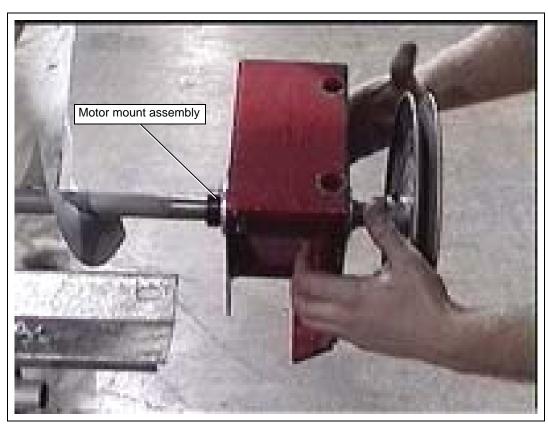


Figure 4I

2. When the motor mount assembly is positioned properly, tighten the lock collars. To tighten the lock collars, use a punch and hammer to drive the collar, closest to the flighting, clockwise and the collar, closest to the pulley, counterclockwise, until tight (noted in *Figure 4J*). Then proceed to tighten with an 1/8" hex head wrench. (See Figure 4K.)





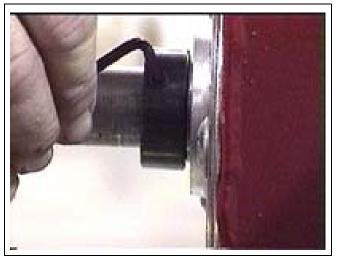


Figure 4K

## **Install the Shield Support Bracket**

1. Mount the shield support bracket to the motor mount assembly using two (2) 5/16" x 1" bolts, four (4) flat washers, two (2) lock washers and two (2) nuts. Bolt the shield support bracket to the inside of the motor mount assembly.

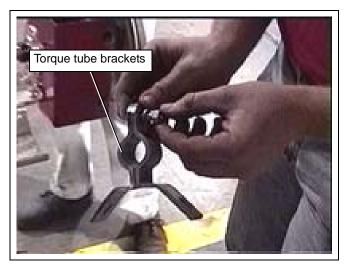
**NOTE:** Do not completely tighten the bolt on the shield support bracket. They will be tightened later in the assembly.



Figure 4L

## **Install the Torque Tube Clamp**

- 1. Using four (4) 5/16" x 1" bolts, lock washers and nuts, attach the torque tube clamps to the torque tube. Place the torque tube clamps together first and place the middle bolt on them to hold them together. The tube will correspond to the length of the sweep.
- 2. Slide the torque tube brackets onto the torque tube. Do not tighten completely.



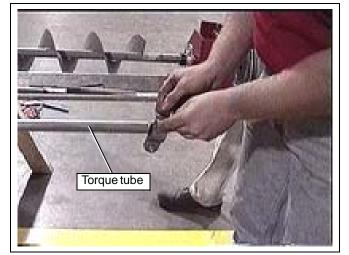


Figure 4M Figure 4N

## **Install the Shield**

1. Position the torque tube clamp underneath the shield. Align holes in torque tube clamps with holes in back shield.



Figure 40

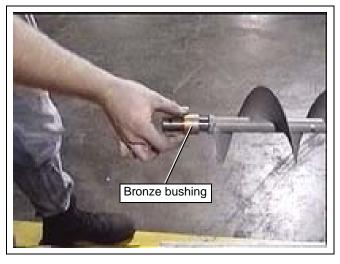
2. Tighten the bolts and nuts that hold the tube to the torque tube clamps.



Figure 4P

## **Install the Bearing Clamp Brackets**

- 1. Place a bronze bushing onto the flighting shaft opposite the end of the motor mount assembly. The middle bushing is already pre-placed on longer models.
- 2. Place the bearing clamps together over both bronze bushings using one 5/16" bolt, lock washer and nut for each bearing clamp. Tighten the bolts.



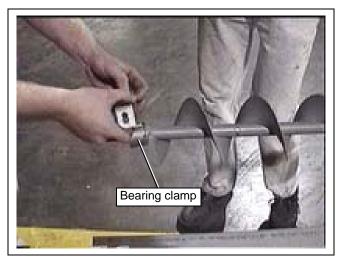


Figure 4Q

Figure 4R

## Attach the Flighting to the Shield

- 1. Connect the shield support bracket and the torque clamp to the shield using two (2) 5/16" x 1" bolts, lock washers and nuts as shown in *Figure 4S*.
- 2. Connect the bearing brackets and the torque tube clamps to the shield using four (4) 5/16" x 1" bolts, washers and nuts for each area as shown in *Figure 4T*.

**NOTE:** Make sure to place the head of the bolts on the inside of the shield with the threaded end protruding to the outside.

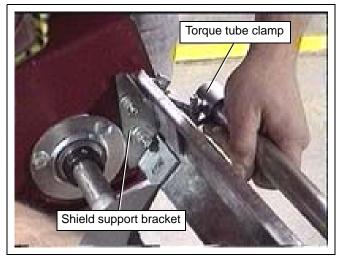






Figure 4T

## **Wheel Assembly**

1. Insert the sweep wheel shaft with non-threaded end into the flighting tube securing it with a 5/16" x 2" roll pin placed in the hole located in the flighting tube.

**NOTE:** Make sure to place the 5/16" x 2" pin in the inner positioned hole located on the sweep wheel shaft leaving one hole exposed.

Use a hammer and if needed a punch to center the pin.

2. Insert the 5/16" x 1" pin into the hole on the sweep wheel shaft. Drive the pin into the shaft until it is centered in the wheel shaft.

