

OWNERS MANUAL

EDGE



Introduction

- The purpose of this manual is to explain the operation and maintenance of the Edge 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 Edge 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.

Sioux Steel Company
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Sioux Falls, SD 57101-1265

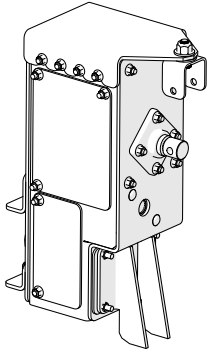
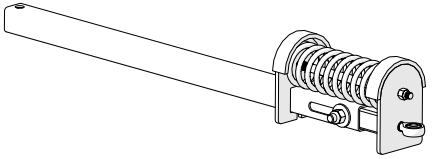
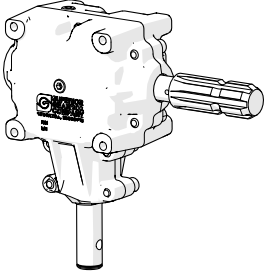
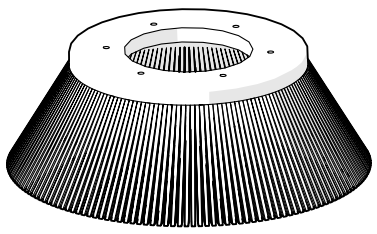
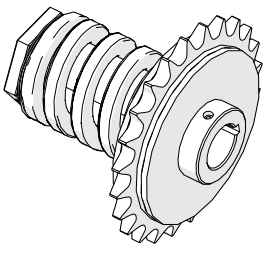
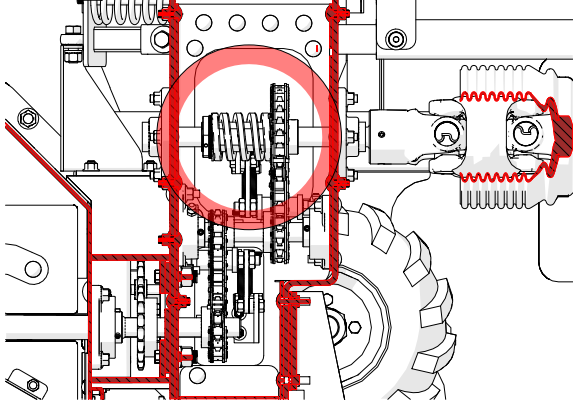
Phone: 1-800-557-4689

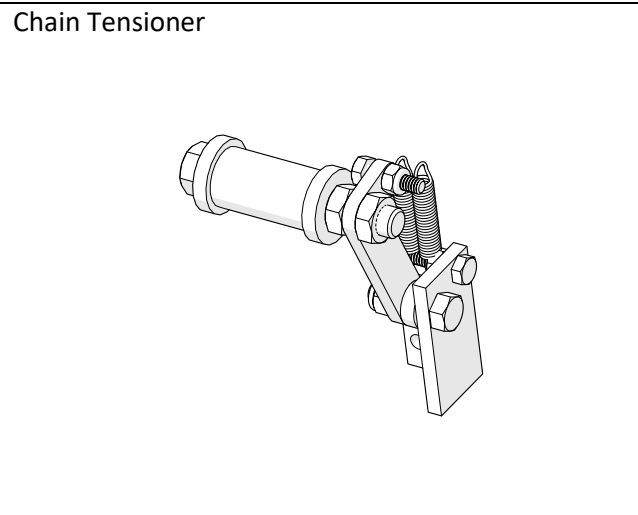
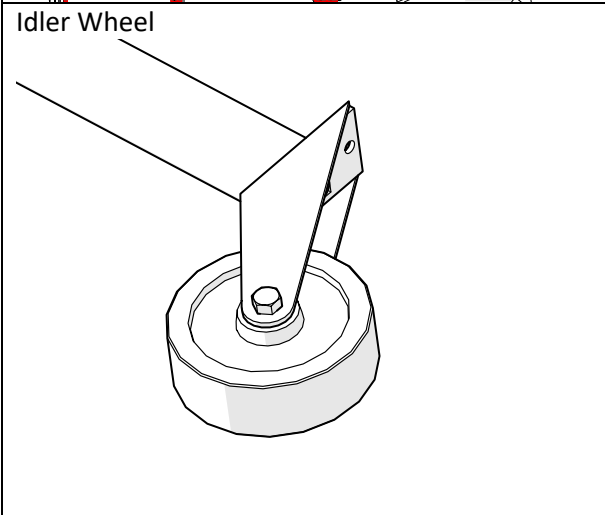
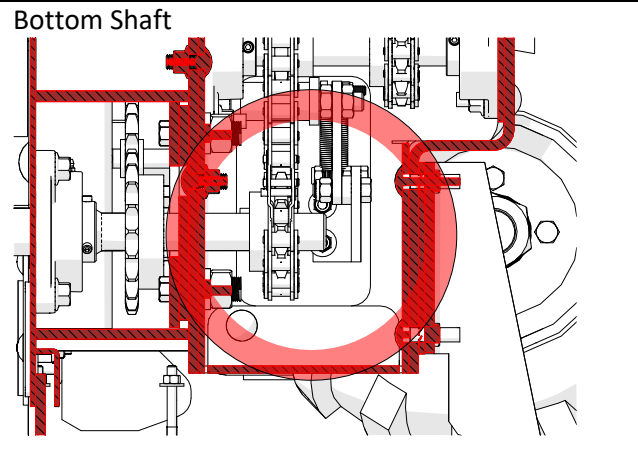
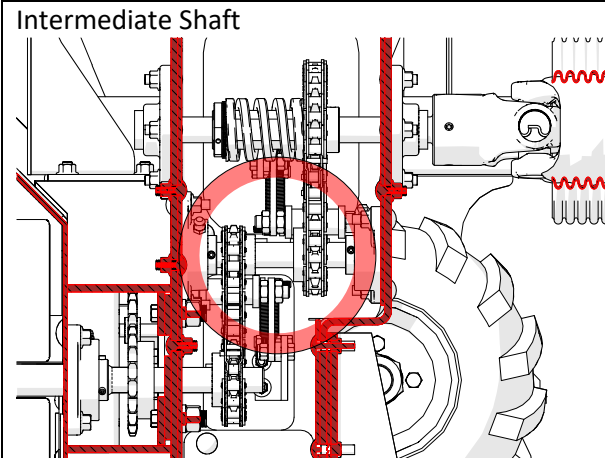
www.edgesweep.com

