

# 6"-6", 6"-8", 8"-8", 8"-10" and 10"-12" 25° Bin Unloader

## Assembly and Operation Manual

PNEG-1430

Date: **12-21-20**

GSI GROUP



PNEG-1430



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## 1. Introduction

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READ THIS MANUAL carefully to learn how to properly use and install equipment. Failure to do so could result in personal injury or equipment damage.

INSPECT the shipment immediately upon arrival. The customer is responsible for ensuring that all quantities are correct. The customer should report and note any damage or shortage on the bill of lading to justify their claim to the transport company.

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your equipment and should be easily accessible when needed.

This warranty provides you the assurance that the company will back its products when defects appear within the warranty period. In some circumstances, the company also provides field improvements, often without charge to the customer, even if the product is out of warranty. Should the equipment be abused, or modified to change its performance beyond the factory specifications, the warranty will become void and field improvements may be denied.

## Safety Guidelines

This manual contains information that is important for you, the owner/operator, to know and understand. This information relates to protecting **personal safety** and **preventing equipment problems**. It is the responsibility of the owner/operator to inform anyone operating or working in the area of this equipment of these safety guidelines. To help you recognize this information, we use the symbols that are defined below. Please read the manual and pay attention to these sections. Failure to read this manual and its safety instructions is a misuse of the equipment and may lead to serious injury or death.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



**DANGER** indicates a hazardous situation which, if not avoided, will result in death or serious injury.



**WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury.



**CAUTION**, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



**NOTICE** is used to address practices not related to personal injury.

## 2. Safety

### Safety Instructions

Our foremost concern is your safety and the safety of others associated with this equipment. We want to keep you as a customer. This manual is to help you understand safe operating procedures and some problems that may be encountered by the operator and other personnel.

As owner and/or operator, it is your responsibility to know what requirements, hazards, and precautions exist, and to inform all personnel associated with the equipment or in the area. Safety precautions may be required from the personnel. Avoid any alterations to the equipment. Such alterations may produce a very dangerous situation where **SERIOUS INJURY** or **DEATH** may occur.

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.

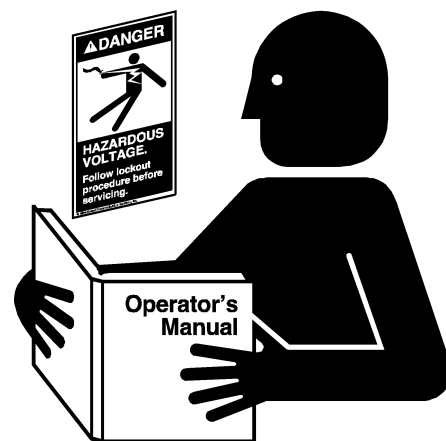
#### Follow Safety Instructions

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.

Keep your machinery in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual or need assistance, contact your dealer.



**Read and Understand Manual**

#### Operate Motor Properly

To avoid serious injury or death, stay away from unit and make sure everyone is clear of the equipment before starting or operating the unit.

All electrical connections should be made in accordance with the National Electric Code. Be sure equipment and bins are properly grounded.

Do not operate electric motor equipped units until motors are properly grounded.

Disconnect power on electrical driven units 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/or drive components.



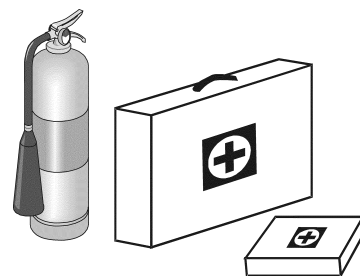
**Electric Shock Hazard**

### Prepare for Emergencies

Be prepared if fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



**Keep Emergency Equipment Quickly Accessible**

### Wear Protective Clothing

Wear close-fitting clothing and safety equipment appropriate to the job.

Remove all jewelry.

Tie long hair up and back.

Wear safety glasses at all times to protect eyes from debris.

Wear gloves to protect your hands from sharp edges on plastic or steel parts.

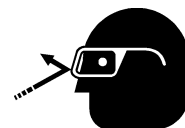
Wear steel-toed boots to help protect your feet from falling debris. Tuck in any loose or dangling shoestrings.

A respirator may be needed to prevent breathing potentially toxic fumes and dust.

Wear a hard hat to help protect your head.

Wear appropriate fall protection equipment when working at elevations greater than six feet (6').

**Eye Protection**



**Gloves**



**Steel-Toed Boots**



**Respirator**



**Hard Hat**



**Fall Protection**



### Operate Unload Equipment Properly

- Untrained operators subject themselves and others to **SERIOUS INJURY** or **DEATH**. **NEVER** allow untrained personnel to operate this equipment.
- **NEVER** work alone.
- Keep children and other unqualified personnel out of the working area at **ALL** times. Refer to the **Start-Up** section of this manual for diagrams of the work area.
- Make sure **ALL** equipment is locked in position before operating.
- **NEVER** start equipment until **ALL** persons are clear of the work area.
- Keep hands and feet away from the auger intake and other moving parts.
- **NEVER** attempt to assist machinery operation or to remove trash from equipment while in operation.
- Be sure all operators are adequately rested and prepared to perform all functions of operating this equipment.
- **NEVER** allow any person intoxicated or under the influence of alcohol or drugs to operate the equipment.
- Make sure someone is nearby who is aware of the proper shut down sequence in the event of an accident or emergency.
- **ALWAYS** think before acting. **NEVER** act impulsively around the equipment.
- **NEVER** allow anyone inside a bin, truck or wagon which is being unloaded by an auger or conveyor. Flowing grain can trap and suffocate in seconds.
- Use ample overhead lighting after sunset to light the work area.
- Keep area around intake free of obstacles such as electrical cords, blocks, etc., that might trip workers.
- **NEVER** drive, stand or walk under the equipment.
- Use caution not to hit the auger when positioning the load.
- **ALWAYS** lock out **ALL** power to the equipment when finished unloading a bin.
- Be aware of pinch points. A pinch point is a narrow area between two surfaces that is likely to trap or catch objects and so is a potential safety hazard.



**Operate Unload  
Equipment Safely**



## Operator Qualifications

- A. The User/Operator must be competent and experienced to operate auger equipment. Anyone who works with or around augers must have good common sense in order to be qualified. These persons must also know and meet all other qualifications, such as:
- i. Any person who has not read and/or does not understand all operation and safety procedures is not qualified to operate any auger systems.
  - ii. Certain regulations apply to personnel operating power machinery. Personnel under the age of 18 years may not operate power machinery, including augers. It is your responsibility, as owner and/or supervisor, to know what these regulations are in your area or situation.
  - iii. Unqualified or incompetent persons are to remain out of the work area.
  - iv. O.S.H.A. (Occupational Safety and Health Administration) regulations state: "At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in the safe operation and servicing of all equipment with which the employee is, or will be involved". (Federal Occupational Safety and Health Standards for Agriculture. Subpart D, Section 1928.57 (a) (6)).
- B. As a requirement of O.S.H.A., it is necessary for the employer to train the employee in the safe operating and safety procedures for this auger. The sign-off sheet is provided for your convenience and personal record keeping. All unqualified persons are to stay out of the work area at all times. It is strongly recommended that another qualified person who knows the shut down procedure is in the area in the event of an emergency.

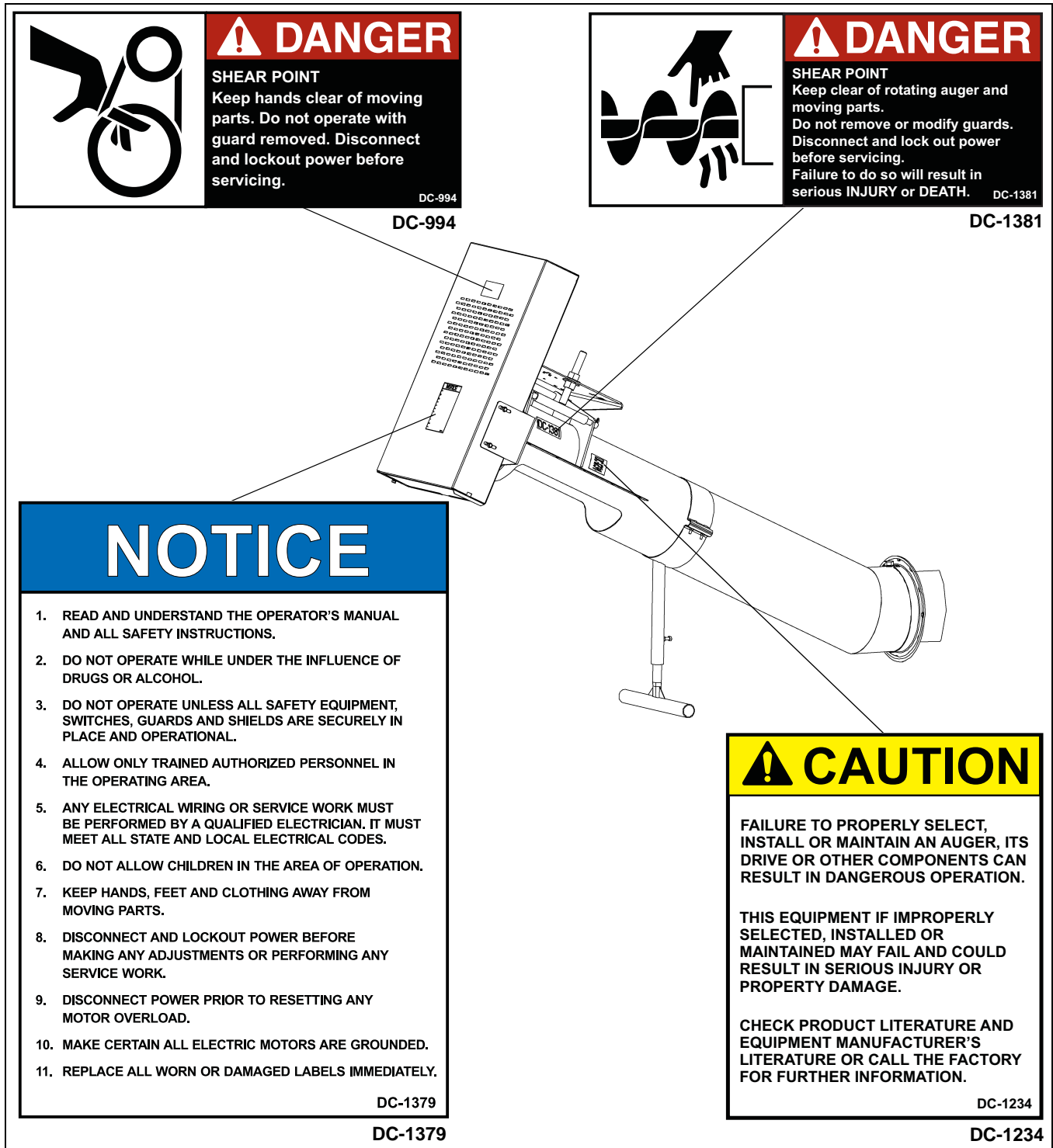
[illegible]

### 3. Safety Decals

Check components shown below to ensure that the safety decals are in place and in good condition. If a decal cannot be easily read for any reason or has been painted over, replace it immediately. Contact your dealer or the manufacturer to order a replacement decal free of charge.