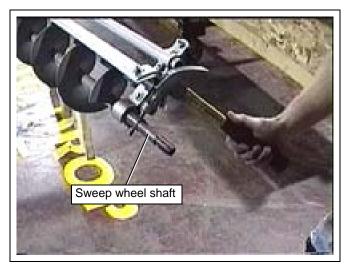




Figure 4U

Figure 4V

3. Place two (2) steel discs onto the shaft followed by five (5) rubber discs, followed by two (2) steel disc.

	6" Swe	8"			
	4-1/4" O.D. Flighting	5" O.D. Flighting	Sweep	Qty	
Steel	4"	5"	5"	4	
Rubber	5"	6"	6"	5	



Figure 4W

# **Wheel Assembly (Continued)**

- 4. When finished, the wheel assembly should appear as shown in Figure 4X.
- 5. Place one 3/4" lock washer and one 3/4" nut onto the shaft and tighten.





Figure 4X Figure 4Y

#### **Install the Motor Mount Rods**

- 1. Place one 3/4" nuts onto each of the motor mount rods.
- 2. Install both top motor mount clip and both bottom motor mount clip onto the motor mount rods with a two (2) 3/8" x 2-1/2" carriage bolt, lock washer and nut.



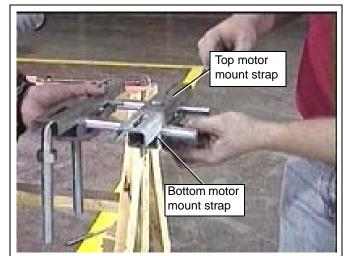


Figure 4Z Figure 4AA

## **Install the Motor Mount Rods (Continued)**

3. Insert the threaded ends of the motor mount rods into the motor mount. The motor mount rods should be facing away from the pulley as shown in *Figure 4AB*.

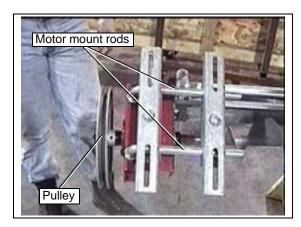


Figure 4AB

## **Install the Pivot Pin Extension (If Needed)**

1. Slide the pivot pin extension over the pivot tube located on the motor mount assembly.



Figure 4AC

## Install the Bin Sweep into the Bin

- 1. After removing all grain from the center well and intermediate well, place the bin sweep auger in the bin.
- 2. Place the pin, located on the sweep motor mount, into the tube provided on top of the well.
- 3. Lay the sweep auger on the pile of sloping grain.
- 4. Use the extension tube between the motor mount and the bin well, if desired.
- 5. Attach the suitable electric wiring to the motor in a manner that will permit the sweep to rotate around the bin.

**NOTE**: The motor starting controls must be located outside the bin. They must **NEVER** be installed on the sweep inside the bin.

## Install the Motor Mount on the Flighting Drive End

- 1. Assemble the flange bearings on each side of the motor mount assembly, using 5/16" x 3/4" carriage bolts with lock washers and nuts.
- 2. Tighten the carriage bolts and nuts.

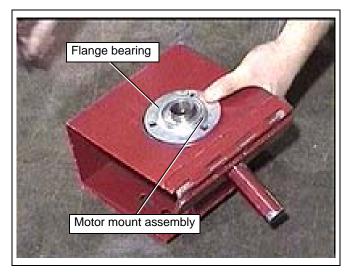




Figure 5B

Figure 5A

- 3. Place a lock collar onto the shaft. Do not tighten.
- 4. Place the motor mount assembly onto the shaft of the small flighting section making sure that the hinge of the motor mount assembly is facing outward.

**NOTE:** The bearing and motor mount assembly is placed on the end of the flighting shaft that is the longest without flight.



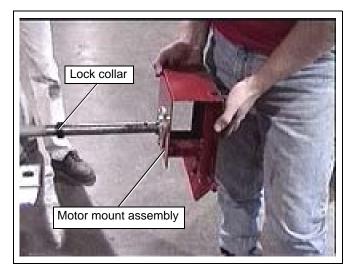


Figure 5C Figure 5D

## Install the Motor Mount on the Flighting Drive End (Continued)

5. Place the outer lock collar onto the flighting shaft. This lock collar will be located on the opposite side of the motor mount assembly as the first one. Do not tighten the collar.

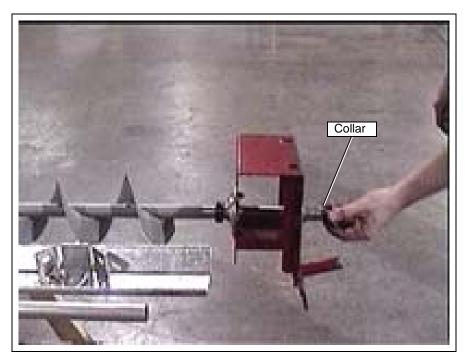


Figure 5E

## **Install the Pulley**

1. Place the pulley onto the flighting shaft making sure that the stub of the pulley is facing inward toward the motor mount assembly.

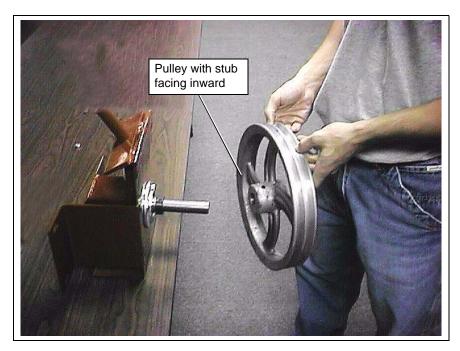
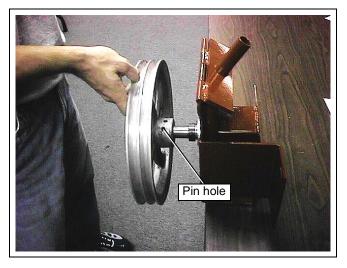


Figure 5F

## **Install the Pulley (Continued)**

- 2. Turn the pulley wheel so that the roll pin hole on the pulley shaft and the roll pin hole on the tube align.
- 3. Insert a 5/16" x 2" roll pin into pin hole located on the pulley stub. Drive the roll pin, with a hammer and a punch, equally through both sides of pulley.

