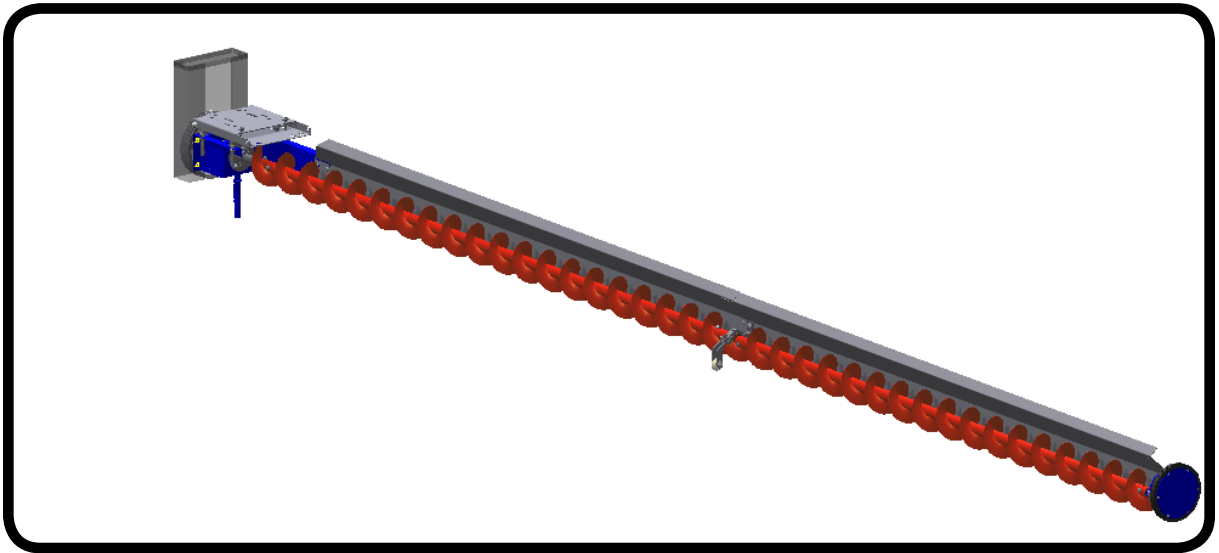




# 10" Bin Sweep

## Owner's and Operator's Manual



Effective Date  
2011-12-27

Publication Number  
019065



# GENERAL STATEMENT



## WARNING



Watch for this warning symbol!  
It will always be accompanied by important information  
regarding Safety, Warnings, and Precautions.

## ATTENTION! BE ALERT! YOUR SAFETY IS INVOLVED! TO THE OWNER

Occupational safety is of prime concern to NECO. This Owner's and Operator's Manual is provided to help ensure the safety of the operator as well as others who may come in contact with the equipment. It is your responsibility as an owner, operator, or supervisor to know what specific requirements, precautions, and work hazards exist and to make these known to all persons working with the equipment or who are in the area so that they may take any needed safety precautions. Failure to read this Owner's & Operators Manual or to understand and heed its safety instructions constitutes a misuse of the equipment.

We at NECO are continually testing and improving our products to provide the most efficient and economical grain handling equipment available. We cannot be responsible, however, for upgrading or changing units previously sold when making improvement to subsequent models.

The NECO equipment that you have just purchased will provide years of dependable service when properly maintained. Your workload will be lightened and you'll save valuable time. Welcome to the growing number of satisfied NECO equipment owners.

### LIMITED WARRANTY\*

For a period of one (1) year after shipment of goods by Buyer to the Buyer's customer, NECO will supply, free of charge, EXW\*\* NECO's factory, Omaha, Nebraska, replacement parts for any parts that prove to be defective due to workmanship or material.\* Defective parts must be returned, freight-prepaid, to the NECO Factory in Omaha, Nebraska. You must obtain a "Return Authority" form from NECO prior to returning goods.

GOODS NOT MANUFACTURED BY NECO CARRY ONLY THE MANUFACTURER'S WARRANTY.

THIS UNDERTAKING IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

\*This limited warranty does not extend to parts designed to wear in normal operation and be replaced periodically or to damage caused by negligence, accident, abuse, or improper installation or operation.

\*\*Ex Works (or EXW) is the correct Incoterm term for what North Americans traditionally call FOB. (See "Incoterm" on wikipedia.org for clarification.)

FAILURE TO FOLLOW THE INSTRUCTIONS CONTAINED IN THIS MANUAL AS WELL AS THE EXISTENCE OF ANY OF THE CONDITIONS LISTED BELOW WILL CAUSE THIS LIMITED WARRANTY TO BE VOIDED.

1. Improper assembly
2. Improper installation (including power and wiring)
3. Unauthorized alteration of goods
4. Operating the unit when repairs are needed
5. Use of unauthorized parts
6. Operation by children or uninstructed personnel
7. Processing of materials that are abrasive, that do not flow freely, or that are otherwise unsuited for processing in a grain dryer
8. Abuse or misuse of the unit or of any of its components
9. Accidents

### LIMITATION OF LIABILITY

BUYER AGREES THAT IN NO EVENT SHALL NECO HAVE LIABILITY FOR DIRECT DAMAGES IN EXCESS OF THE CONTRACT PRICE OF THE GOODS FOR WHICH THE CLAIM IS MADE. Buyer further agrees that in no event shall NECO have liability for loss of use, loss of profits, or for any indirect, incidental, or consequential damages on any claim of any kind.

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# SAFETY

## Safety Precautions



### OPERATOR QUALIFICATIONS

Only competent and experienced persons should operate this farm equipment. Anyone who operates or works around power equipment must understand and meet all legal and contractual requirements. Good common sense is always in order.

Some regulations specify that no one under the age of 16 may operate power machinery. This includes farmstead equipment. It is your responsibility to know the regulations in your own area or situation.

Current OSHA regulations state in part, “At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in the safe operation and servicing of all equipment with which the employee is, or will be involved.” \*

Unqualified persons are to stay out of the work area. *Work area* is defined as the area surrounding the grain handling equipment. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine.



### FULL-LOAD OPERATING PROCEDURES

During the regular operation of your farmstead equipment one person must be in a position to monitor the operation. Inspect the equipment periodically during the operation. Be alert for unusual vibrations, noises, and the loosening of any fasteners. Do the following.

- Observe work area restrictions.
- Keep all safety shields and devices in place.

- Make sure everyone is clearly out of harm’s way before operating or moving farmstead equipment.
- Keep hands, feet, and clothing away from moving parts.
- Shut OFF and LOCK OUT power before adjusting, cleaning, or servicing equipment.



### MACHINE INSPECTION

You must inspect the equipment after completing assembly and before each use. This mandatory inspection should include but not be limited to the following.

- Check to see that each guard listed in the assembly instructions (and included with the unit) is secured in its proper place.
- Make sure all fasteners are tight.
- Properly adjust all belts and chains.

Make sure each safety decal is still clean, legible, and visible. If new decals are needed, contact NECO at 1-800-367-6208.



### WORK AREA SAFETY

Under no circumstances should persons not involved in the operation be allowed into the work area.

Operators must ensure that no children or other unauthorized persons enter the work area. The operator on duty must immediately shut down the equipment if anyone not involved in the actual operation trespasses into the work area. Prior to start-up and during operation, any and all operators must ensure that the work area is clean and free of all debris and tools that might cause tripping or falling.

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



## DRIVES AND LOCKOUTS

You must inspect the drive before adding power. You must know how to shut down the equipment in an emergency. Whenever you service or adjust the equipment, make sure you SHUT OFF power and LOCK OUT your power source.

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

You must disconnect power before resetting the motor.

The reset controls and motor-starting controls must be located where the operator has a full view of the entire operation.

Ensure that all guards and shields are kept in place.

Ensure that a main power disconnect switch capable of being locked only in the OFF position is provided. This disconnect switch must be locked whenever work is being performed on the equipment



## SHUTDOWN

### Normal Shutdown

Make certain that the equipment is empty before stopping the unit.

LOCK OUT the power source before leaving the work area.

### Emergency Shutdown

Disconnect and LOCK OUT the power source if the equipment suddenly or unexpectedly shuts down while under load. Clear as much grain from the hopper and auger as you can. Never attempt to restart the equipment when the hopper is full.

Reconnect the power source and clear the equipment gradually.

Starting equipment under load may result in damage to the equipment. Starting equipment under load is considered abuse of the equipment.



## BIN SAFETY

Never enter a bin unless you're monitored by another person and unless all power to equipment has been SHUT OFF and LOCKED OUT. Use a safety harness and safety line when inside the bin. Avoid walking on grain near the grain outlets because flowing grain can trap and suffocate.

Do not enter the bin if the grain has not flowed out of the bin normally. Moisture can cause grain to crust over and form steep, unstable inclines or bridges. See Figures 1 and 2.

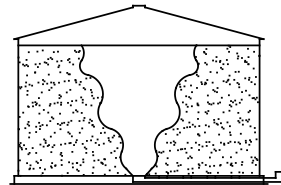


Figure 1. Crusted Grain Forming Steep Inclines

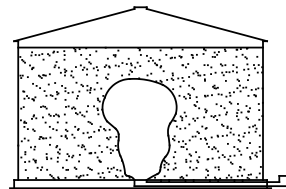


Figure 2. Crusted Grain Forming a Bridge



**FAILURE TO HEED THESE INSTRUCTIONS CAN RESULT IN PERSONAL INJURY OR DEATH!**

# Safety Decals

Grain bins and augers both present safety hazards. You must therefore display decals in appropriate locations to provide adequate warning regarding these hazards. NECO supplies the necessary decals with the equipment. Replacement decals are available by contacting NECO at the telephone numbers or email address found on the back of this manual.

