

DGD Paddle Sweep

Owner's Manual

PNEG-2333

Version 01

Date: 03-30-20



PNEG-2333

All information, illustrations, photos, and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

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INTRODUCTION

- The purpose of this manual is to explain the operation and maintenance of the paddle sweep. It also contains a parts list for reference, if replacement parts are needed.
- It is recommended that you read this manual in its entirety for the information available in order to provide the proper care and maintenance of the paddle sweep. The equipment is built to provide many years of dependable service when used properly. Reading this manual will also provide information on how to use the equipment correctly to prevent any accidents while using the system.
- If you have any further questions, comments, improvements or suggestions regarding the contents of any of the manuals provided, please see the contact information below.
- This machine is covered by one or more United States patents. Refer to www.siuoxsteel.com for current patent information. Or scan this QR Code to go directly to the patent area on the website.



**ALL safety decals are no charge from the factory.
Please replace all safety decals if damaged or missing.
Your safety is important**

WARNING! Anyone who will be operating or working around the equipment should first read this manual to familiarize themselves with the machinery.

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SECTION 1 - SAFETY INFORMATION

SAFETY ALERT SYMBOLS

The symbol shown below is used to call your attention to instructions concerning your personal safety. Watch for this symbol it points out important safety precautions. It means **ATTENTION! Become Alert! Your Personal Safety Is Involved!**

Read the message that follows and be alert to the possibility of personal injury or death.



DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. The color associated with Danger is RED.



WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury. The color associated with Warning is ORANGE.



CAUTION: Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. The color associated with Caution is YELLOW.



WARNING! Anyone who will be operating or working around the equipment should first read this manual to familiarize themselves with the machinery.

SECTION 1 - SAFETY INFORMATION



SAFETY



A careful operator is the best operator. Most accidents can be avoided by observing certain precautions. To help prevent accidents, read the following precautions before operating this equipment. Equipment should be operated only by those who are responsible and instructed to do so.

Carefully review the procedures given in this manual with all operators. It is important that all operators be familiar with and follow safety precautions. Improper use of the equipment can cause serious injury or death.

1. Read the operator's manual before operating equipment..
2. Only allow properly trained persons to operate the equipment.
3. Keep hands and feet away from all pinch points.
4. Keep bystanders away during operation.
5. **DO NOT** clean, lubricate or adjust the equipment while it is running. Disengage the machine and lock out and tag out all power sources before performing any maintenance.

REMEMBER:

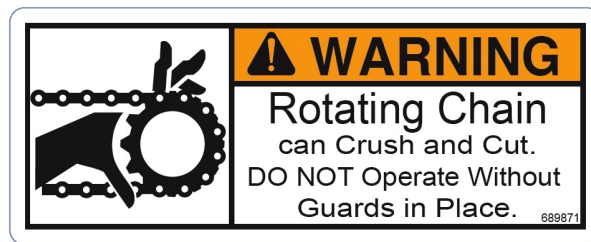
The manufacturer includes or provides all reasonable means for accident prevention except a safe and careful operator.

SECTION 1 - SAFETY INFORMATION

SAFETY & LOGO DECALS



P/N K686033



P/N K689871

SECTION 1 - SAFETY INFORMATION

OPERATIONAL INFORMATION

OPERATION:

- Once sweep has been properly installed, engage the sweep and run one complete pass around the bin, looking for potential obstructions.
- Make sweep adjustments including:
 - Drag rubber placement; it needs to account for non-level floors.
 - Caster wheel location; it needs to clear sump opening.
 - Distance between sweep drive end and bin wall, (usually 3" - 6")
 - Placing zero entry pads under the support plates. (if equipped)
- Check capacity to make sure your unload system is equal to or greater capacity than sweep. If the sump is getting backed up, the sweep will need to be slowed down with either a slower gear ratio gear box, or electronically.

SWEEP BURIAL:

- Prior to sweep burial, the sweep should be positioned rearward of the sump line, to help with initial startup.
- If machine is equipped with jacks, position the sweep support jacks so they are just touching the floor. The drive wheels, roller wheels and all jacks need to be touching the floor for proper support prior to burial.
- If machine is equipped with zero entry supports, ensure supports are placed properly over the zero entry pads to support the sweep.
- If the machine is equipped with an electrical cord, it needs to be positioned behind the sweep drive wheels on the floor. The excess cord should be tied up, usually next to the bin access door.
- Make sure motor cover is in good condition to prevent motor fan damage from plugging upon burial.
- Prior to sweep startup, visually check the sweep for any damage or foreign debris that may impede the paddle chain.
- If sweep is equipped with electrical cord, remove excess cord from bin. Ensure cord has not become entangled and is not in front of sweep drive wheels.
- Engage the sweep and allow the commodity to be moved to the center sump. Once the sweep and sump are emptied and deemed safe, shut the sweep off.
- If equipped with jacks, enter the bin and raise them to their storage position.
- Exit the bin and reengage the sweep. Depending on the size of bin, a commodity avalanche might occur, spilling over the sweep. It can easily be swept clean with a second pass.
- The sweep was designed to have drive wheels spin as it advances around the bin. Once the resistance against the sweep has subsided, the drive wheels will advance the sweep forward.
- When the bin has been swept completely, follow burial instructions prior to filling bin.

WARNING!

Follow bin emptying procedures per your bin manufacturer. If bin is equipped with multiple sumps, use all of them to uncover as much of the sweep as possible. Once all the commodities have stopped flowing out of the sumps, open the access door to the bin.

NOTE: Confined space awareness should be followed.

690344

P/N K690344



P/N K688462

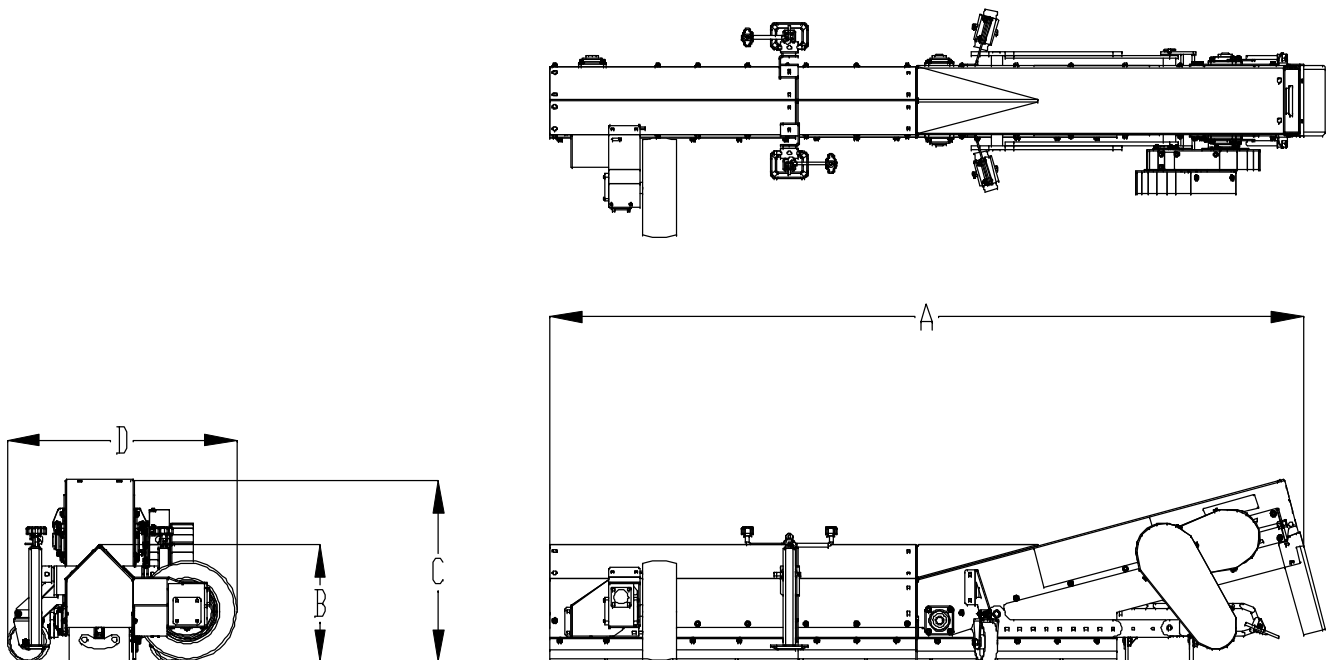
SECTION 2 - SPECIFICATIONS

FEATURES

- Capacity: 5000 bu/hr @ 350 rpm tightner shaft speed
- Chain speed: 390 feet per minute
- Drive tire size: 5" x 8" -15" height segmented wheel
- Drive wheel powered by a 40:1 gearbox off the paddle chain.
- Ability to perform single-pass or double pass operation
- Designed to be fully submersed in grain
- Housing is made out of 12 ga. Material
- Moves grain gently and evenly to sump
- Adjustable chain mount
- Flexible pivot joint allows sweep to move independently from gearbox to allow for variations in the bin floor.
- Adjustable stabilizer arms to accommodate variations in bin size and out of roundness.
- Rubber drag to help clean the floor for less sweeping.

Specifications are subject to change without notice and without liability.

OVERALL DIMENSIONS AND WEIGHTS



SECTION 2 - SPECIFICATIONS

DIMENSIONS AND WEIGHTS (Continued)

Bin Size	15'	18'	21'	24'	27'
Sweep Size	7'	8' 6"	10'	11' 6"	13'
Length (Dim A)	95.25"	113.25"	131.25"	149.25"	167.25"
Height-Sweep (Dim B)	17.50"	17.50"	17.50"	17.50"	17.50"
Height-Pivot (Dim C)	27.13"	27.13"	27.13"	27.13"	27.13"
Width (Dim D)	34.56"	34.56"	34.56"	34.56"	34.56"
Unit Weight	764 lbs	803 lbs	838 lbs	873 lbs	906 lbs

Bin Size	30	33'	36'	42'	48'
Sweep Size	14' 6"	16'	17' 6"	20' 6"	23' 6"
Length (Dim A)	185.25	203.25"	221.25"	257.25"	293.25"
Height-Sweep (Dim B)	17.50"	17.50"	17.50"	17.50"	17.50"
Height-Pivot (Dim C)	27.13"	27.13"	27.13"	27.13"	27.13"
Width (Dim D)	34.56"	34.56"	34.56"	34.56"	34.56"
Unit Weight	941 lbs	975 lbs	1037 lbs	1107 lbs	1176 lbs

Bin Size	54'	60'	66'
Sweep Size	26' 6"	29' 6"	32' 6"
Length (Dim A)	329.25"	365.25"	401.25"
Height-Sweep (Dim B)	17.50"	17.50"	17.50"
Height-Pivot (Dim C)	27.13"	27.13"	27.13"
Width (Dim D)	34.56"	34.56"	34.56"
Unit Weight	1272 lbs	1342 lbs	1411 lbs

SECTION 2 - SPECIFICATIONS

LAYOUT DIMENSIONS

Nominal Bin Dia.	Sweep Length from Pivot		Caster Wheel Path		Drive Wheel Path	
	Min	Max	Min	Max	Min	Max
15'	6' 4"	7' 10"	5' 4"	7' 0"	4' 9"	6' 8"
18'	7' 10"	9' 4"	5' 4"	7' 0"	6' 3"	8' 2"
21'	9' 4"	10' 10"	5' 4"	7' 0"	7' 9"	9' 8"
24'	10' 10"	12' 4"	5' 4"	7' 0"	9' 3"	11' 2"
27'	12' 4"	13' 10"	5' 4"	7' 0"	10' 9"	12' 8"
30'	13' 10"	15' 4"	5' 4"	7' 0"	12' 3"	14' 2"
33'	15' 4"	16' 10"	5' 4"	7' 0"	13' 9"	15' 8"
36'	16' 10"	18' 4"	5' 4"	7' 0"	15' 3"	17' 2"
42'	19' 10"	21' 4"	5' 4"	7' 0"	18' 3"	20' 2"
48'	22' 10"	24' 4"	5' 4"	7' 0"	21' 3"	23' 2"
54'	25' 10"	27' 4"	5' 4"	7' 0"	24' 3"	26' 2"
60'	28' 10"	30' 4"	5' 4"	7' 0"	27' 3"	29' 2"
66'	31' 10"	33' 4"	5' 4"	7' 0"	30' 3"	32' 2"

SECTION 3 - INSTALLATION

INSTALLATION NOTES

PRIOR TO INSTALLATION:

- For ease and safety of installation it is recommended that the bin be empty with a clean floor.
- If bin is equipped with aeration or perforated steel floor, ensure that no obtrusions or potential obstructions are present that would hinder or damage the paddle chain or drive wheels.
- Any depression in the floor will need to be brought back to reasonably level, especially any depression that is in the path of the drive wheels. These depressions will cause the sweep to hang-up.
- Extra floor supports or structure will be required to support the sweep during burial if a full aeration floor is used. These supports or structure will need to be placed directly underneath the zero entry pads/jacks/caster wheels to support the sweep in the burial condition. **Failure to do so will result in damage to the paddle sweep, sweep accessories, and aeration floor.**
- Review the center gearbox in the bin and determine if the pivot kit ordered is applicable.



WARNING!

- Since the installation of this sweep can take place in a hazardous environment, Confined Space safety procedures should be followed.
- Since the power for the DGD Paddle Sweep is thru the gearbox, lock out tag out procedures should be followed.

TOOLS NEEDED FOR INSTALLATION:

- Cordless Driver
- Ratchet
- 1/2" & 9/16" shallow & deep socket
- (1) 3/4" wrench
- (1) 15/16" wrench
- (2) Alignment punch
- (1) Center Punch
- Battery powered/Explosion proof light
- Pliers/Needle Nose
- 3' to 5' of wire (for pulling paddle chain thru)
- Standard Allen wrench set
- Gloves
- Hammer
- Loctite (blue)

INSTALLATION NOTES:

- All parts are made to fit thru a 24" diameter access hole or larger. Certain sub-assemblies may have to be assembled in the bin since they will not pass thru smaller man holes or access doors fully assembled.
- It is recommended after components are assembled and inserted into the bin, to layout these components on the bin floor in a loose pattern that resembles the assembled product. Please see the layout section of manual for specific sweep length configuration.
- All setscrews should have Loctite (blue) put on them prior to tightening. This will help prevent them from loosening during operation.
- We recommend the use of steel track pathways on any portion of aeration floor that the caster wheels on any of the sweeps and the drive wheel on the farm sweeps contact. **Failure to do so will result in damage to the paddle sweep, sweep accessories, and aeration floor.**

SECTION 3 - INSTALLATION

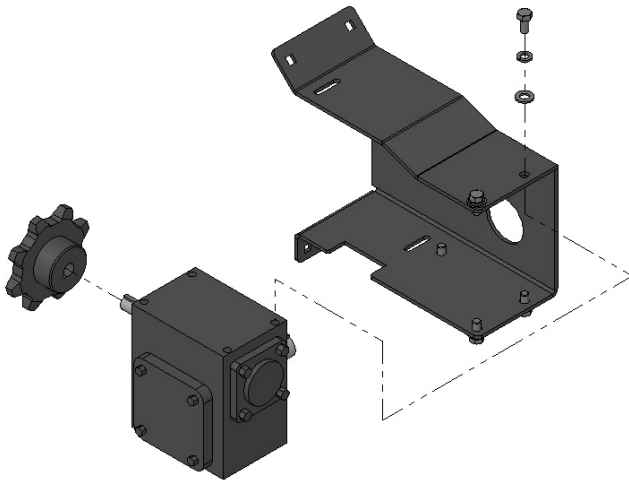
DRIVE END ASSEMBLY

Drive End Assembly:

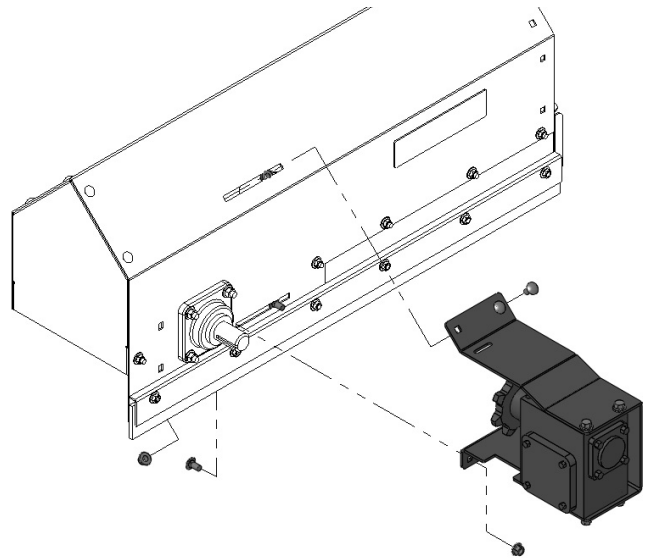
Reference the following parts of this manual. See Table of Contents for specific page numbers.

- Drive End Assembly Diagram for a overall detailed view.
- Drive End Assembly Parts List for the proper fasteners.

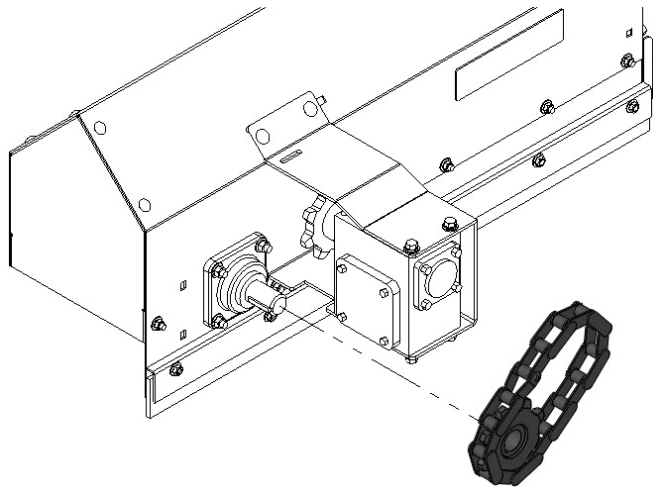
1. Locate the appropriate bolts to assemble the Drive End Section from the bolt bag that came with the sweep.



2. Assemble the Sprocket (K688933) and 3/16" key (included with the gearbox) to the Gearbox (K689837).
 - Do not tighten the setscrew yet. The sprocket may have to be adjusted in or out to align with the drive section shaft sprocket.
3. Secure the gearbox in the Drive Gearbox Bracket Wldt (K688924) using the appropriate fasteners.



4. Attach the Drive Gearbox Bracket Wldt to the Drive Section making sure the bolts and nuts are orientated properly (the bottom nuts are on the outside and the upper nuts are on the inside)
 - Tighten the nuts only hand tight. The bracket will need to slide back and fourth to ensure the drive chain is at the proper tensions.

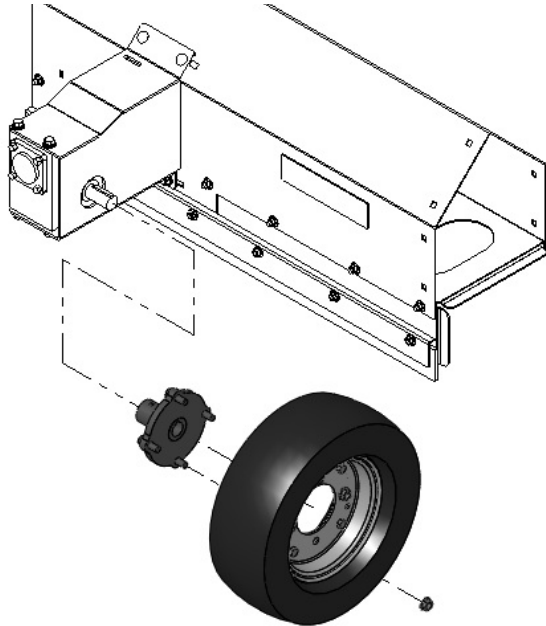


5. Install the sprocket (K688929) and 1/4" key (K686358) onto the drive section shaft.
6. Align the gearbox sprocket and drive section shaft sprocket with each other.

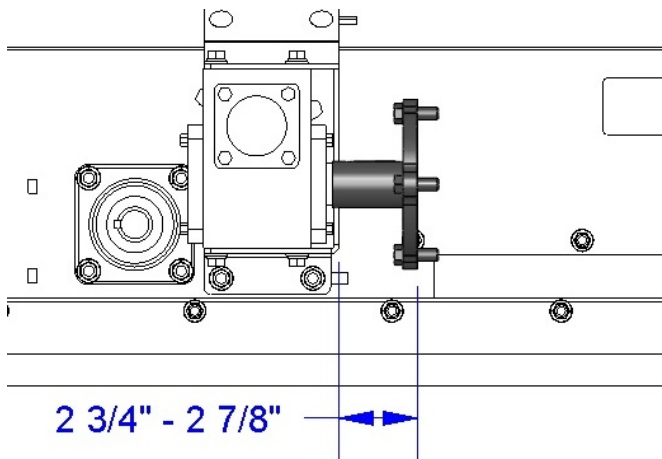
SECTION 3 - INSTALLATION

DRIVE END ASSEMBLY (Continued)

7. Install the 15 link chain (K688422) onto the sprockets.
8. Slide the Drive Gearbox Bracket Wldt forward to tighten the chain.
9. Once the chain is adjusted to the correct tension, tighten the Drive Gearbox Bracket Wldt in place to the Drive Section.



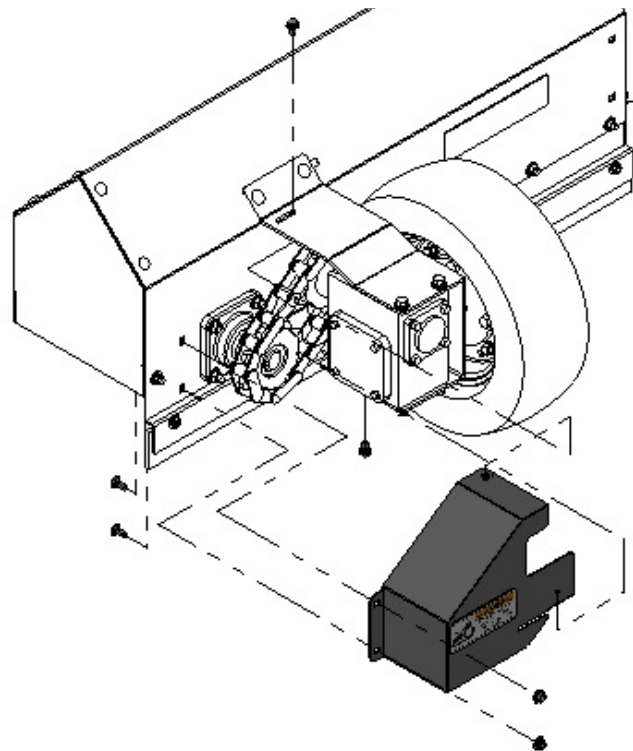
10. Install the Wheel Hub Wldt (K689804) onto the gearbox.



- Set the distance between the outside of the Wheel Hub Wldt plate and the

Drive Gearbox Bracket Wldt between 2.75" and 2.875".

11. Install the wheel (K689095) onto the Wheel Hub Wldt.
12. Make sure the chain and sprockets are aligned & all bolts and setscrews are properly tightened.



13. Install the Drive Chain Guard Wldt (K688930).
14. Remove the plug from the upper/outer most port of the gearbox and install the vent plug in its place.
 - The vent hole must be pointed upward.
 - Failure to properly install the vent plug can lead to pressurization of the gearbox housing as operating temperature rises, resulting in leakage at the shaft seals.