**NOTE:** It may be necessary to pre-start the roll pin. The pulley is separate from the shaft as seen in Figure 5H corner picture.



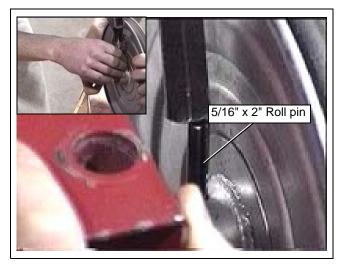


Figure 5G

Figure 5H

## Position the Motor Mount Assembly and Tighten the Lock Collars

1. Slide the motor mount assembly toward the pulley until there is an 1/8" to 1/4" gap between each.

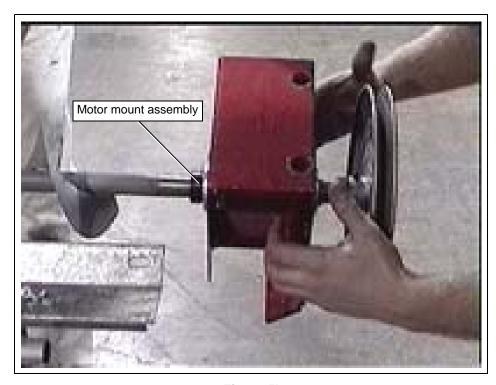


Figure 5I

# Position the Motor Mount Assembly and Tighten the Lock Collars (Continued)

2. When the motor mount assembly is positioned properly, tighten the lock collars. To tighten the lock collars, use a punch and hammer to drive the collar, closest to the flighting, clockwise and the collar, closest to the pulley, counterclockwise, until tight (noted in *Figure 5J*). Then proceed to tighten with an 1/8" hex head wrench. (See Figure 5K.)



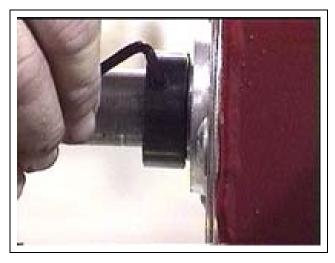


Figure 5J

Figure 5K

## Install the Flighting

1. Insert the connecting stub into the small section of flighting. Secure it with bolts, lock washers and nuts.

**NOTE:** Use the Chart below to determine the number of flighting and shield sections needed for the length of sweep to be used.

10" Bin Sweep Flight/Shield Combinations					
Bin	3' 9"	5' 3"	6' 9"	8' 3"	9' 9"
24'		2			
27'		1	1		
30'			2		
33'			1	1	
36'				2	
39'				1	1
42'					2

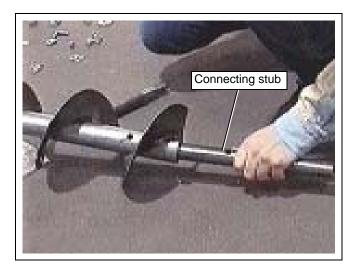


Figure 5L

# **Install the Bearing Bracket**

1. Place the hanger bearing bracket onto the connecting stub.

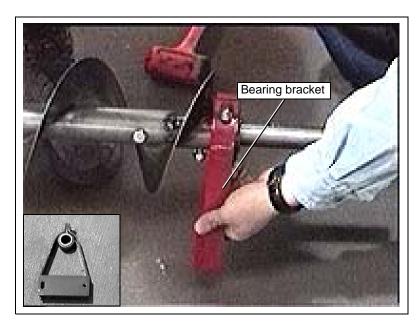


Figure 5M

# **Install the Sweep Flighting**

1. Install the next section of flighting. Secure the flighting with bolts, lock washers and nuts.



Figure 5N

# **Install the Flighting Shield**

1. Install the smallest shield to the shield mounting bracket located on the motor mount assembly. Secure using two (2) 3/8" x 3" bolts and lock nuts. Make sure the nut is on the side of the slotted hole for adjustment.

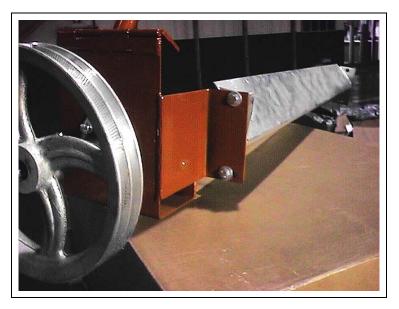


Figure 50

2. Install the first and second section of flighting shield to the hanger bearing bracket (when applicable). Use two (2) 3/8" x 3" bolts, lock washers and nuts to secure these together.



Figure 5P

#### **Assemble the Wheel Shaft**

1. Place one steel disc onto the wheel shaft. Place three (3) rubber discs onto the wheel shaft followed by one steel disc. Secure the wheel shaft assembly with a 3/4" lock washer and left handed nut. Tighten the left handed nut with a wrench.

	10" Sweep	Qty
Steel	6"	4
Rubber	7"	5



Figure 5Q

# **Install the Hanger Bearing Bracket**

1. Place the hanger bearing bracket onto the wheel shaft.

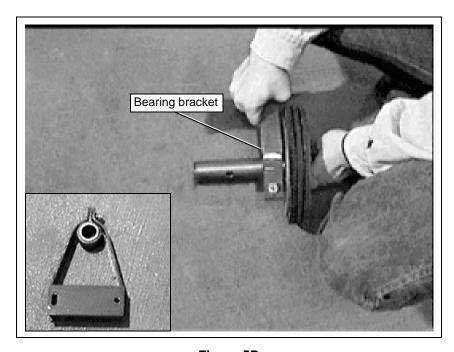


Figure 5R

#### Install the Wheel Shaft

- 1. Slide the wheel shaft into the flighting. Secure the wheel shaft to the flighting with one 7/16" x 2-1/4" bolt and lock nut. Tighten with a wrench.
- 2. Attach the last shield section to the hanger bearing bracket and secure it using two (2) 3/8" x 3" bolts, flat washers and lock nuts.