The actual decals are larger than illustrated in this manual.

Decals must be affixed to equipment and to the bin as explained in the section titled *Decal Placement*.

The eight types of Safety Decals associated with the U-Trough Power Sweep are as follows.

- A. Danger—Flowing Grain
- B. Danger—Rotating Flighting
- C. Danger—Keep Out...Rapid Travel Sweep
- D. Caution—General Bin and Auger Safety
- E. Danger—Rotating Pulley

The five decals listed above are illustrated in Figures 3A, 3B, 3C, 3D, and 3E. The first four come in the Bag of Parts. Decal 3E comes affixed to the Motor Mount.

NOTE: For instructions on affixing the Safety Decals to the equipment and bin, refer to the section of this manual titled *Decal Placement*.

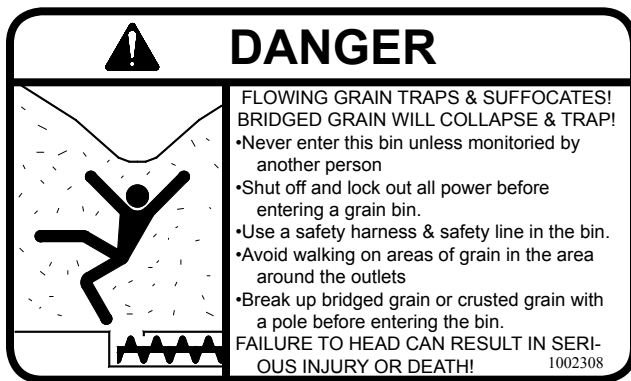


Figure 3A. Danger—Flowing Grain



Figure 3B. Danger—Rotating Flighting



Figure 3C. Danger—Keep Out...Rapid Travel Sweep

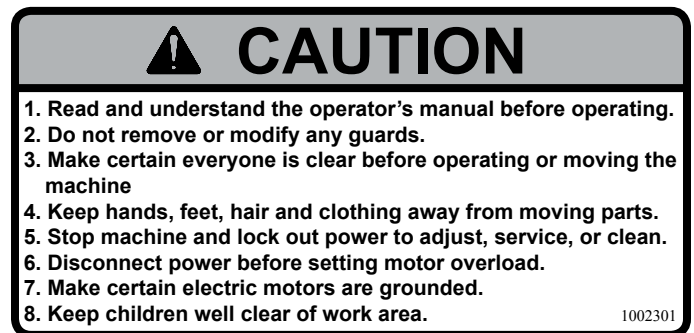


Figure 3D. Caution—General Bin and Auger Safety



Figure 3E. Danger—Rotating Pulley

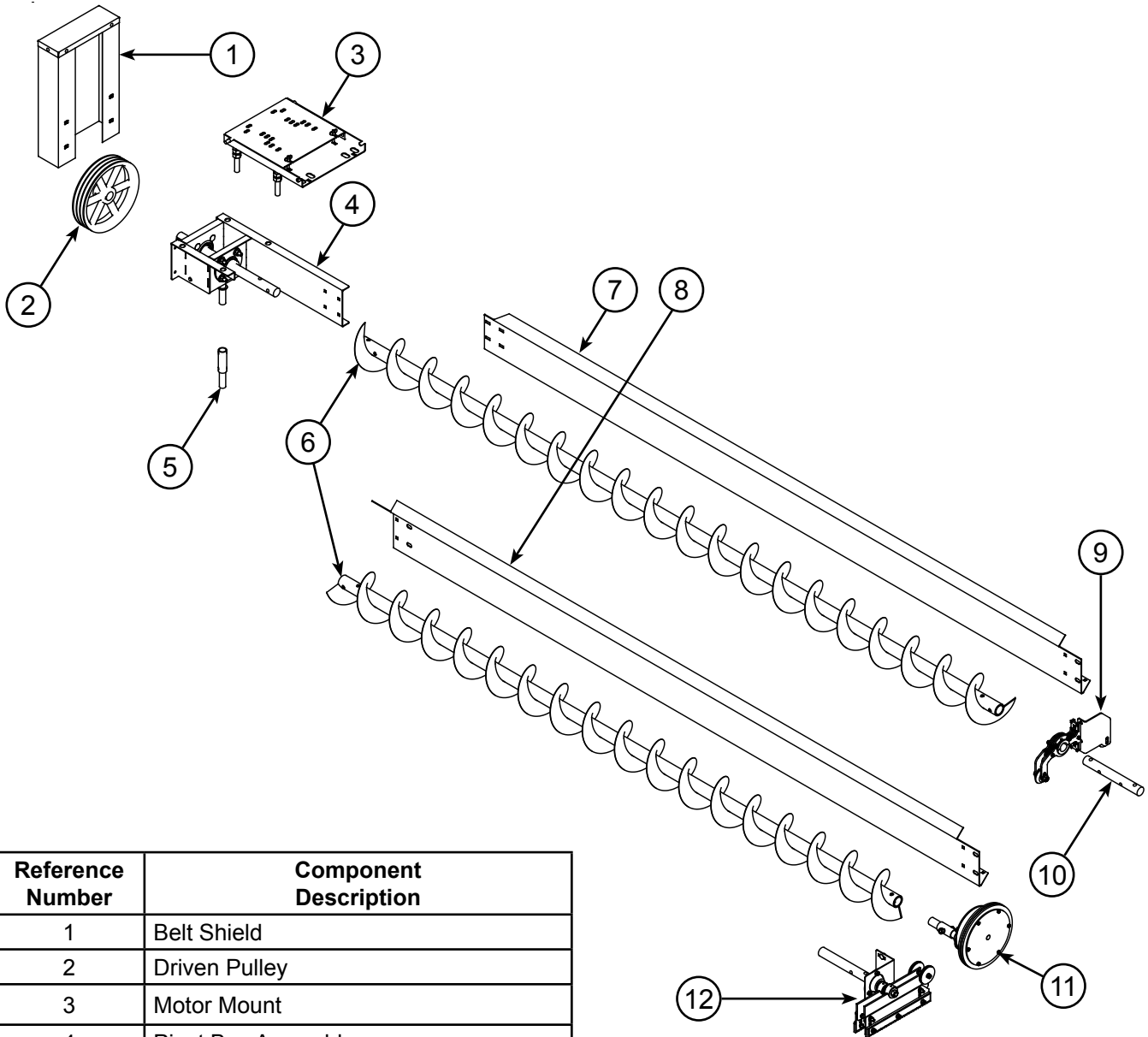
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# EQUIPMENT OVERVIEW

## 10" Bin Sweep Parts

Before proceeding to the following sections, make sure you've read and that you understand the safety issues involved.

The overview provided in Figure 4 will help guide you as you proceed to the Assembly and Installation portion of this manual.



Reference Number	Component Description
1	Belt Shield
2	Driven Pulley
3	Motor Mount
4	Pivot Box Assembly
5	Sweep Stilt
6	Sweep Auger
7	Inside Drag Angle
8	Outside Drag Angle
9	Sweep Carrier
10	Connecting Shaft
11	Reduction Wheel
12	Sweep Walker

Key to Figure 4

Figure 4. Basic layout of the 10" Sweep Auger system

For detailed lists of parts showing NECO part numbers, please see the Bill of Ladings lists in the appendix of this manual.

**Table 1. 10" Sweep Auger Bill of Lading Table**

10" Sweep Auger Bill of Lading Table															
Part Number	Description	054621	054622	054623	054624	054625	054626	054627	054628	054629	054630	054631	054632	054633	054634
		18'	21'	24'	27'	30'	33'	36'	39'	42'	48'	54'	60'	72'	78'
047800	E-Z Off Motor Mount 10"/12"	1	1	1	1	1	1	1	1	1	1	1	1	1	1
051798	10" Sweep Auger 141"				1						1				
051799	10" Sweep Auger 123"			1						1	1				1
051802	10" Sweep Auger 114"												2		
051803	10" Sweep Auger 105"		1					1	2	1		2	1	3	3
051804	10" Sweep Auger 87"	1				1	2	1				1		1	
051805	10" Sweep Auger 69"					1									
051811	10" Inside Drag Angle 141"				1						1				
051812	10" Inside Drag Angle 123"			1						1					1
051813	10" Inside Drag Angle 105"		1					1	1				1		
051814	10" Inside Drag Angle 87"	1					1					1		1	
051815	10" Inside Drag Angle 69"					1									
051820	10" Outside Drag Angle 123"										1				
051821	10" Outside Drag Angle 114"												2		
051822	10" Outside Drag Angle 105"								1	1		2		3	3
051823	10" Outside Drag Angle 87"					1	1	1							
051890	10" Pivot Box Assembly	1	1	1	1	1	1	1	1	1	1	1	1	1	1
054613	BOP 10" Sweep	1	1	1	1										
054614	BOP 10" Sweep					1	1	1	1	1	1				
054615	BOP 10" Sweep											1	1		
054616	BOP 10" Sweep													1	1

\*See appendix for list of items in box or parts.

The Sweep Drive Mechanisms are to be ordered separately.