SECTION 3 - INSTALLATION

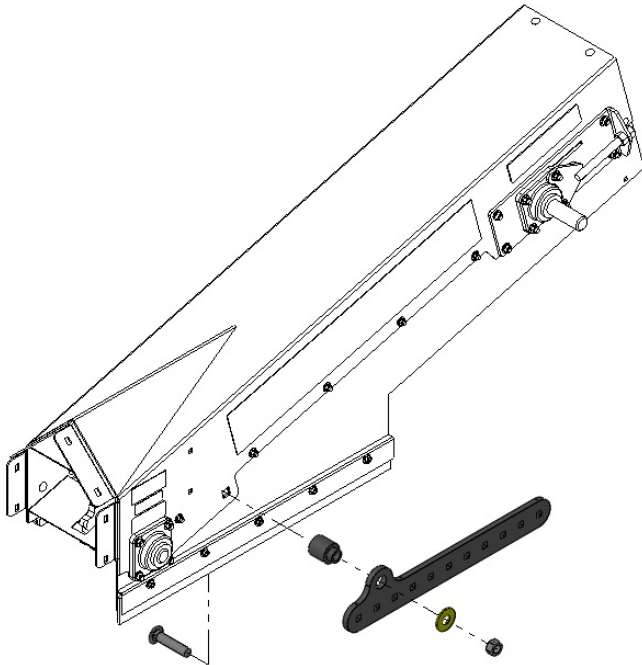
PIVOT END ASSEMBLY

Pivot End Assembly:

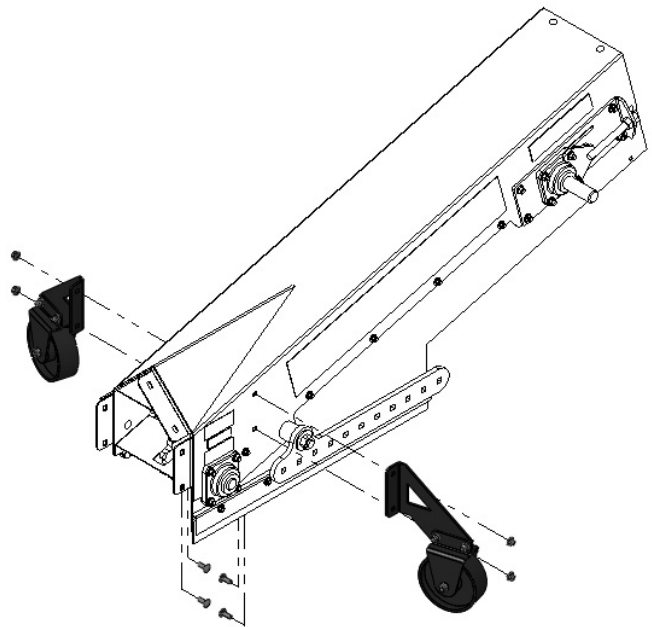
Reference the following parts of this manual. See Table of Contents for specific page numbers.

- Pivot End Assembly Diagram for a overall detailed view.
- Pivot End Assembly Parts List for the proper fasteners.

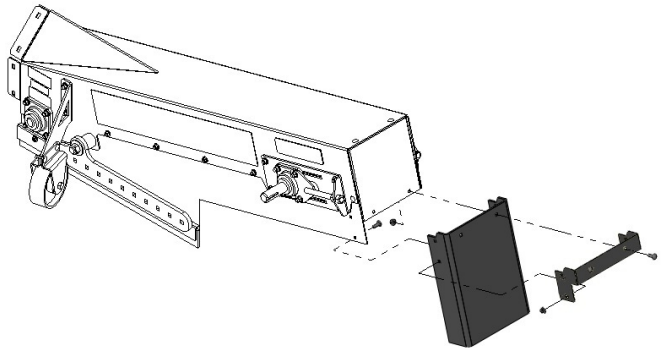
1. Locate the appropriate hardware to assemble the Pivot end from the hardware bag that came with the sweep.



2. Install the Pivot Stabilizer Bushing (K688936) and the Stabilizer Lock Arm (K688914) on both sides of the Pivot End Assembly (K704800). Tighten the nuts.
 - Make sure the lock arms rotate with minimal resistance. If the arms are difficult to rotate, disassemble the arm and clean out the hole with a file or piece of emery cloth. Reassemble and recheck the resistance. Repeat the process if necessary.



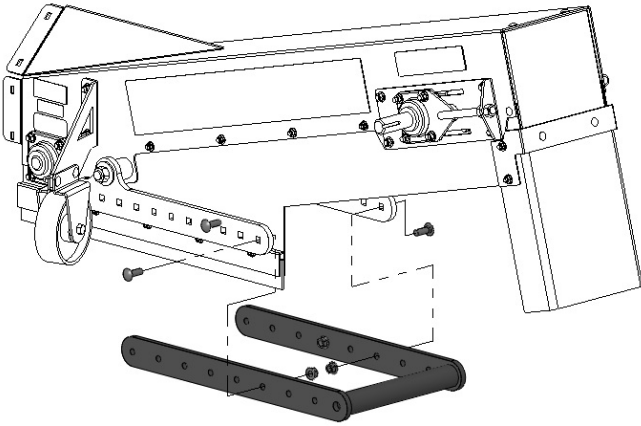
3. Install the Pivot Front Caster Wheel Assembly (K704838) and Pivot Rear Caster Wheel Assembly (K689824) to the Pivot End Assy.
 - Make sure the fasteners are orientated correctly.



4. Install the Pivot End Rubber (K689838) and Pivot End Rubber Plate (K704838).
 - Make sure the fasteners are oriented correctly. The back bolts have the head on the outside. The side bolts have the head on the inside.

SECTION 3 - INSTALLATION

PIVOT END ASSEMBLY (Continued)



5. Install the Stabilizer Wldt (K688970) to the Stabilizer Lock Arms.
 - The proper holes to use is not important at this time. The length will be adjusted when the DGD Paddle Sweep is connected to the gear box.
 - Hand tighten nuts only.
6. Ensure all fasteners are tightened properly and parts that need to move freely, can.

SECTION 3 - INSTALLATION

DGD PADDLE SWEEP ASSEMBLY

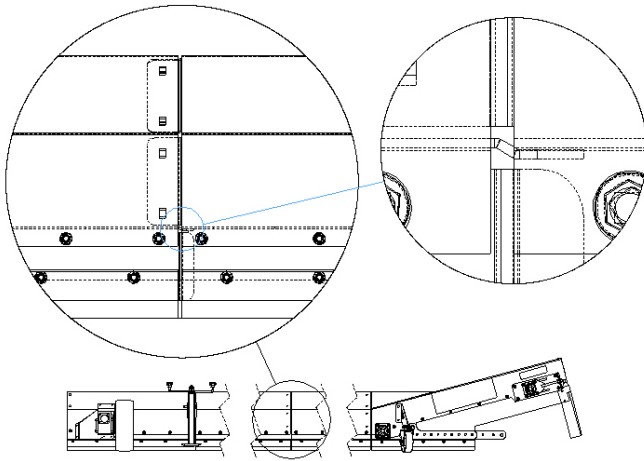
Sweep Assembly:

Reference the following parts of this manual. See Table of Contents for specific page numbers.

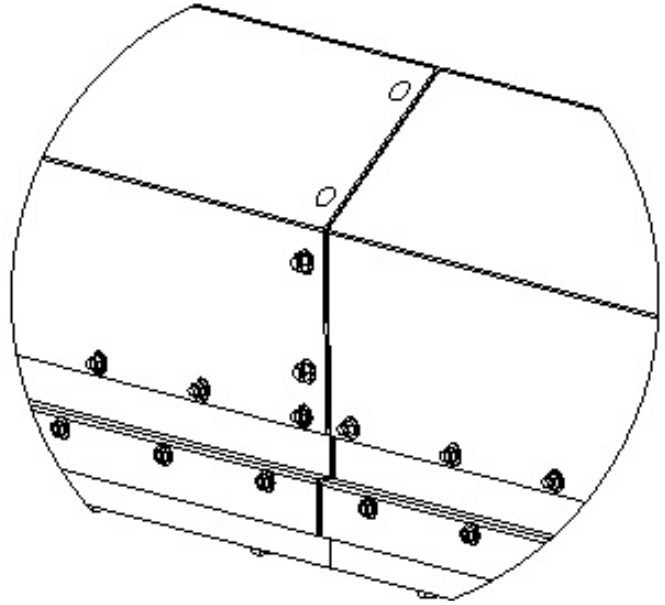
- DGD Paddle Sweep Setup Layout Diagram for the length of sweep that is being assembled.
- DGD Paddle Sweep Parts List for the length of sweep that is being assembled.
- Section Joint with Jacks Assembly parts list and diagram.
- Section Joint without Jacks Assembly parts list and diagram.

NOTES:

- Assemble the DGD Paddle Sweep starting with the Drive End and finishing with the Pivot End.
- Position the Drive end along the outside of the bin and work towards the center of the bin.



- When connecting the sections make sure the tabs on the sections interlock with each other. See the drawing above for correct orientation.
- When installing the fasteners, make sure they are also in the correct orientation.
 - The bolts on the vertical sides have the bolt heads on the inside.



- The bolts on the top have the bolt head on the outside.
- When tightening the section bolts, start with the upper most bolts first and work downward.
1. Connect the Drive End with the next section according to the size layout. Install the Jack Mount Wldt (K688940) in the appropriate location according to the layout diagram.
 2. Continue assembling the sweep sections to the Power Sweep.
 3. Connect the Pivot Section to the DGD Paddle Sweep.
 4. Position the Power Sweep in position so the Pivot End Section is over the center gearbox and the Drive section is far enough away from the wall to clear any obstructions it may encounter as it travels around the bin.
 - Door frames and ladders should be the narrowest points.

SECTION 3 - INSTALLATION

PADDLE CHAIN INSTALLATION

Paddle Chain Installation:

Reference the following parts of this manual. See Table of Contents for specific page numbers.

- DGD Paddle Sweep Setup Layout diagram for the length of sweep that is being assembled.
- DGD Paddle Sweep Parts List for the length of sweep that is being assembled.

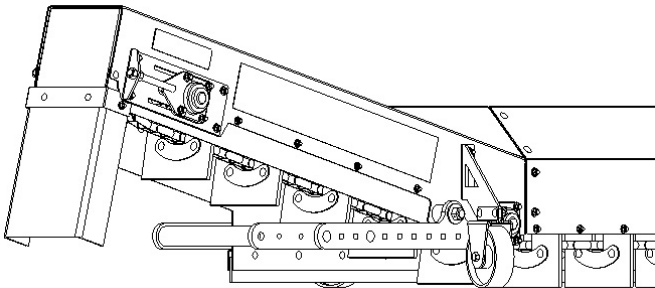
WARNING!



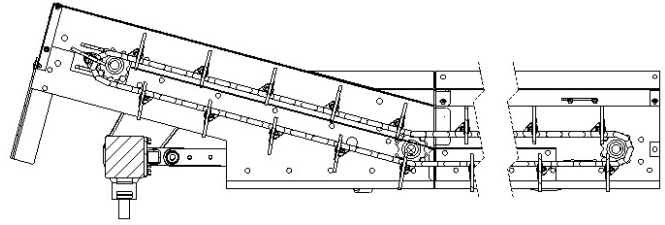
- NEVER use mechanical means to install the chain.
- Use Caution when advancing the chain. There are many pinch points created while inserting the chain.

NOTES:

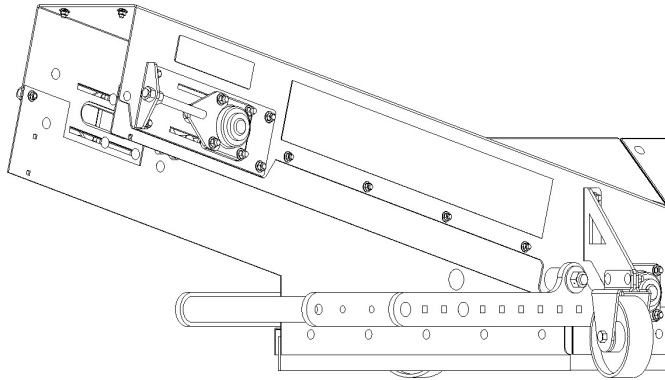
- When installing, be aware to not get any twists or kinks in the paddle chain assembly. This will cause assembly problems later while trying to pull the chain thru the sweep housing.
- If installing the DGD Paddle Sweep in a bin that is not been completely cleaned out yet, minimize the amount of grain under the sweep. This will make it easier to pull the chain into place.



- The paddle chain is installed with the lower paddles facing the center sump. The bolt plate will be on the front side and the chain attachment will be on the back side.



- The paddle chain can be installed a number of different ways. The following two ways are only suggestions and may not apply to every situation or condition.
 - Use the wire and the holes in the Section Dividers to advance the chain as needed.
 - Slow and steady is better and safer than jerking motions.
- I. New bins or ones that have been cleaned out so there is only minimal amounts of grain on the floor.



1. Start by removing the Pivot End Rubber (K689838) and Pivot End Rubber Plate (K704838).
 - Reference the Pivot End Assembly diagram and parts list pages.
2. Remove the Pivot End Cap (K704837).
 - Reference the Pivot End Sub Assembly diagram and parts list pages.
3. Position the Paddle Chain on the opposite side of the bin as the DGD Paddle Sweep.

SECTION 3 - INSTALLATION

PADDLE CHAIN INSTALLATION (Continued)

4. Unroll the chain
 5. Tie the piece of wire to the end of the chain.
 - The chain will be fed thru the top side of the sweep.
 6. Feed the chain thru the top side of the sweep, around the Drive End Sprocket on back to Pivot section on the bottom side.
 - Make sure the chain is installed in the correct orientation.
 7. Install the chain connector link between the two ends of the chain.
- II. Bins that have the Grain sucked down to the sump and needs to be cleaned out with a sweep.
1. Position the paddle chain in front of the DGD Paddle Sweep.
 2. Unroll the chain.
 3. Tie a piece of wire to the end of the chain.
 4. Starting in the middle of the sweep, feed the chain along the bottom towards the Drive End Section.
 5. Go around the Drive End Section Sprocket and feed it along the top side of the sweep.
 6. Go around the Pivot End Sprocket and back toward the middle of the sweep along the bottom side.
 - Make sure the chain is installed in the correct orientation.
 7. Install the chain connector link between the two ends of the chain.

SECTION 3 - INSTALLATION

PIVOT KIT ASSEMBLY

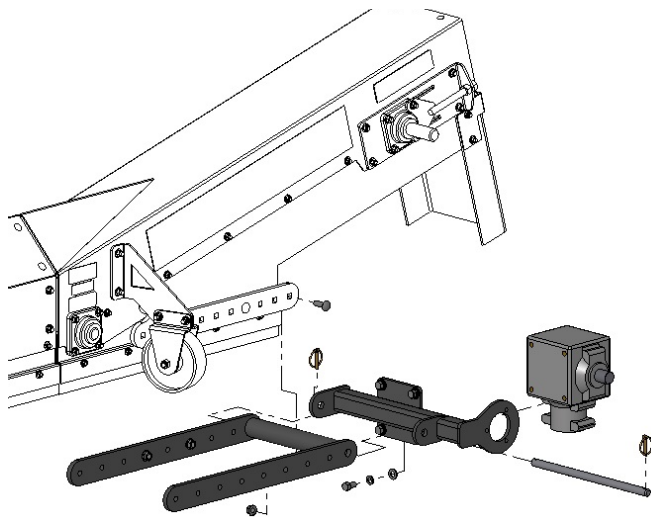
Pivot Assembly:

Reference the following parts of this manual. See Table of Contents for specific page numbers.

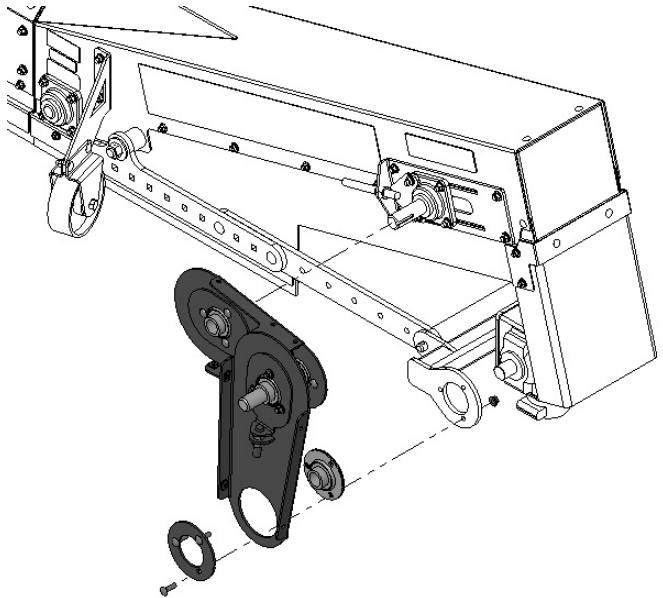
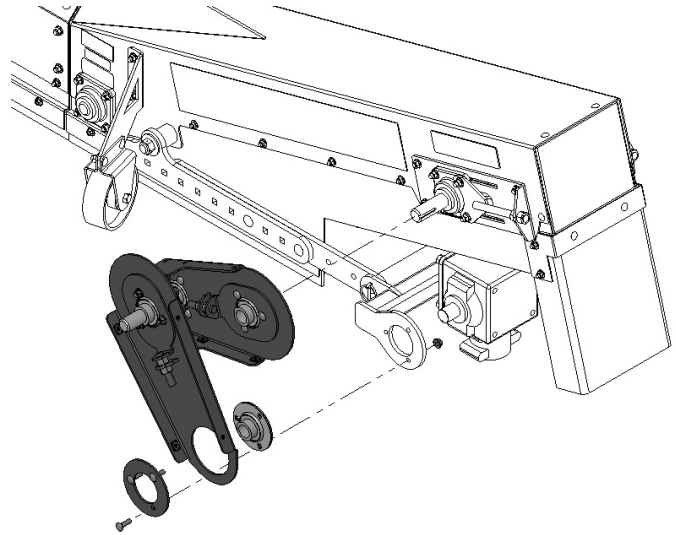
- Pivot Kit Diagram.
- Pivot Kit Parts List.
- Eccentric Locking Collar Installation
- Bearing Slide Plate Orientation

NOTES:

- Position the DGD Paddle Sweep so that the Drive End Section will not hit any obstructions when it goes around the bin.
 - Ladder and door frames are the most common obstructions.



1. Install the Pivot Bracket Wldt onto the gear box.
2. Remove the bolts connecting the Stabilizer Wldt to the Stabilizer Lock arms.
3. Align the Stabilizer Wldt in between the plates on the Pivot Bracket and install the Stabilizer Pin (K688913).
4. Secure the pin in place using the Lynch Pins (K750100).
5. Reconnect the Stabilizer Wldt and the Stabilizer lock arms.
 - The Paddle Sweep may have to be moved inward for holes to line up. Install and tighten the bolts.



OR

6. Slide the bearing on the Pivot Joint Assembly onto the upper pivot section shaft.
 - The orientation of the pivot joint will depend on the position of the Lower Pivot Arm Wldt.
 - The Lower Pivot Arm Wldt should be in the most vertical position possible.
 - The Bearing Slide Plate and Paddle Chain Tightener Wldt may need to be

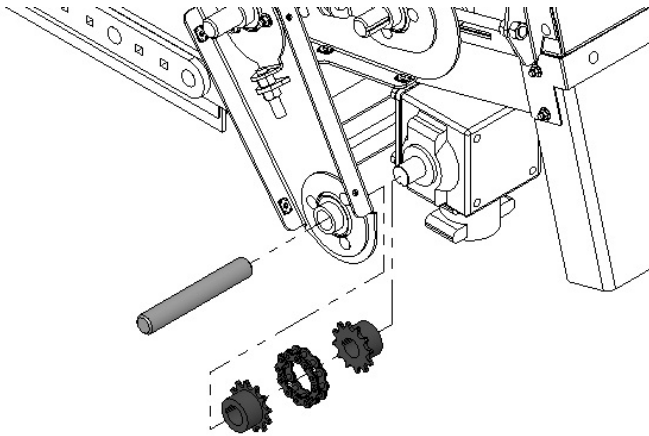
SECTION 3 - INSTALLATION

PIVOT KIT ASSEMBLY (Continued)

rotated 180 degrees.

- Refer to Bearing Slide Plate orientation.

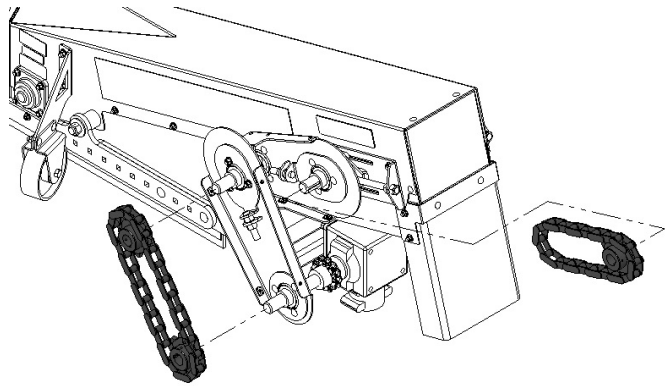
7. Connect the bottom part of the Pivot Joint Assembly to the Pivot Bracket.
 - The bearing will rotate inside the large hole in the lower plate on the Pivot Joint.
 - The Pivot Joint Round Cover Plate holds the lower assembly plate in place over the bearing.
 - The proper bearing orientation is with the lock collar away from the gearbox.



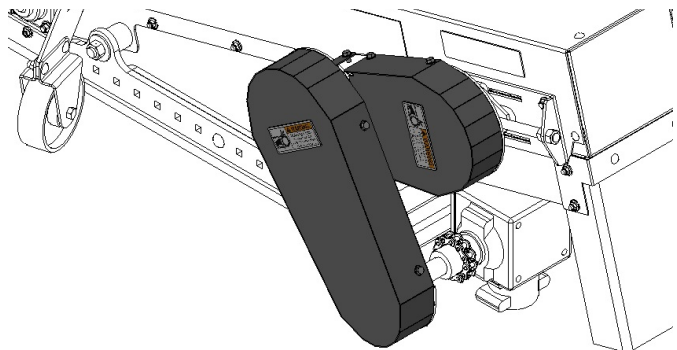
8. Install the 12 Tooth Chain Sprocket (PN will vary depending on what pivot kit is used) and key (not supplied) onto the gearbox and tighten setscrew.
 - The gearbox shaft should not be extended out past the edge of the sprocket.
9. Insert the Pivot Gearbox Extension Shaft (PN will vary depending on what pivot kit is used) thru the bearing in the lower plate of the Pivot Joint.
10. Install the 12 Tooth Chain Sprocket (K689834) and 1/4" Key (K686358) onto the Pivot Gearbox Extension Shaft and tighten setscrew.
 - The shaft should not extend past the edge of the sprocket.
11. Install the 12 Link Coupler Chain (K689835) around the two 12 Tooth Sprockets. Secure it

in place with the connector link.

12. Adjust the Pivot Joint Assembly so that it is parallel with the DGD Paddle Sweep.
13. Install the eccentric lock collars for both the upper and lower bearings.
 - Refer to Eccentric locking collar installation.



14. Install the Sprockets (sizes and PN will vary depending on what pivot kit is used) onto the Shafts accordingly.
15. Install the Chains (sizes and PN will vary depending on what pivot kit is used) onto the sprockets.
16. Slide the sprockets in and out on the shafts to align the chains. Tighten the sprocket setscrews.
17. Tighten the chain to the correct tension and secure the chain tightener nuts.

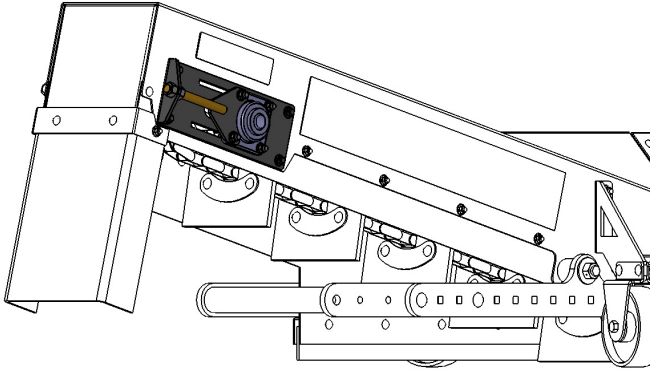


18. Install the Chain Guards (K688894, K688897 & K688912) and secure them in place.

SECTION 3 - INSTALLATION

PADDLE CHAIN TIGHTENING

Paddle Chain Tightening:



1. Start by loosening the nuts on both of the shaft bearings.
2. Adjust the nuts on the paddle chain tightener wldt.
 - Keep the shaft as perpendicular as possible to the chain by giving both sides a couple turns at a time, switching between the two.
3. Continue adjusting the nuts until the Paddle Chain is at the correct tension.
4. Tighten the Paddle Chain tightener nuts.
5. Tighten the nuts on both of the shaft bearings.