Figure 5S Figure 5T

## **Install the Motor Mount Rods**

- 1. Place one 3/4" nuts onto each of the motor mount rods.
- 2. Install both top motor mount clip and both bottom motor mount clip onto the motor mount rods with a two (2) 3/8" x 2-1/2" carriage bolt, lock washer and nut.



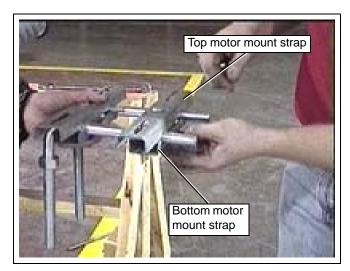


Figure 5V Figure 5V

## **Install the Motor Mount Rods (Continued)**

3. Insert the threaded ends of the motor mount rods into the motor mount. The motor mount rods should be facing away from the pulley as shown in *Figure 5W*.

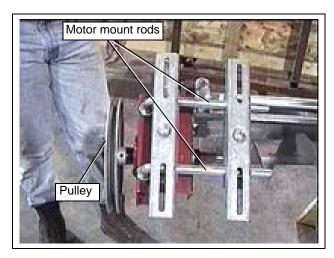


Figure 5W

## Install the Pivot Pin Extension (If Needed)

Slide the pivot pin extension over the pivot tube located on the motor mount assembly.

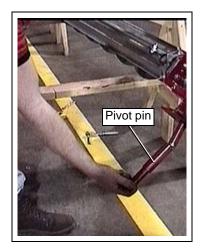


Figure 5X

## Install the Bin Sweep into the Bin

- 1. Place the bin sweep auger in the bin after all the grain that can be removed through the center well and intermediate well have been removed.
- 2. Place the pin, located on the sweep motor mount, into the tube provided on top of the well.
- 3. Lay the sweep auger on the pile of sloping grain.
- 4. Use the extension tube between the motor mount and the bin well, if desired.
- 5. Attach the suitable electric wiring to the motor in a manner that will permit the sweep to rotate around the bin.

**NOTE:** The motor starting controls must be located outside the bin. The must **NEVER** be installed on the sweep inside the bin.

#### **Perform Pre-Start Checks**



Failure to perform any or all of these pre-start checks may cause damage to the equipment and/or cause SERIOUS INJURY or DEATH to those in the work area.

Failure to perform any or all of these pre-start checks may also be a misuse of the equipment. Any misuse of the equipment may void the warranty.

- 1. Make sure ALL belts are tensioned properly.
- 2. Make sure ALL shields are in place and that the belt(s) and pulley(s) are able to move freely.



ALWAYS keep ALL guards and shields in place, until all the power is disconnected and locked out.

- 3. Inspect the drive unit for any problems or potential problems.
- 4. Be aware of any emergency shut down procedures. Two (2) people must always be in a position where the operation of the equipment can be monitored.
- 5. Before starting the auger for the first time, make sure that all parts are assembled correctly according to the instructions in this manual.



Make certain ONLY trained operators are in the work area before operating or moving the machine. Two (2) people must always be in a position where the operation of the equipment can be monitored.

## Start the Auger

1. Start the auger.



DO NOT start or stop the auger while it is under load. Doing so may cause the auger to "jam".

- 2. Run the auger through a "break-in" period, if it is being used for the first time.
- 3. Polish the flighting by running the auger at partial capacity until it is smooth, before attempting full capacity.



Failures may occur if the auger is run full before it has been "polished" during the "break-in" period.



NEVER operate the auger empty. Operating augers empty for any length of time will cause excessive wear.

NEVER operate the auger at speeds higher than recommended. Auger flight speed in excess of recommended speed causes excessive wear.



Be aware of any unusual vibration or noises during the initial start-up and "break-in" period. If anything unusual is detected, immediately shut down the auger and disconnect and lock out the power supply before servicing.

## **Operate the Bin Sweep Auger**



Keep out of the bin while the bin sweep auger is in operation. The rapidly moving sweep auger can cause SERIOUS INJURY or DEATH.

1. Start the bin unloading equipment before starting the bin sweep auger.

**NOTE:** The bin sweep auger will work toward the floor. When it reaches the floor, it should empty the bin in one revolution.

- 2. Shut down the auger as soon as the bin is empty.
- 3. Remove the sweep auger from the bin before refilling the bin.

**NOTE:** The shield must be adjusted to clear the floor at a minimum of 1/2" to allow the sweep wheel to move the sweep properly into the grain.



DO NOT leave the bin sweep inside the bin during filling.

NEVER enter the bin while the bin sweep is in operation.



NEVER attempt to control the operation of the bin sweep by depressing the operating controls with shovels, brooms or any other objects other than the hands.

DO NOT attempt to restrain movement of the bin sweep with ropes, bars or other devices.

NEVER allow an operator to manually restrain the bin sweep.

#### **Normal Shut Down**

- 1. Before shutting down the unit, be sure the hoppers and augers are empty.
- 2. Disconnect and lock out the power source before leaving the work area.

## **Emergency Shut Down**

- 1. Know how to shut down the auger in case of an emergency.
- 2. Do not re-start the auger while it is under load.



NEVER start the equipment under load. Doing so may cause damage. This type of damage is considered a misuse of the equipment. Any misuse of the equipment may void the warranty.

- 3. Close the bin well control gates.
- 4. Re-connect and unlock the power source.
- 5. Clear the auger gradually, until there is no grain and there are no obstructions.

## **Storage Preparation**

- 1. Close all wells to the discharge auger.
- 2. Be sure the unload tube is empty.
- 3. Shut down the auger.
- 4. Make sure all fasteners are tight.