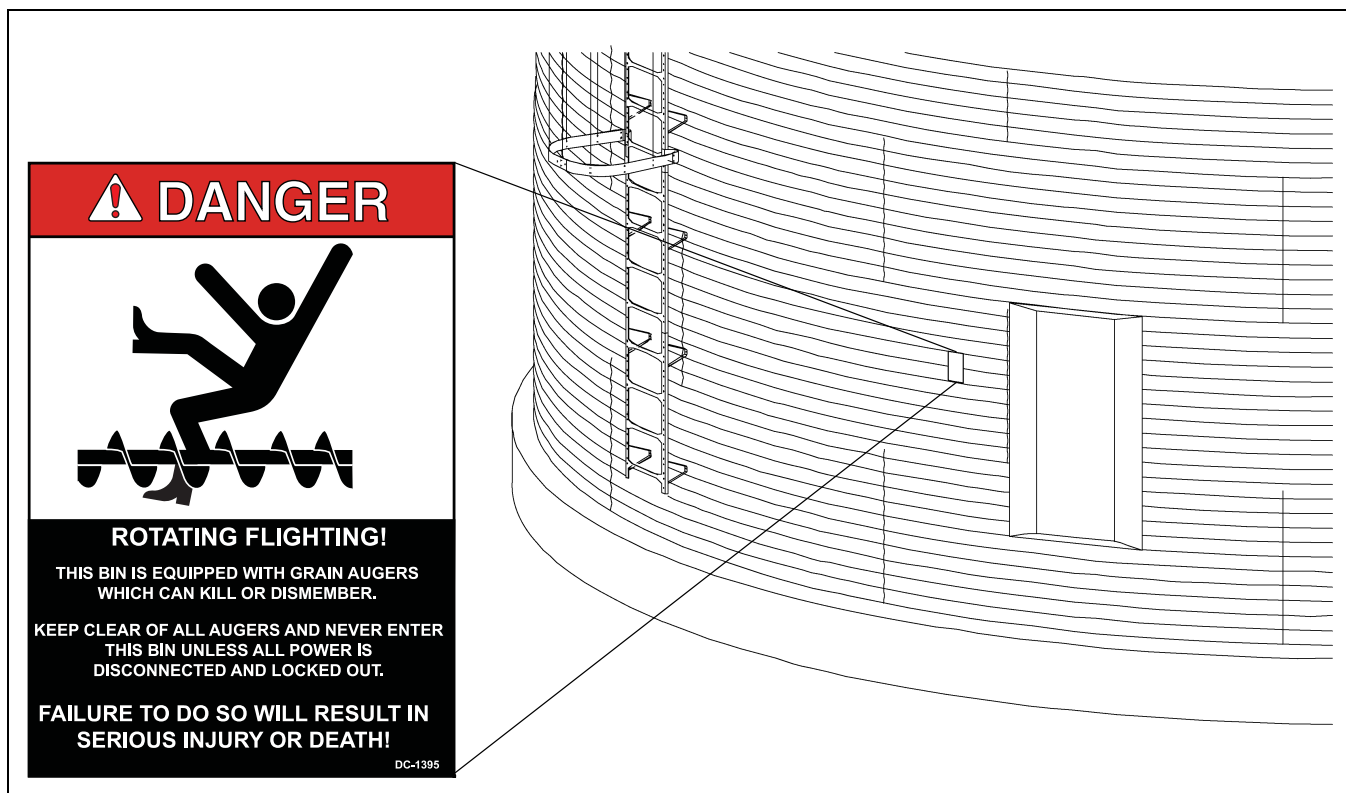
#### Contact:

The GSI Group  
1004 E. Illinois St.  
Assumption, IL. 62510  
Phone: 1-217-226-4421



- 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 your dealer, distributor or ordered from the factory.

Order SAFETY SIGN NO. DC-1395

## 4. Assembly

### Attaching the Adapter Plate (for 6"-8", 8"-10" and 10"-12")

1. Align studs on adapter plate with the holes on the unload tube's angle ring.
2. Insert studs through the holes and fasten using nuts from tube end plate. (See Figure 4A.)

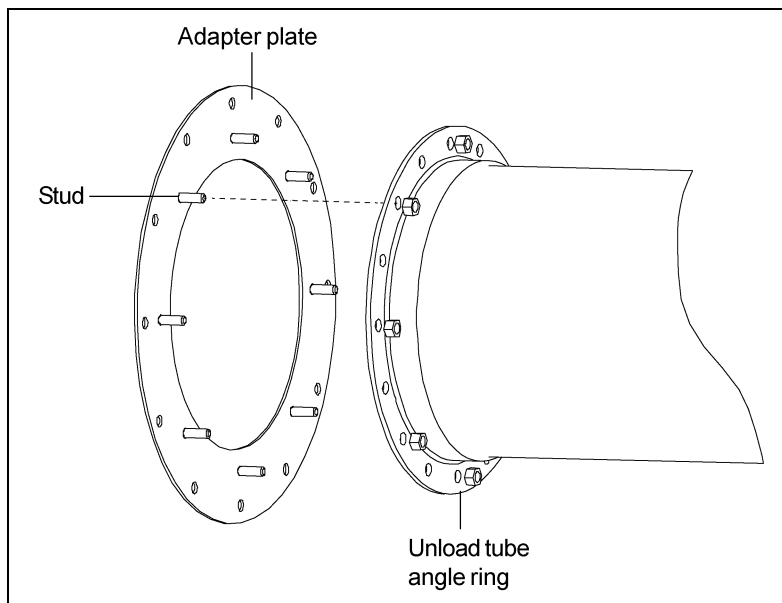


Figure 4A

### Assembling Support Stand

1. Insert support stand base into support stand top and secure with 3/8" x 1-1/4" bolt. (See Figure 4B.)

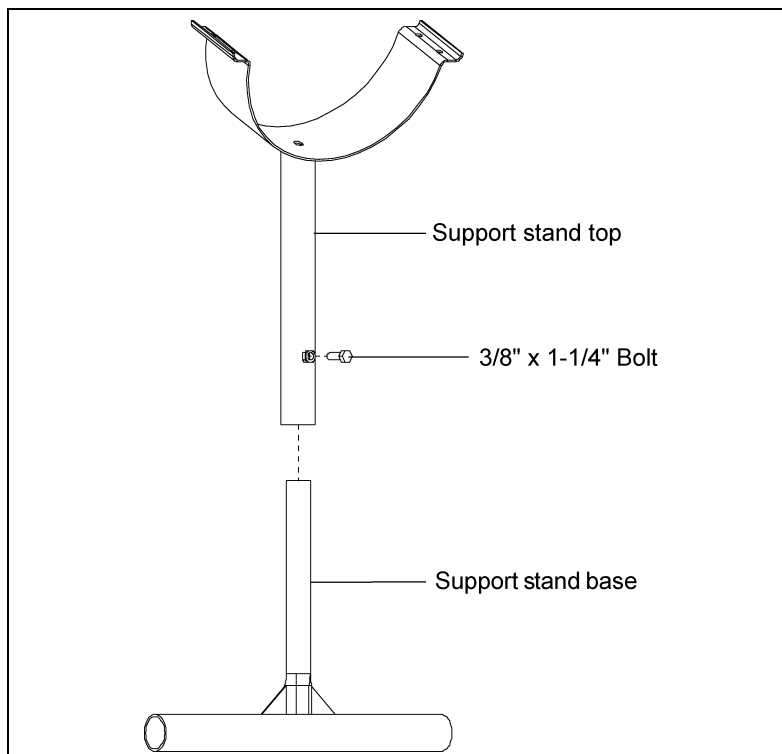


Figure 4B

## Attaching Support Stand to Tube

1. Place support stand and half band around tube and secure together with 5/16" bolts and serrated flange nuts. (See Figure 4C.)

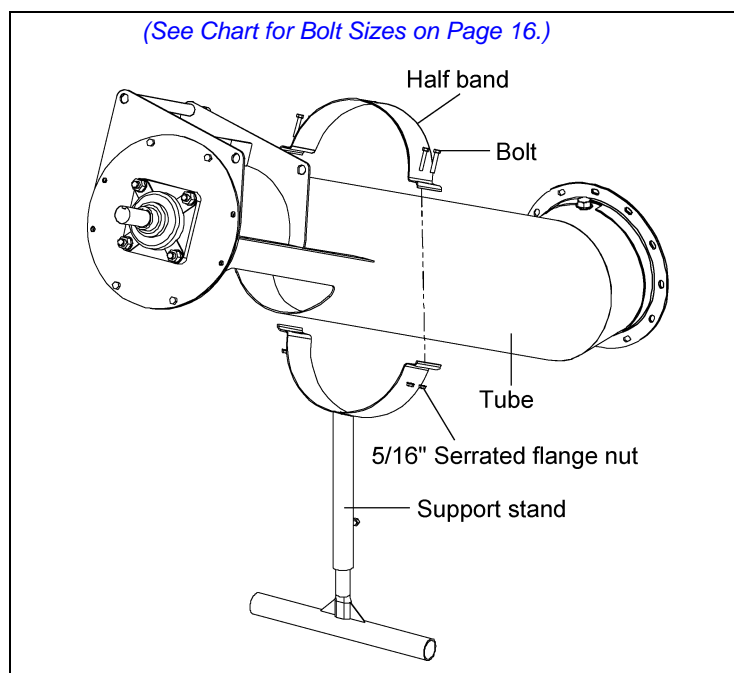


Figure 4C

## Attaching Flights

1. Pull bin unload flight out of unload tube approximately one foot (1').
2. Remove bearing connecting stub bolts and nuts from connecting stub.
3. Position 25° unloader assembly in-line with bin tube.
4. Align holes in unload flight with holes in bearing connecting stub and slide flight onto stub.
5. With holes aligned, secure with bearing connecting stub bolts and nuts that were removed in [Step 2](#). (See Figure 4D.)