SECTION 3 - INSTALLATION

BEARING SLIDE PLATE ORIENTATION

Bearing Slide Plate Orientation:

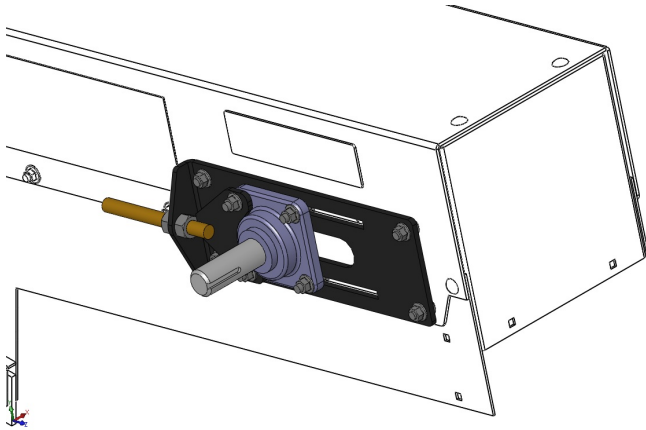
Reference the following parts of this manual. See Table of Contents for specific page numbers.

- Pivot End Sub Assembly Diagram.
- Pivot End Sub Assembly Parts List.

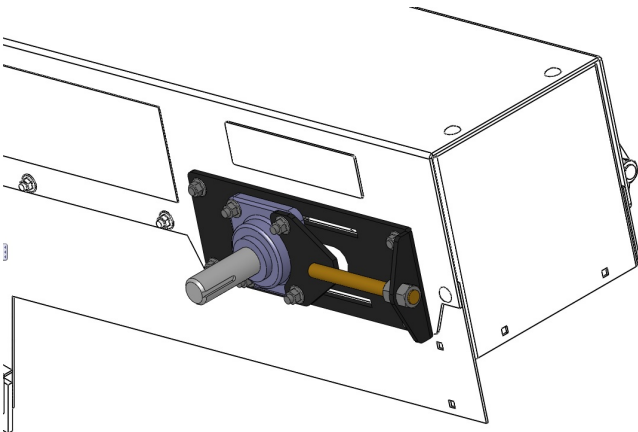
NOTES:

- Depending on the orientation of the Lower Pivot Arm Wldt, the Bearing Slide Plate and Chain Tightener Wldt may need to be flipped so the chain tightener nuts are accessible.

3. Remove the 4 nuts and bolts holding on the Bearing Slide Plate.
4. Rotate the Bearing Slide Plate 180 degrees and reinstall the 4 nuts and bolts to secure it to the housing.
5. Reinstall the 4 nuts and bolts to secure it to the housing.
 - The chain tightener will be on the opposite side of the bearing.
 - The two longer bolts attach the chain tightener to the bearing.
6. Repeat for the other side.



OR



1. To switch the direction of the chain tightener wldt, loosen and remove the 4 nuts and bolts securing the bearing to the housing.
2. Shorten the Chain Tightener to its retracted position.

SECTION 3 - INSTALLATION

DGD PADDLE SWEEP CHAIN TENSION ADJUSTMENT

Chain Tension instructions:

Chain tightness

To properly check the tightness of the chain, lockout/tag out all power sources. Once the power source to the sweep has been locked out you will use a stick to push up on the inner chain link bars between two paddles to check for the proper chain tension, shown in below diagrams. Dimension 1 in Figure 5-1 should be between 3-5/8" and 3-3/4" from the ground. When referring to the ground we recommend using the flattest possible place of ground/floor possible. If the center chain link touches the sweep divider it is too loose and will need to be tightened. If the chain link does not move the chain is too tight and needs to be loosened up. (See Figure 5-2). Orient chain as shown.

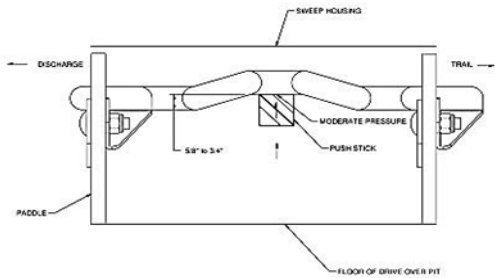


Figure 5-1

Shown is an example of proper chain tension. The chain has some deflection, but does not touch the sweep housing.

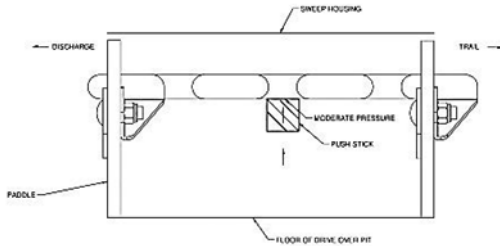


Figure 5-2

Shown is the chain too tight, and needs loosening. The chain does not move upward with moderate pressure.

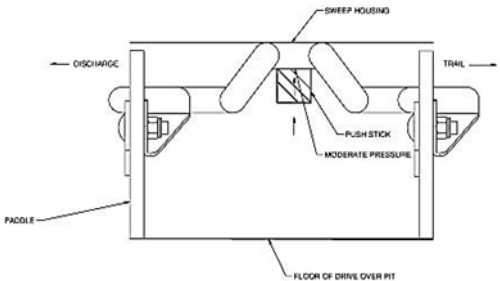


Figure 5-3

Shown is the chain too loose, and needs to be tightened. With moderate pressure the chain touches the sweep housing.

SECTION 3 - INSTALLATION

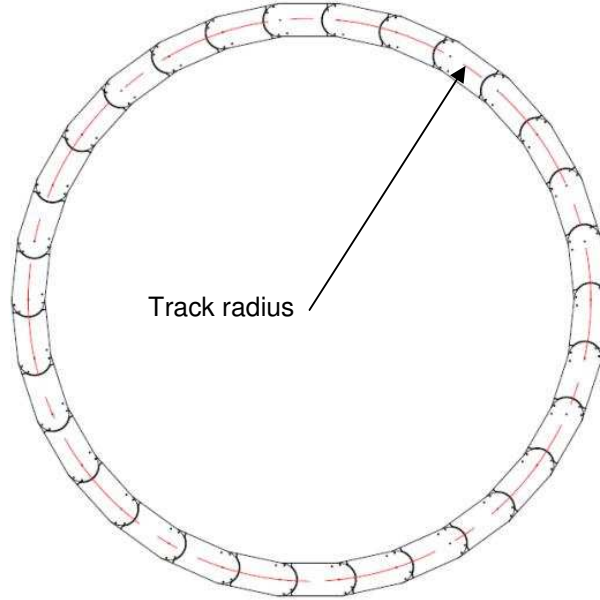
ECCENTRIC LOCKING COLLAR INSTALLATION

ECCENTRIC LOCKING COLLAR INSTALLATION INSTRUCTIONS:

1. Ensure that the shaft is clean, free from nicks and burrs, straight and of proper diameter.
 - The housed unit should not be mounted on a worn section of the shaft.
2. Apply a thin oil film to shaft and bearing bore.
3. Slide the housed unit into position on shaft.
4. Install the housed unit mounting bolts.
 - Check the housed unit alignment.
 - Verify mounting surfaces are in the same flat plane to help make sure good alignment is achieved.
5. Rotate the eccentric locking collar until it is hand tight (the direction of rotation does not matter).
6. Lock the eccentric locking collar firmly in place using a spanner wrench or hammer and drift.
 - When using a hammer and drift, one or two firm, but not too hard, blows will be sufficient due to the shallow eccentric ramp.
 - Make sure you drive the collar in the same direction in which you hand tightened it so as to turn it to a tighter position on the bearing's inner ring.
7. Tighten the eccentric locking collar set screws

SECTION 3 - SETUP

TRACK PATHWAY INSTALLATION



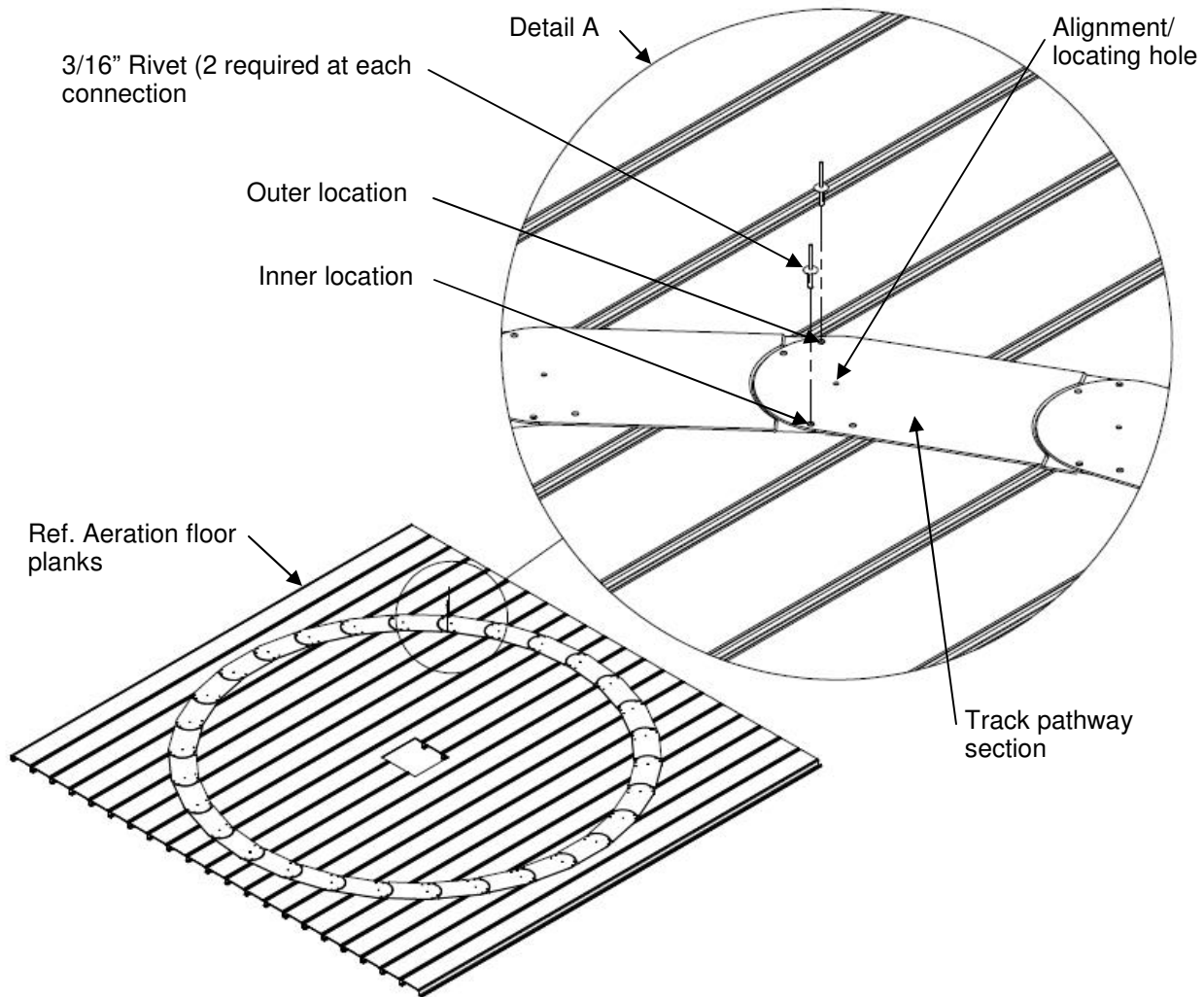
SWEEP TRACK PATHWAY RADIUS SCHEDULE																	
TRACK QTY	RIVET QTY	TRACK RAD.	TRACK QTY	RIVET QTY	TRACK RAD.	TRACK QTY	RIVET QTY	TRACK RAD.	TRACK QTY	RIVET QTY	TRACK RAD.	TRACK QTY	RIVET QTY	TRACK RAD.	TRACK QTY	RIVET QTY	TRACK RAD.
7	14	14.313"	19	38	37.735"	31	62	61.417"	43	86	85.101"	55	110	108.792"	67	134	132.542"
8	16	16.239"	20	40	39.708"	32	64	63.390"	44	88	87.076"	56	112	110.771"	68	136	134.521"
9	18	18.164"	21	42	41.682"	33	66	65.364"	45	90	89.052"	57	114	112.750"	69	138	136.500"
10	20	20.102"	22	44	43.655"	34	68	67.337"	46	92	91.027"	58	116	114.729"	70	140	138.459"
11	22	22.051"	23	46	45.629"	35	70	69.311"	47	94	93.003"	59	118	116.708"	71	142	140.417"
12	24	24.000"	24	48	47.602"	36	72	71.284"	48	96	94.978"	60	120	118.688"	72	144	142.375"
13	26	25.971"	25	50	49.576"	37	74	73.258"	49	98	96.954"	61	122	120.666"	73	146	144.354"
14	28	27.942"	26	52	51.549"	38	76	75.231"	50	100	98.929"	62	124	122.645"	74	148	146.333"
15	30	29.875"	27	54	53.523"	39	78	77.205"	51	102	100.907"	63	126	124.625"	75	150	148.313"
16	32	31.839"	28	56	55.496"	40	80	79.178"	52	104	102.875"	64	128	126.604"	76	152	150.292"
17	34	33.802"	29	58	57.470"	41	82	81.152"	53	106	104.844"	65	130	128.583"	77	154	152.271"
18	36	35.766"	30	60	59.443"	42	84	83.125"	54	108	106.813"	66	132	130.563"	78	156	154.250"

TRACK QTY	RIVET QTY	TRACK RAD.	TRACK QTY	RIVET QTY	TRACK RAD.	TRACK QTY	RIVET QTY	TRACK RAD.	TRACK QTY	RIVET QTY	TRACK RAD.	TRACK QTY	RIVET QTY	TRACK RAD.	TRACK QTY	RIVET QTY	TRACK RAD.
79	158	156.229"	91	182	179.969"	103	206	203.688"	115	230	227.375"	127	254	251.094"	139	278	274.844"
80	160	158.208"	92	184	181.954"	104	208	205.656"	116	232	229.344"	128	256	253.078"	140	280	276.813"
81	162	160.188"	93	186	183.938"	105	210	207.625"	117	234	231.313"	129	258	255.063"	141	282	278.797"
82	164	162.167"	94	188	185.907"	106	212	209.604"	118	236	233.281"	130	260	257.031"	142	284	280.781"
83	166	164.146"	95	190	187.875"	107	214	211.583"	119	238	235.250"	131	262	259.000"	143	286	282.750"
84	168	166.125"	96	192	189.844"	108	216	213.563"	120	240	237.250"	132	264	260.984"	144	288	284.719"
85	170	168.084"	97	194	191.813"	109	218	215.542"	121	242	239.219"	133	266	262.969"	145	290	286.719"
86	172	170.042"	98	196	193.781"	110	220	217.521"	122	244	241.219"	134	268	264.9375"	146	292	288.688"
87	174	172.037"	99	198	195.75"	111	222	219.500"	123	246	243.1875"	135	270	266.922"	147	294	290.656"
88	176	174.020"	100	200	197.743"	112	224	221.469"	124	248	245.156"	136	272	268.906"	148	296	292.625"
89	178	176.002"	101	202	199.735"	113	226	223.438"	125	250	247.141"	137	274	270.875"	149	298	294.625"
90	180	177.985"	102	204	201.719"	114	228	225.407"	126	252	249.125"	138	276	272.859"	150	300	296.594"

TRACK QTY	RIVET QTY	TRACK RAD.	TRACK QTY	RIVET QTY	TRACK RAD.	TRACK QTY	RIVET QTY	TRACK RAD.	TRACK QTY	RIVET QTY	TRACK RAD.
151	302	298.563"	163	326	322.313"	175	350	346.031"	187	374	369.688"
152	304	300.563"	164	328	324.281"	176	352	347.000"	188	376	371.656"
153	306	302.531"	165	330	326.265"	177	354	349.969"	189	378	373.625"
154	308	304.500"	166	332	328.250"	178	356	351.938"	190	380	375.594"
155	310	306.484"	167	334	330.218"	179	358	353.906"	191	382	377.563"
156	312	308.468"	168	336	332.203"	180	360	355.875"	192	384	379.531"
157	314	310.438"	169	338	334.1875"	181	362	357.844"	193	386	381.500"
158	316	312.406"	170	340	336.156"	182	364	359.813"	194	388	383.486"
159	318	314.375"	171	342	338.125"	183	366	361.797"	195	390	385.453"
160	320	316.375"	172	344	340.094"	184	368	363.766"	196	392	387.438"
161	322	318.344"	173	346	342.078"	185	370	365.750"	197	394	389.406"
162	324	320.328"	174	348	344.063"	186	372	367.719"	198	396	391.375"

SECTION 3 - INSTALLATION

TRACK PATHWAY INSTALLATION



- Step 1. Measure the radius length from the center pivot of the sweep to the sweep wheel/caster which is to be supported.
- Step 2. Select the radius closest to your measured radius from the schedule on the previous page.
- Step 3. Mark a circle centered at the center pivot using the radius you selected from the schedule.
- Step 4. Space out all sweep pathway sections around the marked circle. The alignment/locating holes on each end of sweep pathway section should be located around the circumference of the circle. Adjust as necessary to get all parts to align.
- Step 5. Sweep pathway sections must be fastened to the floor planks with a 3/16" rivet at the inner and outer hole locations indicated in detail "A" above. To install the 3/16" rivets (supplied), 13/64" holes must first be drilled. (Note: If a hole happens to fall between floor planks, it will be necessary to drill a new hole through the pathway sections and the floor at a location which is not between the floor planks.)
- Step 6. Continue drilling and riveting sections in place until all are fastened down.

SECTION 4 - OPERATION

DGD PADDLE SWEEP

OPERATION:

Once the initial installation and setup have been completed we are ready to engage the sweep. Engage the sweep and, if bin is empty, run the sweep around paying close attention to any potential obstructions or hang up points within the bin. Repair or fix any of these potential trouble spots. Monitor the position of the drag rubber as it goes around the bin to determine if it needs to be raised or lowered according to the slope of the bin floor. Also check the distance between the Drive End Section and the outer wall. Make any length adjustments at the stabilizer arm to move the sweep closer or further from the wall.

If or when the sweep is operated in grain, monitor the grain going into the sump hole. Make sure that the take away system is adequately removing the grain from the sump hole. If not, the sweep has a higher capacity than the take away system, which will damage to power sweep gear box. To lower the sweep capacity, the paddle chain needs to run slower. This is to be done by changing the gear ratio in the sweep pivot.

BURIAL:

This sweep is designed to be buried in a variety of commodities. Since the sweep operation is clockwise we suggest that the sweep be positioned rearward of the sump line (this would be to the right of the sump when looking towards the center of the bin from the access door). This is to help with the ease of initial startup. Position the jacks downward, so they are just touching the floor. The Drive Wheel should be slightly off the floor (if it is touching the floor, it will advance the sweep during startup and damage the Jacks). The caster wheels and all jacks should be touching the floor to secure the sweep, and will not “crush” after the bin is filled. Secure the bin to be filled.

STARTUP:

Follow bin emptying procedures per your bin manufacturer. If bin is equipped with multiple sumps use them to uncover as much of the sweep

as possible. Once all commodities have stopped flowing out of the sumps, open the access door to the bin. Visually check the sweep for any damage or for foreign debris that may impede the paddle chain. Engage the sweep and allow the commodity to be moved to the center sump. Once the sweep has emptied out or it is deemed safe, disengage the sweep and lock out/tag out all power sources to the bin and sweep. Enter the bin to raise and move the jacks to the storage position. Remove any other objects that was used to bury the sweep. Exit the bin and reengage the sweep. Depending upon the size of the bin, commodities may avalanche down and over the sweep. This spillage can easily be swept on a second pass around the bin. The unit is designed to have the drive wheel spin. Once resistance against the front of the sweep has resided, the drive wheel will move the sweep forward until the bin floor has been swept clean. After the first or second pass follow the burial procedure outlined in the previous section.

WARNING!

- Confine space awareness should be followed.
- Lock out/tag out awareness should be followed.



SECTION 5 - SERVICE

GENERAL INFORMATION

- Grease fittings before each use.
- Periodically check all bolts for looseness and re-torque if necessary.
- Check paddle chain & drive chains for looseness and tighten as necessary.
- Check oil level in gearboxes. If low use specified oil listed below or equivalent for proper gearbox. **Synthetic lubricant should be change every 6,000 hours of operation or every two years, which ever comes first.**
 - Grove Gear (Ironman): Mobile Glygoyle 460 (Available from GSI PN#K688413)
 - IronHorse: Mobile SHC 634
 - Approximate Capacity—19.41 ounces
 - Worldwide: Mobile SHC 634
 - Approximate Capacity—19.41 ounces



CAUTION: Too much oil will cause overheating and too little will result in gear failure. Check oil level regularly. More frequent oil changes are recommended when operating continuously, at high temperatures or under conditions of extreme dirt or dust.