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1 Edge Sweep Terminology

<p data-bbox="203 268 316 298">Gearbox</p> 	<p data-bbox="836 268 982 298">Torque Arm</p> 
<p data-bbox="203 709 462 739">Brush Head Gearbox</p> 	<p data-bbox="836 709 982 739">Brush Head</p> 
<p data-bbox="203 1176 332 1205">Slip Clutch</p> 	<p data-bbox="836 1176 966 1205">Top Shaft</p> 



2 Safety Information

- A careful operator is the best operator. Most accidents can be avoided by observing necessary 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 follows safety precautions. Improper use of the equipment can cause serious injury or death.
- Read the operator's manual before operating equipment.
- Only allow properly trained persons to operate the equipment.
- Keep hands and feet away from all pinch points.
- Keep bystanders away during operation. In an empty bin/silo, keep everyone rearward of the sweep during operation to validate installation or maintenance.
- Do not contact (i.e. push, stand, touch, etc.) any portion of the sweep during operation. • Since the installation of this sweep takes place within a confined space. Confined space awareness should be followed. Lockout/tag out awareness should be followed.
- **DO NOT** clean, lubricate, or adjust the equipment while it is running. Disengage the machine prior to doing so.
- Always disconnect and lock out all power sources from the collector ring before attempting to perform any service function. Follow lockout/tag out procedures as outlined in OSHA section 1910.147 where appropriate.
- Refer to maintenance chart to check all fasteners and hardware to assure tightness.
- **REMEMBER: The manufacturer includes or provides all reasonable means for accident prevention except a safe and careful operator**

2.1 Safety Alert Symbol

- 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! Be Alert! Your Personal Safety Is Involved!**



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.

2.2 Safety & Logo Decals

- 689771 WARNING - Rotating Chain can Crush and Cut. DO NOT Operate Without Guards in Place.



- 687218 DANGER - Rotating driveline contact can cause death KEEP AWAY! DO NOT OPEATE WITHOUT –
 - All driveline guards, tractor and equipment shields in place
 - Drivelines securely attached at both ends
 - Driveline guards that turn freely on driveline