## **Maintain the Auger**



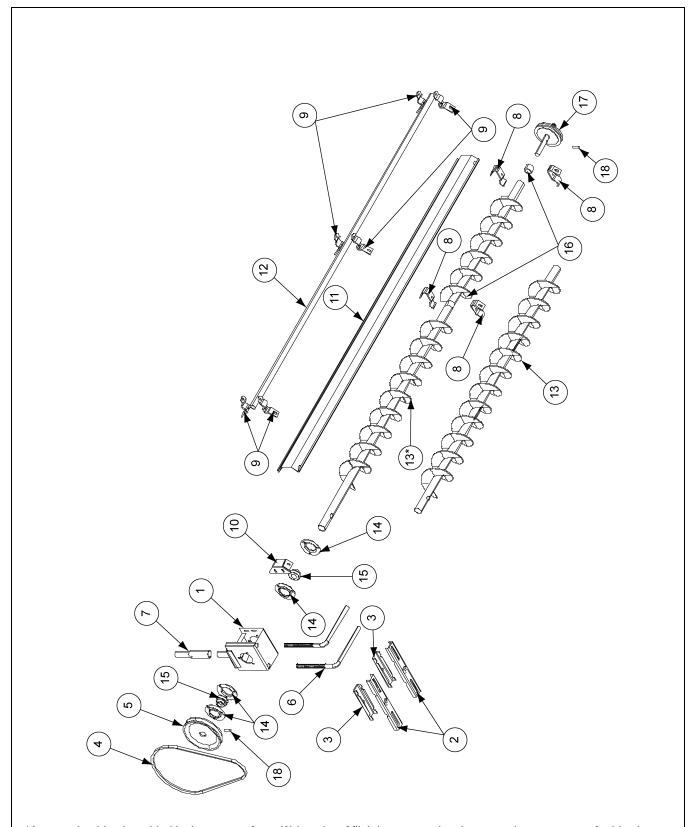
ALWAYS shut down and disconnect the power supply before adjusting, servicing or cleaning the equipment.

- 1. Use caution when repairing or replacing equipment parts.
- 2. Make sure ALL decals are legible and tightly attached to the auger. If necessary, replace them **FREE OF CHARGE** by contacting your dealer or the manufacturer.
- 3. Ensure that ALL electric motors, etc., are operating at the proper speed.
- 4. Maintain proper adjustments on the belt(s).
- 5. Mount controls for any electric motors at a safe distance from the machine and in a location accessible in case of an emergency.
- 6. Make sure ALL electrical wiring is not damaged and that it meets proper wiring codes.
- 7. Make sure ALL components are in good working condition before use.
- 8. Make sure all components are in good working condition before use.
- 9. Grease the bearing at least two (2) times each season.

# **NOTES**

- 1. 6" Bin Sweep Auger (See Pages 40-41.)
- 2. 8" Bin Sweep Auger (See Pages 42-43.)
- 3. 10" Bin Sweep Auger (See Pages 44-45.)
- 4. 6", 8" and 10" Bin Sweep Auger Wheel Assembly (See Pages 46.)

## 6" Bin Sweep Auger



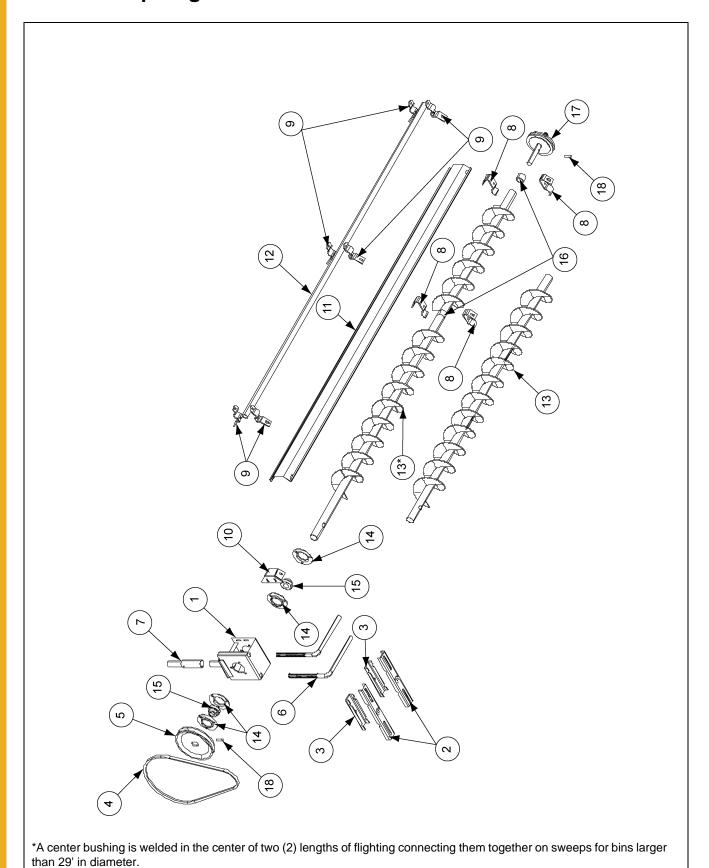
<sup>\*</sup>A center bushing is welded in the center of two (2) lengths of flighting connecting them together on sweeps for bins larger than 29' in diameter.