HOURLY SERVICE SCHEDULE

Periodic Service	Daily	8	16	24	50	100	200
Check/tighten hardware		I			S		
Grease zerks	S	S					
Clean out debris from equipment	S	S					
Tighten and torque wheel bolts			I				S
Bearing Setscrews		I			S		

KEY:

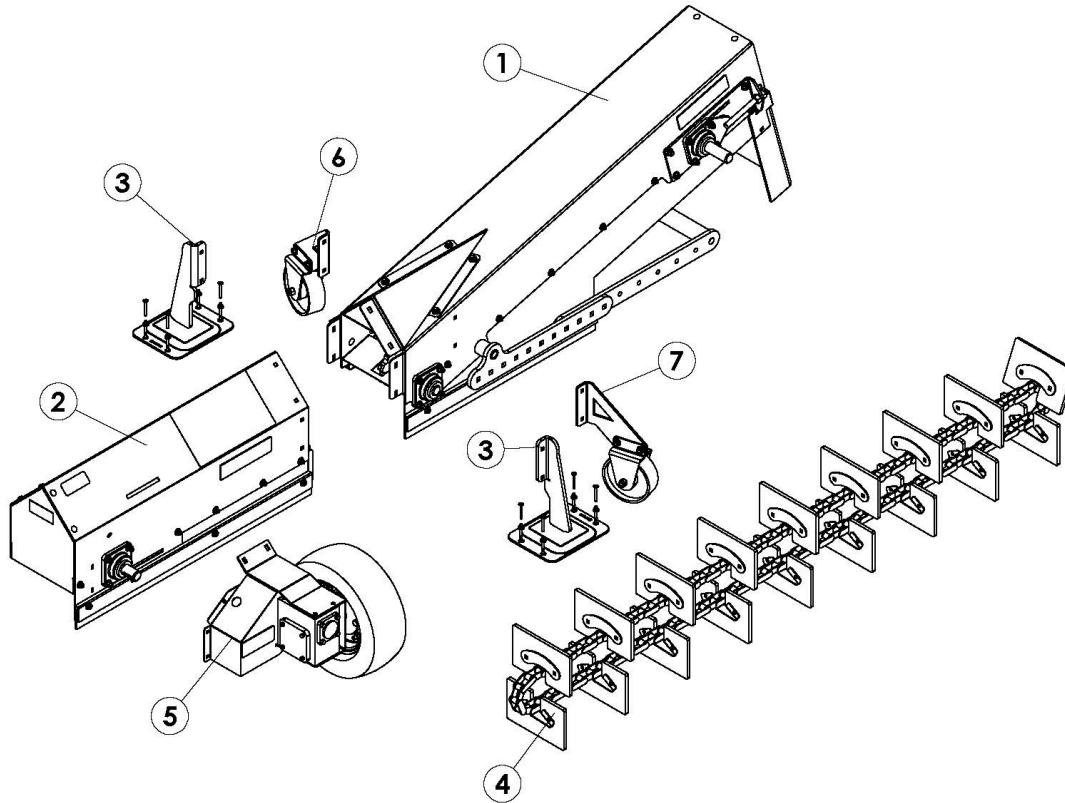
“S” = REQUIRED SERVICE HOURLY INTERVAL (Continue repeating service intervals)

“I” = PERFORM AT INITIAL BREAK-IN (Thereafter at hour interval shown)

“A” = ANNUALLY OR AT HOURLY INTERVAL (Whichever occurs FIRST)

SECTION 6 - DIAGRAM & PARTS LIST

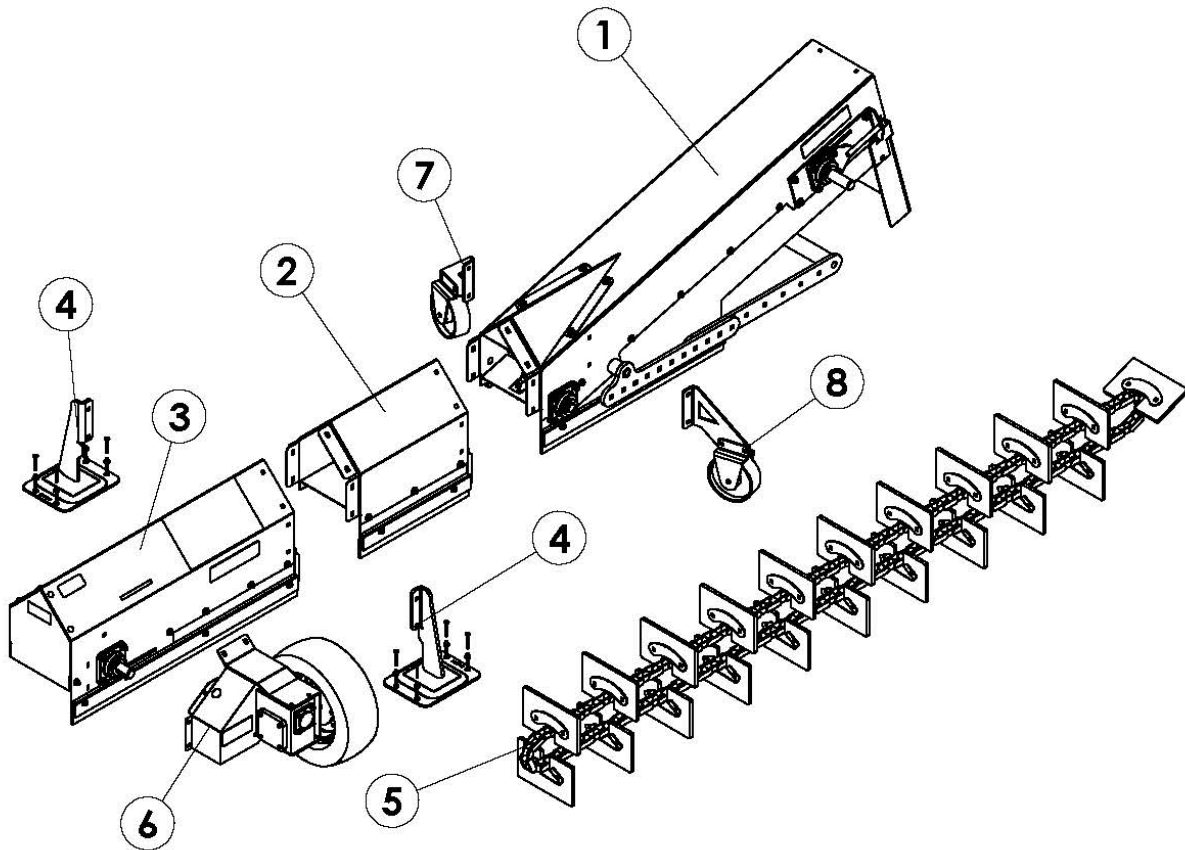
7' DGD PADDLE SWEEP FOR A 15' BIN (K704867)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704800	PIVOT END ASSEMBLY	1
2	K704804	DRIVE END ASSY	1
3	K695135	JACK MOUNT WELDMENT	2
4	K693103	108 LINK PADDLE CHAIN ASSY	1
5	K704806	TRACTOR DRIVE	1
6	K689823	FRONT CASTER	1
7	K689824	REAR CASTER	1

SECTION 6 - DIAGRAM & PARTS LIST

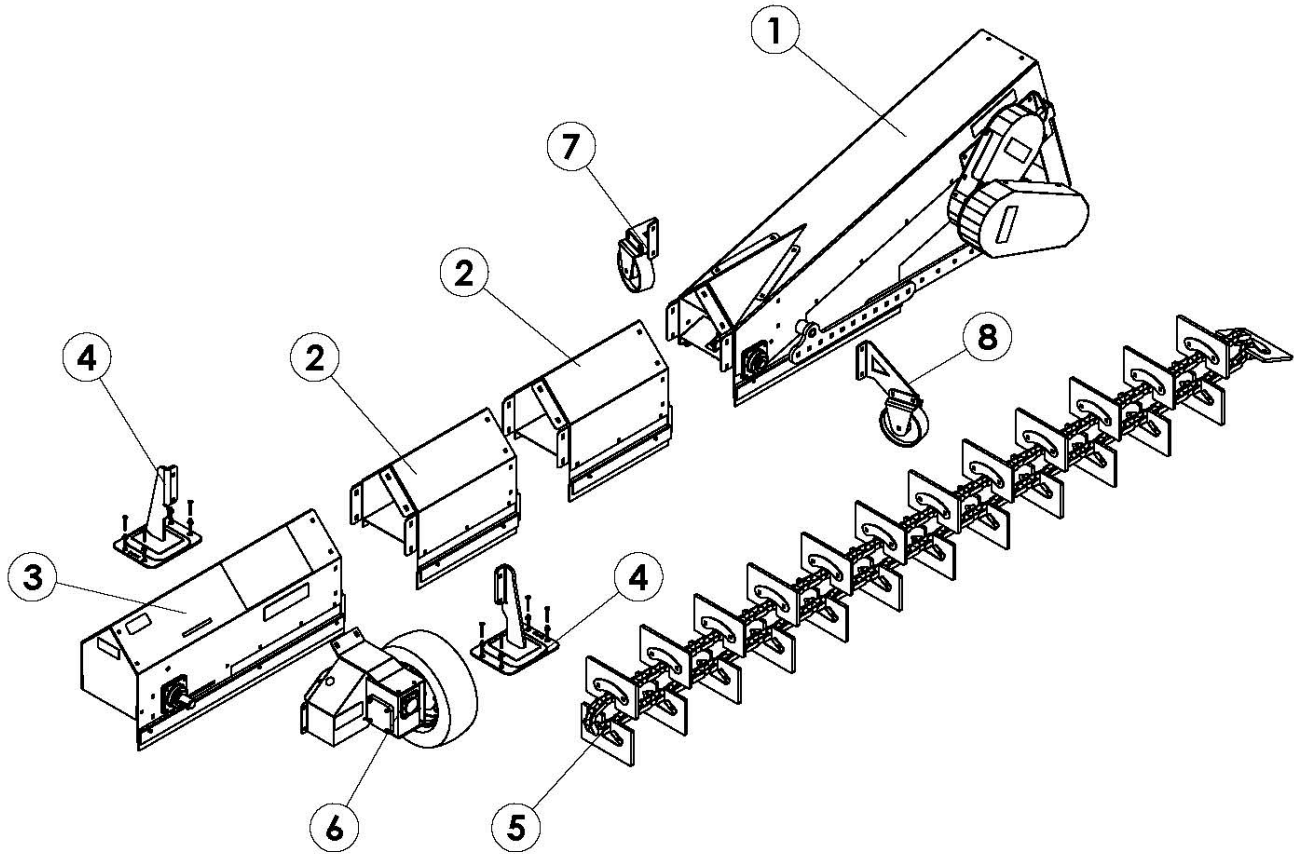
8' 6" DGD PADDLE SWEEP FOR A 18' BIN (K704868)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704800	PIVOT END ASSEMBLY	1
2	K704801	ASSY 1' 6" SECTION	1
3	K704804	DRIVE END ASSY	1
4	K695135	ZERO ENTRY KIT	2
5	K693105	131 LINK PADDLE CHAIN ASSY	1
6	K704806	TRACTOR DRIVE	1
7	K689823	FRONT CASTER	1
8	K689824	REAR CASTER	1

SECTION 6 - DIAGRAM & PARTS LIST

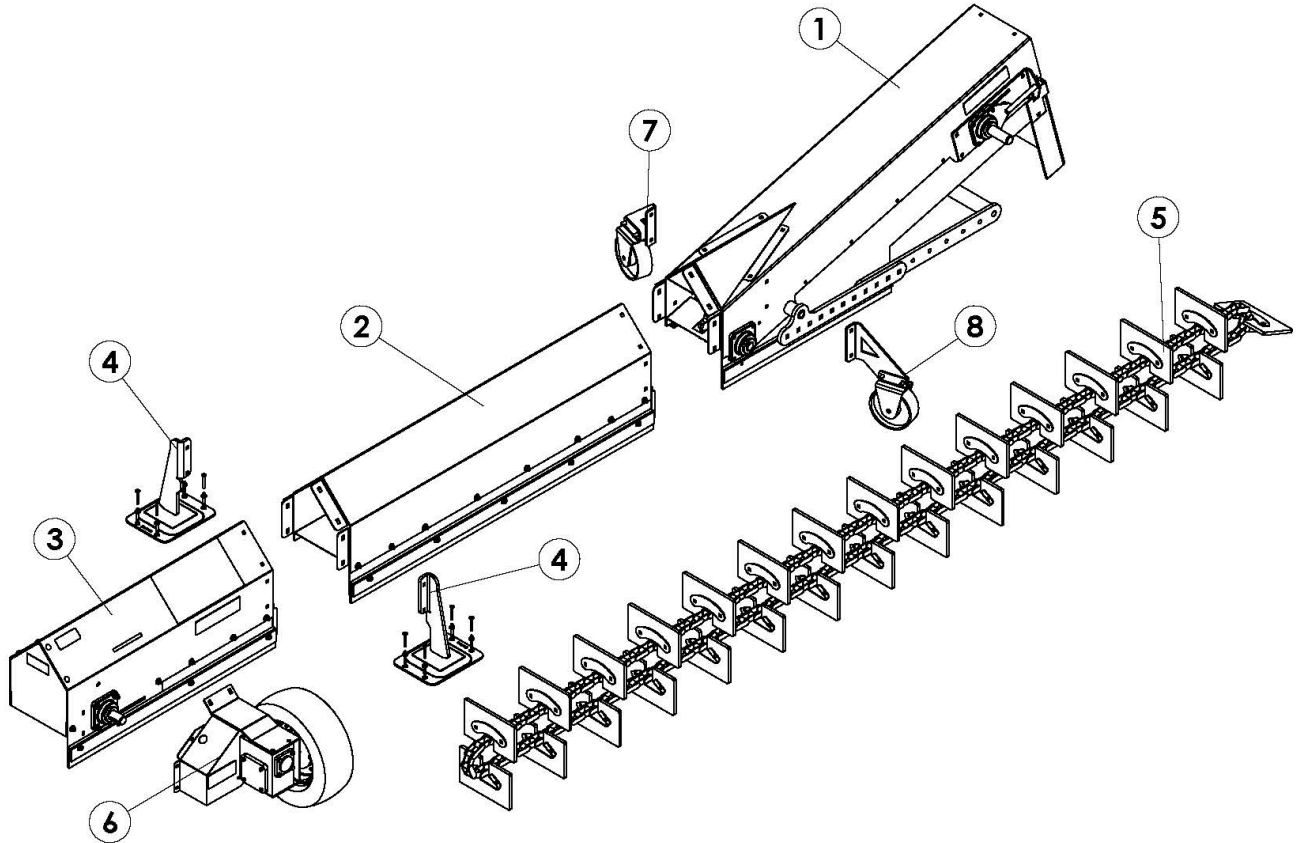
10' DGD PADDLE SWEEP FOR A 21' BIN (K704869)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704800	PIVOT END ASSEMBLY	1
2	K704801	ASSY 1' 6" SECTION	2
3	K704804	DRIVE END ASSY	1
4	K695135	ZERO ENTRY KIT	2
5	K693107	153 LINK PADDLE CHAIN ASSY	1
6	K704806	TRACTOR DRIVE	1
7	K689823	FRONT CASTER	1
8	K689824	REAR CASTER	1

SECTION 6 - DIAGRAM & PARTS LIST

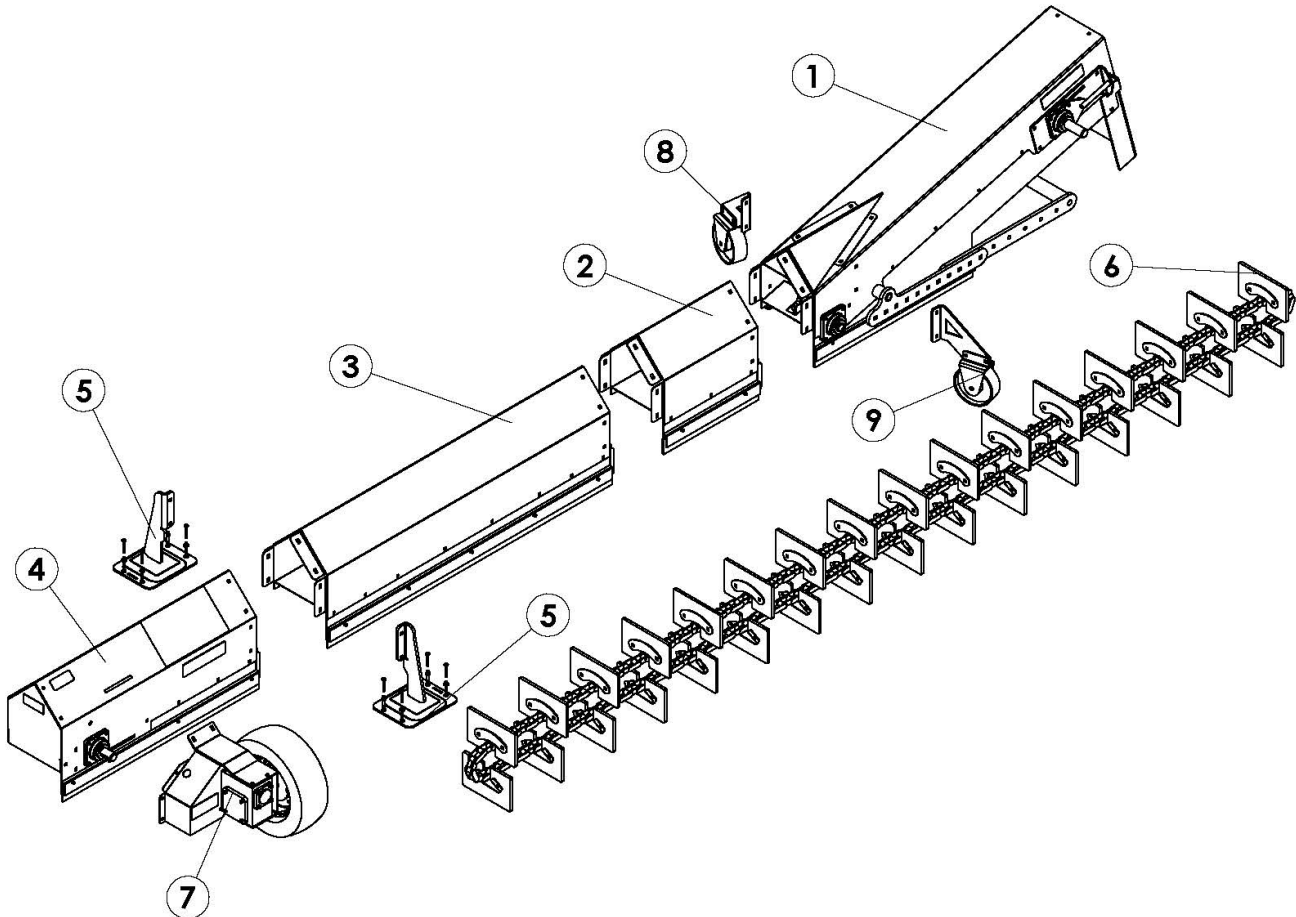
11' 6" DGD PADDLE SWEEP FOR A 24' BIN (K704870)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704800	PIVOT END ASSEMBLY	1
2	K704803	ASSY 4' 6" SECTION	1
3	K704804	DRIVE END ASSY	1
4	K695135	ZERO ENTRY KIT	2
5	K693109	176 LINK PADDLE CHAIN ASSY	1
6	K704806	TRACTOR DRIVE	1
7	K689823	FRONT CASTER	1
8	K689824	REAR CASTER	1

SECTION 6 - DIAGRAM & PARTS LIST

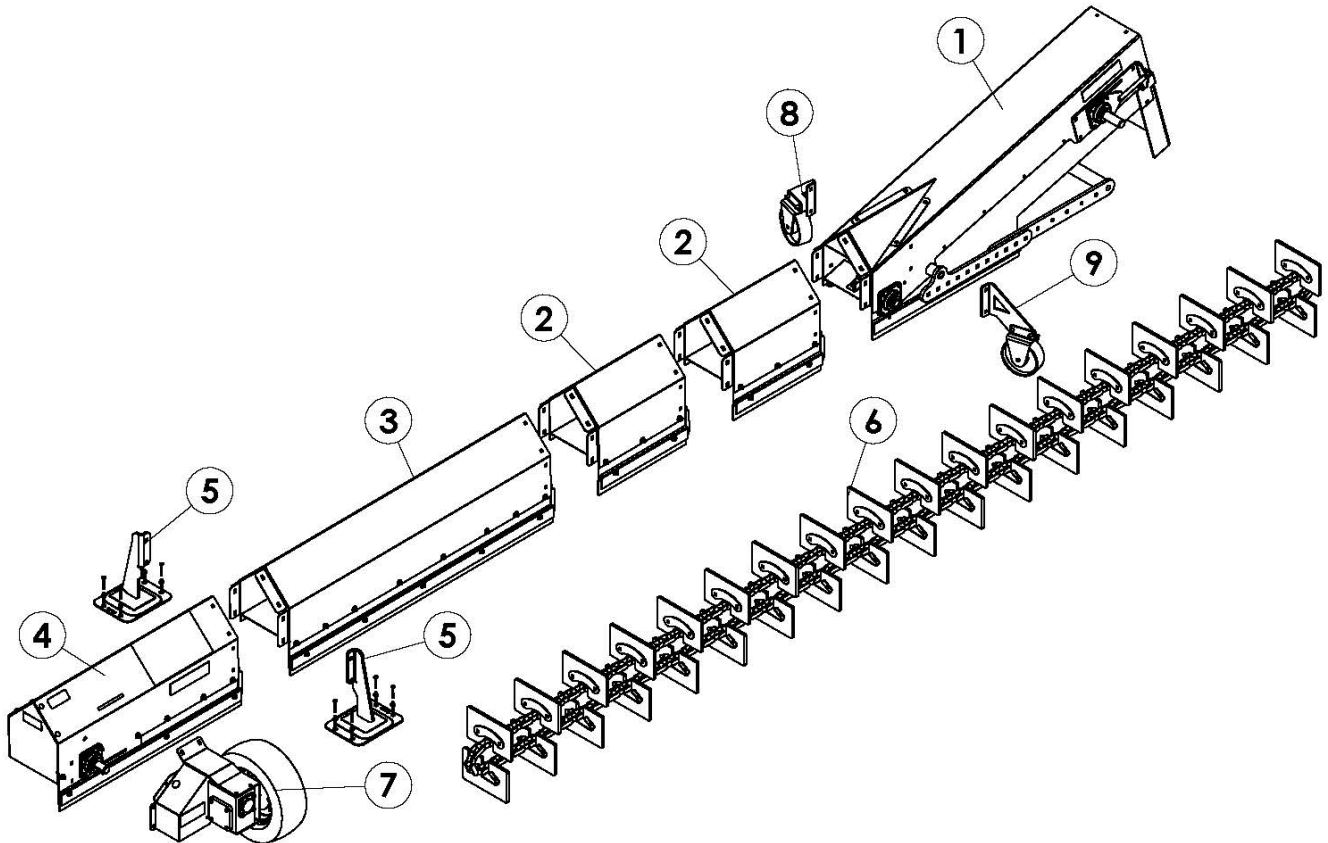
13' DGD PADDLE SWEEP FOR A 27' BIN (K704871)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704800	PIVOT END ASSEMBLY	1
2	K704801	ASSY 1' 6" SECTION	1
3	K704803	ASSY 4' 6" SECTION	1
4	K704804	DRIVE END ASSY	1
5	K695135	ZERO ENTRY KIT	2
6	K693111	198 LINK PADDLE CHAIN ASSY	1
7	K704806	TRACTOR DRIVE	1
8	K689823	FRONT CASTER	1
9	K689824	REAR CASTER	1

SECTION 6 - DIAGRAM & PARTS LIST

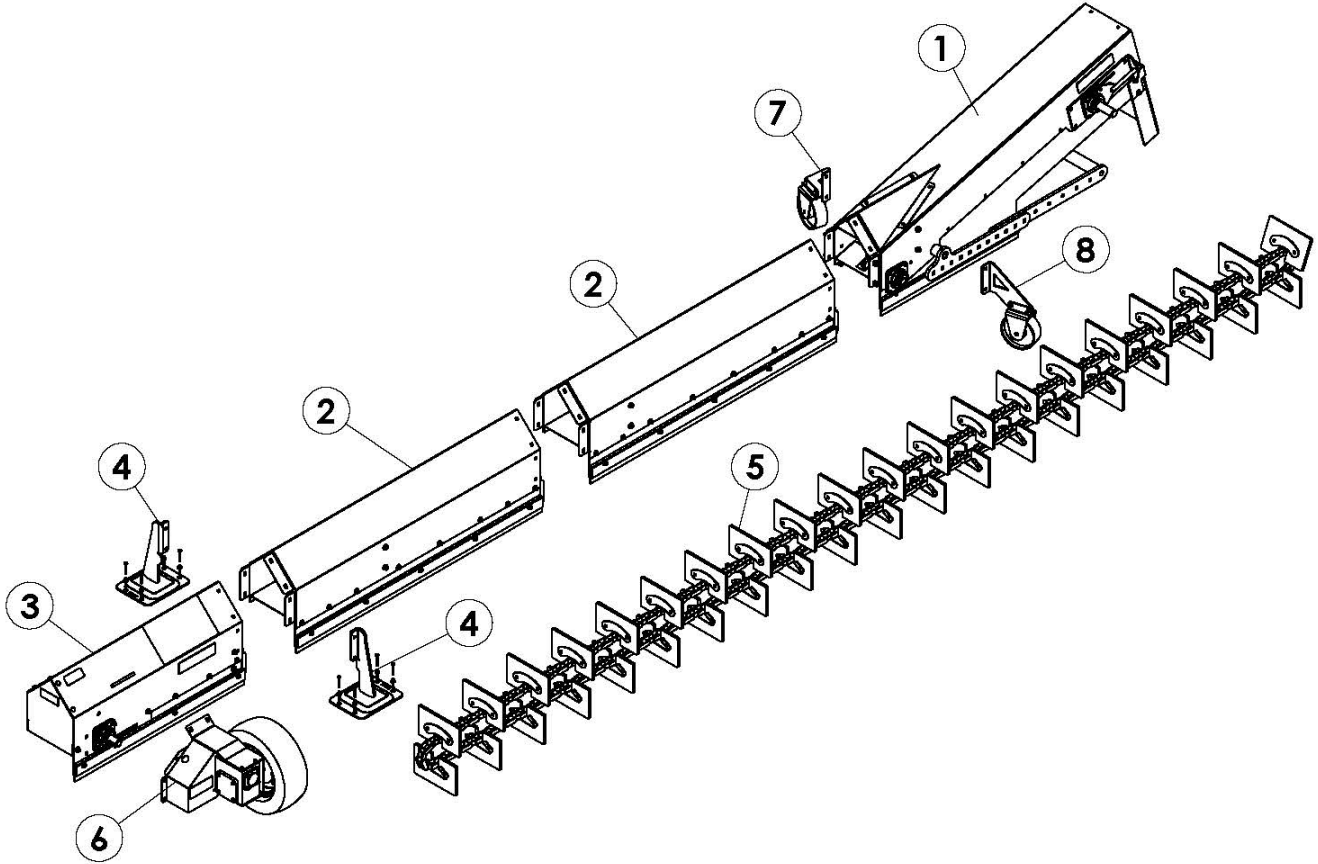
14' 6" DGD PADDLE SWEEP FOR A 30' BIN (K704872)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704800	PIVOT END ASSEMBLY	1
2	K704801	ASSY 1' 6" SECTION	2
3	K704803	ASSY 4' 6" SECTION	1
4	K704804	DRIVE END ASSY	1
5	K695135	ZERO ENTRY KIT- FARM SWEEP	2
6	K693113	221 LINK PADDLE CHAIN ASSY	1
7	K704806	TRACTOR DRIVE	1
8	K689823	FRONT CASTER	1
9	K689824	REAR CASTER	1