046502—Box of Parts 6/8/10" Reduction Wheel

054563—Box of Parts 10" Sweep Walker & End Bearing

# INSTALLATION



Important! Check with your bin manufacturer to determine if your bin can be unloaded in a single pass without causing structural damage. See the section titled 'Operation' for detailed unloading instructions.

## Pivot Box Assembly

Attach the inside drag angle to the pivot box assembly using 3/8" carriage bolts, flat washers, and nuts. Do not tighten. Attach the inside sweep auger to the drive shaft using 1/2" bolts and lock nuts. See Figure 4.

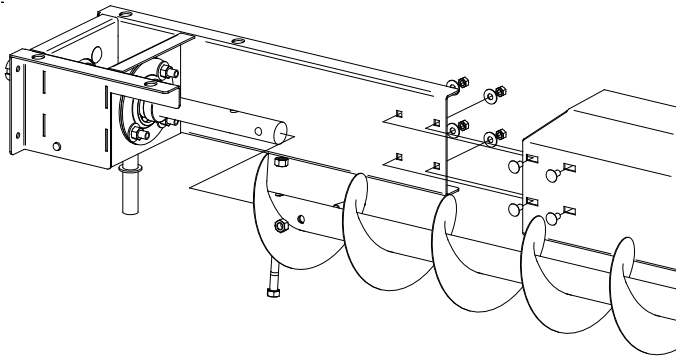


Figure 4. 10" Pivot Box Assembly

## Sweep Extension Assembly

Attach the next drag angle sections using four 3/8" carriage bolts, flat washers, and nuts. Attach the forward carrier assembly using 1/2" carriage bolts, flat washers and nuts. Do not tighten. Attach the rear carrier to the forward carrier bolts using four flat washers and two nuts. Do not tighten. See Figure 5.

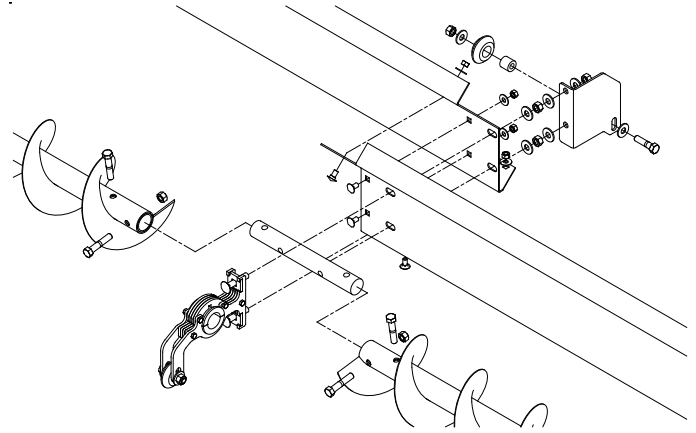


Figure 5. 10" Sweep Assembly

Slide the connecting shaft through the forward carrier and into the inside sweep auger. Attach the shaft to the sweep auger using 1/2" bolts and lock nuts. Slide the extension auger onto the connecting shaft and attach using 1/2" bolts and lock nuts as shown in Figure 5.

## Sweep Drive Assembly

### Reduction Wheel

Slide the reduction wheel shaft into the outside sweep auger and attach using a 1/2" bolt and lock nut. Attach the drag angle to the inside of the reduction wheel's outermost mounting tab using 1/2" carriage bolts, flat washers and nuts. See Figure 6.

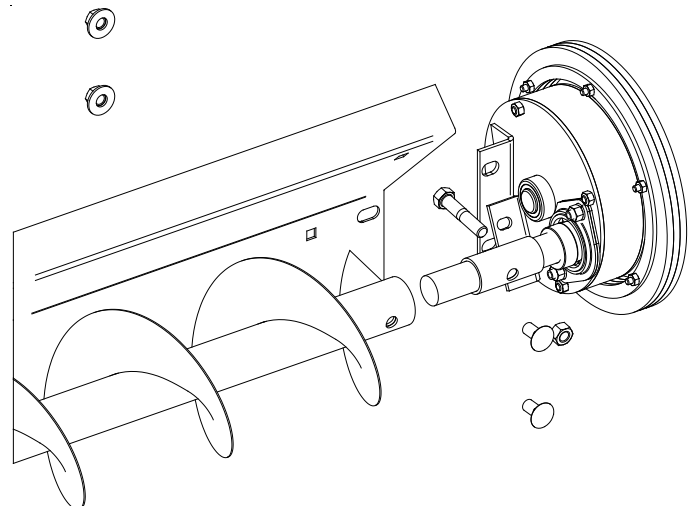


Figure 6. Reduction Wheel

## Sweep Walker

Assemble the bearing flanges and bearing to the sweep end bearing bracket using 3/8" carriage bolts and nuts. Slide the bearing onto the sweep walker shaft. Slide the sweep walker shaft into the outside sweep auger and attach using 1/2" bolts and lock nuts. Connect the end bearing bracket to the outside drag angle using 3/8" carriage bolts, flat washers, and nuts. See Figure 7.

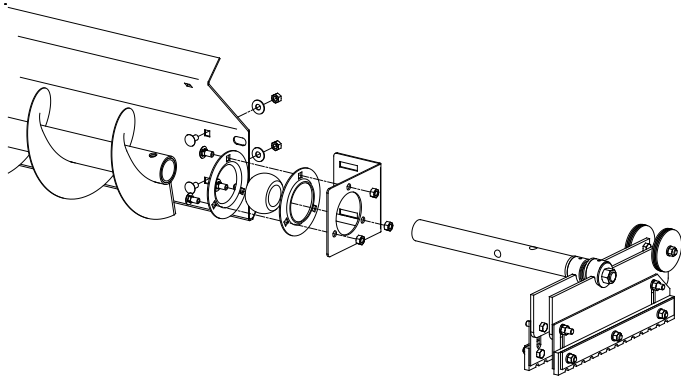


Figure 7. 10" Sweep Walker Assembly

## Adjust Auger Clearance

Adjust the drag angle so that all intermediate hanger bearings are centered between the augers and the augers will clear the hangers. Tighten the forward carrier and rear carrier assemblies. Adjust the height of the intermediate carrier wheels. Tighten the pivot box assembly hardware.

## Motor Mount & Drive Assembly

Fasten four 3/4" x 6" rods to the motor mount base plate using a 3/4" nut and flat washer on each side of the plate. The rods should be flush with the top nut. Install the 5/16" carriage bolts and wing nuts loosely to the bottom plate. Install another 3/4" nut on each rod and install the base plate on the pivot box assembly. See Figure 8.

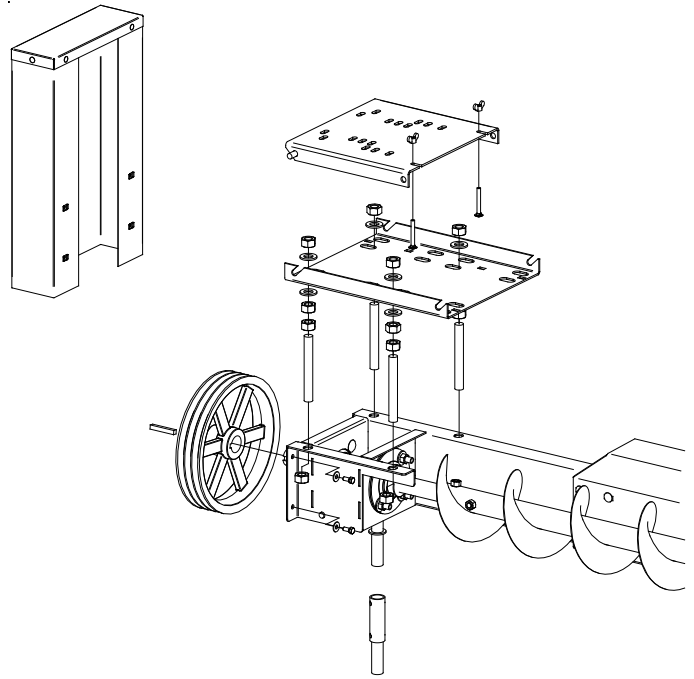


Figure 8. Drive Assembly

Install the motor (not included) on the top plate with either 5/16" or 3/8" hardware depending on motor frame size. Place the top plate into the grooves on the base plate and secure with 5/16" carriage bolts and wing nuts. Attach the drive pulley (not included) to the motor shaft. Attach the driven pulley and key to the auger shaft. Refer again to Figure 8.

Level motor mount plate and align pulleys with a straight edge and tighten pulley set screws. Install v-belts and adjust belt tension. Slide the belt shield over the pulleys and attach to pivot box assembly with four 5/16" bolts and flat washers.

## Stilt Installation & Use

The stilt is used when the sweep auger is initially installed and prevents the driven pulley from hitting the floor when the sweep sits at an angle in the bin. Attach the stilt to the hopper then set the pivot box assembly down on the stilt. Once the sweep auger has run long enough to reach the floor, shut off and lock out power to the sweep. Remove the stilt and attach the pivot box assembly directly to the center hopper. If the bin is being unloaded in multiple passes, this process may need to be repeated when adding sweep extensions.

# DECAL PLACEMENT

## Affixing the Safety Decals

All necessary decals should be included with this manual. If you cannot find them, contact NECO immediately for free replacements at 402-453-6912 or toll free at 1-800-367-6208.

Clean surfaces before attempting to affix the decals.

### BIN DECALS

Two sets of bin decals are provided. Please refer to Table 1 for a list of these decals.

The bin decals are designated as Decals A and B. See Figure 9. Affix one set of bin decals on the bin in each of the following two locations.