#### **6" Bin Sweep Auger Parts List**

Ref #	Part #	Description	Bin Diameter (ft.)	Qty
1	GK1235	Motor Mount Assembly	15-36	1
2	GK1063	Top Motor Mount Clip	15-36	2
3	GK1064	Bottom Motor Mount Clip	15-36	2
4	GK1236	B38 Belt	15-36	1
5	GK1237	7" (17.78 cm) Sheave - 1" (2.54 cm) Bore	15-36	1
6	GK1239	Motor Mount Rods	15-36	2
7	GK1073-Y	Extension for Pivot Pin Tube - Ochre	15-36	1
8	GK1074	Bearing Clamp Bracket	15-36	1 Pair
9	GK1078	Torque Tube Clamp	15-36	2 Pair
10	GK1075	Shield Support Bracket	15-36	1
11	GK1079	Shield: 76" Long	15	1
11	GK1084	Shield: 94" Long	18	1
11	GK1071	Shield: 112" Long	21	1
11	GK1091	Shield: 130" Long	24	1
11	GK1095	Shield: 148" Long	27	1
11	GK1100	Shield: 166" Long	30	1
11	GK1262	Shield: 184" Long	33	1
11	GK1273	Shield: 202" Long	36	1
12	GK1080	Torque Tube: 76" Long	15	1
12	GK1817	Torque Tube: 94" Long	18	1
12	GK1088	Torque Tube: 112" Long	21	1
12	GK1092	Torque Tube: 130" Long	24	1
12	GK1096	Torque Tube: 148" Long	27	1
12	GK1101	Torque Tube: 166" Long	30	1
12	GK1270	Torque Tube: 184" Long	33	1
12	GK1274	Torque Tube: 202" Long	36	1
13	GK1234	Flighting: 84" Long	15	1
13	GK1242	Flighting: 102" Long	18	1
13	GK1244	Flighting: 120" Long	21	1
13	GK1246	Flighting: 138" Long	24	1
13	GK1248	Flighting: 156" Long	27	1
13	GK1251	Flighting: 174" Long	30	1
13	GK1252	Flighting: 192" Long	33	1
13	GK1254	Flighting: 210" Long	36	1
14	GK1319	1" (2.54 cm) Bearing Flangette	15-36	2
15	GK1318	1" (2.54 cm) Bearing w/ Lock Collar	15-36	2
16	GK1070	1.03" (2.62 cm) I.D. 1" (2.54 cm) Bronze Bushing	15-36	1
17**	N/A	Wheel Assembly	15-36	1
18	S-4377	5/16" Roll Pin: 2" Long	15-36	2

<sup>\*\*</sup>See Page 46 for a component breakdown of the wheel assembly.

## 8" Bin Sweep Auger

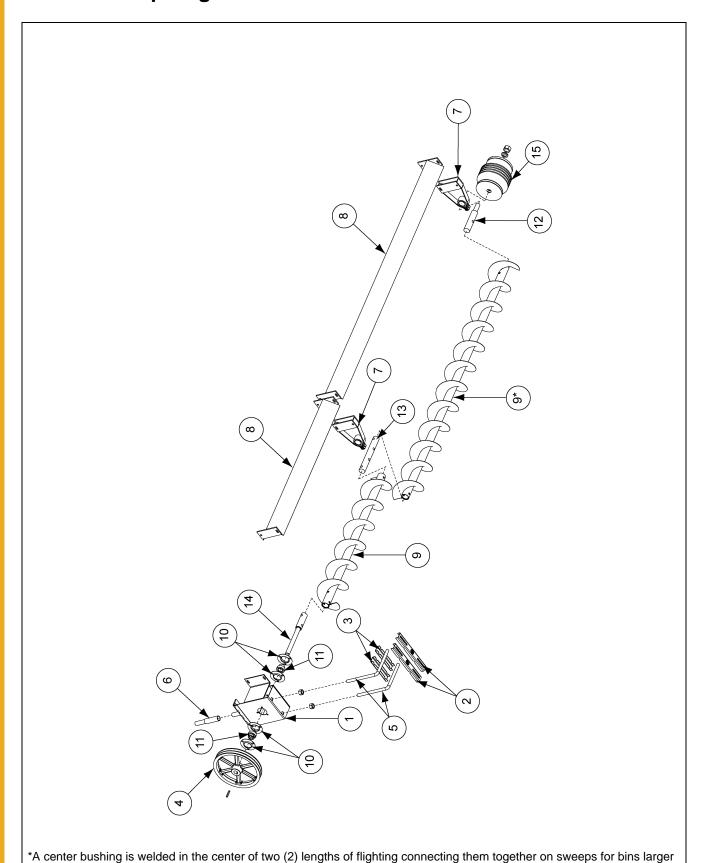


#### 8" Bin Sweep Auger Parts List

Ref #	Part #	Description	Bin Diameter (ft.)	Qty
1	GK1062-Y	Motor Mount Assembly - Ochre	15-36	1
2	GK1063	Top Motor Mount Clip	15-36	2
3	GK1064	Bottom Motor Mount Clip	15-36	2
4	GK1065	B42 Belt - For 15'-27' Bins	15-36	1
4	GK1099	B44 Belt - For 30'-36' Bins	15-36	1
5	GK1066	10" (25.40 cm) Sheave - 1" (2.54 cm) Bore	15-36	1
6	GK1239	Motor Mount Rods	15-36	2
7	GK1073-Y	Extension for Pivot Pin Tube - Ochre	15-36	1
8	GK1074	Bearing Clamp Bracket	15-36	1 Pair
9	GK1078	Torque Tube Clamp	15-36	2 Pair
10	GK1075	Shield Support Bracket	15-36	1
11	GK1079	Shield: 76" Long	15	1
11	GK1084	Shield: 94" Long	18	1
11	GK1071	Shield: 112" Long	21	1
11	GK1091	Shield: 130" Long	24	1
11	GK1095	Shield: 148" Long	27	1
11	GK1100	Shield: 166" Long	30	1
11	GK1262	Shield: 184" Long	33	1
11	GK1273	Shield: 202" Long	36	1
12	GK1080	Torque Tube: 76" Long	15	1
12	GK1817	Torque Tube: 94" Long	18	1
12	GK1088	Torque Tube: 112" Long	21	1
12	GK1092	Torque Tube: 130" Long	24	1
12	GK1096	Torque Tube: 148" Long	27	1
12	GK1101	Torque Tube: 166" Long	30	1
12	GK1270	Torque Tube: 184" Long	33	1
12	GK1274	Torque Tube: 202" Long	36	1
13	GK1081	Flighting: 84" Long	15	1
13	GK1086	Flighting: 102" Long	18	1
13	GK1089	Flighting: 120" Long	21	1
13	GK1093	Flighting: 138" Long	24	1
13	GK1097	Flighting: 156" Long	27	1
13	GK1258	Flighting: 174" Long	30	1
13	GK1271	Flighting: 210" Long	33	1
13	GK1275	Flighting: 210" Long	36	1
14	GK1319	1" (2.54 cm) Bearing Flangette	15-36	2
15	GK1318	1" (2.54 cm) Bearing w/ Lock Collar	15-36	2
16	GK1070	1.03" (2.62 cm) I.D. 1" (2.54 cm) Bronze Bushing	15-36	1
17**	N/A	Sweep Wheel Shaft	15-36	1
18	S-4377	5/16" Roll Pin: 2" Long	15-36	2