SECTION 6 - DIAGRAM & PARTS LIST

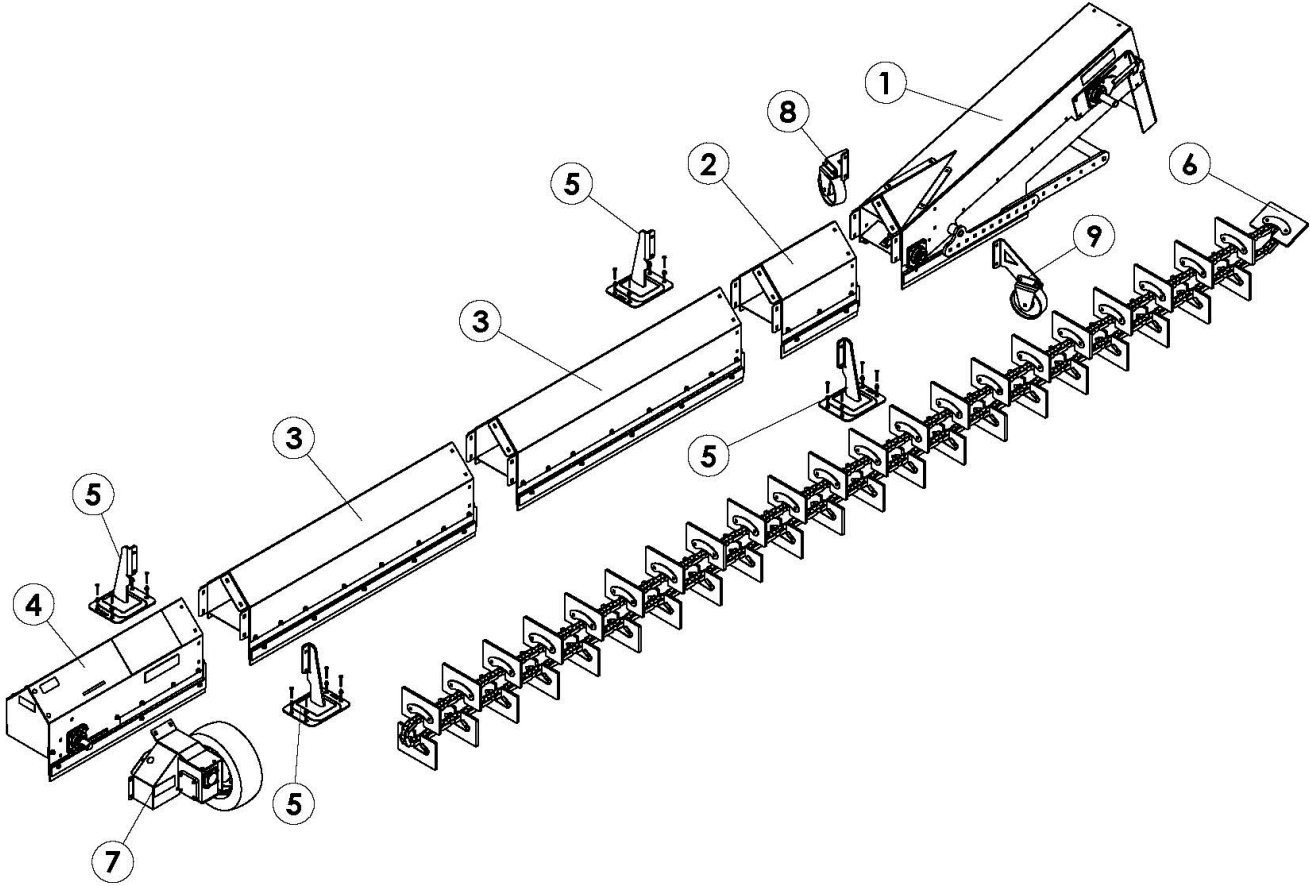
16' DGD PADDLE SWEEP FOR A 33' BIN (K704873)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704800	PIVOT END ASSEMBLY	1
2	K704803	ASSY 4' 6" SECTION	2
3	K704804	DRIVE END ASSY	1
4	K695135	ZERO ENTRY KIT	2
5	K693115	238 LINK PADDLE CHAIN ASSY	1
6	K704806	TRACTOR DRIVE	1
7	K689823	FRONT CASTER	1
8	K689824	REAR CASTER	1

SECTION 6 - DIAGRAM & PARTS LIST

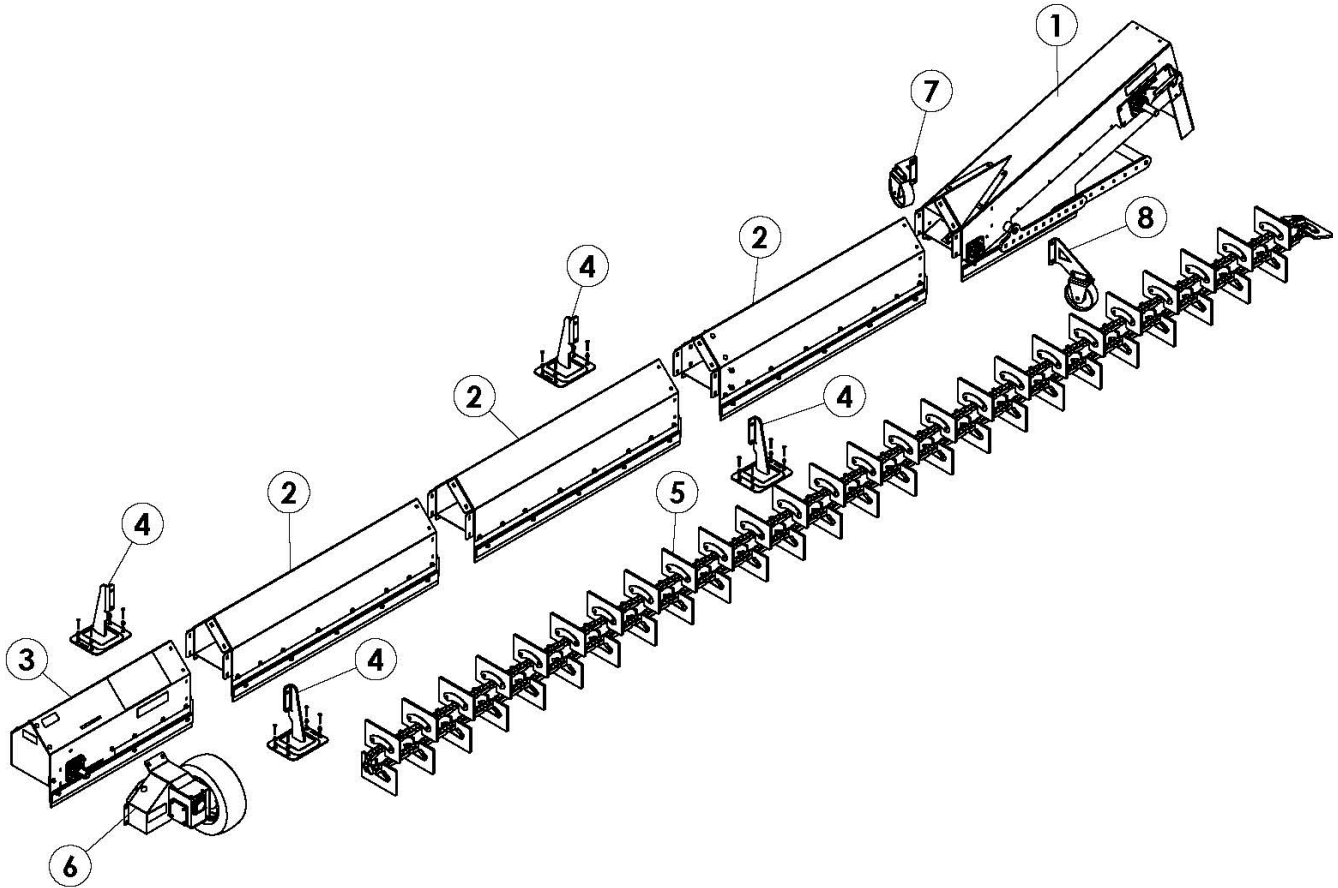
17' 6" DGD PADDLE SWEEP FOR A 36' BIN (K704874)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704800	PIVOT END ASSEMBLY	1
2	K704801	ASSY 1' 6" SECTION	1
3	K704803	ASSY 4' 6" SECTION	2
4	K704804	DRIVE END ASSY	1
5	K695135	ZERO ENTRY KIT	4
6	K693117	266 LINK PADDLE CHAIN ASSY	1
7	K704806	TRACTOR DRIVE	1
8	K689823	FRONT CASTER	1
9	K689824	REAR CASTER	1

SECTION 6 - DIAGRAM & PARTS LIST

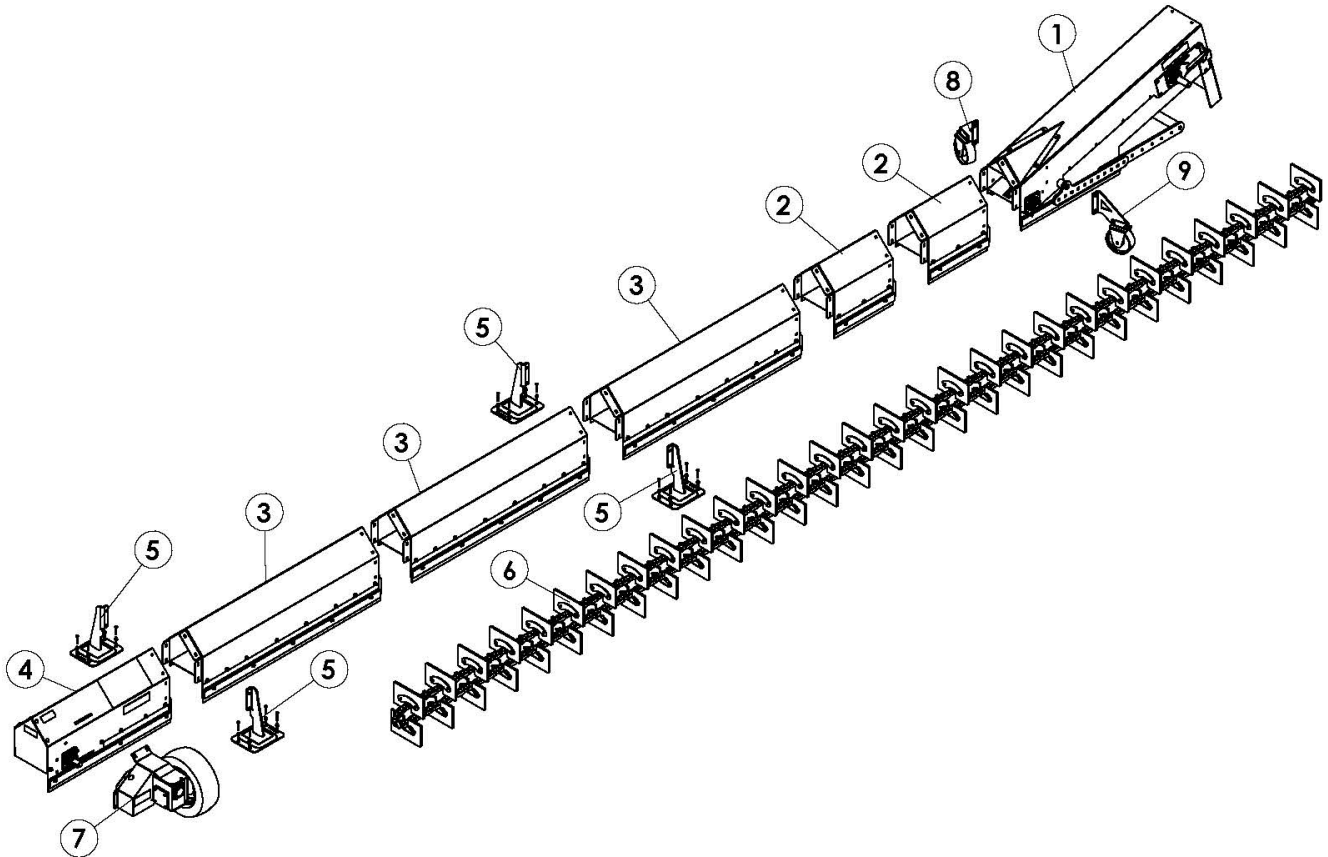
20' 6" DGD PADDLE SWEEP FOR A 42' BIN (K704875)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704800	PIVOT END ASSEMBLY	1
2	K704803	ASSY 4' 6" SECTION	3
3	K704804	DRIVE END ASSY	1
4	K695135	ZERO ENTRY KIT	4
5	K693119	308 LINK PADDLE CHAIN ASSY	1
6	K704806	TRACTOR DRIVE	1
7	K689823	FRONT CASTER	1
8	K689824	REAR CASTER	1

SECTION 6 - DIAGRAM & PARTS LIST

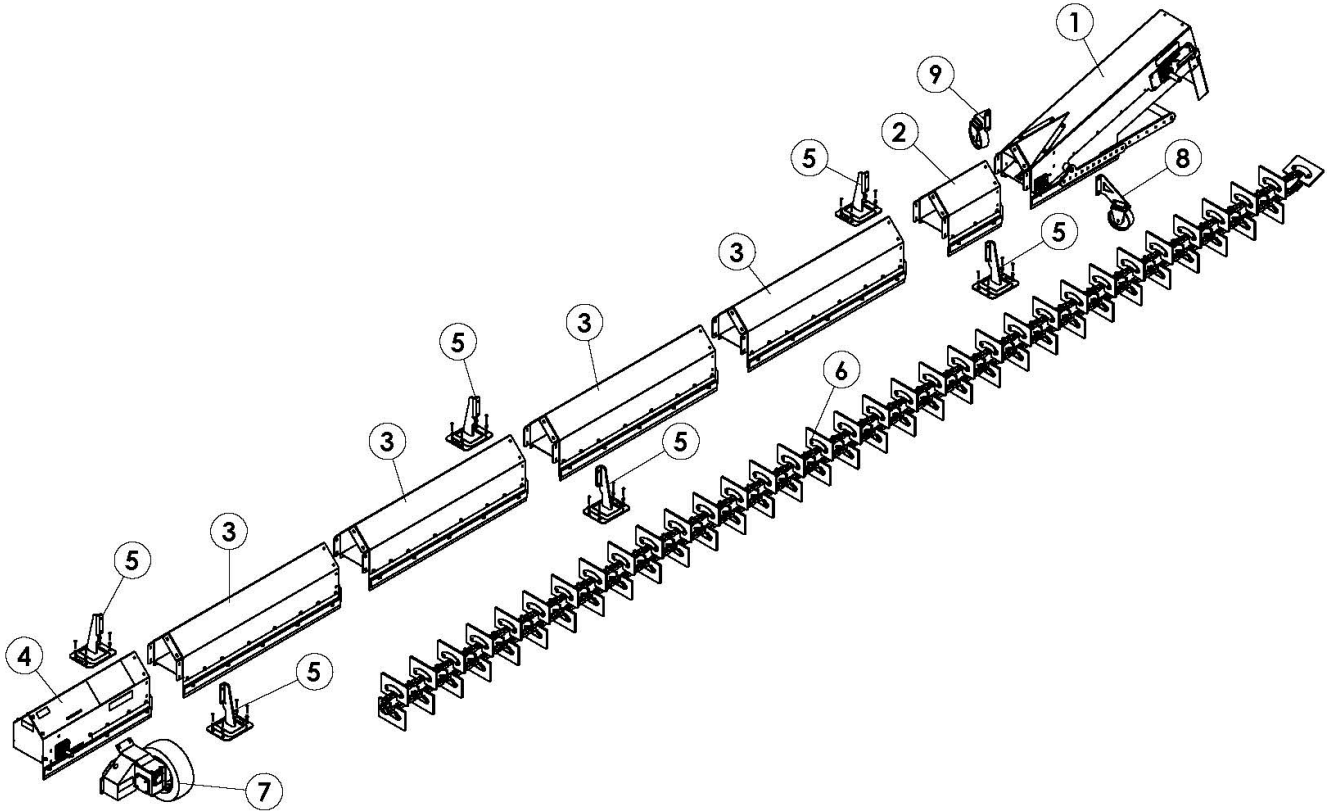
23' 6" DGD PADDLE SWEEP FOR A 48' BIN (K704876)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704800	PIVOT END ASSEMBLY	1
2	K704801	ASSY 1' 6" SECTION	2
3	K704803	ASSY 4' 6" SECTION	3
4	K704804	DRIVE END ASSY	1
5	K695135	ZERO ENTRY KIT	4
6	K693131	356 LINK PADDLE CHAIN ASSY	1
7	K704806	TRACTOR DRIVE	1
8	K689823	FRONT CASTER	1
9	K689824	REAR CASTER	1

SECTION 6 - DIAGRAM & PARTS LIST

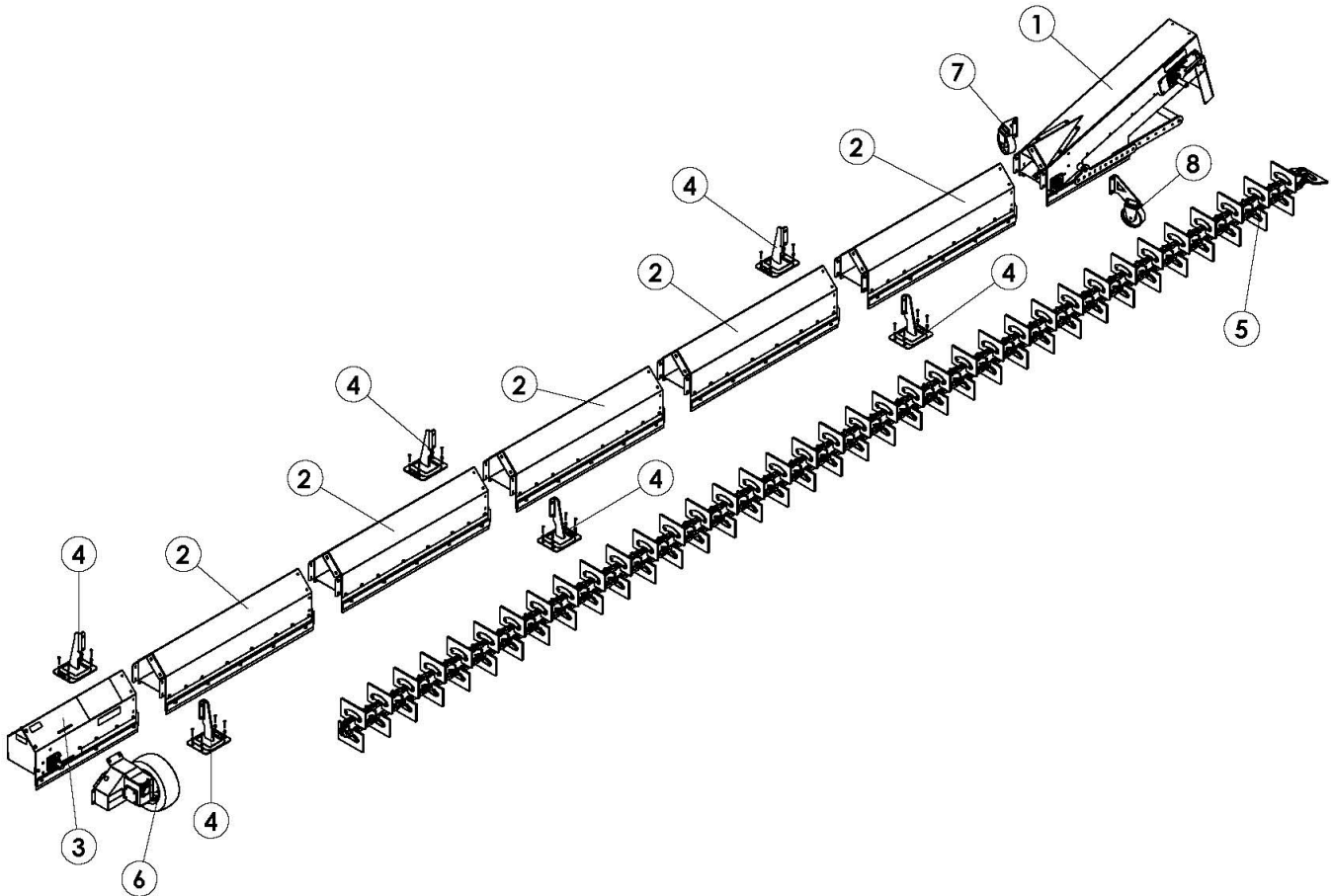
26' 6" DGD PADDLE SWEEP FOR A 54' BIN (K704877)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704800	PIVOT END ASSEMBLY	1
2	K704801	ASSY 1' 6" SECTION	1
3	K704803	ASSY 4' 6" SECTION	4
4	K704804	DRIVE END ASSY	1
5	K695135	ZERO ENTRY KIT	6
6	K693123	401 LINK PADDLE CHAIN ASSY	1
7	K704806	TRACTOR DRIVE	1
8	K689823	FRONT CASTER	1
9	K689824	REAR CASTER	1

SECTION 6 - DIAGRAM & PARTS LIST

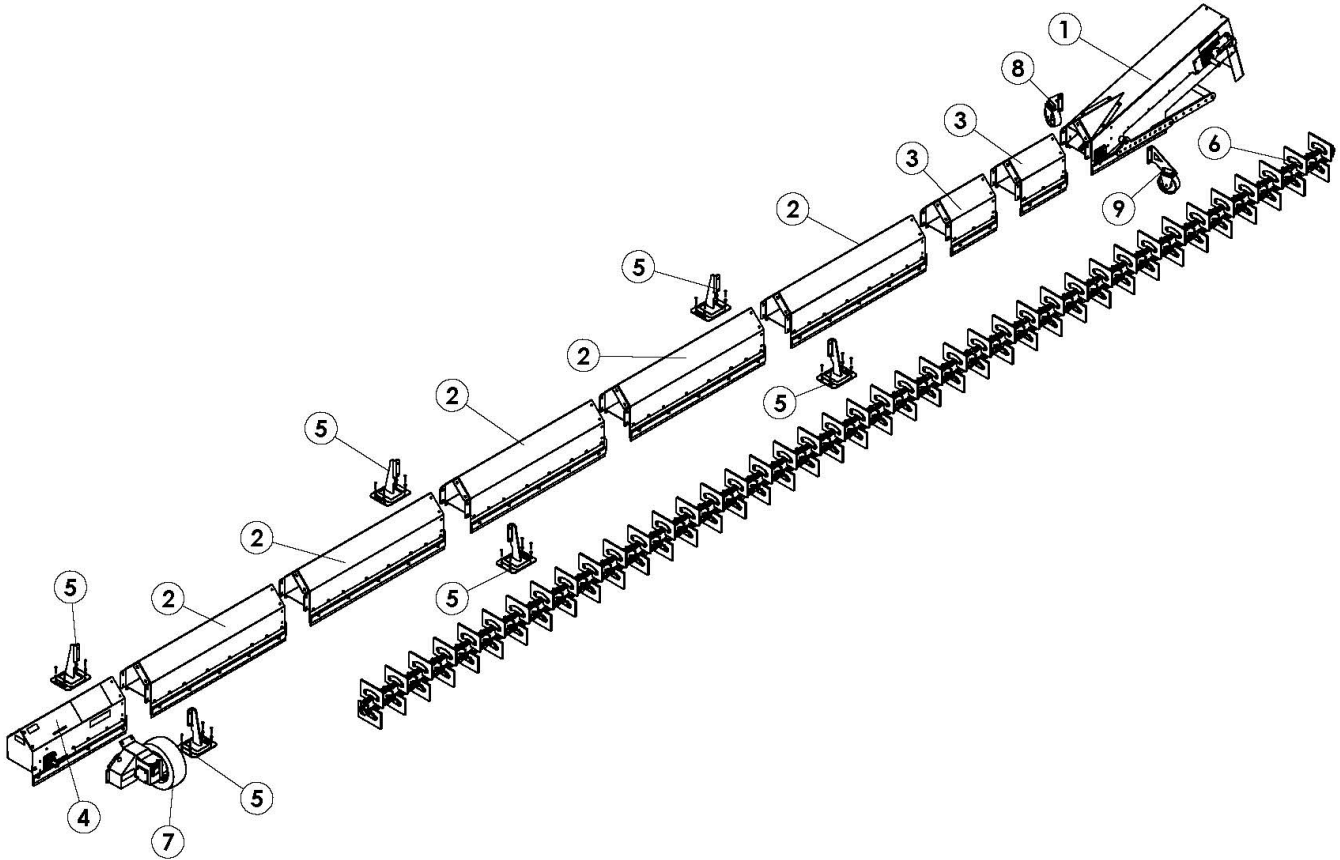
29' 6" DGD PADDLE SWEEP FOR A 60' BIN (K704878)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704800	PIVOT END ASSEMBLY	1
2	K704803	ASSY 4' 6" SECTION	5
3	K704804	DRIVE END ASSY	1
4	K695135	ZERO ENTRY KIT	6
5	K693125	446 LINK PADDLE CHAIN ASSY	1
6	K704806	TRACTOR DRIVE	1
7	K689823	FRONT CASTER	1
8	K689824	REAR CASTER	1