- On the outside of the bin door at eye level
- Next to the bin door

Affix the decals where you are most likely to see the warnings on the decals.

### Equipment Decals

The equipment decals are designated as Decals C, D, and E. Affix these decals as shown in Figure 10. Make sure all warning decals are installed in their proper places.

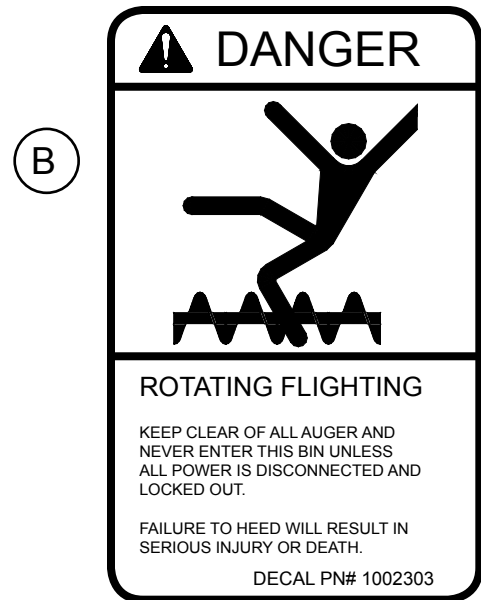
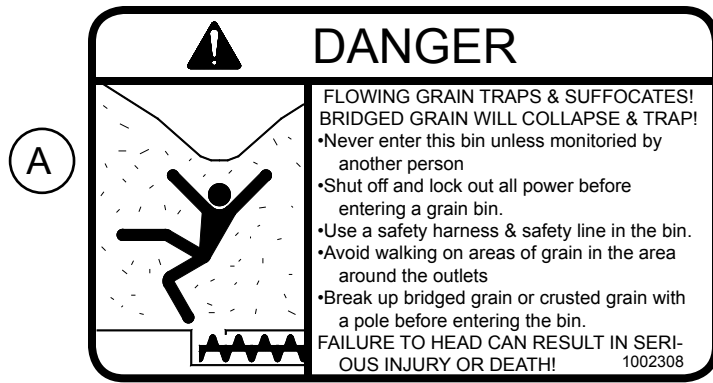
**IMPORTANT:** Surfaces must be free from oils, dirt, and moisture before decals are applied. If the decals become unreadable in any way, contact NECO at 402-453-6912 or toll free at 800-367-6208.

Table 2. System Decals

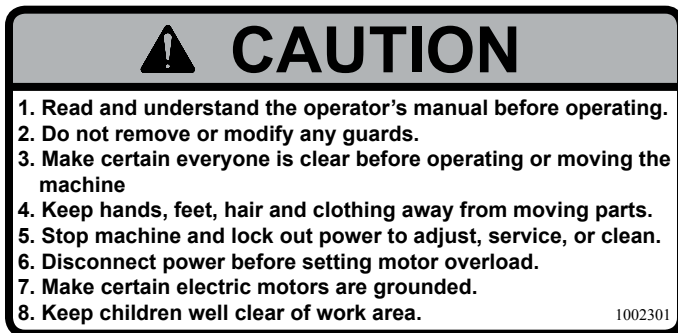
BIN DECALS (Place these on the bin)				
Decal	Decal Header	Part Number	Number of Decals	Where?
A	Danger—Flowing grain traps and suffocates	1002308	2	•On the outside of the bin door •Next to the bin door
B	Danger—Rotating Flighting	1002303	2	•On the outside of the bin door •Next to the bin door
EQUIPMENT DECALS (Place these on equipment)				
C	Danger—Rapid Travel Sweep	1002304	1	•On equipment (see Figure 10)
D	Caution—General Bin and Auger Safety	1002301	2	•On equipment (see Figure 10)
E	Danger—Rotating Pulley	035690	1	•On equipment (see Figure 10)

**IMPORTANT!** Place one of each of the Decals A and B on the outside of the bin door and next to the bin door. See Figure 10. Apply the decals to the latch side of the door at eye level. Clean the surface before applying the decals.

**IMPORTANT!** Make sure Decals C through E are affixed to the equipment as described in Table 2 and as illustrated in Figure 10.



Please pay attention to all safety warnings. They call out important safety precautions and alert you to hazardous situations that can cause personal injury or even death.



**D**

Figure 9. Bin Decals

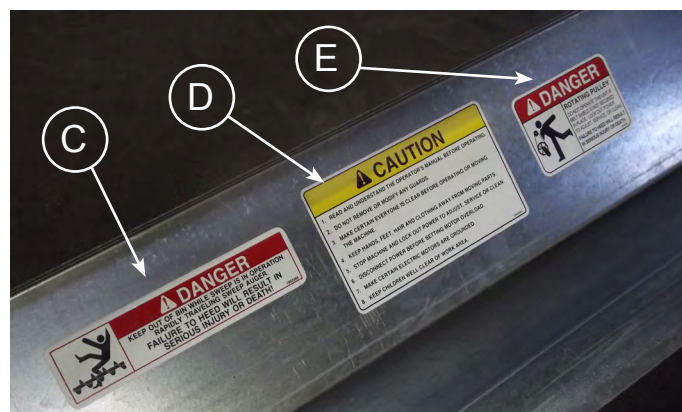


Figure 10. Decal Placement—Drag Angles

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# OPERATION

## Bin Unloading Procedure

### Step 1. UNLOAD FROM THE CENTER

Turn ON power to the under floor auger and open the center hopper. See Figure 11.

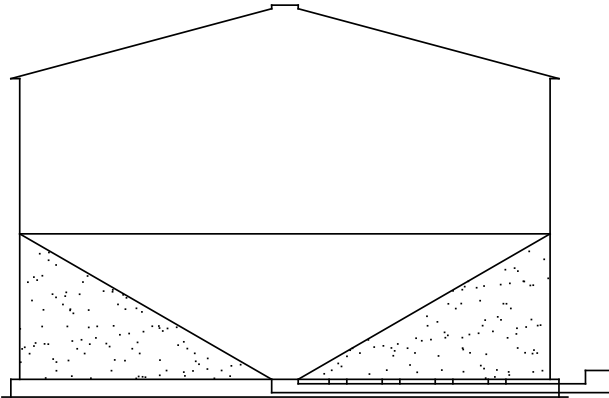


Figure 11. Step 1. Unloading Center Hopper

Never start unloading the grain bin from the intermediate hoppers. **Doing so puts dangerous stress loads on the bin wall which could cause the bin to fail, move off the pad, or collapse. Serious or fatal injuries could occur.** See Figure 12.

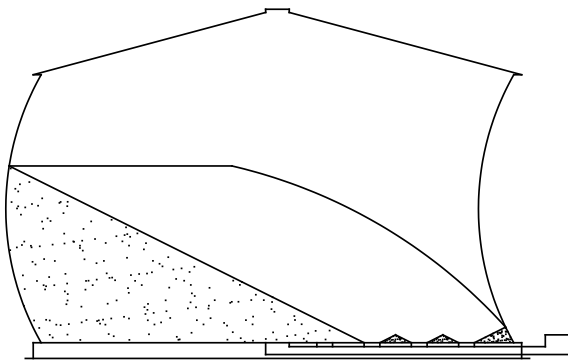


Figure 12. Intermediate Unloading Problems

### Step 2. UNLOAD FROM THE FIRST INTERMEDIATE HOPPER

After grain has stopped flowing into the center hopper, open the inside intermediate hoppers. See Figure 13.

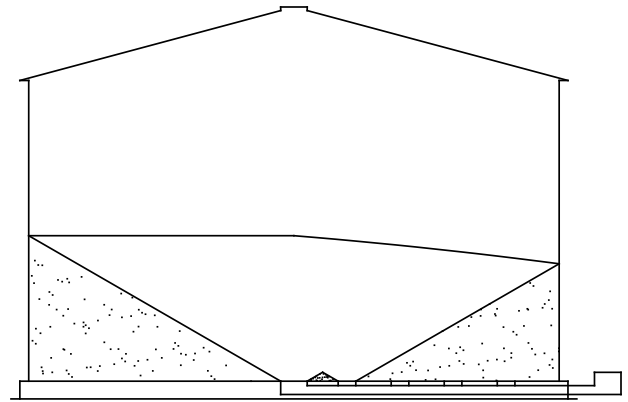


Figure 13. Step 2. Unloading the First Intermediate Hopper

### Step 3. UNLOAD THE BIN FROM THE INTERMEDIATE HOPPER(S)

After grain has stopped flowing into the center and first intermediate hoppers, open the remaining intermediate hoppers. See Figure 14.

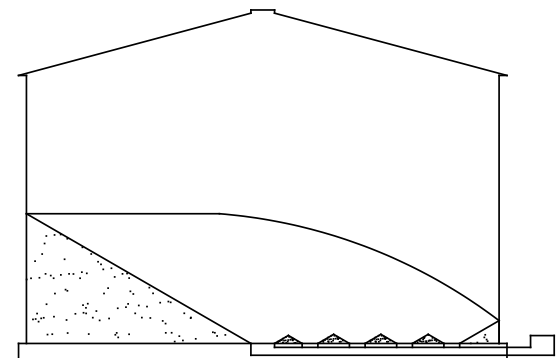


Figure 14. Step 3. Unloading Intermediate Hopper(s)

### Step 4. UNLOAD USING THE SWEEP

Shut OFF and LOCK OUT power to the unit. Carry the assembled pivot box, inside drag angle, and sweep drive into the bin. Place the sweep stilt in the center hopper and place the pivot box on the stilt. Make sure that any electrical cords are far from any moving parts on the sweep. Exit the bin. Turn ON power to the underfloor auger and the sweep auger.