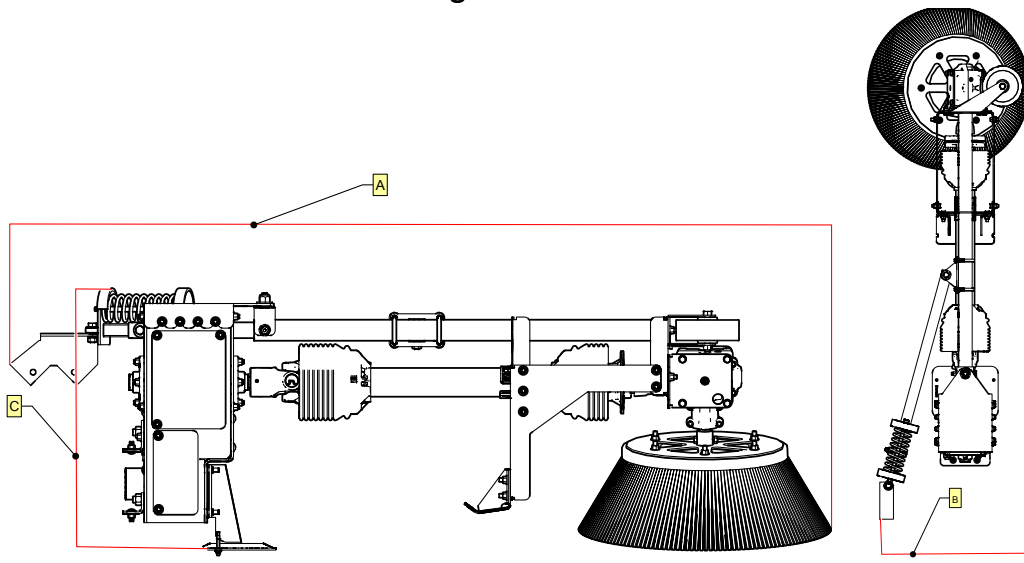
3 Specifications

(Specifications are subject to change without notice and without liability)

3.1 Features

- **Bin cleanout:** The Edge Sweep will clean the remaining grain that the sweep cannot reach on the edges of the bin
 - **Note:** The effectiveness of cleanout depends on the varying conditions present, including but not limited to; moisture content, grain commodity type and flowability, amount of foreign matter present, and compaction rate. These all play a part in the performance of the Edge Sweep. Edge Sweep effectiveness may also vary as the angle of the sloping grain varies. For optimal performance, dry flowable grain is recommended. The paddle sweep is not intended for use in high moisture grain storage applications or suitable for non-grain commodities including fertilizer, lime, etc. Also, grain that may have gone out of condition due to moisture or insect activity and has become hard or caked will result in diminished effectiveness.
- **Slip clutch:** Allows for hands free use of the Edge Sweep. During burial the Edge Sweep will not run, protecting equipment from damage, and keeping the power use low for the rest of the paddle sweep.
 - **Note:** The slip clutch will allow for 75 minutes of continuous slipping before adjustment is needed.
- **Designed to be fully submersed in grain:** Edge Sweep includes a cast zero entry stand and heavy built design so it can be left in the grain bin during burial.
- **Galvanized design for rust protection**
- **Shear bolts for component protection:** Works in tandem with the slip clutch.
- **Spring loaded compression arm to wrap around obstacles:** Allows for the Edge Sweep to work around obstacles such as an entry door, ladder, internal stiffeners, etc.