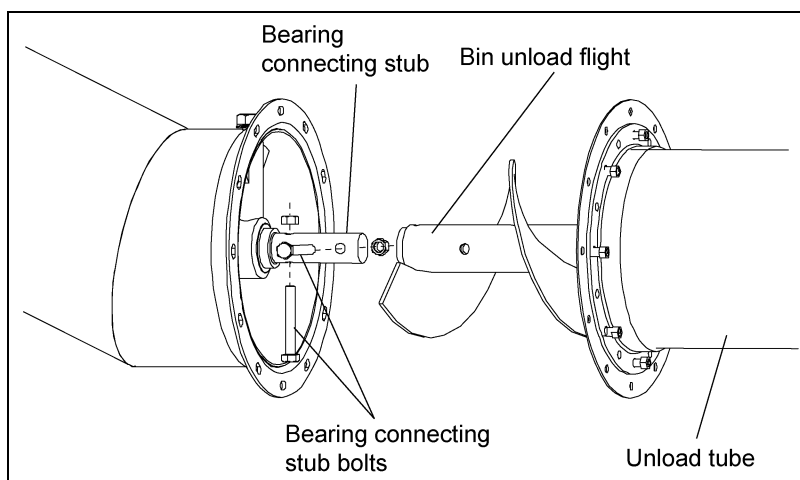


Figure 4D

## 4. Assembly

### Installing the Motor Mount Adjuster

1. Place motor mount adjuster between the head plate and back plate on the discharge tube.
2. Insert pivot rod through the tube plates and motor mount adjuster. Secure in place with two (2) 3/16" x 2" cotter pins. *(See Figure 4E.)*

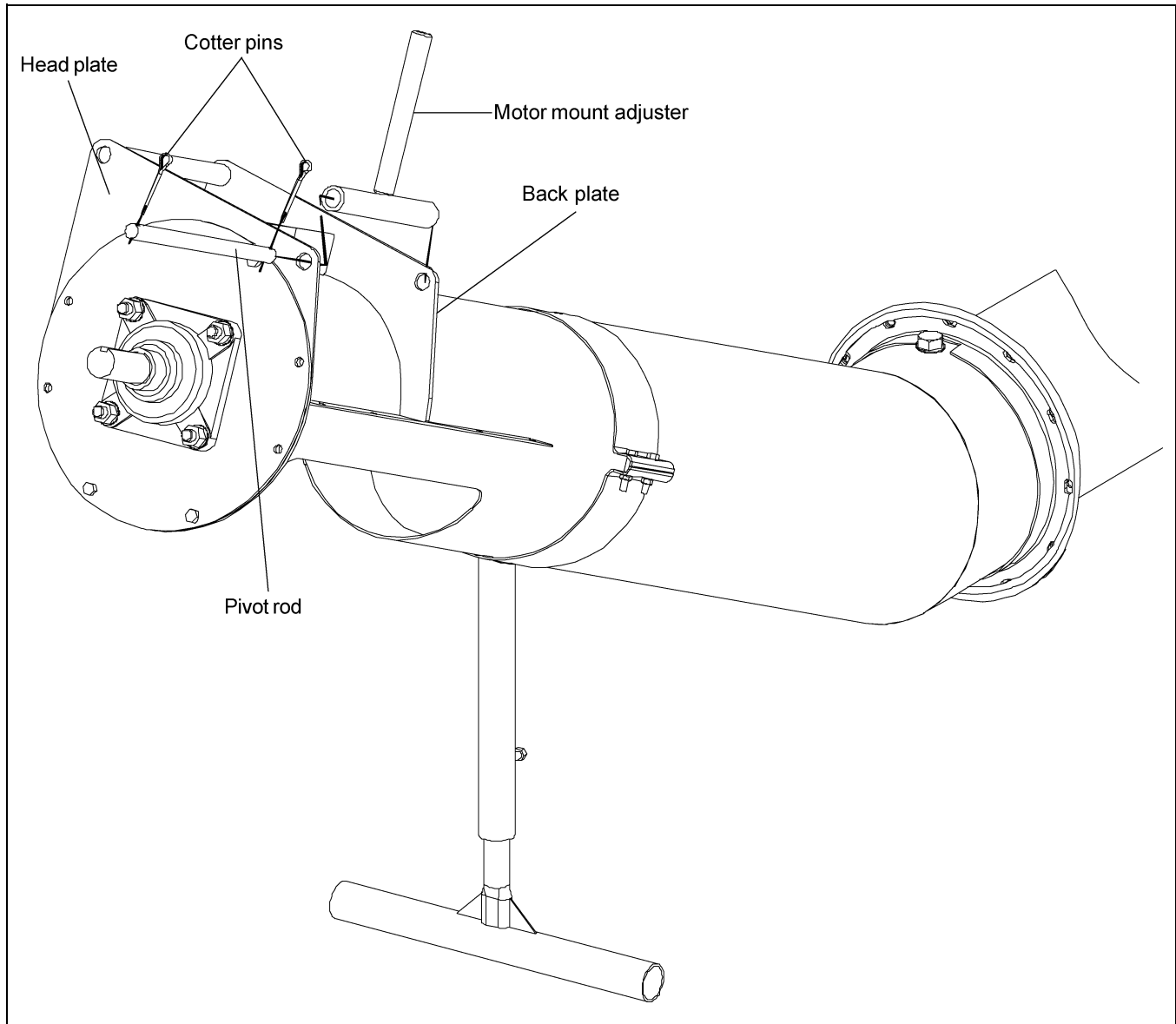


Figure 4E

## Installing the Motor Mount Plate

1. Secure one of the motor mount adjustment nuts and one of the motor mount adjustment washers approximately 3/4" of the way down the motor mount adjuster's threaded shaft.
2. Once the nut and washer are secure, slip the motor mount plate over the adjuster and align the pivot holes with the pivot tube. (See Figure 4F.)

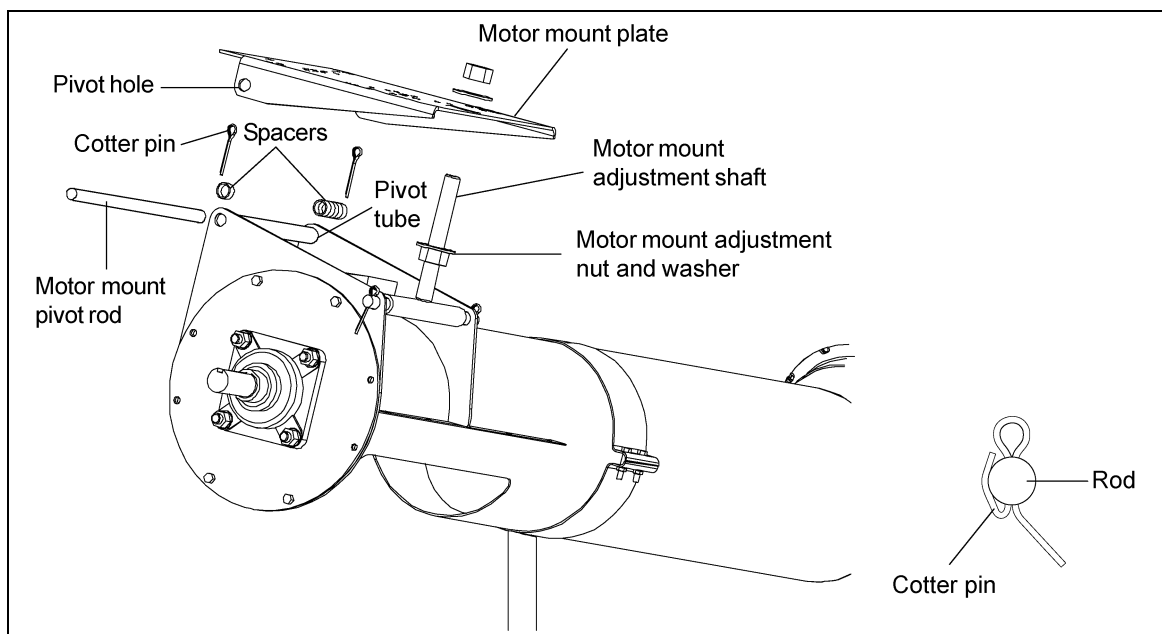


Figure 4F

3. Slide the motor mount pivot rod through the pivot tube on the discharge tube.
4. When the pivot rod begins to extend through the pivot tube, install the spacers BETWEEN the back plate and the inner face of the motor mount plate. (See Figure 4G.)

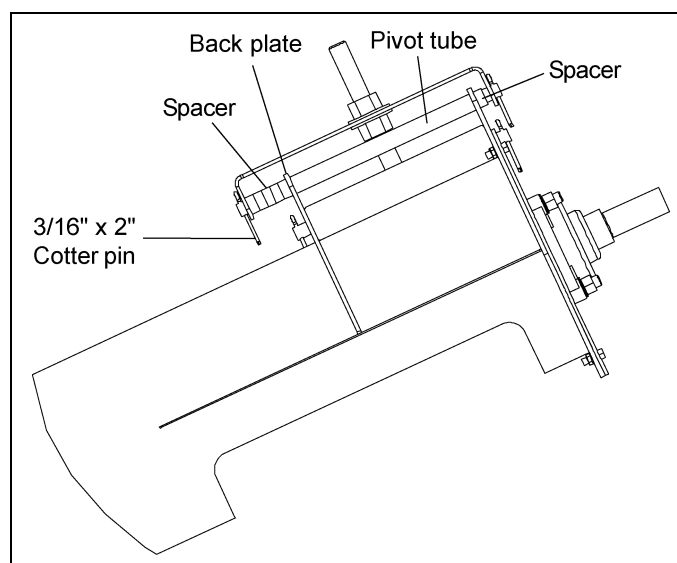


Figure 4G

5. Secure pivot rod with two (2) 3/16" x 2" cotter pins.

**NOTE:** The number of spacers will vary depending on size of unloader.

## 4. Assembly

### Installing the Belt Guard Brackets

1. Align the holes on the bearing plate with the slots on the belt guard mounting brackets.
2. Secure the brackets with proper bolts, flat washers and serrated flange nuts. *(See Chart below and Figure 4H.)*