Once the sweep is resting on the floor, shut

OFF and LOCK OUT power to the underbin and sweep augers. Remove the sweep stilt and place the pivot box on the center hopper. Exit the bin and turn ON power to the underfloor auger and the sweep auger to continue unloading. See Figure 15.

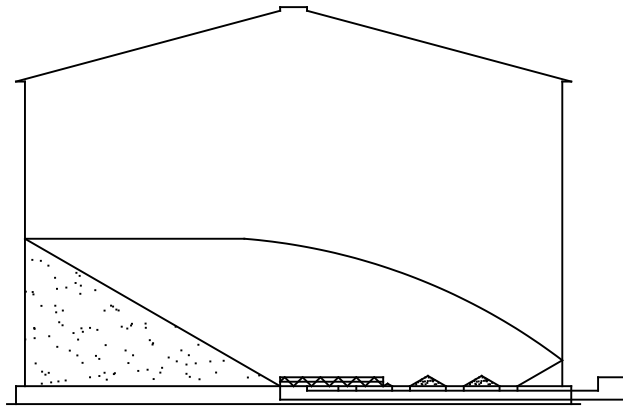


Figure 15. Step 4A. Unloading Via the First Sweep Section

After the inside Sweep Section has unloaded as much grain as possible, shut off and lock out the power to the underbin and sweep augers. Install the first Extension Sweep. Exit the bin. Unlock the power and continue unloading. Repeat this step for each extension of the sweep. The bin will then be nearly empty. See Figure 16.

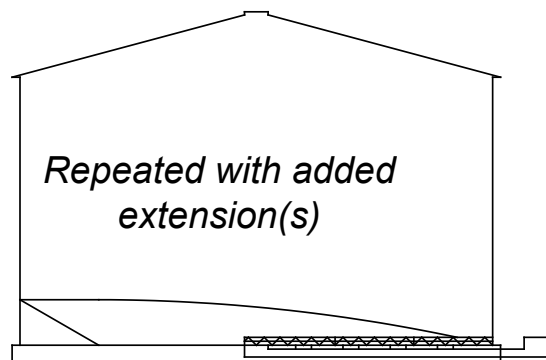


Figure 16. Step 4B. Unloading Via the Next Sweep Section

**CAUTION**

If you don't unload the bin according to the procedure described above, **dangerous stress loads** are likely to be exerted on the bin wall. See the example in Figure 17. **Please**

**consult with your bin manufacturer if you wish to unload a bin in one pass. If the bin manufacturer advises against unloading a bin in a single pass using multiple extensions, follow that advice and don't try it! Your bin could fail, move off the pad, or collapse. Serious or fatal injuries could occur.**

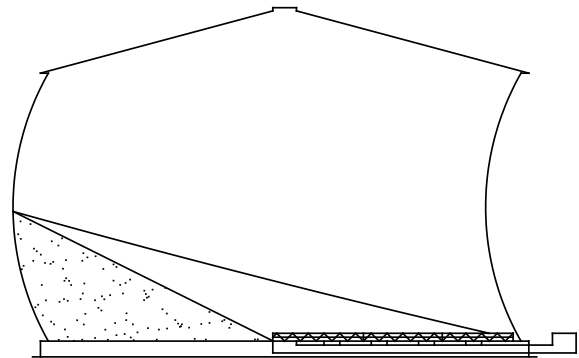


Figure 17. Unloading Sweep with one pass

**WARNING**

NEVER operate the Sweep Augers or Underfloor Auger when a person is in the bin! Sweep Augers can cause serious injuries or death.

# REPLACEMENT PARTS

10" Sweep Auger Assembly .....	18
Sweep Assembly .....	20
Pivot Box Assembly .....	22
Sweep Walker .....	23
Reduction Wheel .....	24

# REPLACEMENT PARTS

Figure 18 provides an overview of the Replacement Parts featured in this manual. The key to Figure 18 shows where the various subassemblies can be found. Some parts come in various dimensions to match the dimensions of the U-Trough with which they'll be coupled. Use the

key to navigate to the pages where the needed parts are listed. Determine the size and part number for the parts you need to purchase.

Parts listed with a part number can be used with any 10" bin sweep regardless of length.

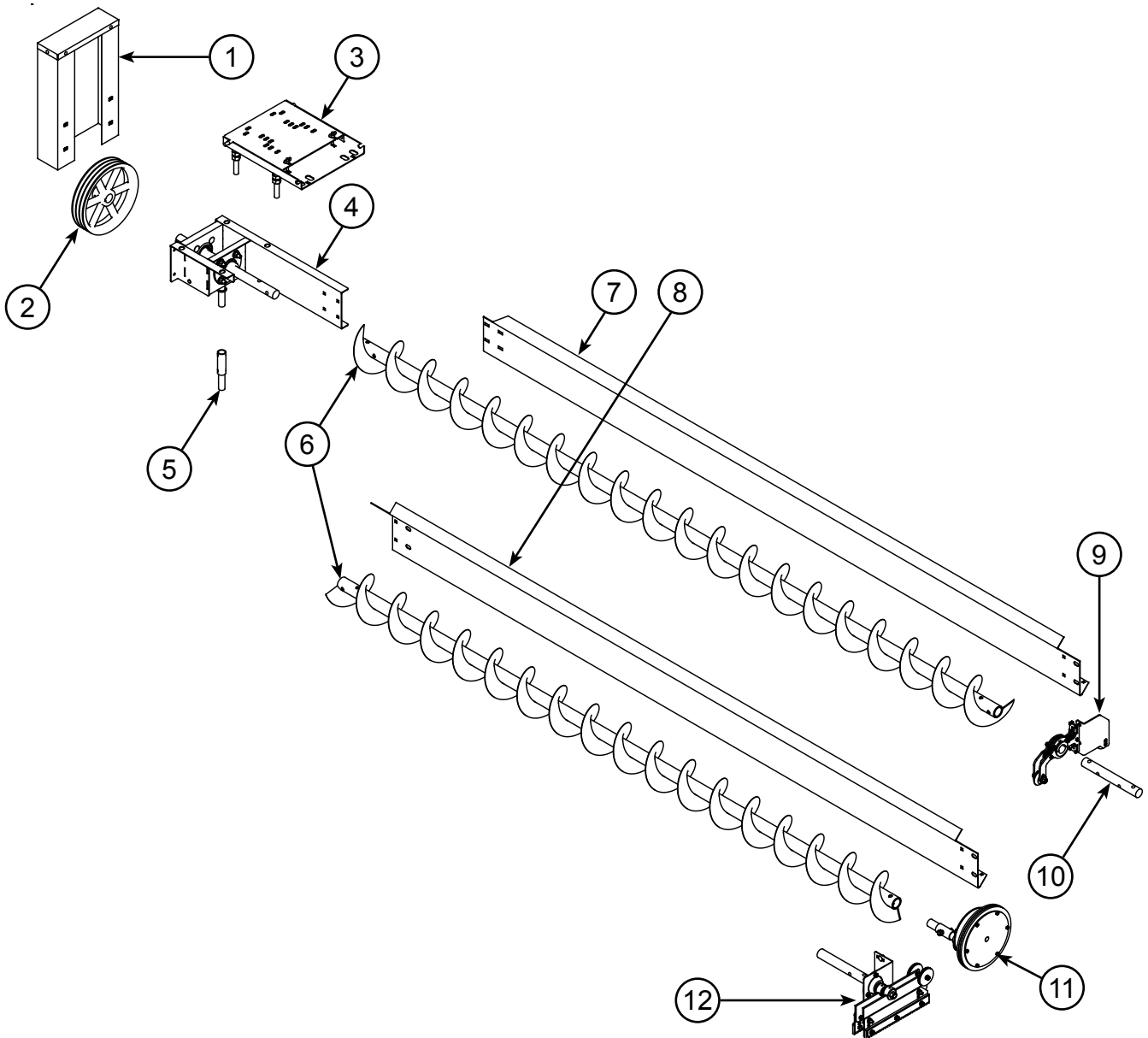
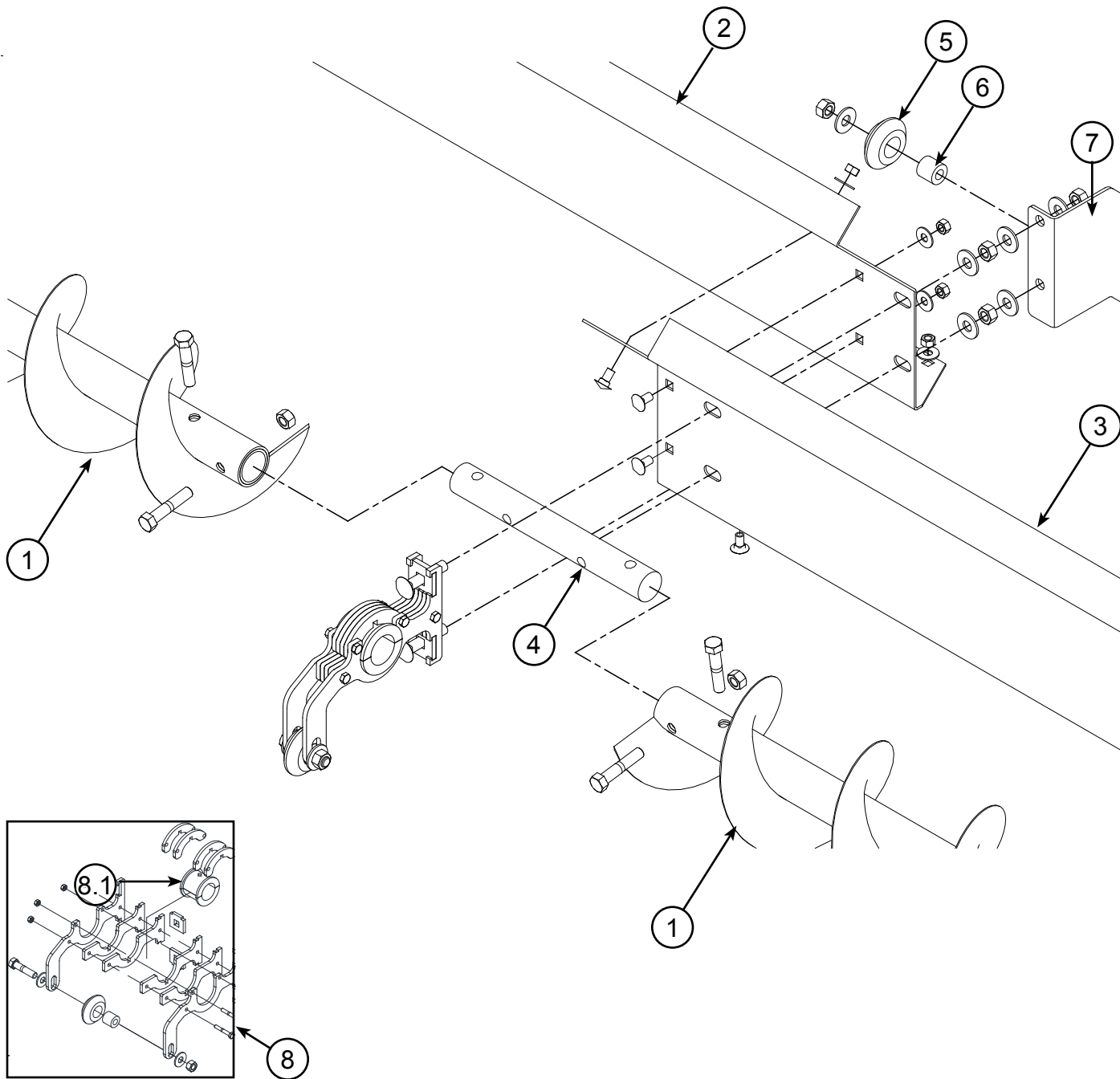