SECTION 6 - DIAGRAM & PARTS LIST

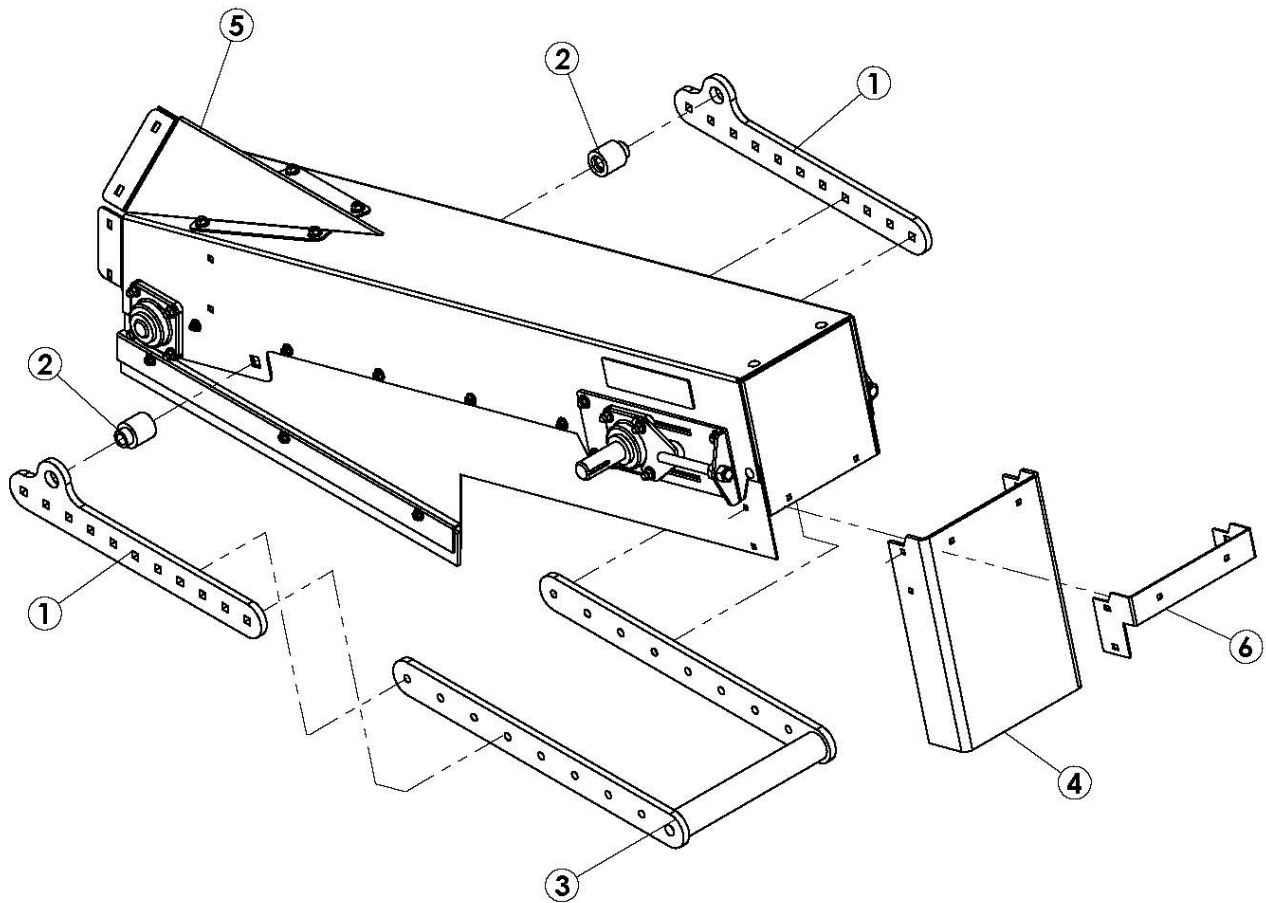
32' 6" DGD PADDLE SWEEP FOR A 66' BIN (K704879)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704800	PIVOT END ASSEMBLY	1
2	K704803	ASSY 4' 6" SECTION	5
3	K704801	ASSY 1' 6" SECTION	2
4	K704804	DRIVE END ASSY	1
5	K695135	ZERO ENTRY KIT	6
6	K693127	491 LINK PADDLE CHAIN ASSY	1
7	K704806	TRACTOR DRIVE	1
8	K689823	FRONT CASTER	1
9	K689824	REAR CASTER	1

SECTION 6 - DIAGRAM & PARTS LIST

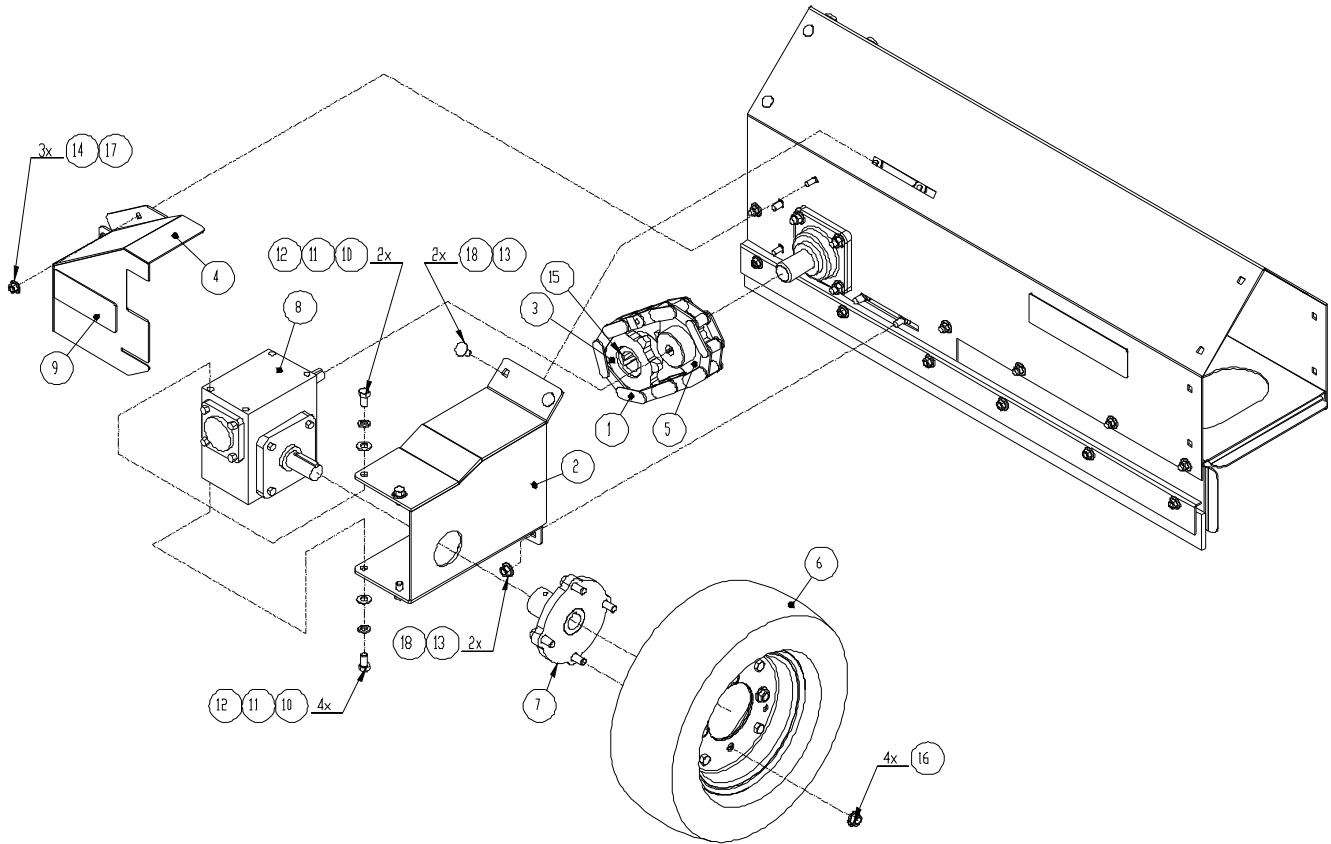
PIVOT END ASSEMBLY (K704800)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K688914	STABALIZER LOCK ARM	2
2	K688936	PIVOT STABALIZER BUSHINGS	2
3	K688970	STABILIZER WLDT	1
4	K689838	PIVOT END RUBBER	1
5	K704805	PIVOT END	1
6	K704838	PIVOT END RUBBER PLATE	1

SECTION 6 - DIAGRAM & PARTS LIST

TRACTOR DRIVE ASSEMBLY (K704806)

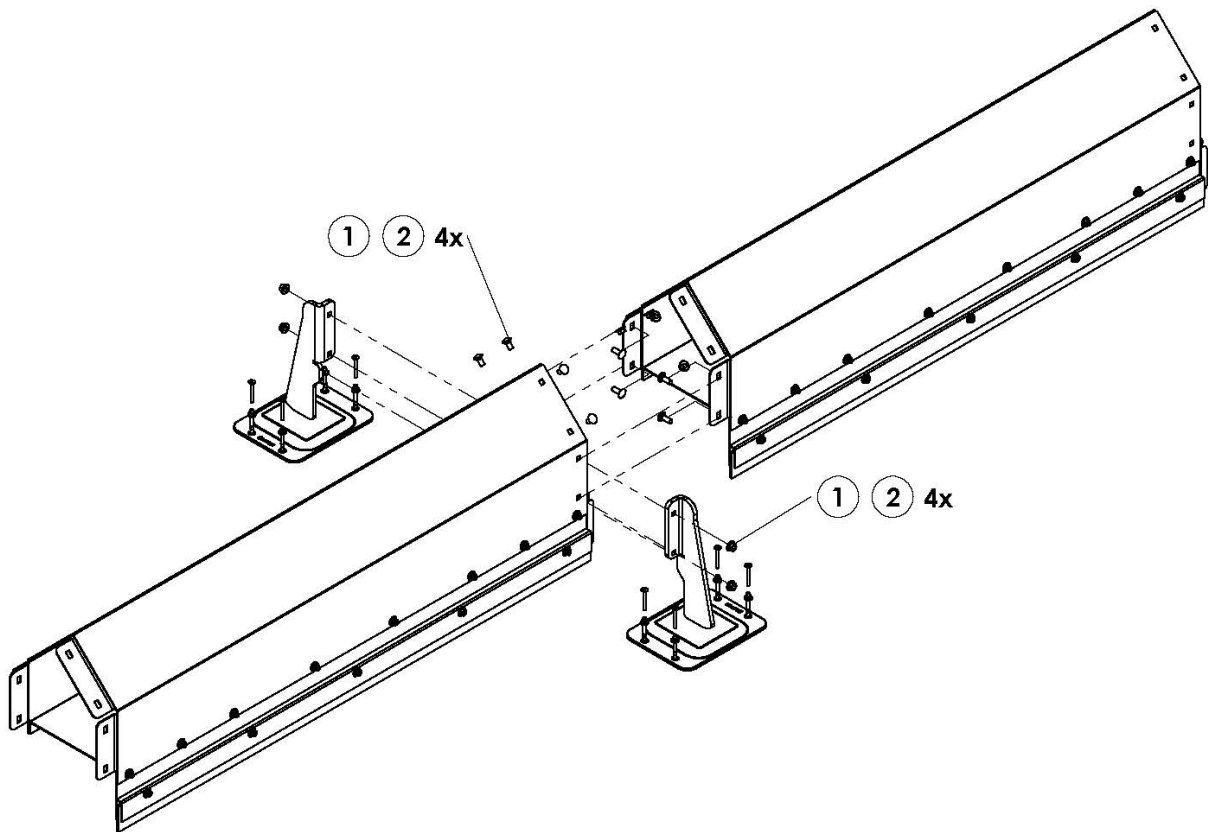


ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K688422	15 LINK CA550 CHAIN	1
2	K688924	DRIVE GEARBOX BRACKET WLDT	1
3	K688929	550 8 TOOTH WELD SPROCKET	1
4	K688930	DRIVE CHAIN GUARD WLDT	1
5	K688933	550 8 TOOTH WELD SPROCKET	1
6	K689095	15' SEGMENTED WHEEL	1
7	K689204	WHEEL HUB WELDMENT - 1"	1
8	K689837	206 REDUCTION GEAR	1
9	K689871	DECAL - DANGER	1
TRACTOR DRIVE HARDWARE KIT (K701898)			
10	K640025	SCREW-.375-16 X .75 GR 5 HHC	6
11	K640155	WASHER - 7/16" SPRING LOCK	6
12	K640154	WASHER - 3/8" FLAT	6
13	K701182	NUT - .375 X 16 FLANGE CENTER LOCK	4
14	K701467	NUT - .3125 X 18 FLANGE CENTER LOCK	3
15	K686358	.250 x .250 x 1.500 KEY	1
16	K682857	NUT - .438 X 14 FLANGE LOCKNUT	4
17	K683943	SCREW - .3125 - 18 X .75 CARRIAGE	3
18	K683942	SCREW - .375-16 X 0.75 GR 5 CAR	4

SECTION 6 - DIAGRAM & PARTS LIST

SECTION JOINT WITH ZERO ENTRY ASSEMBLY

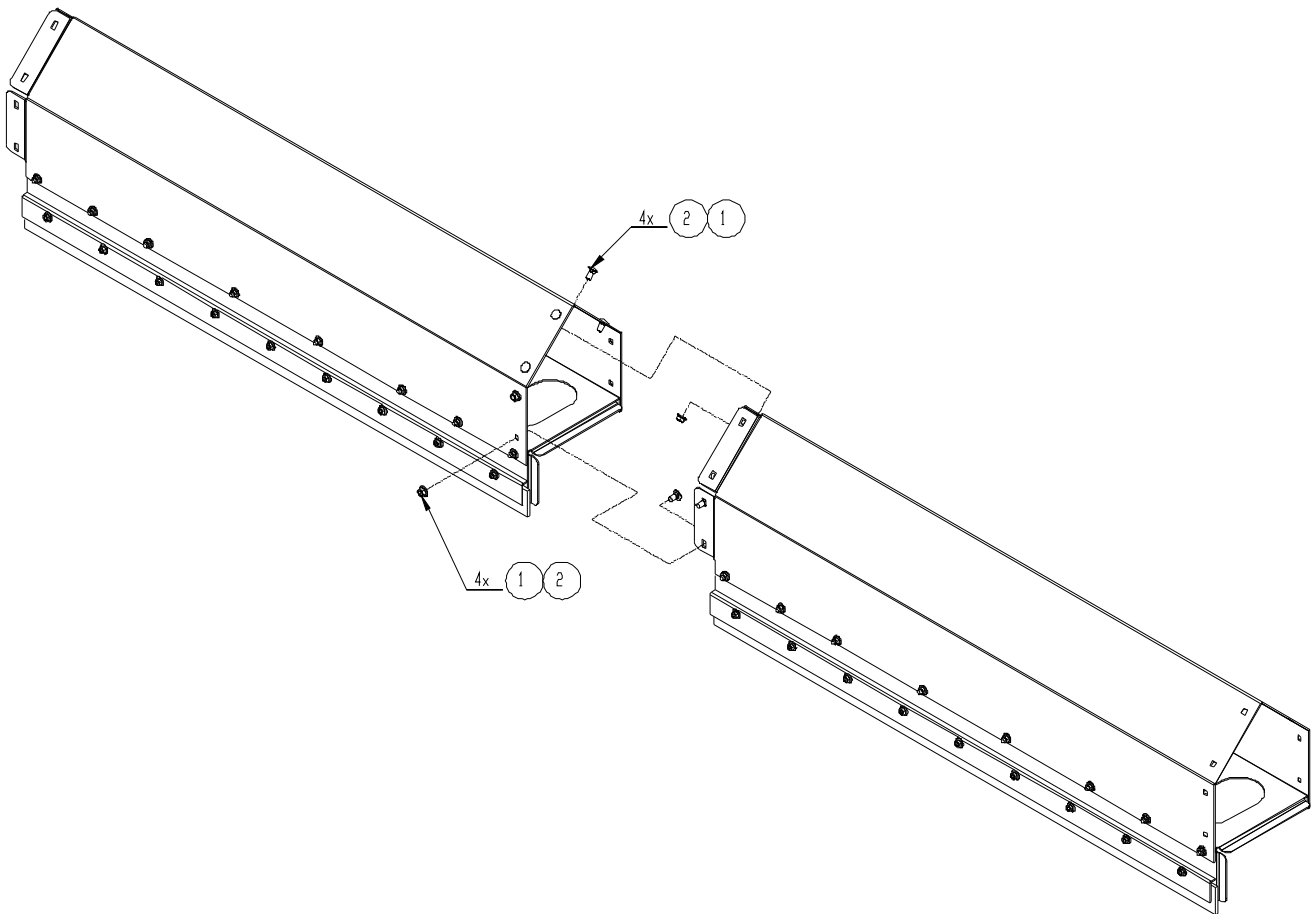
ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K640030	SCREW - .375-16 X 1.00 GR 5 CAR	8
2	K701182	NUT - .375 X 16 FLANGE CENTER FLANGE	8



SECTION 6 - DIAGRAM & PARTS LIST

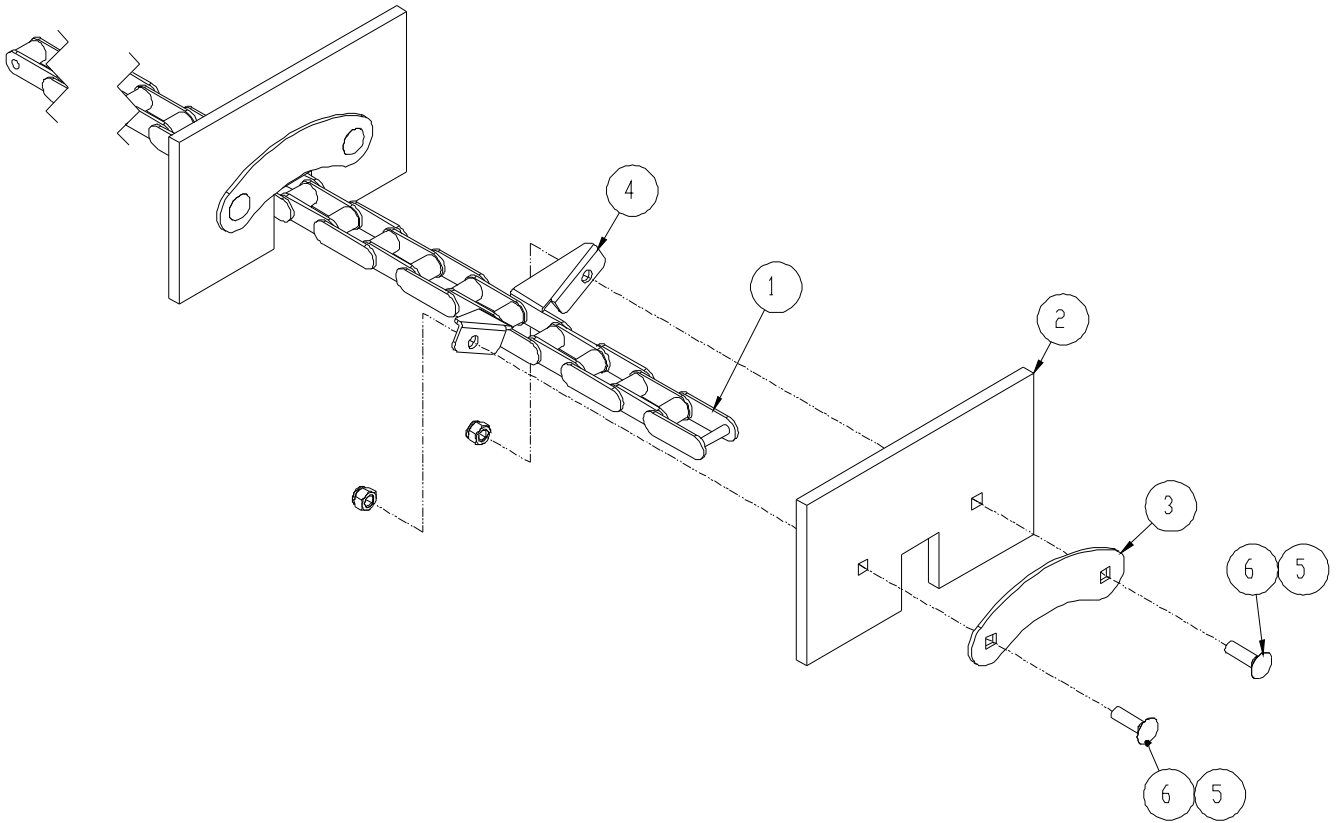
SECTION JOINT WITHOUT ZERO ENTRY ASSEMBLY

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K701182	NUT - .375 X 16 FLANGE CENTER LOCK	8
2	K640030	SCREW - .375-16 X 1.00GR 5 CAR	8



SECTION 6 - DIAGRAM & PARTS LIST

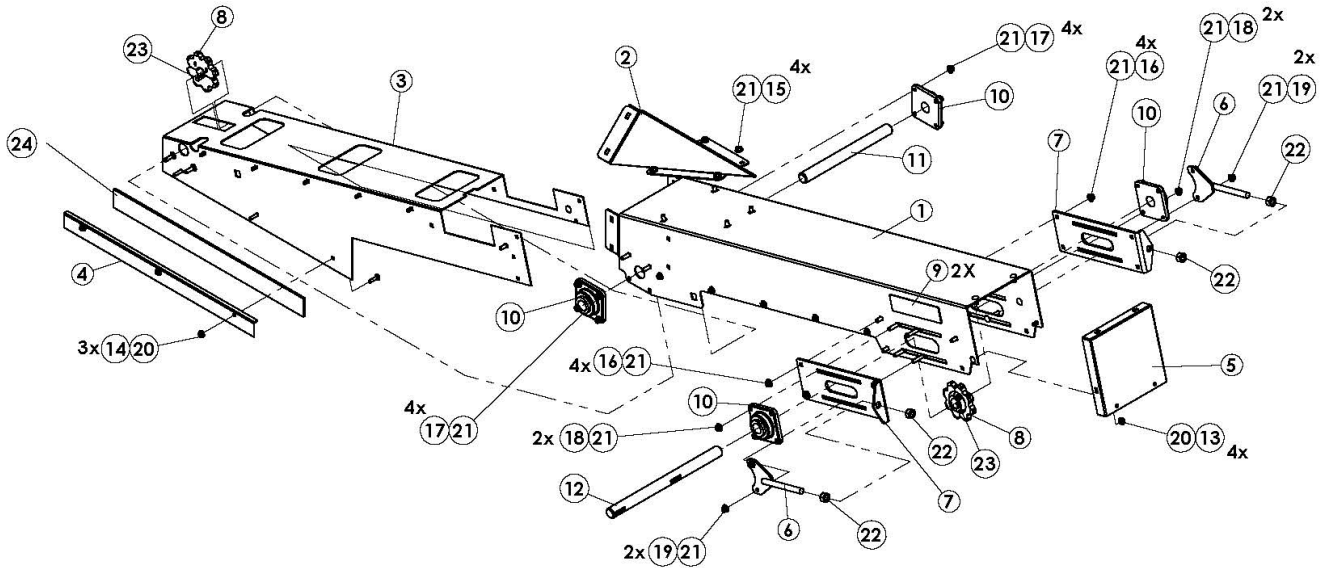
PADDLE CHAIN



ITEM NO.	PART NUMBER	DESCRIPTION
1	K686010	MALE CONNECTOR LINK
2	K686081	RUBBER PADDLE
3	K686111	PADDLE BACKING PLATE
4	K688591	BULK CA550 CHAIN W/ F17 ATTACHEMTN EVERY 6TH
5	K654121	3/8" NYLON LOCKNUT
6	K680140	3/8" X 1.25" CARRIAGE BOLT