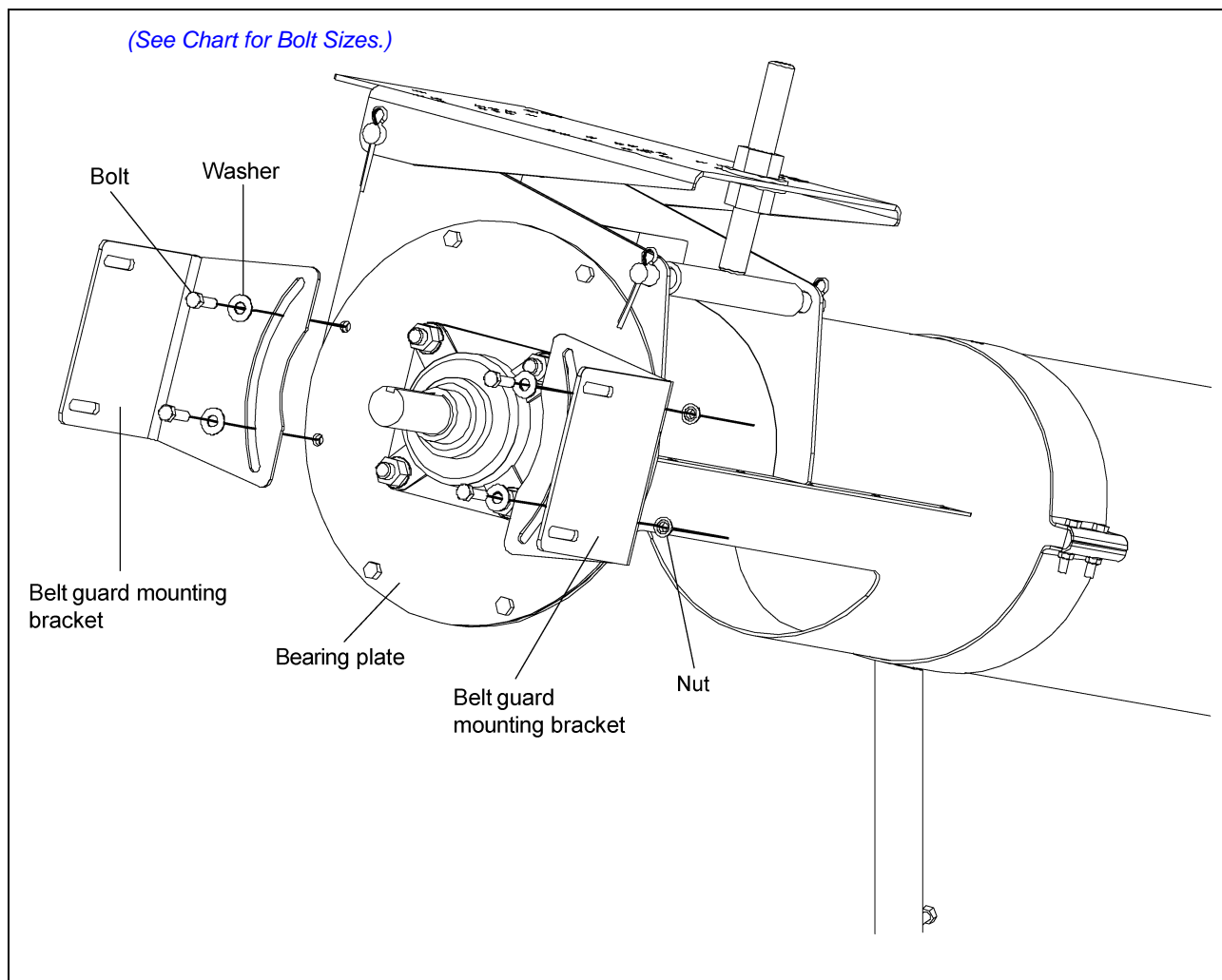


Figure 4H

Belt Guard Mounting Bracket Bolt		
Part #	Bolt Size	Description
S-1196	6" to 6", 6" to 8" and 8" to 8"	5/16"-18 x 1" Grade 5 Bolt
S-2071	8" to 10" and 10" to 12"	3/8"-16 x 1-1/4" Grade 5 Bolt

**NOTE:** ***DO NOT** tighten the bolts completely. The brackets will need to be rotated to align the slot in the belt guard with the shafts on the motor and flight.*



## Installing the Pulley

1. Place and position the key into the keyway located on the drive shaft.
2. Place the pulley onto the drive shaft with the set screw side of the pulley facing away from the bearing plate. (See Figure 4I.) Position the pulley so that it is as close to the lock collar as possible, but without touching it.
3. Once the pulley is appropriately positioned, tighten the set screw with a hex head wrench to secure it to the drive shaft. (See Figure 4I.)

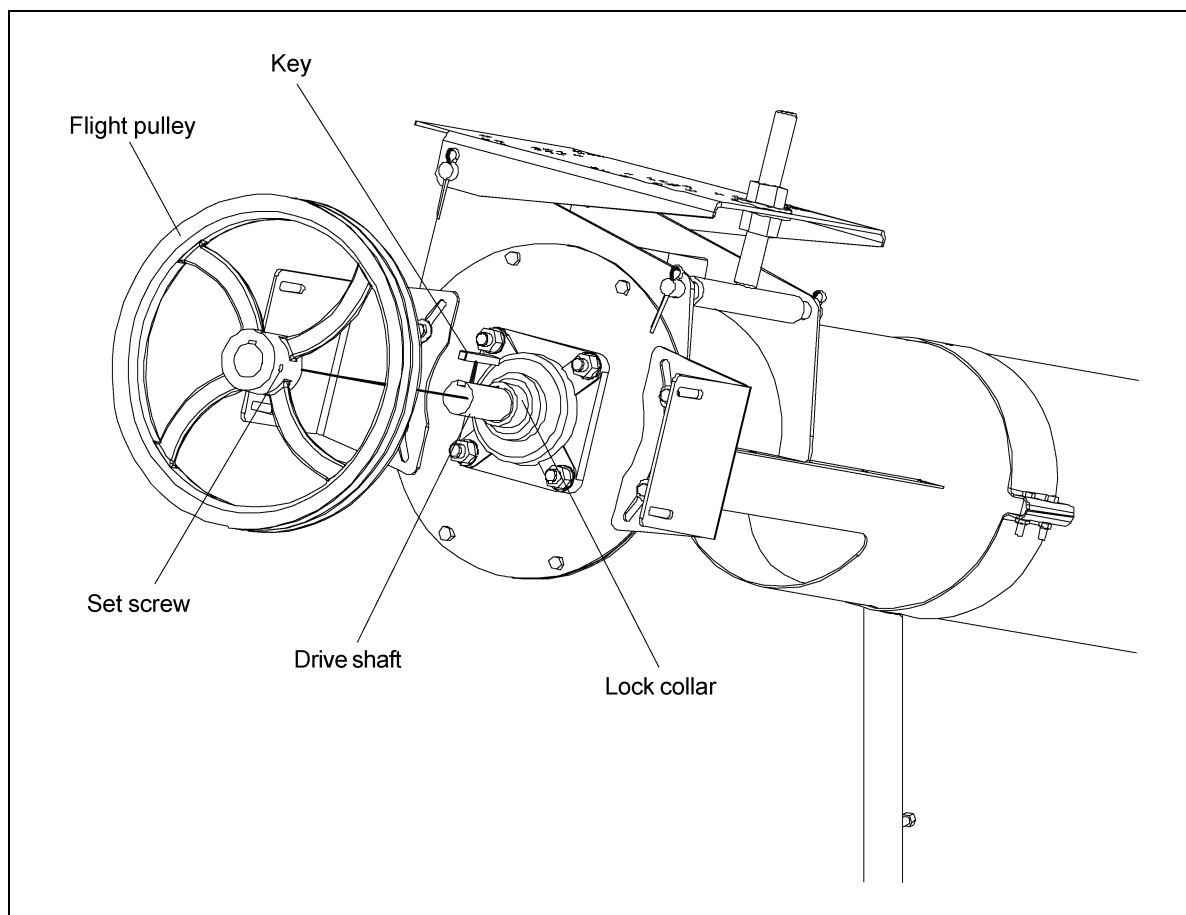


Figure 4I

## Tightening the Lock Collar

1. Use a punch and hammer to drive the lock collar clockwise or in the same direction as the shaft rotation. Once the lock collar is set in place, use a hex head wrench to tighten the lock collar by tightening the set screw.

**NOTE:** If the lock collar is not turned far enough, the set screw will not lock it into place.

### Installing the Motor (Not Provided)

1. Attach the motor to the motor mount plate using appropriate bolts, lock washers and hex nuts.  
(See [Motor Bolt Chart below.](#))
2. Install pulley onto motor shaft making sure that it is aligned with the flight pulley. It may be necessary to move spacers to gain shaft alignment. (See [Figure 4J.](#))

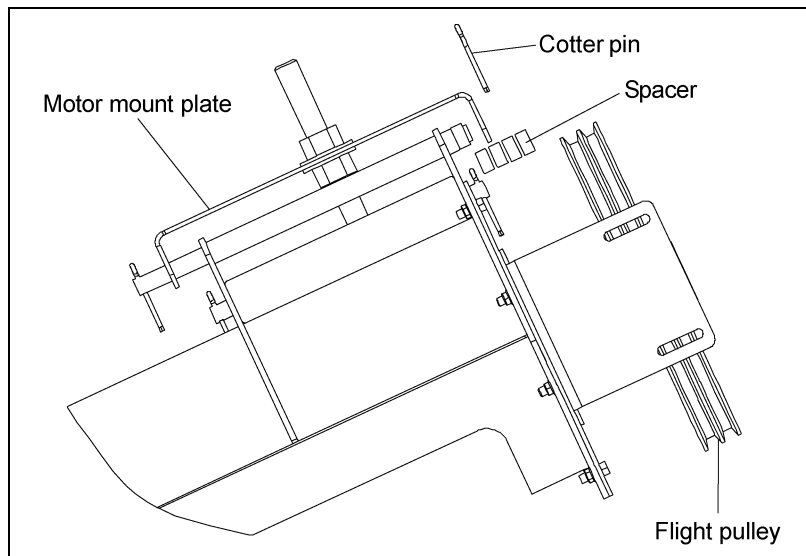


Figure 4J

Motor Bolt Chart		
Motor Size	Hex Bolt Size	Qty
56 143T 145T	5/16"-18 x 1-1/4"	4
182T 184T 213T 215T	3/8"- 16 x 1-1/4"	4
254T 256T	1/2"-13 x 1-3/4"	4

### Installing the Belts

1. Place the belts on the pulleys.
2. Screw the lower motor mount adjustment nut upward, thereby raising the motor mount plate and putting tension on the belts.
3. Once the desired tension is reached, tighten the upper motor mount adjustment nut down onto the motor mount plate to lock it into place. (See [Figure 4K on Page 19.](#))

## Installing the Belt Guard

1. With the belts properly tensioned, remove the bottom belt guard cover and slip belt guard down over motor shaft.
2. Bolt the belt guard to the belt guard mounting brackets. Note that the brackets should still be loose at this time.
3. Align the motor shaft and the flight drive shaft in the belt guard's slot, making sure that the belt guard DOES NOT contact either pulley or shaft and tighten down the belt guard mounting brackets to the bearing plate. (See Figure 4K.)
4. Once the brackets are tightened, slide the bottom cover back into place and secure with supplied bolt.