Figure 18. 10" Sweep Auger Assembly

<b>Reference Number</b>	<b>Part Number</b>	<b>Component Description</b>	<b>Page</b>
1	051987	Belt Shield	22
2	varies	Driven Pulley	28-31
3	047800	Motor Mount	22
4	051890	Pivot Box Assembly	22
5	018524	Sweep Stilt	—
6	varies	Sweep Auger	20
7	varies	Inside Drag Angle	20
8	varies	Outside Drag Angle	20
9	—	Sweep Carrier	20
10	035288	Connecting Shaft	20
11	046502	Reduction Wheel	24
12	054563	Sweep Walker	23

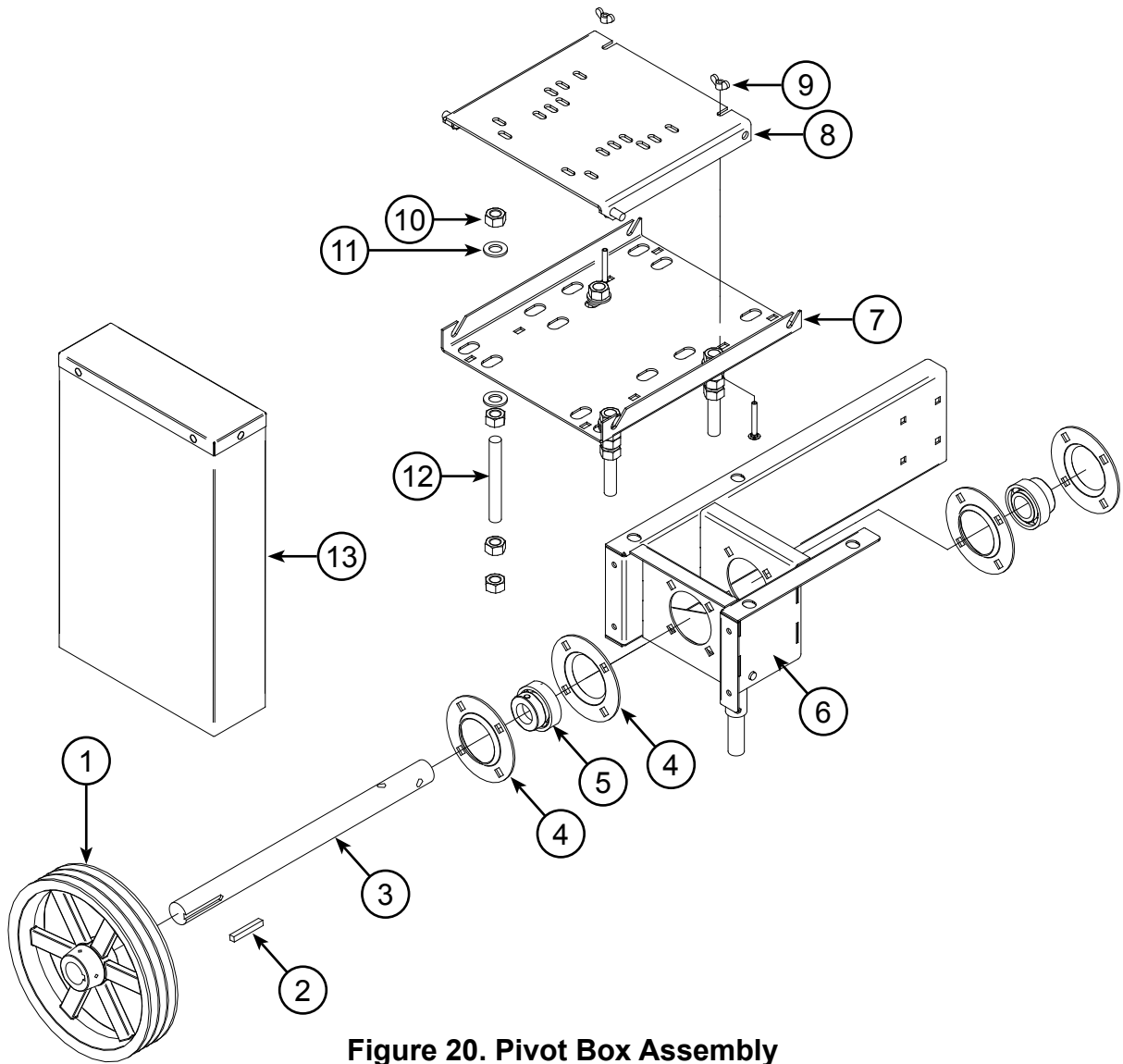
**Key to Figure 18**



**Figure 19. Sweep Assembly**

<b>Reference Number</b>	<b>Part Number</b>	<b>Description</b>	<b>Bin Size (Quantity Required)</b>
1	051798	10" x 141" Sweep Auger	See Bill of Lading on Page 9.
	051799	10" x 123" Sweep Auger	See Bill of Lading on Page 9.
	051802	10" x 114" Sweep Auger	See Bill of Lading on Page 9.
	051803	10" x 105" Sweep Auger	See Bill of Lading on Page 9.
	051804	10" x 87" Sweep Auger	See Bill of Lading on Page 9.
	051805	10" x 69" Sweep Auger	See Bill of Lading on Page 9.
2	051811	10" Inside Drag Angle for 141" Sweep	See Bill of Lading on Page 9.
	051812	10" Inside Drag Angle for 123" Sweep	See Bill of Lading on Page 9.
	051813	10" Inside Drag Angle for 105" Sweep	See Bill of Lading on Page 9.
	051814	10" Inside Drag Angle for 87" Sweep	See Bill of Lading on Page 9.
	051815	10" Inside Drag Angle for 69" Sweep	See Bill of Lading on Page 9.
3	051820	10" Drag Angle for 123" Sweep	See Bill of Lading on Page 9.
	051821	10" Drag Angle for 114" Sweep	See Bill of Lading on Page 9.
	051822	10" Drag Angle for 105" Sweep	See Bill of Lading on Page 9.
	051823	10" Drag Angle for 87" Sweep	See Bill of Lading on Page 9.
4	035288	1½" Connecting Shaft	30' and larger
5	051938	Sweep Carrier—Beveled Wheel	30' and larger
6	051933	Sweep Carrier—Wheel Bushing	30' and larger
7	051939	10" Rear D/A Support	30' and larger
8	051932	Sweep Carrier—10" Front Wheel Assembly	30' and larger
8.1	035298	1½" Bearing	30' and larger