SECTION 6 - DIAGRAM & PARTS LIST

PIVOT END SUB ASSEMBLY (K704805)

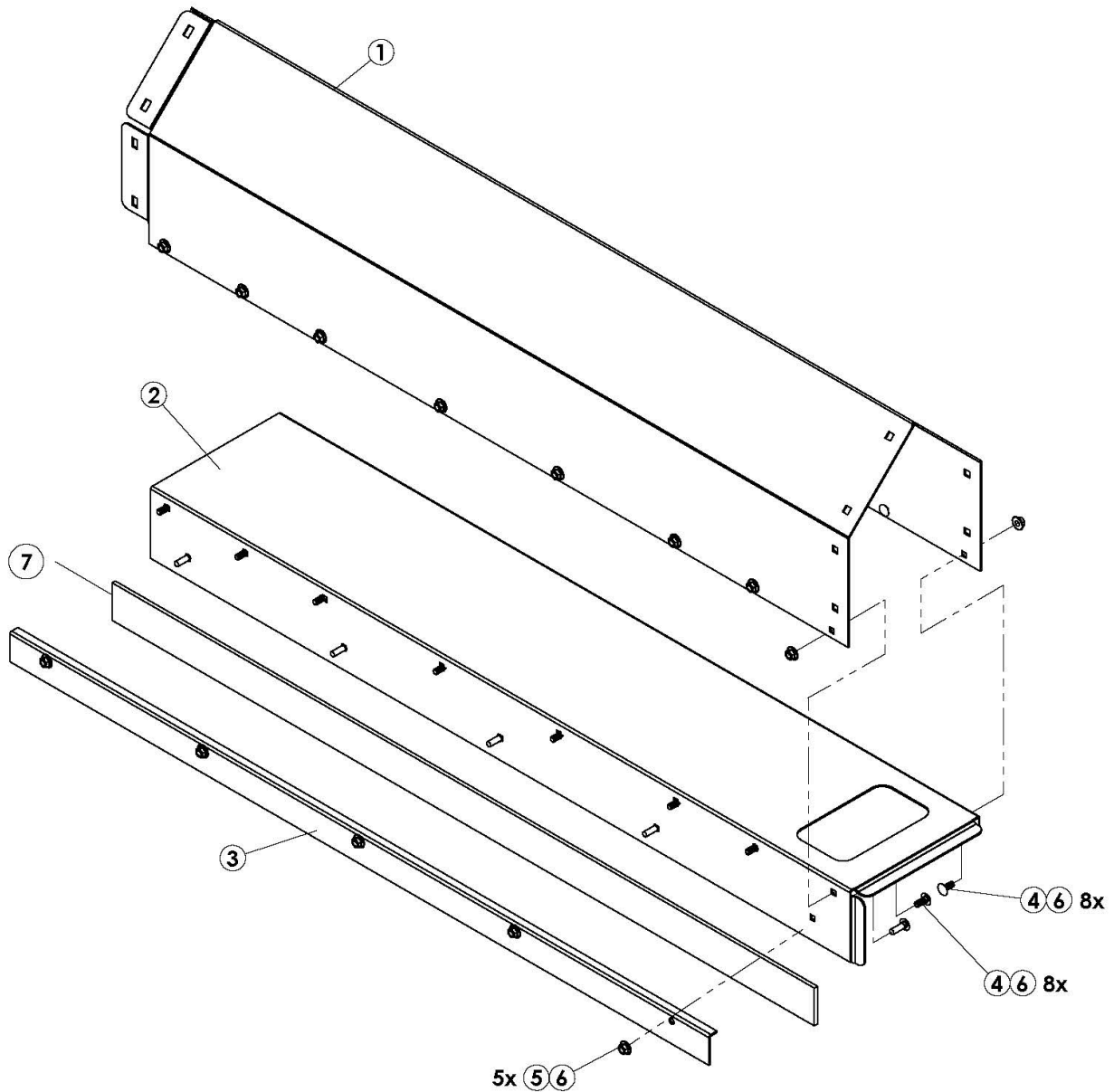


ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704833	PIVOT END COVER PLATE	1
2	K704834	PIVOT END PEAK PLATE	1
3	K704835	PIVOT END DIVIDER PLATE	1
4	K704836	DRAG COVER PLATE - PIVOT END	1
5	K704837	PIVOT END CAP	1
6	K688922	PADDLE CHAIN TIGHTNER WLDT	2
7	K688942	BEARING SLIDE PLATE	2
8	K686008	550 8 TOOTH SPROCKET	2
9	K686033	DECAL - DANGER	2
10	K686603	1 1/4" FLANGE BEARING	4
11	K688921	SHAFT - PIVOT END MID	1
12	K688985	SHAFT - PIVOT END	1
13	K683943	SCREW - .3125 - 18 X .75 CARRIAGE	14
14	K686183	SCREW - .3125 X 1.25 GR 5 CAR	3
15	K683942	SCREW - .375-16 X .75 GR 5 CAR	4
16	K640030	SCREW - .375-16 X 1.00 GR 5 CAR	8
17	K680140	SCREW - .375 - 16 X 1.25 CARRIAGE	8
18	K700705	SCREW - .375-16 X 1.50 GR 5 CAR	4
19	K686527	SCREW - .375-16 X 1.75 GR 5 CAR	4
20	K701467	NUT - .3125 X 18 FLANGE CENTER LOCK	17
21	K701182	NUT - .375 X 16 FLANGE CENTER LOCK	28
22	K640142	NUT-.625-11 GR 5 HEX	4
23	K688944	5/16 x 1.25 KEY	2
24	K688954	DRAG RUBBER	1

SECTION 6 - DIAGRAM & PARTS LIST

4'6" SECTION (K704803)

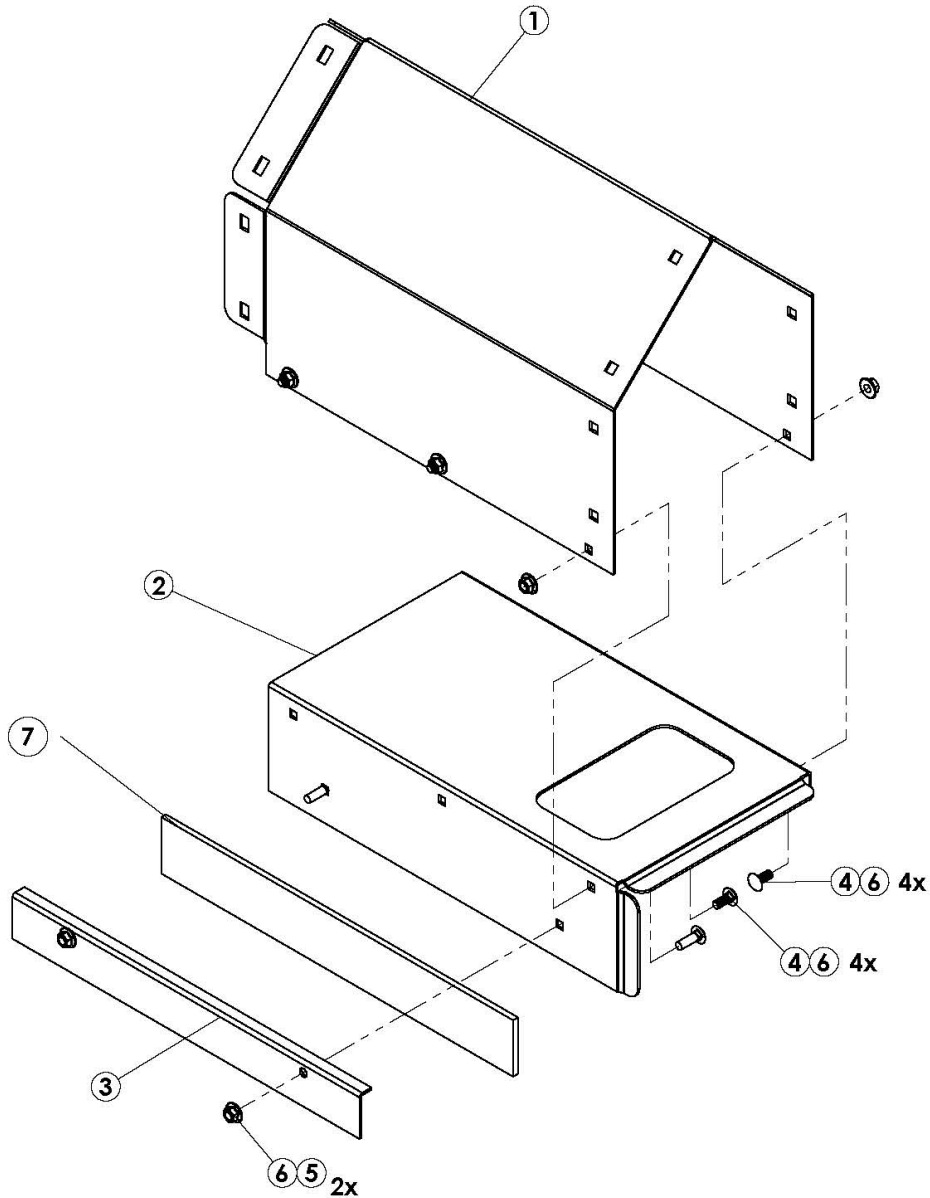
ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704822	4' 6" SINGLE COVER	1
2	K704825	4' 6" SINGLE DIVIDER PLATE	1
3	K704828	DRAG COVER PLATE - 4' 6" SECTION	1
4	K683943	SCREW - .3125 - 18 X .75 CARRIAGE	16
5	K686183	SCREW - .3125 X 1.25 GR 5 CAR	5
6	K701467	NUT - .3125 X 18 FLANGE CENTER LOCK	21
7	K704828	DRAG RUBBER	1



SECTION 6 - DIAGRAM & PARTS LIST

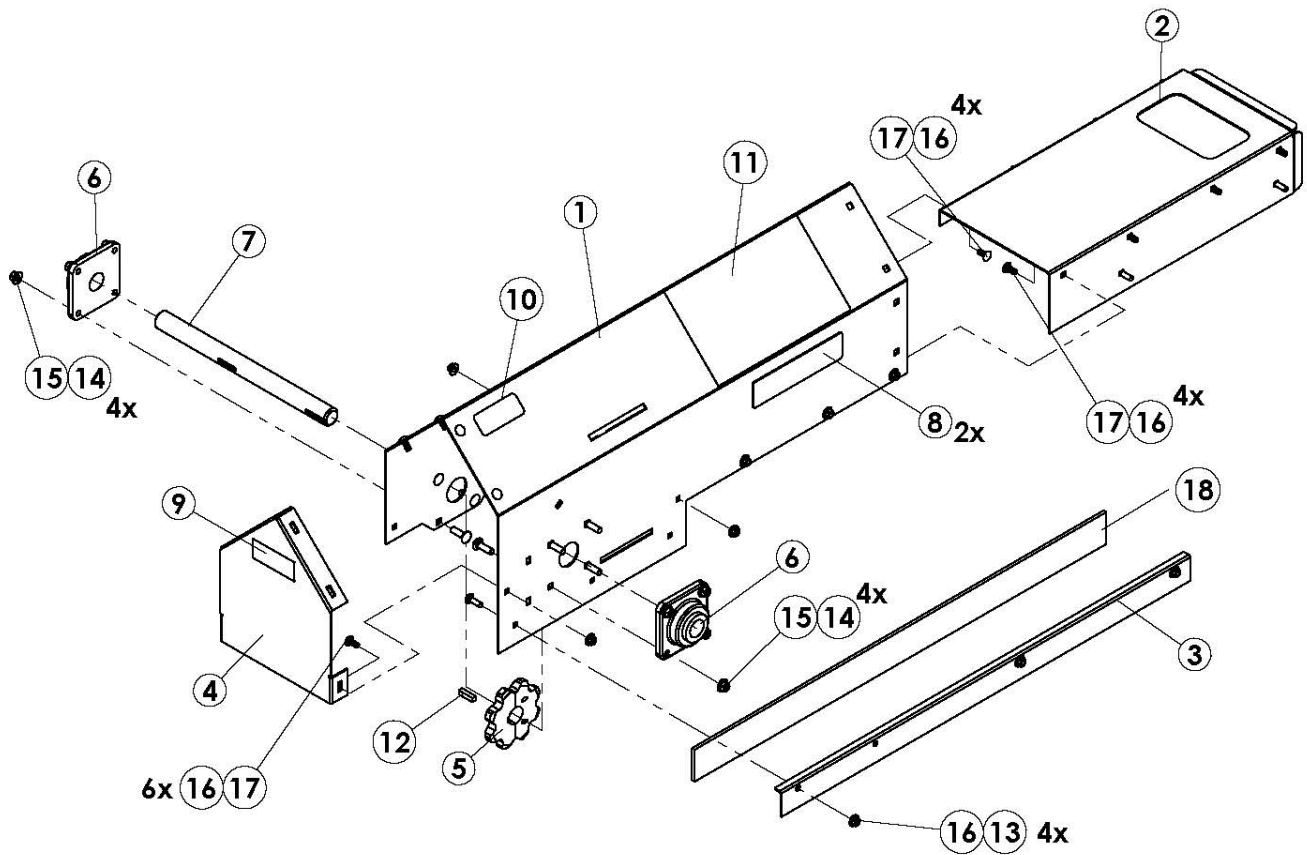
1'6" SECTION (K704801)

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704820	1' 6" SINGLE COVER	1
2	K704823	1' 6" DIVIDER PLATE DIVIDER	1
3	K704826	DRAG COVER PLATE - 1' 6" SECTION	1
4	K683943	SCREW - .3125 - 18 X .75 CARRIAGE	6
5	K686183	SCREW - .3125 X 1.25 GR 5 CAR	2
6	K701467	NUT - .3125 X 18 FLANGE CENTER LOCK	8
7	K688947	DRAG RUBBER	1



SECTION 6 - DIAGRAM & PARTS LIST

DRIVE END SUB ASSEMBLY (K704804)

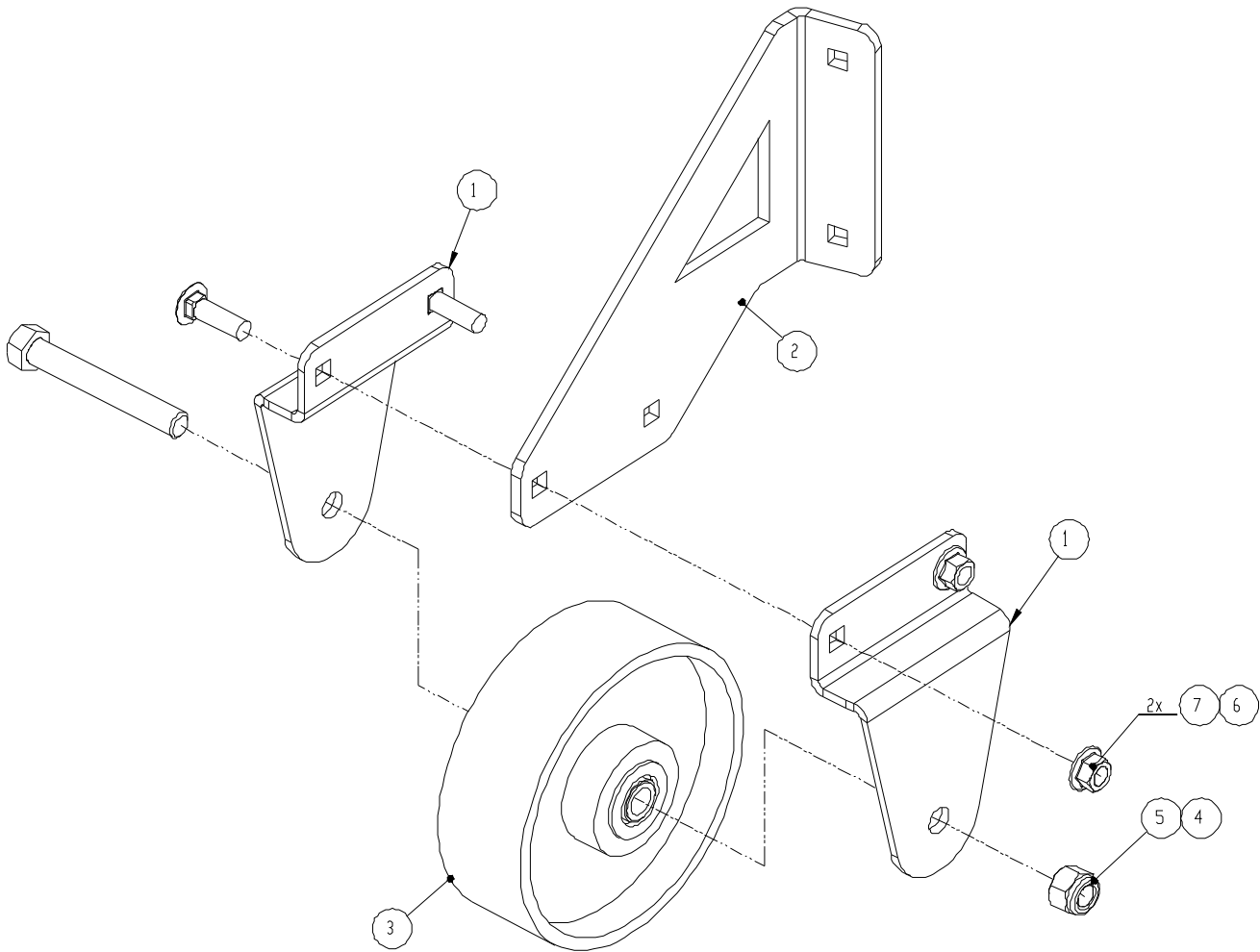


ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K704829	DRIVE END COVER	1
2	K704830	DRIVE END DIVIDER PLATE	1
3	K704831	DRAG COVER PLATE - DRIVE SECTION	1
4	K704832	DRIVE END COVER PLATE	1
5	K686008	550 8 TOOTH SPROCKET	1
6	K686603	1 1/4" FLANGE BEARING	2
7	K688963	1 1/4" DRIVE SHAFT	1
8	K686033	DECAL - DANGER	2
9	K666941	SERIAL NUMBER DECAL	1
10	K704991	PATENT DECAL	1
11	K690344	OPERATIONS DECAL	1
12	K688944	5/16 x 1.25 KEY	1
13	K686183	SCREW - .3125 X 1.25 GR 5 CAR	4
14	K680140	SCREW - .375 - 16 X 1.25 CARRIAGE	8
15	K701182	NUT - .375 X 16 FLANGE CENTER LOCK	8
16	K701467	NUT - .3125 X 18 FLANGE CENTER LOCK	18
17	K683943	SCREW - .3125 - 18 X .75 CARRIAGE	14
18	K688962	DRAG RUBBER	1

SECTION 6 - DIAGRAM & PARTS LIST

FRONT CASTER WHEEL ASSEMBLY (K689823)

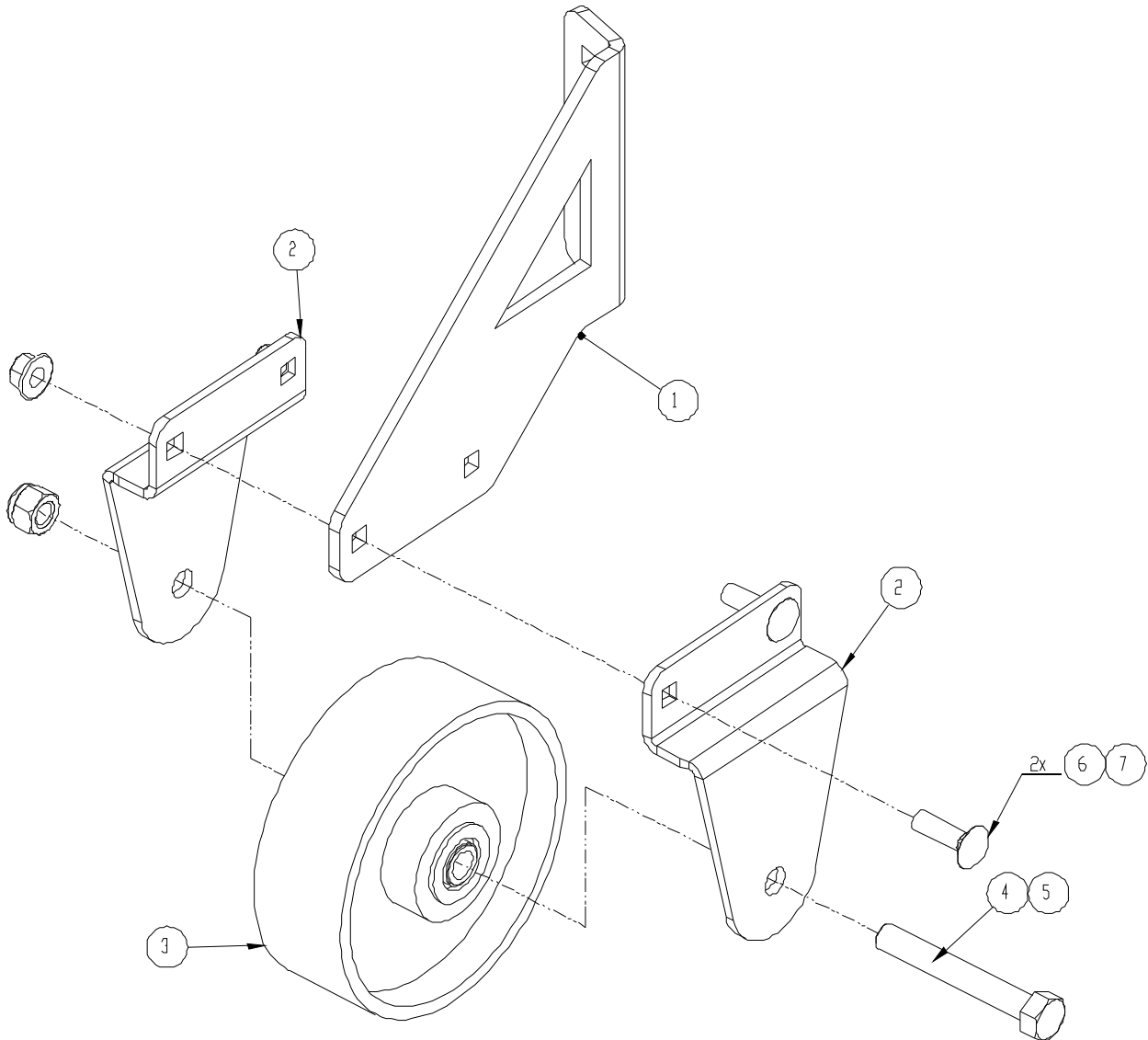
ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K688969	CASTER PLATE	2
2	K688971	FRONT CASTER PLATE - PIVOT SECTION	1
3	K688997	GLASS FILLED NYLON WHEEL	1
4	K640067	SCREW-.50-13 X 3.50 GR 5 HHC	1
5	K660638	NUT - .500 - 13 GR 2 LOCK NYLON INSERT	1
6	K680140	SCREW - .375 - 16 X 1.25 CARRIAGE	2
7	K682413	NUT - .375 X 16 FLANGE	2



SECTION 6 - DIAGRAM & PARTS LIST

REAR CASTER WHEEL ASSEMBLY (K689824)