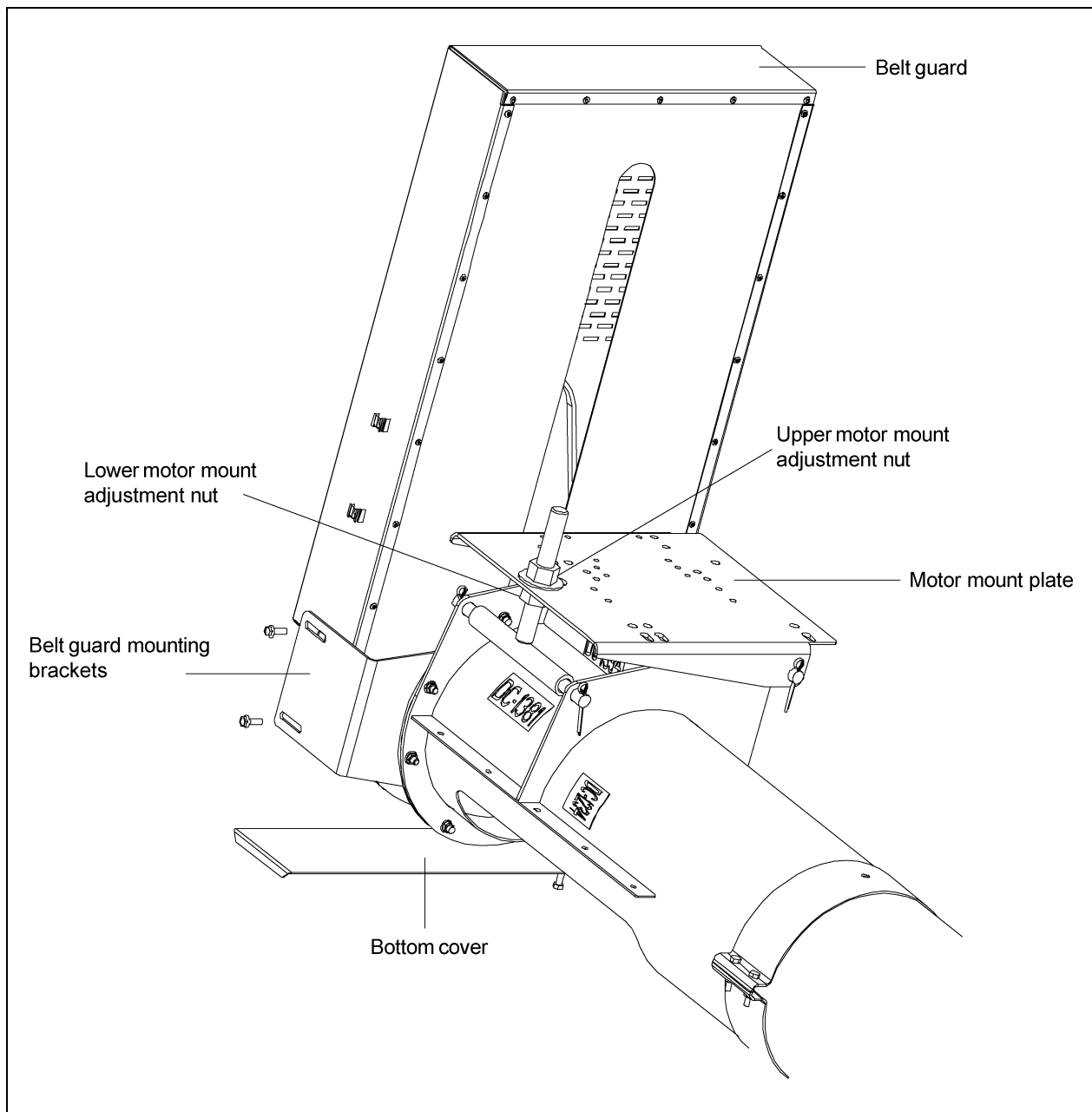


Figure 4K

### Electric Drive Motors



**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.**

- A. Knowing the bin size and the length of flighting to be used in the unloading tube is necessary to determine how much horsepower is required for the job.
- B. Use the [Chart below](#) to determine the size of motor required. Use a larger motor when encountering high moisture or when high capacity is required.

25° Horsepower	Grain Bin Diameter									
	15'	18'	21'	24'	27'	30'	33'	36'	42'	48'
6"	2	2	3	3	3	3	5	5	-	-
8"	3	3	5	5	5	7-1/2	7-1/2	7-1/2	7-1/2	7-1/2
10"	-	-	-	5	5	7-1/2	7-1/2	7-1/2	10	10

**NOTE:** For high capacity or high moisture, use one size larger motor.

**LONGER BELT NOTE:** Longer belts may be required when using larger framed motors due to high capacity or high moisture applications.

- C. The following horsepower recommendations are for augering relatively dry grain. Use an electric motor of the proper size that operates at 1750 RPM. Motor pulleys are not furnished with the auger.
- D. A magnetic starter should be used for the operator's protection and for the protection of the motor. This helps to protect the operator against accidental re-start caused by power interruption, conductor fault, low voltage, circuit interruption or motor overload. Therefore, the motor must be restarted manually. If using a motor with built-in thermal overload protection, make sure this type of motor has a manual reset.



**Disconnect and lock out power before resetting motor overloads. Make certain electric motors are grounded.**

## 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.***

- A. Make sure ALL belts are tensioned properly.
- B. Make sure ALL shields are in place and that the belt(s) and pulley(s) are able to move freely.
- C. Inspect the drive unit for any problems or potential problems.
- D. 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.
- E. Before starting the auger for the first time, make sure that all parts are assembled correctly according to the instructions in this manual.



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



***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.***

## 6. Start-Up

### Start the Auger

A. Start the auger.



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

B. Run the auger through a “break-in” period if it is being used for the first time or for the first time of the season.

C. Polish the flighting by running the auger at partial capacity until it is smooth, before attempting to run it at 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 Auger

**NOTE:** *The auger capacity can fluctuate greatly under varying conditions. Moisture content, different commodities, amount of foreign matter and speeds all play a part in the performance of the auger. For example, 25% moisture may cut capacity by as much as 40% under some conditions.*

- A. Make certain there are at least two (2) people in the work area to monitor operations at all times.
- B. Visually inspect the auger periodically during operation.



***Be alert for any unusual vibrations, noises and the loosening of any fasteners. If anything unusual is detected, immediately shut down the auger, disconnect and lock out the power source before servicing.***

- C. Consideration should be given to the proper size auger for a batch drying or any intermittent type operations. When augers are stopped and re-started under full load, it may result in damage to the auger. Using a larger diameter auger and reducing its load level is generally preferable to subjecting a smaller diameter auger to big loads. If an auger is kept from absolute filling, it will make start-up easier and it will convey more efficiently.

## 8. Shut Down

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### Normal Shut Down

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

### Emergency Shut Down

- A. Know how to shut down the auger in case of an emergency.
- B. Do not re-start the auger when it is under load.
- C. Close the bin well control gates.
- D. Re-connect and unlock the power source.
- E. Clear the auger gradually until there is no grain and there are no obstructions.



***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.***

### Storage Preparation

- A. Close all wells to the discharge auger.
- B. Be sure the unload tube is empty.
- C. Shut down the auger.
- D. Make sure all fasteners are tight.



## Maintain the Auger



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

- A. Use caution when repairing or replacing equipment parts.
- B. 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.
- C. Ensure that ALL electric motors, etc., are operating at the proper speed.
- D. Maintain proper adjustments on the belt(s).
- E. Mount controls for any electric motors at a safe distance from the machine and in a location accessible in case of an emergency.
- F. Make sure ALL electrical wiring is not damaged and that it meets proper wiring codes.
- G. Make sure ALL components are in good working condition before use.
- H. Check the auger flighting to make sure it is in good working condition.
- I. Check the internal bearing bracket, bearing and universal joint to make sure they are in good working condition.
- J. Grease bearing at least two (2) times each season.