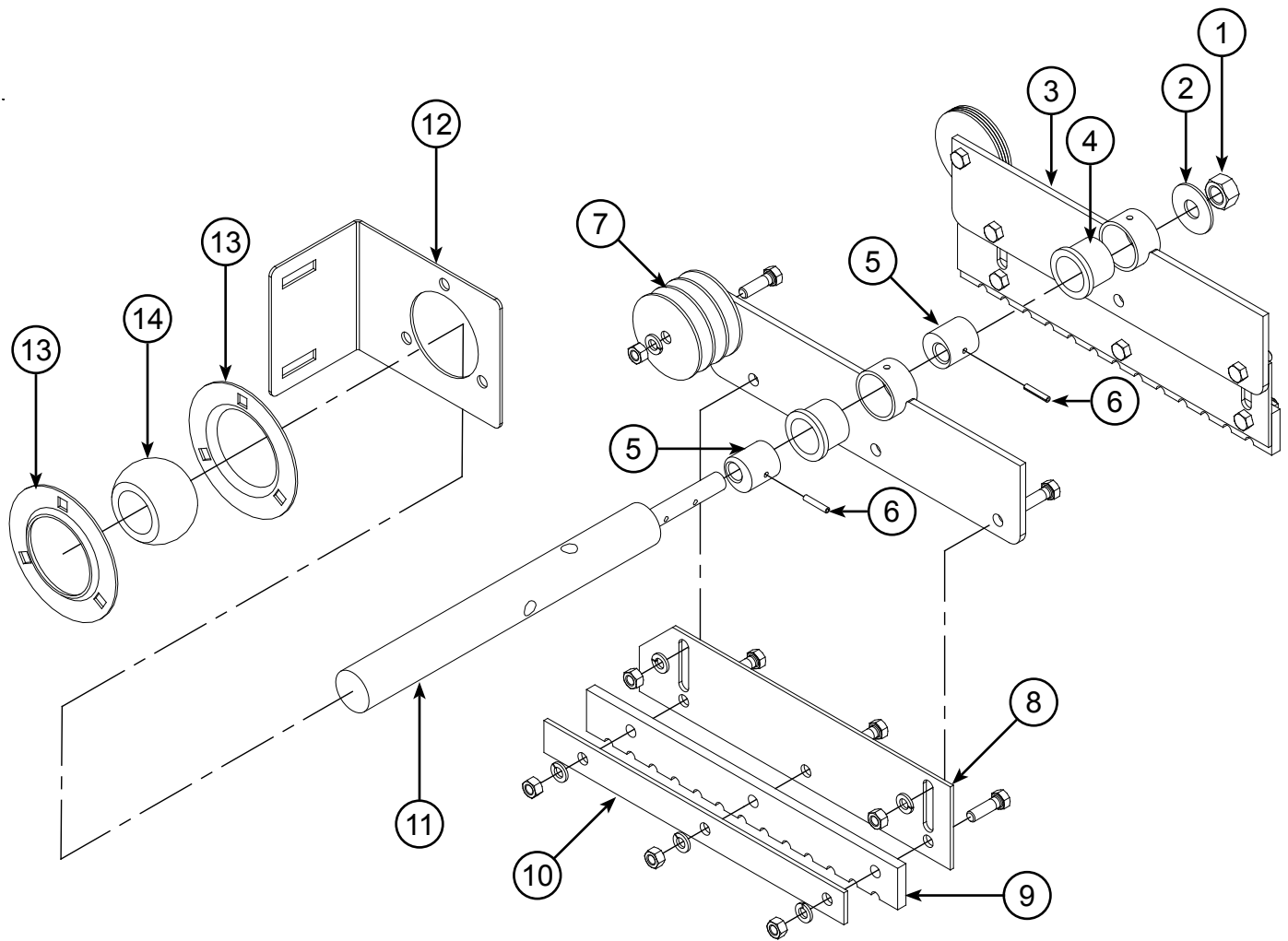
**Key to Figure 19.**



**Figure 20. Pivot Box Assembly**

Reference Number	Part Number	Description
1	varies	Driven Pulley
2	003362	Key 3/8" square by 2 1/2"
3	007154	Drive Shaft 1 1/2" x 2 1/2"
4	035264	Bearing Flange 1 1/2"
5	035265	Bearing with Lock collar 1 1/2"
6	051981	Pivot Box Weldment
7	047041	Motor Mount Base Plate
8	047043	Motor Mount Pivot Plate
9	003468	Wing Nut 5/16"—18 Zn
10	003152	Nut 3/4"—10 Zn
11	003203	Flatwasher 3/4" 1 1/2" OD
12	003348	Threaded Rod 3/4" x 6" Zn
13	051987	Belt Shield

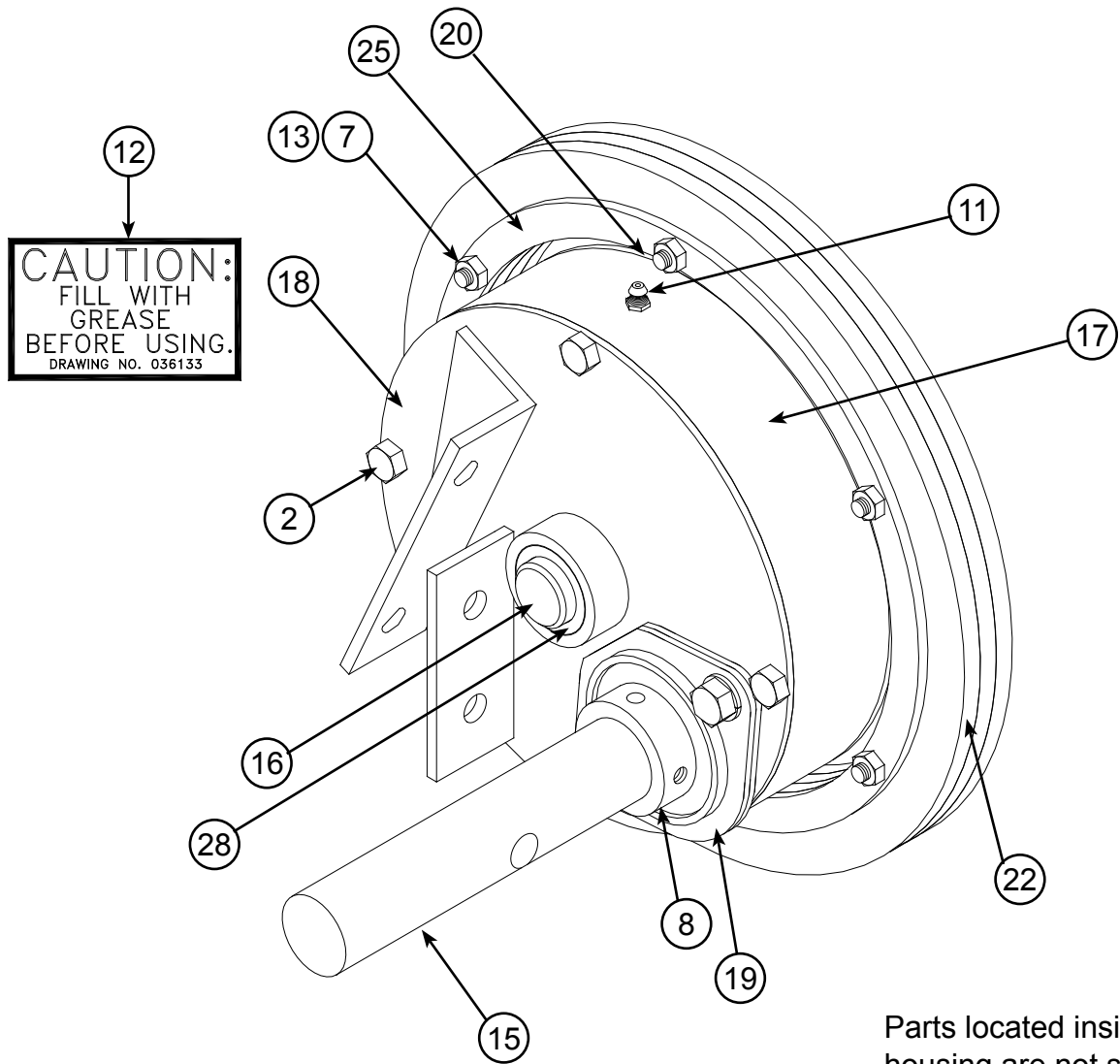
**Figure 20. Key**



**Figure 21. Sweep Walker**

Reference Number	Part Number	Description
1	003535	Locknut 5/8"—18 UNF
2	003194	Flatwasher 5/8"
3	014290	Foot Weldment
4	017200	Bronze Bushing
5	014291	Eccentric Bushing
6	003213	Roll Pin 3/16" x 1"
7	014293	Counter Weight
8	014324	Foot Extension
9	014914	Rubber Traction Paw
10	014915	Clamping Plate
11	014335	10"/12" Sweep Shaft
12	051990	End Bearing Bracket
13	035044	Bearing Flange 1 1/2" Wood
14	035892	Bearing Wood Spherical 1 1/2"

**Figure 21. Key**



**CAUTION:**  
 FILL WITH  
 GREASE  
 BEFORE USING.  
 DRAWING NO. 036133

Parts located inside the housing are not shown:

- (1) (3) (4) (5)
- (6) (9) (10) (14)

Hardware not shown:

- (21) (23) (24) (26) (27)