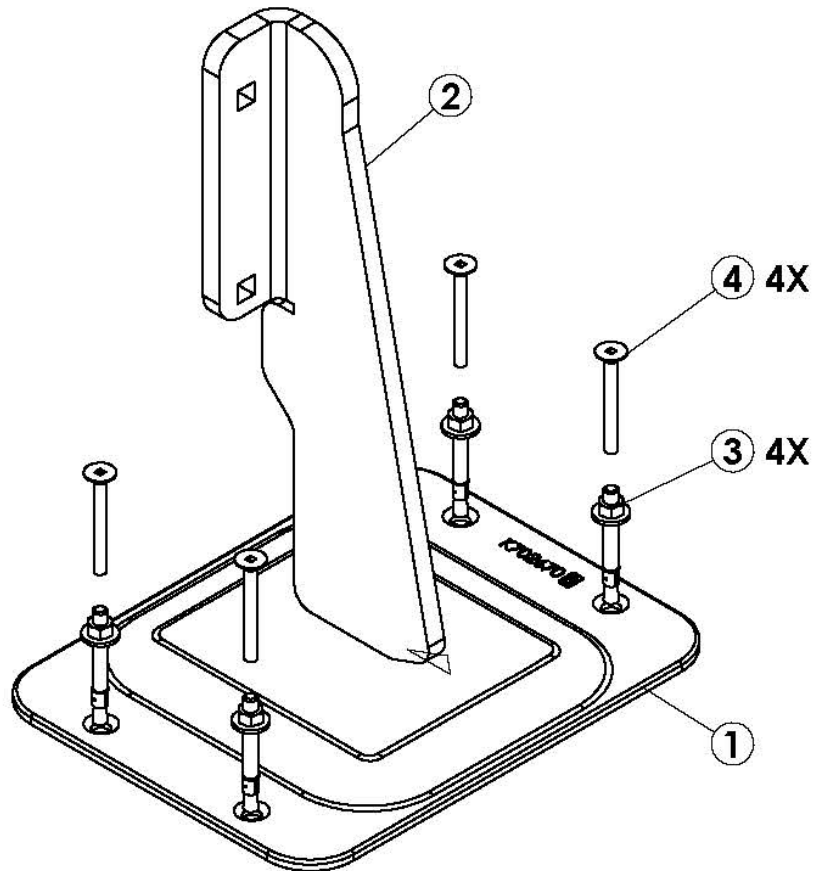
ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K688968	BACK CASTER PLATE - PIVOT SECTION	1
2	K688969	CASTER PLATE	2
3	K688997	GLASS FILLED NYLON WHEEL	1
4	K640067	SCREW-.50-13 X 3.50 GR 5 HHC	1
5	K660638	NUT - .500 - 13 GR 2 LOCK NYLON INSERT	1
6	K680140	SCREW - .375 - 16 X 1.25 CARRIAGE	2
7	K682413	NUT - .375 X 16 FLANGE	2



SECTION 6 - DIAGRAM & PARTS LIST

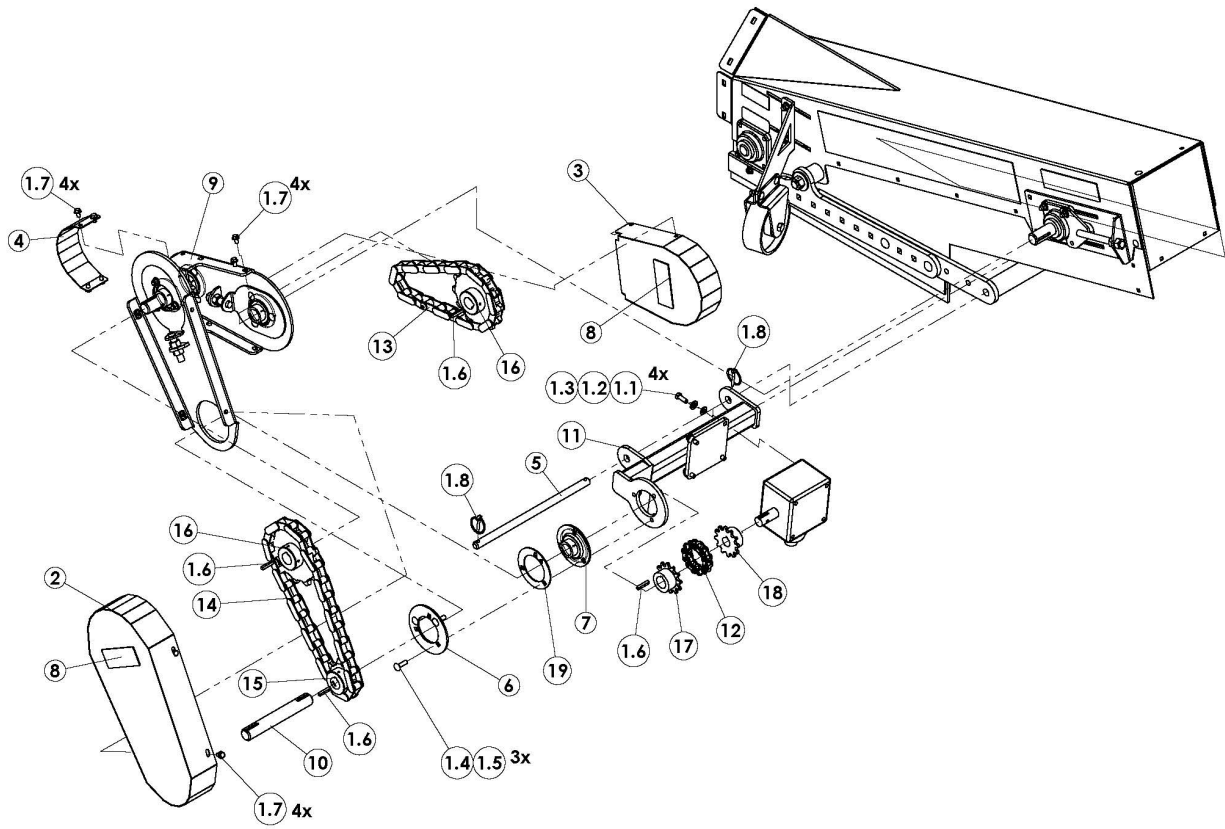
ZERO ENTRY KIT (K695135)

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K702670	SUPPORT PAD	1
2	K693277	SUPPORT PLATE	1
3	K695701	WEDGE ANCHOR 1/4" X 2 1/4" (CONCRETE)	4
4	K695702	SCREW- SELF TAPPING #12-24 X 1.5"	1



SECTION 6 - DIAGRAM & PARTS LIST

8" PIVOT KIT (OFFSET GEAR BOX) K693253



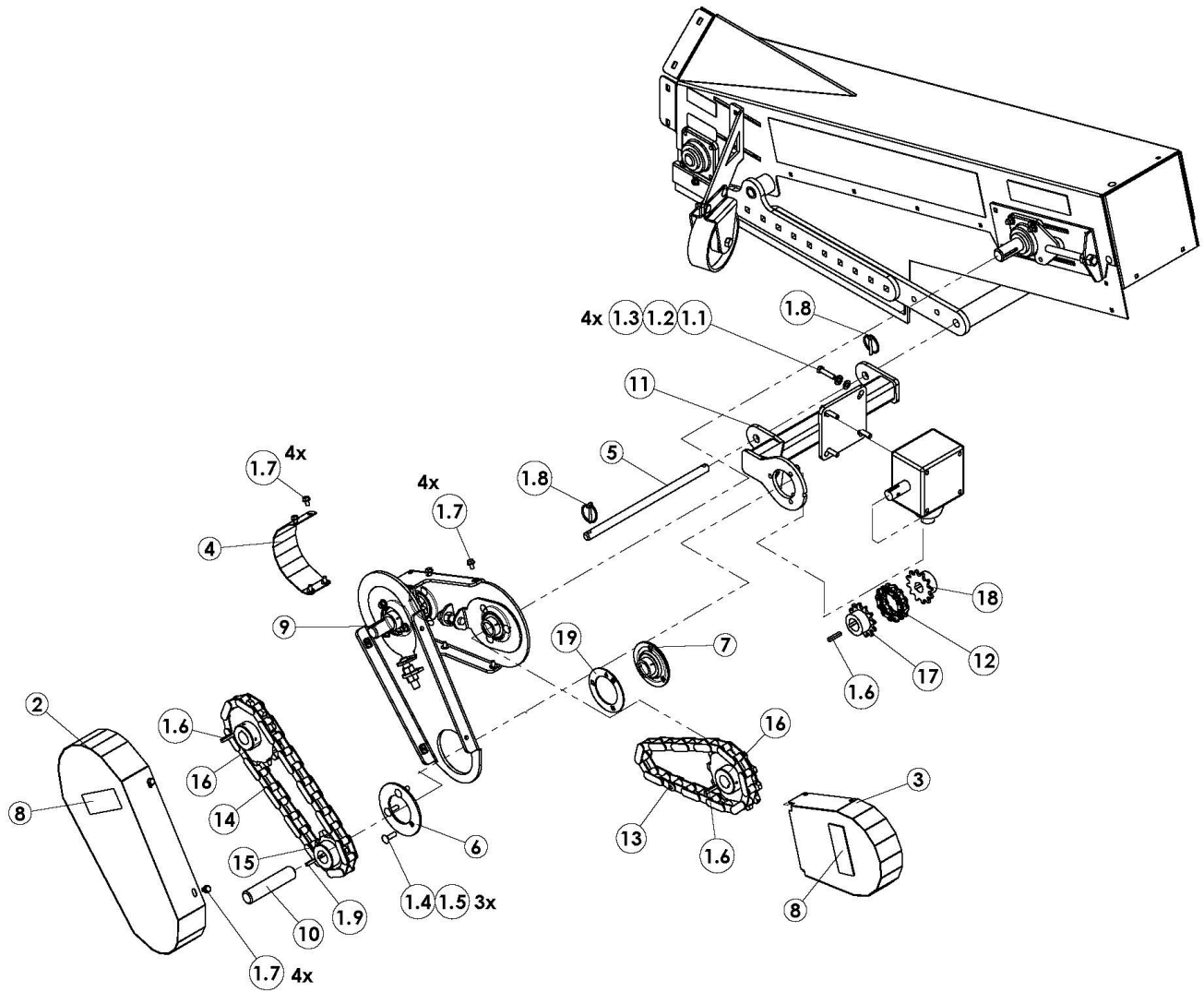
SECTION 6 - DIAGRAM & PARTS LIST

8" PIVOT KIT (OFFSET GEAR BOX) K693253

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K689836	BOLT BAG - PIVOT 3/8" GEAR BOX BOLTS	1
1.1	K640028	SCREW - .375-16 X 1.00 GR5 HHC	4
1.2	K640153	WASHER - 3/8" SPRING LOCK	4
1.3	K640154	WASHER - 3/8" FLAT	4
1.4	K680140	SCREW - .375 - 16 X 1.25 CARRIAGE	3
1.5	K682413	NUT - .375 X 16 FLANGE	3
1.6	K686358	.250 x .250 x 1.500 KEY	4
1.7	K689811	SCREW - .3125-18 X 0.50	12
1.8	K750100	PIN-1/4" LYNCH	2
2	K688894	LOWER PIVOT CHAIN GUARD WLDT	1
3	K688897	UPPER PIVOT CHAIN GUARD UPPER WLDT	1
4	K688912	UPPER PIVOT CHAIN GUARD UPPER PLATE	1
5	K688913	STABALIZER PIN	1
6	K689805	PIVOT JOINT ROUND COVER PLATE	1
7	K689810	1 1/4" BEARING W/ 3 BOLT FLANGETTES	1
8	K689871	DANGER DECAL	2
9	K689852	PIVOT JOINT ASSY-7 TOOTH SPROCKET	1
10	K689840	SHAFT - PIVOT GEARBOX EXTENSION	1
11	K699575	PIVOT BRACKET WLDT	1
12	K689835	12 LINK COUPLER CHAIN	1
13	K689854	21 LINK CA550 CHAIN	1
14	K689858	26 LINK CA550 CHAIN	1
15	K689842	550 7 TOOTH WELD SPROCKET 1 1/4" BORE, 1/4" KEY	1
16	K688899	550 12 TOOTH WELD SPROCKET 1 1/4" BORE, 1/4" KEY	2
17	K689834	12 TOOTH CHAIN SPROCKET - 1.25"	1
18	K689841	12 TOOTH CHAIN SPROCKET - 1.00"	1
19	K698443	PLATE - CENTER RING SPACER	1

SECTION 6 - DIAGRAM & PARTS LIST

8" PIVOT KIT (INLINE GEAR BOX) K707380



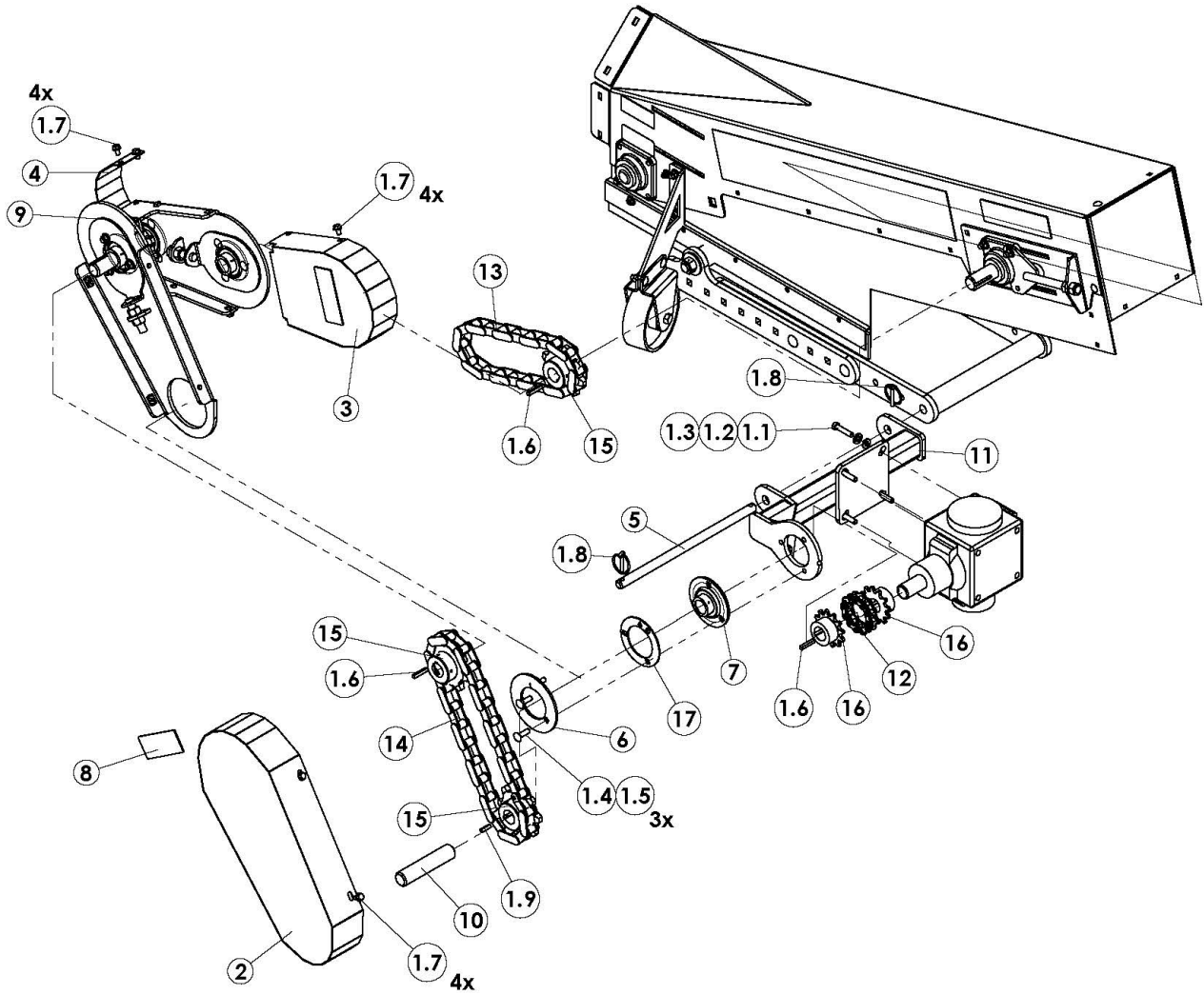
SECTION 6 - DIAGRAM & PARTS LIST

8" PIVOT KIT (INLINE GEAR BOX) K707380

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K689814	BOLT BAG - PIVOT 1/2" GEAR BOX BOLTS	1
1.1	K640057	SCREW - .5 00- 13 X 1.00 GR5 HHT	4
1.2	K640157	WASHER - 1/2" SPRING LOCK	4
1.3	K653098	WASHER - 1/2" FLAT	4
1.4	K680140	SCREW - .375 - 16 X 1.25 CARRIAGE	3
1.5	K682413	NUT - .375 X 16 FLANGE	3
1.6	K686358	.250 x .250 x 1.500 KEY	3
1.7	K689811	SCREW - .3125-18 X 0.50	12
1.8	K750100	PIN-1/4" LYNCH	2
1.9	K161288	.250 x .250 x 1.000 KEY	1
2	K688894	LOWER PIVOT CHAIN GUARD WLDT	1
3	K688897	UPPER PIVOT CHAIN GUARD UPPER WLDT	1
4	K688912	UPPER PIVOT CHAIN GUARD UPPER PLATE	1
5	K688913	STABALIZER PIN	1
6	K689805	PIVOT JOINT ROUND COVER PLATE	1
7	K689810	1 1/4" BEARING W/ 3 BOLT FLANGETTES	1
8	K689871	DANGER DECAL	2
9	K689852	PIVOT JOINT ASSY-7 TOOTH SPROCKET	1
10	K689863	SHAFT - PIVOT GEARBOX EXTENSION	1
11	K699576	PIVOT BRACKET WLDT	1
12	K689835	12 LINK COUPLER CHAIN	1
13	K689854	21 LINK CA550 CHAIN	1
14	K689858	26 LINK CA550 CHAIN	1
15	K689842	550 7 TOOTH WELD SPROCKET 1 1/4" BORE, 1/4" KEY	1
16	K688899	550 12 TOOTH WELD SPROCKET 1 1/4" BORE, 1/4" KEY	2
17	K689834	12 TOOTH CHAIN SPROCKET - 1.25"	1
18	K689841	12 TOOTH CHAIN SPROCKET - 1.00"	1
19	K698443	PLATE - CENTER RING SPACER	1

SECTION 6 - DIAGRAM & PARTS LIST

10" PIVOT KIT (COMMERCIAL CENTER WELL) K693254



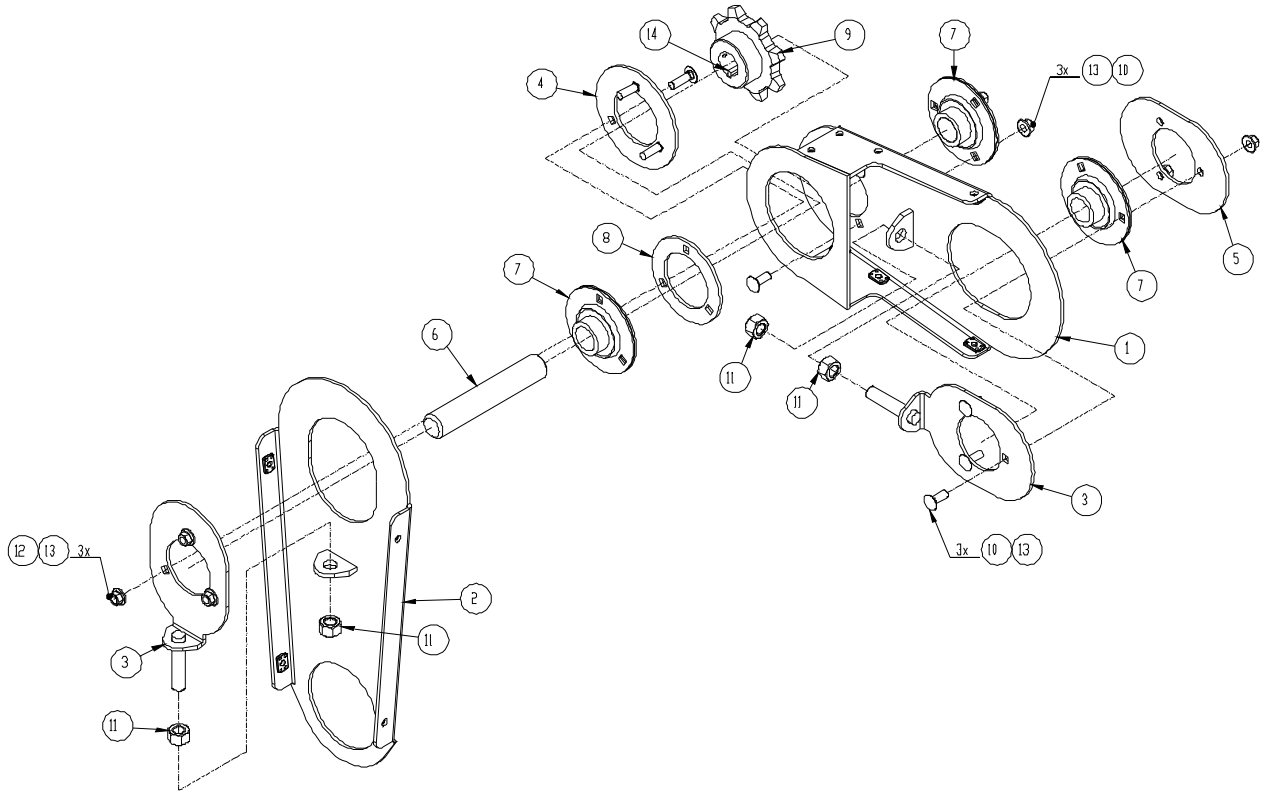
SECTION 6 - DIAGRAM & PARTS LIST

10" PIVOT KIT (COMMERCIAL CENTER WELL) K693254

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K689814	BOLT BAG - PIVOT 1/2" GEAR BOX BOLTS	1
1.1	K640057	SCREW - .5 00- 13 X 1.00 GR5 HHT	4
1.2	K640157	WASHER - 1/2" SPRING LOCK	4
1.3	K653098	WASHER - 1/2" FLAT	4
1.4	K680140	SCREW - .375 - 16 X 1.25 CARRIAGE	3
1.5	K682413	NUT - .375 X 16 FLANGE	3
1.6	K686358	.250 x .250 x 1.500 KEY	3
1.7	K689811	SCREW - .3125-18 X 0.50	12
1.8	K750100	PIN-1/4" LYNCH	2
1.9	K161288	.250 x .250 x 1.000 KEY	1
2	K688894	LOWER PIVOT CHAIN GUARD WLDT	1
3	K688897	UPPER PIVOT CHAIN GUARD UPPER WLDT	1
4	K688912	UPPER PIVOT CHAIN GUARD UPPER PLATE	1
5	K688913	STABALIZER PIN	1
6	K689805	PIVOT JOINT ROUND COVER PLATE	1
7	K689810	1 1/4" BEARING W/ 3 BOLT FLANGETTES	1
8	K689871	DANGER DECAL	2
9	K689833	PIVOT JOINT ASSY-8 TOOTH SPROCKET	1
10	K689863	SHAFT - PIVOT GEARBOX EXTENSION	1
11	K699576	PIVOT BRACKET WLDT	1
12	K689835	12 LINK COUPLER CHAIN	1
13	K688093	20 LINK CA550 CHAIN	1
14	K689857	25 LINK CA550 CHAIN	1
15	K688929	550 8 TOOTH WELD SPROCKET 1 1/4" BORE, 1/4" KEY	3
16	K689834	12 TOOTH CHAIN SPROCKET - 1.25"	2
17	K698443	PLATE - CENTER RING SPACER	1

SECTION 6 - DIAGRAM & PARTS LIST

PIVOT JOINT (K689852 & K689833)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	K688889	UPPER PIVOT ARM WLDT	1
2	K689800	LOWER PIVOT ARM WLDT	1
3	K689802	PIVOT CHAIN TIGHTNER	2
4	K689805	PIVOT JOINT ROUND COVER PLATE	1
5	K689806	PIVOT JOINT OBLONG COVER PLATE	1
6	K689808	SHAFT - PIVOT JOINT	1
7	K689810	1 1/4" BEARING W/ 3 BOLT FLANGETTES	3
8	K689831	PIVOT CENTER RING	1
9*	K689842	550 7 TOOTH WELD SPROCKET (K689852 PIVOT JOINT)	1
	K688929	550 8 TOOTH WELD SPROCKET (K689833 PIVOT JOINT)	1
10	K640030	SCREW - .375-16 X 1.00 GR 5 CAR	6
11	K640142	NUT-.625-11 GR 5 HEX	4
12	K680140	SCREW - .375 - 16 X 1.25 CARRIAGE	3
13	K682413	NUT - .375 X 16 FLANGE	9
14	K686358	.250 x .250 x 1.500 KEY	1

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)	5 Years
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.

(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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