# NOTES

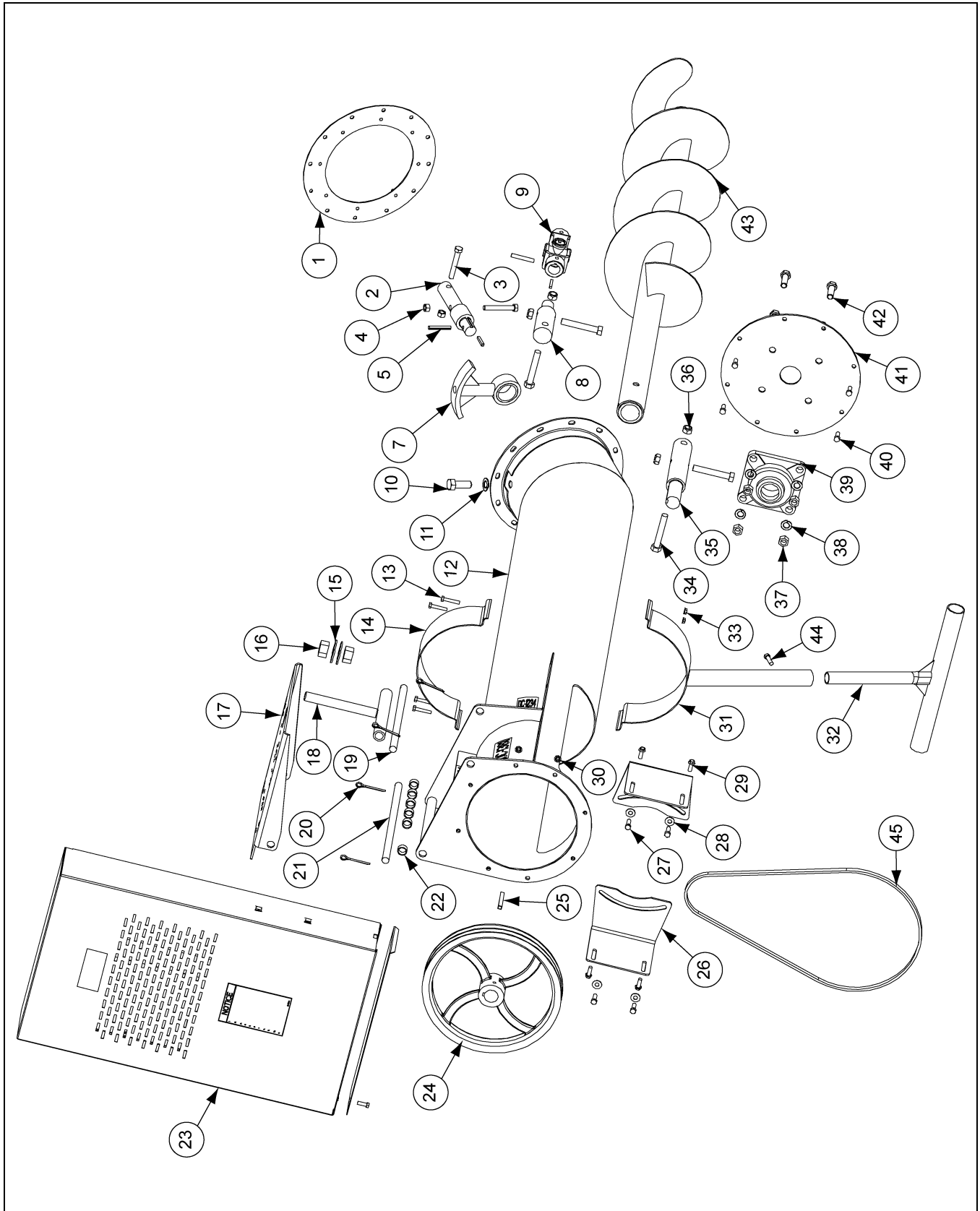
1. 6" to 6" 25° Unloader Parts - [\(See Pages 28-29.\)](#)
2. 6" to 8" 25° Unloader Parts - [\(See Pages 30-31.\)](#)
3. 8" to 8" 25° Unloader Parts - [\(See Pages 32-33.\)](#)
4. 8" to 10" 25° Unloader Parts - [\(See Pages 34-35.\)](#)
5. 10" to 12" 25° Unloader Parts - [\(See Pages 36-37.\)](#)



## 6" to 6" 25° Unloader Parts List

Ref #	Part #	Description
2	GK5706	1" x 7-7/8" Bearing Connecting Stub
3	S-6762	3/8"-16 x 2-1/2" Grade 5 Bearing Connecting Stub Bolt
4	S-8251	3/8"-16 Bearing Connecting Stub Stover Nut
5	S-8397	5/16" x 1-3/4" U-Joint Rolled Pin
7	GC06392	Hanger Bearing
8	GK1267	1" x 6" Connecting Stub
9	GK1266	1" Bore x 5" Long U-Joint
10	S-7886	5/8"-11 x 1-3/4" Grade 8 Hanger Bearing Bolt
11	S-3208	5/8" Hanger Bearing Lock Washer
12	GK7072	6" 25° Unload Tube Assembly
13	S-2741	5/16"-18 x 1-1/2" Grade 5 Stand Connecting Band Bolt
14	GK1122	6" x 4" 12 Gauge Half Band
15	S-866	3/4" Motor Mount Adjustment Flat Washer
16	S-234	3/4"-10 Motor Mount Adjustment Hex Nut
17	GK7052	Motor Mount Plate
18	GK7060	Motor Mount Adjustment Weldment
20	S-6994	3/16" x 2" Cotter Pin
21	GK7058	Motor Mount Plate Pivot Rod
23	GK7005	Belt Guard
24	GK1321	12" Diameter x 1" Bore 2 Belt Sheave
25	S-4513	1/4" x 2" Sheave Key
26	GK7062	Belt Guard Mounting Brackets
27	S-1196	5/16"-18 x 1" Grade 5 Belt Guard Mounting Bracket Bolt
28	S-845	5/16" Belt Guard Mounting Bracket Flat Washer
29	S-9065	3/8"-16 x 1" Grade 5 Bolt
30	S-3611	5/16"-18 Bearing Plate Serrated Flange Nut
31	GK2825	Support Stand Top
32	GK1277	Support Stand Base
33	S-3611	5/16"-18 Serrated Flange Nut
34	S-6762	3/8"-16 x 2-1/2" Grade 5 Flight Connection Bolt
35	GK2025	1" x 10" Drive Shaft
36	S-8251	3/8"-16 Flight Connection Stover Nut
37	S-860	7/16"-14 Bearing Hex Nut
38	S-7014	7/16" Bearing Lock Washer
39	GK1049	1" Two (2) Hole Flange with Lock Collar (Bearing with Flange)
40	S-1196	5/16"-18 x 1" Grade 5 Bearing Plate Bolt
41	GK7061	Bearing Plate
42	S-3886	7/16"-14 x 1-1/4" Grade 5 Bearing Bolt
43	GK2827	6" 25° Weldment Discharge Flight
44	S-2071	3/8"-16 x 1-1/4" Grade 5 Bolt
45	GK1323	B48 V-Belt