**Figure 22. Reduction Wheel**

Reference Number	Part Number	Quantity Required	Description
1	003013	2	3/8" x 1" Bolt
2	003053	4	5/16" x 2 1/2" Bolt
3	003076	2	1/2" x 2 1/2" Bolt
4	003148	2	3/8" Nut
5	003172	2	1/2" Lock Nut Reverse Lock
6	003178	2	3/8" Lock Washer
7	003412	6	3/4" x 1 3/4" Bolt
8	035054	1	1 1/4" Bearing w/Locking Collar
9	035594	1	Mach Bushing 1" I.D. x 1 1/2" O.D. 11 Gauge
10	035595	1	Mach Bushing NR 1" I.D. 14 Gauge
11	035950	1	1/4"-28 Standard Grease Fitting
12	036133	1	Tag, Caution Fill with Grease
13	04003	6	1/4" Nylock Nut
14	04013	4	5/16" Nylock Nut
15	046139	1	Drive Shaft Weldment
16	046168	1	Tire Mounting Plate with Shaft Weldment
17	046169	1	Housing Cover
18	046173	1	Drive Side Housing Weldment
19	046174	2	1 1/4" 2-Hole Notched Flangette
20	046175	1	Outside Housing Weldment
21	046268	1	RC4040 1" Bore Sprocket w/Hole
22	046386	3	Tire 11" O.D. 8.5" I.D.
23	046388	20"	Double Roller Chain #40
24	046389	1	Connecting Link #40 Double
25	046391	1	Tire Backing Ring
26	048824	1	Adapter Busing for 10" or 12" Sweep
27	33190	1	5/16" x 2 1/2" Roll Pin
28	6303D	2	1" I.D. Bronze Bushing

**Key to Figure 22.**

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# BILL OF LADING ITEMS

054613—Box of Parts for a 36'-42' Diameter Bin.....	28
054614—Box of Parts for a 30'-50' Diameter Bin.....	29
054615—Box of Parts for a 54'-68' Diameter Bin.....	30
054616—Box of Parts for a 72'-80' Diameter Bin.....	31

The table below shows contents of the Box of Parts  
for the 10" Bin Sweep (15'-28' Bins)

<b>BILL OF LADING ITEMS</b>		
<b>054613—Box of Parts: 15'-28' Diameter</b>		
<b>Part Number</b>	<b>Quantity</b>	<b>Description</b>
003012	4	CRG BLT 3/8 x 3/4 GR5 ZN
003019	2	CRG BLT 1/2 x 1 GR5 ZN
003045	4	CP SCR 5/16 x 3/4 GR5 ZN
003076	2	CP SCR 1/2 x 2 1/2 GRD5 HEX ZN
003148	4	NUT 3/8 HEX ZN
003150	2	NUT 1/2 - 13 HEX ZN
003172	2	LKNUT 1/2 HEX ZN REVERSE LOCK
003191	4	FLATWASHER 5/16" USS ZINC
003192	4	FLATWASHER 3/8" USS ZINC
003193	2	FLATWASHER 1/2" USS ZINC
003362	1	KEY 3/8" SQUARE x 2 1/2"
004032	2	BAG 6" x 8" x 0.005" MILL - CLEAR
004075	1	CTRN 16 x 28 1/2 x 13
018524	1	E0033 STILT, SWEEP 4"
019065	1	MANUAL DB 10300 SWEEP AUGER
035690	1	DECAL—DANGER ROTATING PULLEY
035716	1	PULLEY 12 X 2GR X 1 1/2 AL
035791	2	BELT B50
036718	1	DECAL PACKET, BIN UNLOAD EQUIPMENT
051987	1	BELT SHIELD ASSM 10" COMM SWP
1002301	1	DECAL—CAUTION GENERAL OPERATORS
1002304	1	DECAL—DANGER RAPID TRAVEL SWP

The table below shows contents of the Box of Parts  
for the 10" Bin Sweep (30'-50' Bins)

<b>BILL OF LADING ITEMS</b>		
<b>054614—Box of Parts: 30'-50' Diameter</b>		
<b>Part Number</b>	<b>Quantity</b>	<b>Description</b>
003012	8	CRG BLT 3/8 x 3/4 GR5 ZN
003019	2	CRG BLT 1/2 x 1 GR5 ZN
003045	4	CP SCR 5/16 x 3/4 GR5 ZN
003076	6	CP SCR 1/2 x 2 1/2 GRD5 HEX ZN
003148	8	NUT 3/8 HEX ZN
003150	6	NUT 1/2 - 13 HEX ZN
003172	6	LKNUT 1/2 HEX ZN REVERSE LOCK
003191	4	FLATWASHER 5/16" USS ZINC
003192	8	FLATWASHER 3/8" USS ZINC
003193	8	FLATWASHER 1/2" USS ZINC
003362	1	KEY 3/8" SQUARE x 2 1/2"
003484	2	BAG 6" x 8" x 0.005" MILL - CLEAR
004032	3	CTRN 16 x 28 1/2 x 13
004075	1	CRTN 16 x 28 1/2 x 13
018524	1	E0033 STILT, SWEEP 4"
019065	1	MANUAL DB 10300 SWEEP AUGER
035288	1	B0154 SHAFT 1 1/2 X 12 CONN
035690	1	DECAL—DANGER ROTATING PULLEY
035716	1	PULLEY 12 X 2GR X 1 1/2 AL
035791	2	BELT B50
036718	1	DECAL PACKET, BIN UNLOAD EQUIPMENT
051932	1	SWEEP CARRIER 10" FRNT WHL ASM
051979	1	REAR CARRIER ASSM 10" SWEEP
051987	1	BELT SHIELD ASSM 10" COMM SWP
1002301	1	DECAL—CAUTION GENERAL OPERATORS
1002304	1	DECAL—DANGER RAPID TRAVEL SWP

The table below shows contents of the Box of Parts  
for the 10" Bin Sweep (54'-72' Bins)

<b>BILL OF LADING ITEMS</b>		
<b>054615—Box of Parts: 54'-68' Diameter</b>		
<b>Part Number</b>	<b>Quantity</b>	<b>Description</b>
003012	12	CRG BLT 3/8 x 3/4 GR5 ZN
003019	2	CRG BLT 1/2 x 1 GR5 ZN
003045	4	CP SCR 5/16 x 3/4 GR5 ZN
003076	10	CP SCR 1/2 x 2 1/2 GRD5 HEX ZN
003148	12	NUT 3/8 HEX ZN
003150	10	NUT 1/2 - 13 HEX ZN
003172	10	LKNUT 1/2 HEX ZN REVERSE LOCK
003191	4	FLATWASHER 5/16" USS ZINC
003192	12	FLATWASHER 3/8" USS ZINC
003193	14	FLATWASHER 1/2" USS ZINC
003362	1	KEY 3/8" SQUARE x 2 1/2"
003484	4	BAG 6" x 8" x 0.005" MILL - CLEAR
004032	4	CTRN 16 x 28 1/2 x 13
004075	1	CRTN 16 x 28 1/2 x 13
018524	1	E0033 STILT, SWEEP 4"
019065	1	MANUAL DB 10300 SWEEP AUGER
035288	2	B0154 SHAFT 1 1/2 X 12 CONN
035690	1	DECAL—DANGER ROTATING PULLEY
035717	1	PULLEY 12 X 3 gr X 1 1/2 AL
035791	2	BELT B50
036718	1	DECAL PACKET, BIN UNLOAD EQUIPMENT
051932	2	SWEEP CARRIER 10" FRNT WHL ASM
051979	2	REAR CARRIER ASSM 10" SWEEP
051987	1	BELT SHIELD ASSM 10" COMM SWP
1002301	1	DECAL—CAUTION GENERAL OPERATORS
1002304	1	DECAL—DANGER RAPID TRAVEL SWP

The table below shows contents of the Box of Parts  
for the 10" Bin Sweep (74'-80' Bins)

<b>BILL OF LADING ITEMS</b>		
<b>054616—Box of Parts: 72'-80' Diameter</b>		
<b>Part Number</b>	<b>Quantity</b>	<b>Description</b>
003012	16	CRG BLT 3/8 x 3/4 GR5 ZN
003019	2	CRG BLT 1/2 x 1 GR5 ZN
003045	4	CP SCR 5/16 x 3/4 GR5 ZN
003076	14	CP SCR 1/2 x 2 1/2 GRD5 HEX ZN
003148	16	NUT 3/8 HEX ZN
003150	14	NUT 1/2 - 13 HEX ZN
003172	14	LKNUT 1/2 HEX ZN REVERSE LOCK
003191	4	FLATWASHER 5/16" USS ZINC
003192	16	FLATWASHER 3/8" USS ZINC
003193	20	FLATWASHER 1/2" USS ZINC
003362	1	KEY 3/8" SQUARE x 2 1/2"
003484	6	BAG 6" x 8" x 0.005" MILL - CLEAR
004032	5	CTRN 16 x 28 1/2 x 13
004075	1	CRTN 16 x 28 1/2 x 13
018524	1	E0033 STILT, SWEEP 4"
019065	1	MANUAL DB 10300 SWEEP AUGER
035288	3	B0154 SHAFT 1 1/2 X 12 CONN
035690	1	DECAL—DANGER ROTATING PULLEY
035717	1	PULLEY 12 X 3 gr X 1 1/2 AL
035791	2	BELT B50
036718	1	DECAL PACKET, BIN UNLOAD EQUIPMENT
051932	3	SWEEP CARRIER 10" FRNT WHL ASM
051979	3	REAR CARRIER ASSM 10" SWEEP
051987	1	BELT SHIELD ASSM 10" COMM SWP
1002301	1	DECAL—CAUTION GENERAL OPERATORS
1002304	1	DECAL—DANGER RAPID TRAVEL SWP

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