<sup>\*\*</sup>See Page 46 for a component breakdown of the wheel assembly.

## 10" Bin Sweep Auger



than 29' in diameter.

#### 10" Bin Sweep Auger Parts List

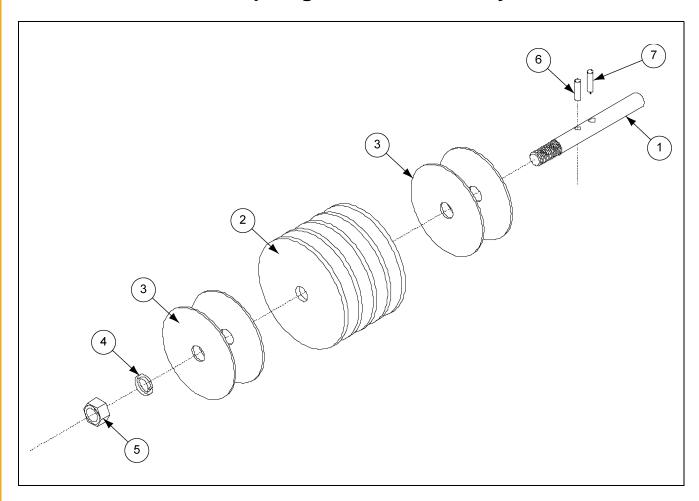
Ref #	Part #	Description	Bin Diameter (ft.)	Qty
1	GK1948-Y	Motor Mount Assembly - Ochre	24-42	1
2	GK1063	Top Motor Mount Clip	24-42	2
3	GK1064	Bottom Motor Mount Clip	24-42	2
4	GK1321	12" Sheave 2B Groove w/ 1" Bore	24-42	1
5	GK1239	Motor Mount Rods	24-42	2
6	GK1073-Y	Extension for Pivot Pin Tube - Ochre	24-42	1
7	GK1954	Bearing Clamp Bracket	24-42	1 Pair
8	GK1957	Shield: 3' 9" Long	See Table Below	See Table Below
8	GK1962	Shield: 5' 3" Long	See Table Below	See Table Below
8	GK1959	Shield: 6' 9" Long	See Table Below	See Table Below
8	GK1968	Shield: 8' 3" Long	See Table Below	See Table Below
8	GK1965	Shield: 9' 9" Long	See Table Below	See Table Below
9	GK1956	Flighting: 3' 9" Long	See Table Below	See Table Below
9	GK1961	Flighting: 5' 3" Long	See Table Below	See Table Below
9	GK1958	Flighting: 6' 9" Long	See Table Below	See Table Below
9	GK1967	Flighting: 8' 3" Long	See Table Below	See Table Below
9	GK1964	Flighting: 9' 9" Long	See Table Below	See Table Below
10	GK1319	1" (2.54 cm) Three Hole Bearing Flangette	24-42	4
11	GK1318	1" (2.54 cm) Bearing w/ Lock Collar	24-42	2
12**	GK1953	Sweep Wheel Shaft	24-42	1
13	GK1951	Connecting Stub	24-42	1
14	GK1949	Head Shaft	24-42	1
15	N/A	Wheel Assembly	24-42	1

<sup>\*\*</sup>See Page 46 for a component breakdown of the wheel assembly.

### 10" Bin Sweep Auger Flight/Shield Combinations

Bin	3' 9"	5' 3"	6' 9"	8' 3"	9' 9"
24'		2			
27'		1	1		
30'			2		
33'			1	1	
36'				2	
39'				1	1
42'					2

# 6", 8" and 10" Bin Sweep Auger Wheel Assembly



6", 8" and 10" Bin Sweep Auger Wheel Assembly Parts List

Ref #	Part #	Description	Qty
1	GK1077	Sweep Wheel Stub for 6" and 8" BSA	1
1	GK1953	Sweep Wheel Stub for 10" BSA	1
2	GK1238	5" (12.70 cm) O.D. Rubber Disc Wheel for use with 4-1/4" O.D. Flighting (some 6" BSA)	5
2	GK1067	6" (15.24 cm) O.D. Rubber Disc Wheel for use with 5" O.D. Flighting (some 6" and all 8" BSA)	5
2	GK1671	8" (20.32 cm) O.D. Rubber Disc Wheel for use with 7" O.D. Flighting (all 10" BSA)	5
3	GK1232	4" (10.16 cm) O.D. Steel Wheel Disc for use with 4-1/4" O.D. Flighting (some 6" BSA)	4
3	GK1076	5" (12.70 cm) O.D. Steel Wheel Disc for use with 5" O.D. Flighting (some 6" and all 8" BSA)	4
3	GK1670	7" (17.78 cm) O.D. Steel Wheel Disc for use with 7" O.D. Flighting (all 10" BSA)	4
4	S-233	3/4" Split Lock Washer Zinc Grade 2	1
5	S-234	3/4"-10 Hex Nut Zinc Grade 5	1
6	S-4377	5/16" x 2" (5.08 cm) Long Roll Pin	1
7	S-7058	5/16" x 1-1/8" (2.8575 cm) Long Roll Pin	1