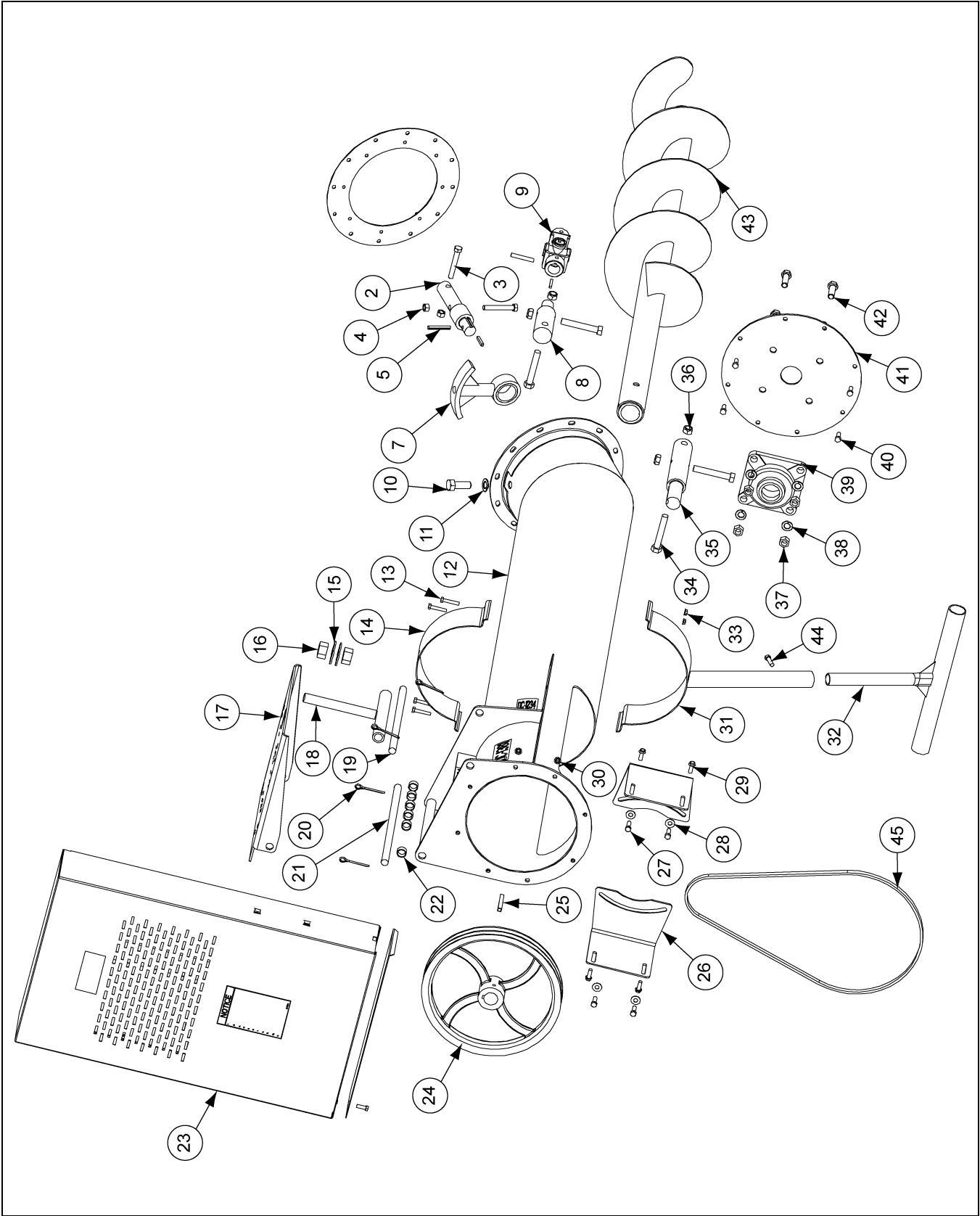
## 6" to 8" 25° Unloader Parts



## 6" to 8" 25° Unloader Parts List

Ref #	Part #	Description
1	GK1280	Adapter Plate
2	GK7241	1" x 8-1/2" Bearing Connecting Stub
3	S-6762	3/8"-16 x 2-1/2" Grade 5 Bearing Connecting Stub Bolt
4	S-8251	3/8"-16 Bearing Connecting Stub Stover Nut
5	S-8397	5/16" x 1-3/4" U-Joint Rolled Pin
7	GC06394	Hanger Bearing
8	GK1267	1" x 6" Connecting Stub
9	GK1266	1" Bore x 5" Long U-Joint
10	S-7886	5/8"-11 x 1-3/4" Grade 8 Hanger Bearing Bolt
11	S-3208	5/8" Hanger Bearing Lock Washer
12	GK7073	8" 25° Unload Tube Assembly
13	S-2741	5/16"-18 x 1-1/2" Grade 5 Stand Connecting Band Bolt
14	GK1059	8" x 4" 12 Gauge Half Band
15	S-7835	1" Motor Mount Adjustment Flat Washer
16	S-240	1"-8 Motor Mount Adjustment Hex Nut
17	GK6986	Motor Mount Plate
18	GK6942	Motor Mount Adjustment Weldment
19	GK7012	Motor Mount Adjustment Pivot Rod
20	S-6994	3/16" x 2" Cotter Pin
21	GK7013	Motor Mount Plate Pivot Rod
22	GK7014	Pivot Spacer Tube
23	GK7005	Belt Guard
24	GK1335	12" Diameter x 1-1/4" Bore 2 Belt Sheave
25	S-4513	1/4" x 2" Sheave Key
26	GK7006	Belt Guard Mounting Brackets
27	S-1196	5/16"-18 x 1" Grade 5 Belt Guard Mounting Bracket Bolt
28	S-845	5/16" Belt Guard Mounting Bracket Flat Washer
29	S-9065	3/8"-16 x 1" Grade 5 Bolt
30	S-3611	5/16"-18 Bearing Plate Serrated Flange Nut
31	GK1278	Support Stand Top
32	GK1277	Support Stand Base
33	S-3611	5/16"-18 Serrated Flange Nut
34	S-8316	7/16"-14 x 3" Grade 8 Flight Connection Bolt
35	GK1331	1-1/4" x 10-1/2" Drive Shaft
36	S-8317	7/16"-14 Flight Connection Stover Nut
37	S-7510	1/2"-13 Bearing Hex Nut
38	S-236	1/2" Bearing Lock Washer
39	GK1330	1-1/4" Two (2) Hole Flange with Lock Collar (Bearing with Flange)
40	S-1196	5/16"-18 x 1" Grade 5 Bearing Plate Bolt
41	GK6987	Bearing Plate
42	S-8760	1/2"-13 x 1-1/2" Grade 5 Bearing Bolt
43	GK1268	8" 25° Weldment Discharge Flight
44	S-2071	3/8"-16 x 1-1/4" Grade 5 Bolt
45	GK1952	B50 V-Belt

8" to 8" 25° Unloader Parts

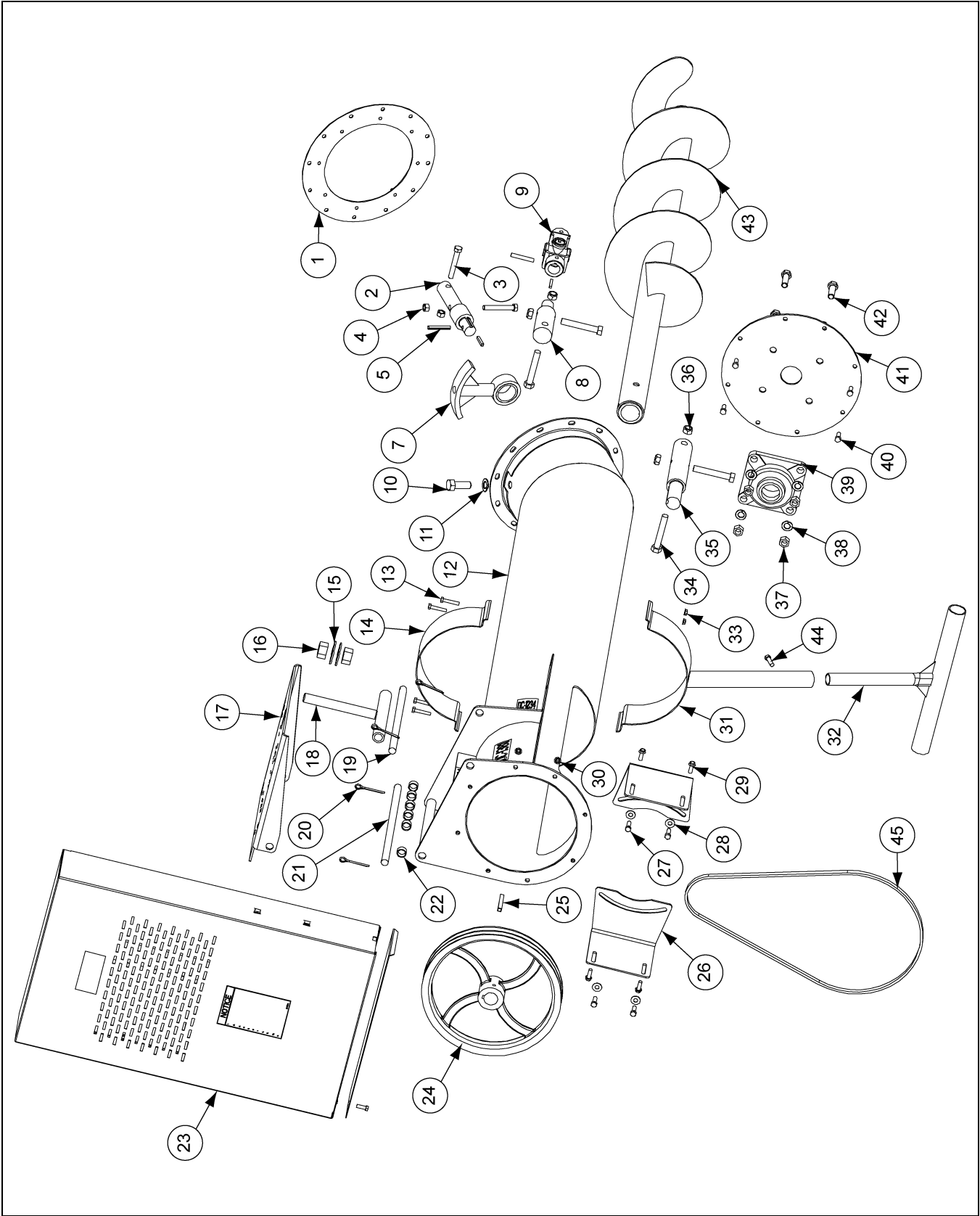




## 8" to 8" 25° Unloader Parts List

Ref #	Part #	Description
2	GK1283	1-1/4" x 7-7/8" Bearing Connecting Stub
3	S-8316	7/16"-14 x 3" Grade 5 Bearing Connecting Stub Bolt
4	S-8317	7/16"-14 Bearing Connecting Stub Stover Nut
5	S-8397	5/16" x 1-3/4" U-Joint Rolled Pin
7	GC06394	Hanger Bearing
8	GK1267	1" x 6" Connecting Stub
9	GK1266	1" Bore x 5" Long U-Joint
10	S-7886	5/8"-11 x 1-3/4" Grade 8 Hanger Bearing Bolt
11	S-3208	5/8" Hanger Bearing Lock Washer
12	GK7073	8" 25° Unload Tube Assembly
13	S-2741	5/16"-18 x 1-1/2" Grade 5 Stand Connecting Band Bolt
14	GK1059	8" x 4" 12 Gauge Half Band
15	S-7835	1" Motor Mount Adjustment Flat Washer
16	S-240	1"-8 Motor Mount Adjustment Hex Nut
17	GK6986	Motor Mount Plate
18	GK6942	Motor Mount Adjustment Weldment
19	GK7012	Motor Mount Adjustment Pivot Rod
20	S-6994	3/16" x 2" Cotter Pin
21	GK7013	Motor Mount Plate Pivot Rod
22	GK7014	Pivot Spacer Tube
23	GK7005	Belt Guard
24	GK1335	12" Diameter x 1-1/4" Bore 2 Belt Sheave
25	S-4513	1/4" x 2" Sheave Key
26	GK7006	Belt Guard Mounting Brackets
27	S-1196	5/16"-18 x 1" Grade 5 Belt Guard Mounting Bracket Bolt
28	S-845	5/16" Belt Guard Mounting Bracket Flat Washer
29	S-9065	3/8"-16 x 1" Grade 5 Bolt
30	S-3611	5/16"-18 Bearing Plate Serrated Flange Nut
31	GK1278	Support Stand Top
32	GK1277	Support Stand Base
33	S-3611	5/16"-18 Serrated Flange Nut
34	S-8316	7/16"-14 x 3" Grade 8 Flight Connection Bolt
35	GK1331	1-1/4" x 10-1/2" Drive Shaft
36	S-8317	7/16"-14 Flight Connection Stover Nut
37	S-7510	1/2"-13 Bearing Hex Nut
38	S-236	1/2" Bearing Lock Washer
39	GK1330	1-1/4" Two (2) Hole Flange with Lock Collar (Bearing with Flange)
40	S-1196	5/16"-18 x 1" Grade 5 Bearing Plate Bolt
41	GK6987	Bearing Plate
42	S-8760	1/2"-13 x 1-1/2" Grade 5 Bearing Bolt
43	GK1268	8" 25° Weldment Discharge Flight
44	S-2071	3/8"-16 x 1-1/4" Grade 5 Bolt
45	GK1952	B50 V-Belt