3.2 Overall Dimensions & Weights

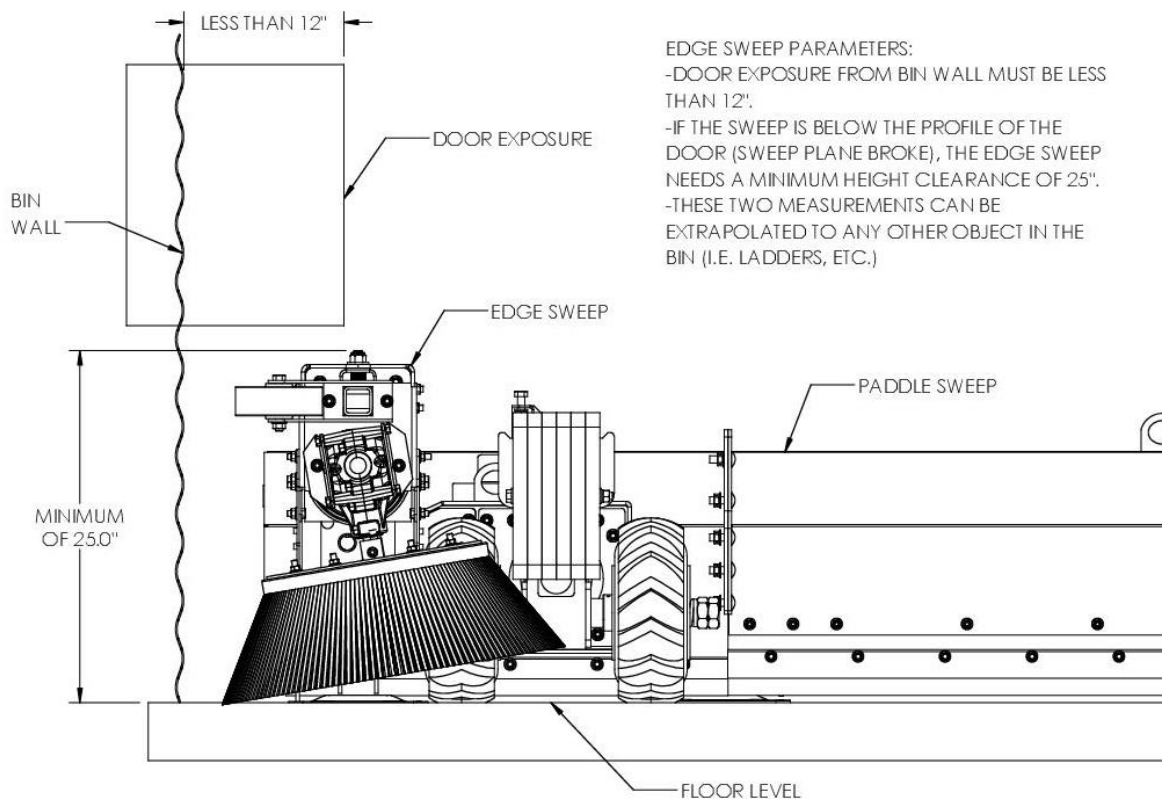


Part Number	Paddle Sweep Compatibility	Length (Dim A) (Inches)	Width (Dim B) (Inches)	Height (Dim C) (Inches)	Unit Weight (lbs)
K712188	Daay Bin Paddle Sweep 5:1 Ratio	78.0	28.2	23.6	185.04
K712189	Daay Bin Paddle Sweep 7.5:1 Ratio	78.0	28.2	23.6	185.52
K712190	Daay Bin Paddle Sweep 10:1 Ratio	78.0	28.2	23.6	185.62
K712191	Daay Bin Paddle Sweep 15:1 Ratio	78.0	28.2	23.6	187.55
K712192	Daay Bin Paddle Sweep 20:1 Ratio	78.0	28.2	23.6	185.87
K712193	Daay Bin Paddle Sweep 30:1 Ratio	78.0	28.2	23.6	184.70
K712194	DPS G2 Paddle Sweep 5:1 Ratio	78.0	28.2	23.6	191.10
K712195	DPS G2 Paddle Sweep 7.5:1 Ratio	78.0	28.2	23.6	192.15
K712196	DPS G2 Paddle Sweep 10:1 Ratio	78.0	28.2	23.6	192.25
K712197	DPS G2 Paddle Sweep 15:1 Ratio	78.0	28.2	23.6	192.26
K712198	DPS G2 Paddle Sweep 20:1 Ratio	78.0	28.2	23.6	192.50
K712199	DPS G2 Paddle Sweep 30:1 Ratio	78.0	28.2	23.6	191.33

4 Setup

4.1 Prior to Installation

- Objects that protrude from that wall of the bin must be checked to ensure that they do not protrude more than **12 inches**. If they do protrude more than 12 inches from the wall and are within **25 inches** of the floor the Edge Sweep **WILL NOT CLEAR** the obstruction. However, if an object protrudes more than 12 inches and is **higher** than 25 inches from the floor this will not interfere with edge sweep operation.
- **Doors:** In some cases, paddle sweeps are set up so the sweep passes underneath a manway or door, the edge sweep **WILL NOT CLEAR** the door unless the door sits higher than 25 inches from the floor at the lowest point of the door protrusion.



4.2 Installation

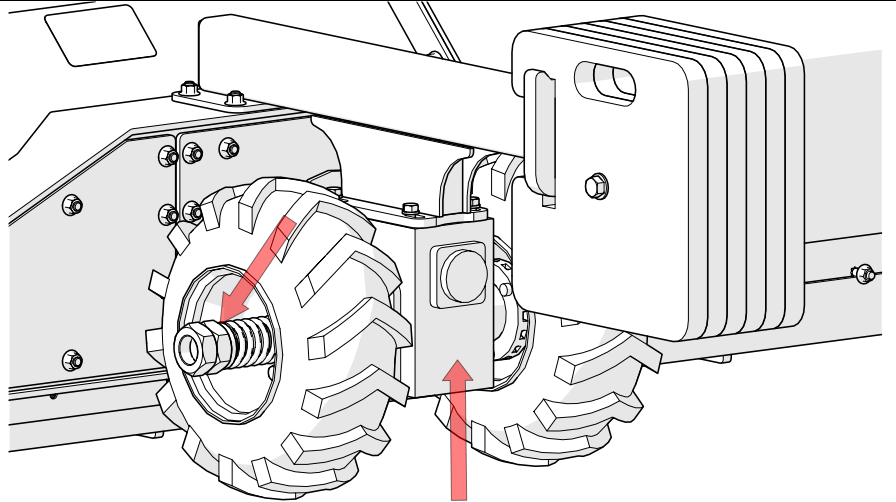
- It is recommended that the bin be empty and free of grain when the Edge Sweep is installed. If this can't be achieved, then a large enough area must be cleared that the Edge Sweep can be installed on a clean floor and free from entrapment danger.
- It is recommended that at least two people install an Edge Sweep as the parts can be large and difficult to handle.
- A tripod kit is available to assist in lifting components and moving them across the bin floor. The tripod can be collapsed to fit through any size door.
- Tools Needed
 - Cordless Driver
 - Ratchet
 - 1/2", 9/16", 5/8" & 3/4" shallow socket
 - 1/2" & 9/16" deep socket
 - 9/16" wrench
 - (1) 5/8" wrench
 - (1) 11/16" wrench
 - (2) 1 1/8" wrench (for tightening paddle chain)
 - Battery powered/Explosion proof light
 - Pliers/Needle Nose
 - Small Pry Bar / Standard Screwdriver
 - Standard Allen wrench set
 - Gloves
 - Hammer/ Dead Blow Hammer
 - Non-Marring / Sparking Drift Punch