Problem	Possible Cause	Solution
	Sweep capacity is too small for unload capacity.	Sweep with larger capacity.
Low Capacity	Horsepower is too low or the motor pulley size is incorrect.	Make sure the correct horsepower is being used.      Make sure the correct motor pulley size is being used. If a greater or lower capacity is desired, it may be possible to change the motor pulley which will change the sweep flight speed.  DO NOT operate a sweep that is overfeeding the unloading auger unit. The slide gate in the center well should be left full open during sweep operation.
	1. Excessive drag.	Check the clearance between the shield and the bin floor for excessive drag. Adjust the shield and carriers to clear metal floor splices or cracks in concrete floors.
	2. Worn wheel.	Check the sweep wheel. Extensive use may have worn down the wheel so that the diameter is no longer large enough to move the sweep properly. Order a replacement wheel or wheel pats from the dealer.
Auger plugs	3. Unconditioned grain.	The grain may have become unconditioned due to moisture or insect activity, making it hard or caked. Stop the sweep auger before entering the bin to correct this or any other difficulty. NEVER enter a bin while the auger is in operation. Disconnect and lock out the power before entering a bin or when servicing the equipment.
	Sweep capacity too large for unload capacity.	4. Sweep with less capacity.

# **NOTES**

### Limited Warranty — N.A. Grain Products

The GSI Group, LLC. ("GSI") warrants products which it manufactures, to be free of defects in materials and workmanship under normal usage and conditions for a period of 12 months from the date of shipment (or, if shipped by vessel, 14 months from the date of arrival at the port of discharge). If, in GSI's sole judgment, a product is found to have a defect in materials and/or workmanship, GSI will, at its own option and expense, repair or replace the product or refund the purchase price. This Limited Warranty is subject to extension and other terms as set forth below.

**Warranty Enhancements:** The warranty period for the following products is enhanced as shown below and is in lieu of (and not in addition to) the above stated warranty period. (Warranty Period is from date of shipment.)

	Product	Warranty Period
Storage	Grain Bin Structural Design Sidewall, roof, doors, platforms and walkarounds Flooring (when installed using GSI specified floor support system for that floor) Hopper tanks (BFT, GHT, NCHT, and FCHT)	
	Dryer Structural Design – (Tower, Portable and TopDry) • Includes (frame, portable dryer screens, ladders, access doors and platforms)	5 Years
Conditioning	All other Dryer parts including: • Electrical (controls, sensors, switches and internal wiring)	2 Years
	All Non-PTO Driven Centrifugal and Axial Fans	3 Years
	Bullseye Controllers	2 Years
	Bucket Elevators Structural Design	5 Years
Material	Towers Structural Design	5 Years
Handling	Catwalks Structural Design	5 Years
	Accessories (stairs, ladders and platforms) Structural Design	5 Years

#### **Conditions and Limitations:**

THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE LIMITED WARRANTY DESCRIPTION SET FORTH HEREIN; SPECIFICALLY, GSI DISCLAIMS ANY AND ALL OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE IN CONNECTION WITH: (I) ANY PRODUCT MANUFACTURED OR SOLD BY GSI, OR (II) ANY ADVICE, INSTRUCTION, RECOMMENDATION OR SUGGESTION PROVIDED BY AN AGENT, REPRESENTATIVE OR EMPLOYEE OF GSI REGARDING OR RELATED TO THE CONFIGURATION, INSTALLATION, LAYOUT, SUITABILITY FOR A PARTICULAR PURPOSE, OR DESIGN OF SUCH PRODUCTS.

The sole and exclusive remedy for any claimant is set forth in this Limited Warranty and shall not exceed the amount paid for the product purchased. This Warranty only covers the value of the warranted parts and equipment, and does not cover labor charges for removing or installing defective parts, shipping charges with respect to such parts, any applicable sales or other taxes, or any other charges or expenses not specified in this Warranty. GSI shall not be liable for any other direct, indirect, incidental or consequential damages, including, without limitation, loss of anticipated profits or benefits. Expenses incurred by or on behalf of a claimant without prior written authorization from the GSI warranty department shall not be reimbursed. This warranty is not transferable and applies only to the original end-user. GSI shall have no obligation or responsibility for any representations or warranties made by or on behalf of any dealer, agent or distributor. Prior to installation, the end-user bears all responsibility to comply with federal, state and local codes which apply to the location and installation of the products.

This Limited Warranty extends solely to products sold by GSI and does not cover any parts, components or materials used in conjunction with the product, that are not sold by GSI. GSI assumes no responsibility for claims resulting from construction defects, unauthorized modifications, corrosion or other cosmetic issues caused by storage, application or environmental conditions. Modifications to products not specifically delineated in the manual accompanying the product at initial sale will void all warranties. This Limited Warranty shall not extend to products or parts which have been damaged by negligent use, misuse, alteration, accident or which have been improperly/inadequately maintained.

#### **Notice Procedure:**

In order to make a valid warranty claim a written notice of the claim must be submitted, using the RMA form, within 60 days of discovery of a warrantable nonconformance. The RMA form is found on the OneGSI portal.

#### Service Parts:

GSI warrants, subject to all other conditions described in this Warranty, Service Parts which it manufactures for a period of 12 months from the date of purchase unless specified in Enhancements above.

(Limited Warranty - N.A. Grain Products revised 01 October 2020)

This equipment shall be installed in accordance with the current installation codes and applicable regulations, which should be carefully followed in all cases. Authorities having jurisdiction should be consulted before installations are made.



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