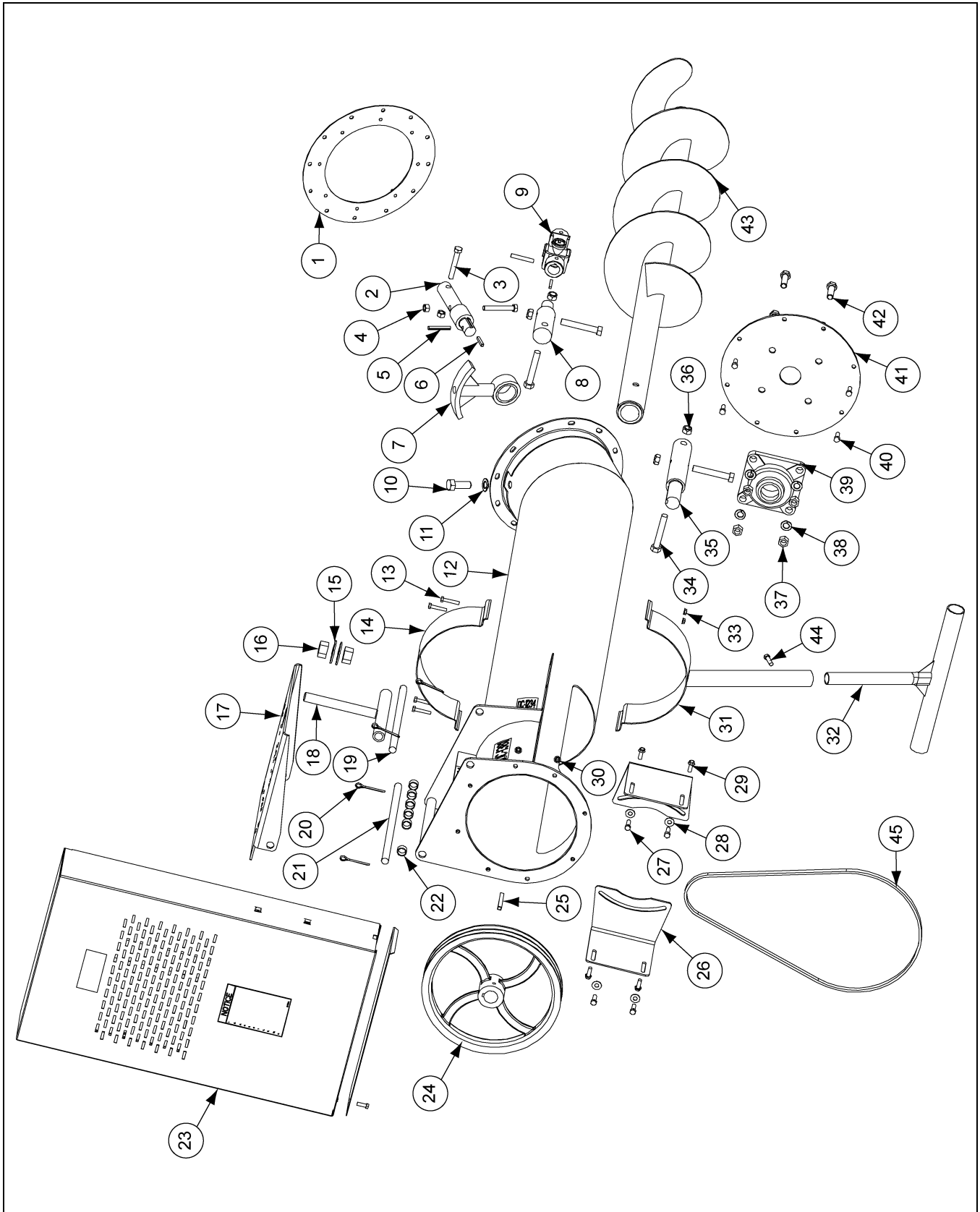
8" to 10" 25° Unloader Parts



## 8" to 10" 25° Unloader Parts List

Ref #	Part #	Description
1	GK1298	Adapter Plate
2	GK7240	1-1/4" x 9" Bearing Connecting Stub
3	S-8316	7/16"-14 x 3" Grade 5 Bearing Connecting Stub Bolt
4	S-8317	7/16"-14 Bearing Connecting Stub Stover Nut
5	S-7245	3/8" x 2-1/2" U-Joint Rolled Pin
7	GC06396	Hanger Bearing
8	GK1290	1-1/4" x 6-1/2" Connecting Stub
9	GK1291	1-1/4" Bore x 7" Long U-Joint
10	S-7886	5/8"-11 x 1-3/4" Grade 8 Hanger Bearing Bolt
11	S-3208	5/8" Hanger Bearing Lock Washer
12	GK7074	10" 25° Unload Tube Assembly
13	S-2741	5/16"-18 x 1-1/2" Grade 5 Stand Connecting Band Bolt
14	GK1301	10" x 4" 12 Gauge Half Band
15	S-7835	1" Motor Mount Adjustment Flat Washer
16	S-240	1"-8 Motor Mount Adjustment Hex Nut
17	GK6986	Motor Mount Plate
18	GK6942	Motor Mount Adjustment Weldment
19	GK7012	Motor Mount Adjustment Pivot Rod
20	S-6994	3/16" x 2" Cotter Pin
21	GK7013	Motor Mount Plate Pivot Rod
22	GK7014	Pivot Spacer Tube
23	GK7005	Belt Guard
24	GK1345	15" Diameter x 1-1/2" Bore 2 Belt Sheave
24	GK1304	15" Diameter x 1-1/2" Bore 3 Belt Sheave
25	S-9181	3/8" x 3" Sheave Key
26	GK7018	Belt Guard Mounting Brackets
27	S-2071	3/8"-16 x 1-1/4" Grade 5 Belt Guard Mounting Bracket Bolt
28	S-248	3/8" Belt Guard Mounting Bracket Flat Washer
29	S-9065	3/8"-16 x 1" Grade 5 Bolt
30	S-968	3/8"-16 Bearing Plate Serrated Flange Nut
31	GK1300	Support Stand Top
32	GK1277	Support Stand Base
33	S-3611	5/16"-18 Serrated Flange Nut
34	S-8316	7/16"-14 x 3" Grade 8 Flight Connection Bolt
34	S-8314	1/2"-13 x 3-1/2" Grade 8 Flight Connection Bolt
35	GK1289	1-1/2" x 11-1/2" Drive Shaft
36	S-8317	7/16"-14 Flight Connection Stover Nut
36	S-8315	1/2"-13 Flight Connection Stover Nut
37	S-7510	1/2"-13 Bearing Hex Nut
38	S-236	1/2" Bearing Lock Washer
39	GK1343	1-1/2" Four (4) Hole Flange with Lock Collar (Bearing with Flange)
40	S-7469	3/8"-16 x 1" Grade 5 Bearing Plate Bolt
41	GK7017	Bearing Plate
42	S-8760	1/2"-13 x 1-1/2" Grade 5 Bearing Bolt
43	GK6396	10" 25° Weldment Discharge Flight
44	S-2071	3/8"-16 x 1-1/4" Grade 5 Bolt
45	GK1346	B57 V-Belt

## 10" to 12" 25° Unloader Parts



## 10" to 12" 25° Unloader Parts List

Ref #	Part #	Description
1	GK2013	Adapter Plate
2	GK7242	1-1/2" x 9" Bearing Connecting Stub
3	S-8314	1/2"-13 x 3-1/2" Grade 5 Bearing Connecting Stub Bolt
4	S-8315	1/2"-13 Bearing Connecting Stub Stover Nut
5	S-7245	3/8" x 2-1/2" U-Joint Rolled Pin
6	S-9169	1/4" x 1-1/2" U-Joint Square Key
7	GC06398	Hanger Bearing
8	GK2008	1-1/4" to 2" x 6-1/2" Connecting Stub
9	GK2009	1-1/4" Bore with Key Way x 7" Long (U-Joint)
10	S-869	3/4"-10 x 2" Grade 8 Hanger Bearing Bolt
11	S-233	3/4" Hanger Bearing Lock Washer
12	GK7075	12" 25° Unload Tube Assembly
13	S-7149	5/16"-18 x 1-3/4" Grade 5 Stand Connecting Band Bolt
14	GK2014	12" x 4" 12 Gauge Half Band
15	S-7835	1" Motor Mount Adjustment Flat Washer
16	S-240	1"-8 Motor Mount Adjustment Hex Nut
17	GK6986	Motor Mount Plate
18	GK6942	Motor Mount Adjustment Weldment
19	GK7012	Motor Mount Adjustment Pivot Rod
20	S-6994	3/16" x 2" Cotter Pin
21	GK7013	Motor Mount Plate Pivot Rod
22	GK7014	Pivot Spacer Tube
23	GK7068	Belt Guard
24	GK1345	15" Diameter x 1-1/2" Bore 2 Belt Sheave
24	GK1304	15" Diameter x 1-1/2" Bore 3 Belt Sheave
25	S-9181	3/8" x 3" Sheave Key
26	GK7065	Belt Guard Mounting Brackets
27	S-2071	3/8"-16 x 1-1/4" Grade 5 Belt Guard Mounting Bracket Bolt
28	S-248	3/8" Belt Guard Mounting Bracket Flat Washer
29	S-9065	3/8"-16 x 1" Grade 5 Bolt
30	S-968	3/8"-16 Bearing Plate Serrated Flange Nut
31	GK2011	Support Stand Top
32	GK1277	Support Stand Base
33	S-3611	5/16"-18 Serrated Flange Nut
34	S-8345	5/8"-11 x 4" Grade 5 Flight Connection Bolt
35	GK2006	2" x 12" Drive Shaft
36	S-8606	5/8"-11 Flight Connection Stover Nut
37	S-4110	5/8"-11 Bearing Hex Nut
38	S-3208	5/8" Bearing Lock Washer
39	GK2004	2" Four (4) Hole Flange with Lock Collar (Bearing with Flange)
40	S-7469	3/8"-16 x 1" Grade 5 Bearing Plate Bolt
41	GK7064	Bearing Plate
42	S-8399	5/8"-11 x 2" Grade 5 Bearing Bolt
43	GK2001	12" 25° Weldment Discharge Flight
44	S-2071	3/8"-16 x 1-1/4" Grade 5 Bolt
45	GK-2546	B62 V-Belt

## 11. Troubleshooting

Problem	Possible Cause	Solution
<b>Auger vibration</b>	1. Drive belt may be overtightened, putting head stub and flight in a bind. Damage can occur to the auger flighting, thus causing noise. Damage usually is caused from foreign material having been run through the auger.	1. It may be necessary to remove the flighting for inspection. 2. Adjust the drive belt to the proper tension.
<b>Low capacity</b>	1. The auger may not be getting enough grain.	1. Check that the intake has not bridged over, restricting flow. The exposed flighting at the auger intake should be covered with grain to achieve maximum capacity.
	2. The auger is moving too slowly.	2. Check the auger speed. Speeds slower than the recommended speed will result in low capacity.
<b>Auger plugs</b>	1. The auger may be getting too much grain, causing "jamming" inside the housing.	1. Decrease the amount of grain the auger is gathering.
	2. The motor may be too small or wired improperly.	2. If the motor is a newer lightweight aluminum type, the next larger size should be considered.
	3. The grain may be wet.	3. If wet grain or other hard-to-move material is being augured, use a larger size motor than recommended for normal use.
	4. The auger may be jammed with foreign material.	4. Be sure there is no foreign material in the auger such as sacks, tarp corners, etc.
	5. The discharge end may be plugged.	5. Make sure the discharge end of the auger is not plugged. A plug of the discharge end will cause an auger plug.

## 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	5 Years
	• 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)	
Conditioning	Dryer Structural Design – (Tower, Portable and TopDry) • Includes (frame, portable dryer screens, ladders, access doors and platforms)	5 Years
	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
Material Handling	Bucket Elevators Structural Design	5 Years
	Towers Structural Design	5 Years
	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.

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.

G S I G R O U P



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