4.3 Daay Bin Paddle Sweep Installation

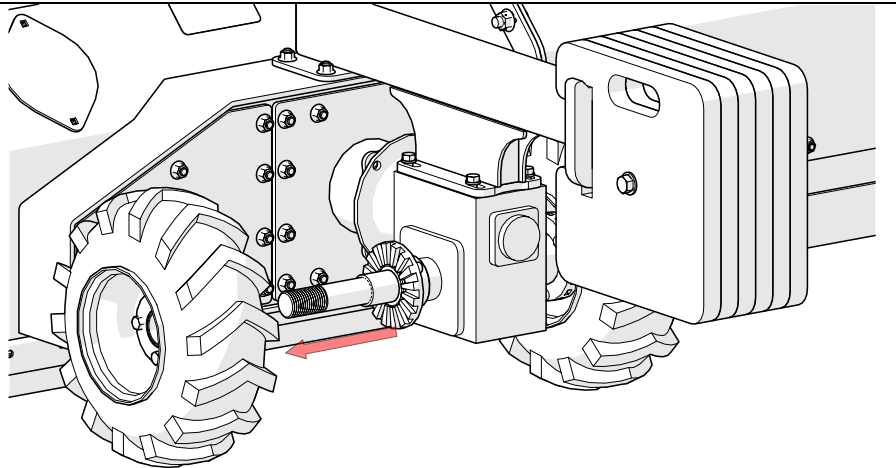
4.3.1 Removing Drive Wheel and Shaft

Disclaimer: Tractor drive units NOT equipped with ratchet drives do NOT need to complete section 4.3.1

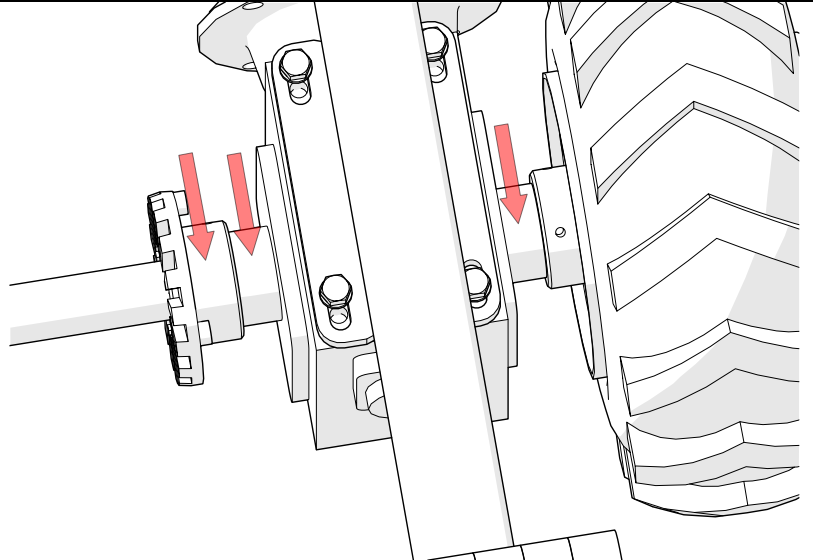
1. Jack up the tail section until the tires are off the ground. Use adjustable wrench (1 7/8") to remove nuts of tractor drive shaft and remove the spring.



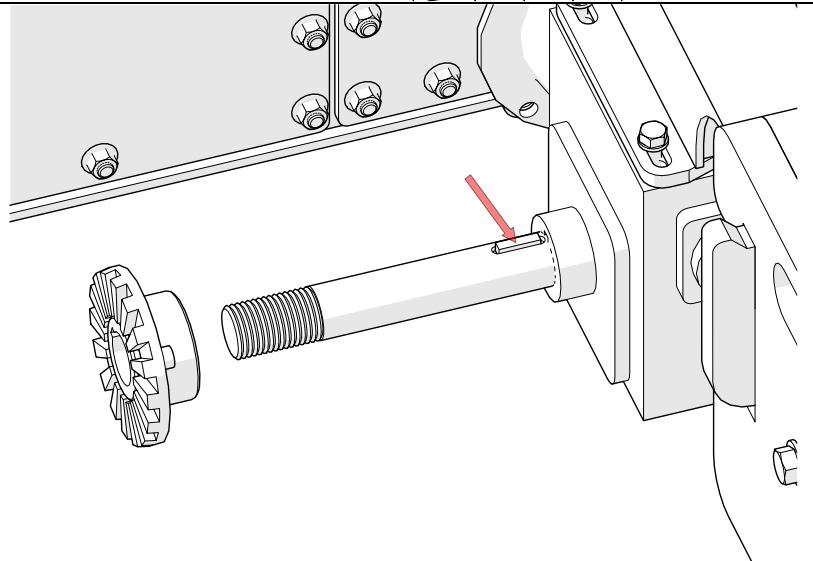
2. Pull the outer tire off with ratchet drive still bolted to tire, along with the bushing located inside the ratcheting assembly.



3. Loosen all three set screws with arrows indicating their locations (5/32 and 1/8 Allen Key).

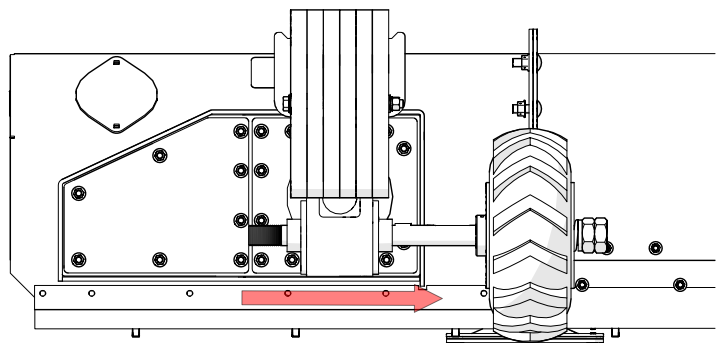


4. Remove the inner ratchet and the keyway located underneath.



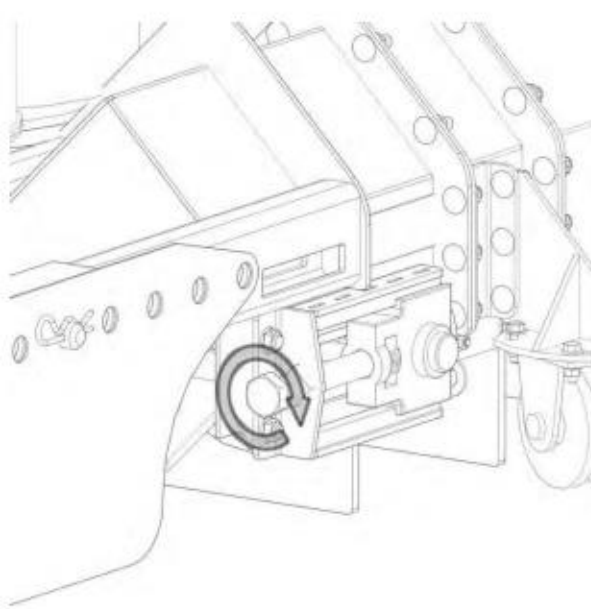
5. Shift the shaft and tire assembly over until the access plate directly beside the tractor drive is clear. This will create enough room to install the Edge Sweep.

If Additional force is required use a dead blow hammer or something that will not mar up the threads on the end of the shaft.



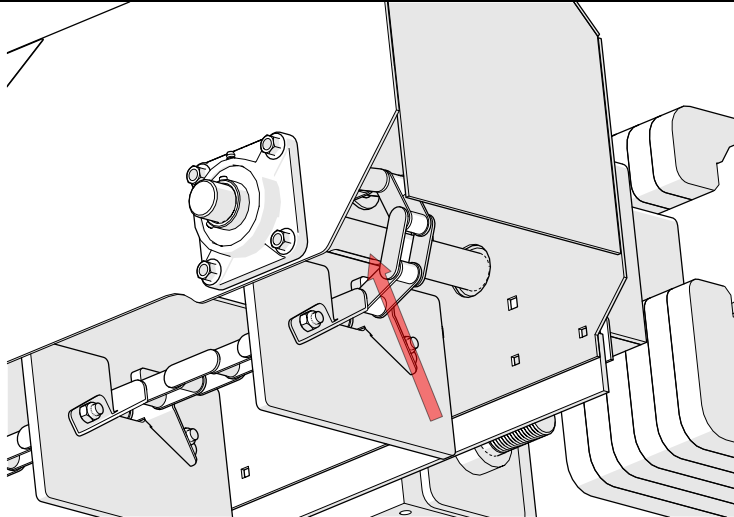
4.3.2 Un-Tensioning Chain and Removing Chain and Tail Shaft

1. Loosen take up bearing assemblies located by the center sump to take pressure off the chain.



2. Loosen and remove split sprocket on the tail shaft of the sweep pictured to the right. There will be a key that must be removed under the split sprocket as well.

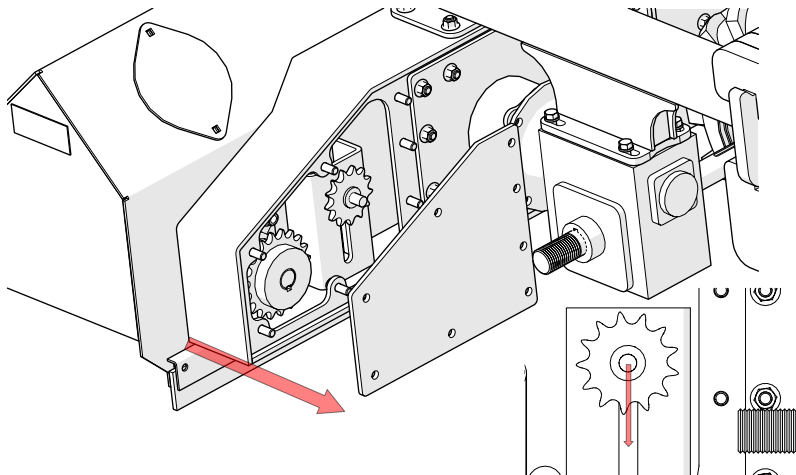
Note: It may help with removal to jack up the front end of the sweep to increase the clearance to the split sprocket and tail shaft



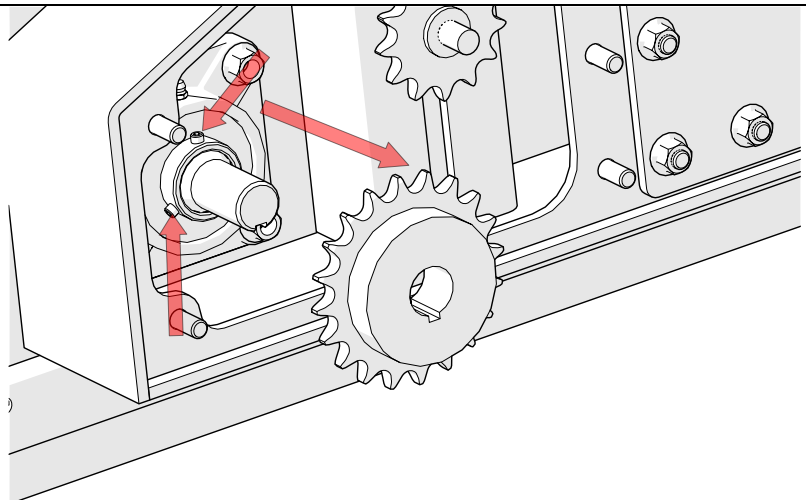
3. Remove the 8 nuts retaining the gear cover plate and gear cover plate exposing the chain drive for the tractor drive (9/16 socket).

Note: gear cover plate can be disposed of.

4. Remove the exposed chain from the tail shaft by loosening the idler sprocket. Then find the master link and disconnect it.

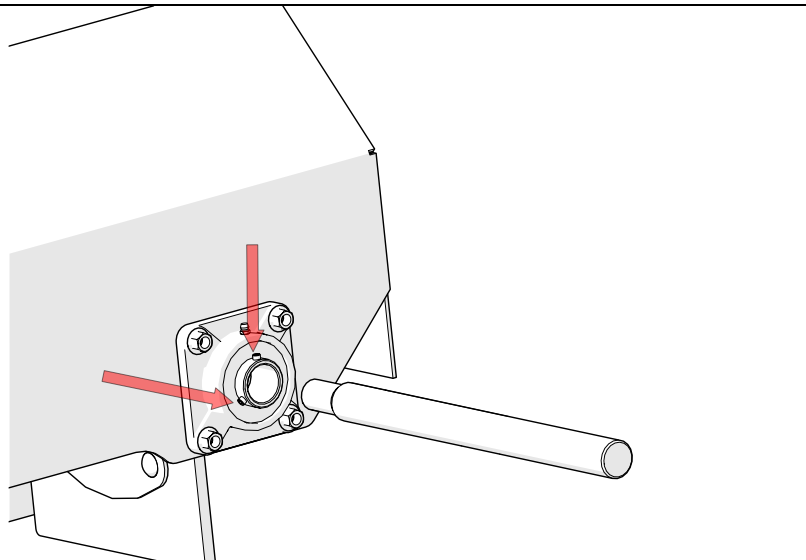


5. Loosen set screws on tail shaft sprocket and remove the sprocket.
6. Remove key for gear.
7. Loosen set screws on tail shaft bearing.



8. Loosen final two set screws on the front side of the sweep for the tail shaft bearing.
9. Remove the tail shaft out of the two bearings. The shaft can be removed in either direction, whichever is easier.

Note: Tail shaft can be discarded after removal, a replacement will be a part of your kit.

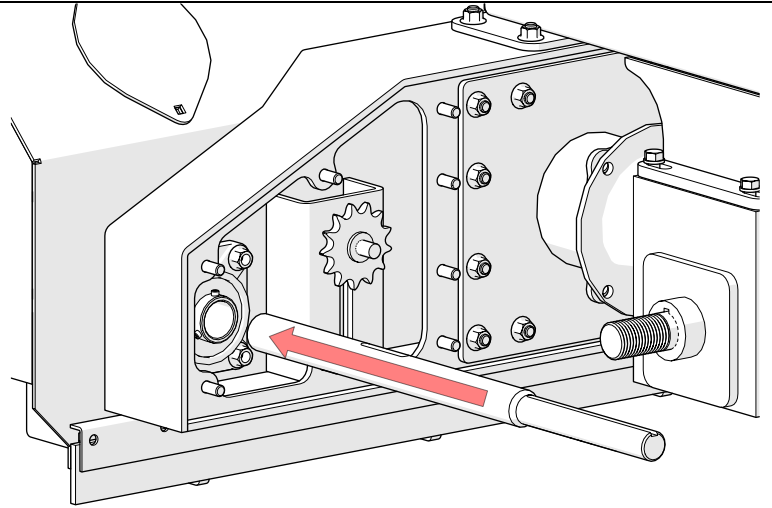


4.3.3 Reinstalling New Shaft and Drive Components

1. Loosen the eight nuts (9/16 socket) on both tail shaft bearings to allow for easier alignment. Insert new shaft through the first bearing that comes with the edge sweep kit.

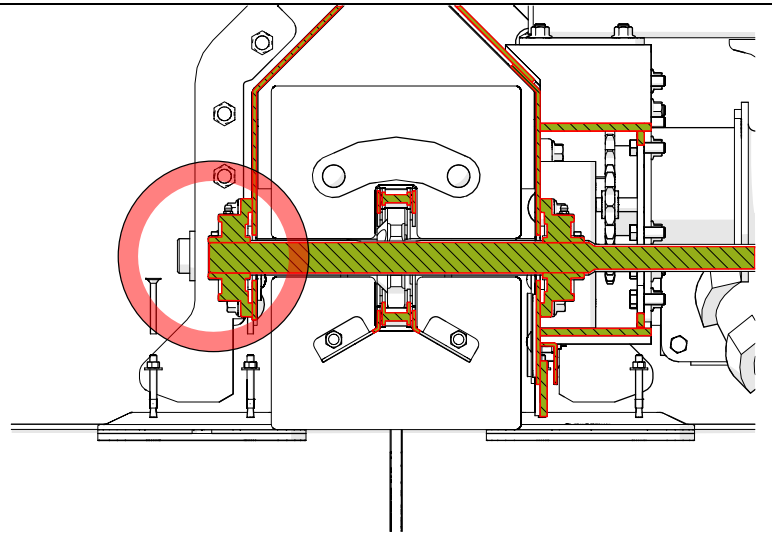
2. When inserting the new shaft, the split sprocket must be reinstalled as well, with the key that fixtured the split sprocket.

Note: Torque (2) 1/4"-20 socket head screws in eight tooth sprocket to 30ft/lbs. secure with blue loctite.
Note: The step in the shaft needs to be facing rearward as shown in diagram.



3. With the split sprocket reattached, install the shaft through the second bearing on the front, the shaft should be roughly flush with the bearing bushing.

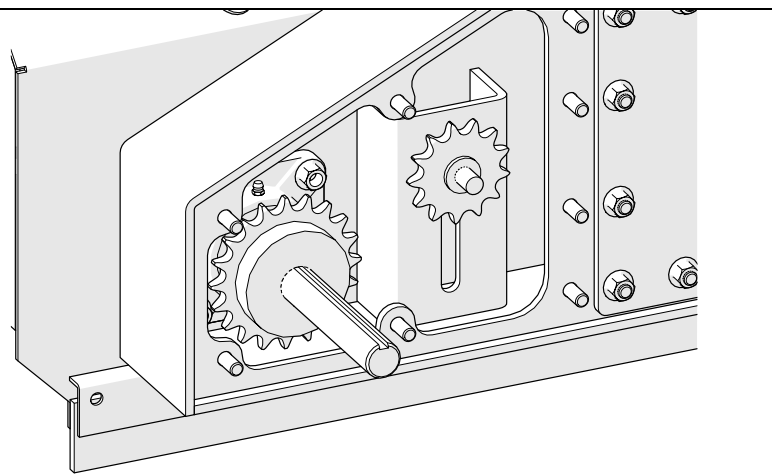
4. The **MOST IMPORTANT** part is that the split sprocket is centered in the sweep housing, so the paddle chain tracks properly. Tighten the split sprocket and reset the paddle chain.



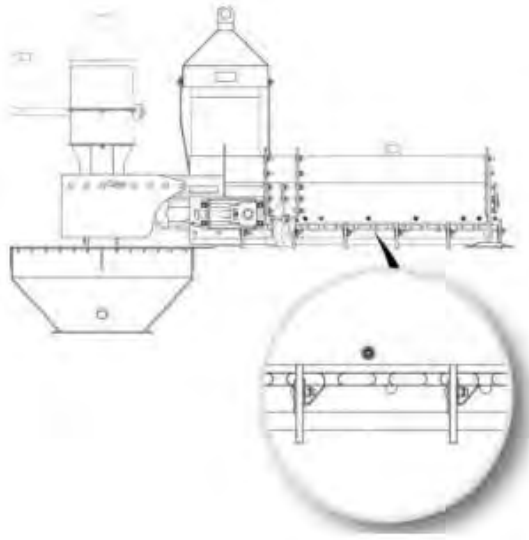
6. Tighten all bearing bolts and set screw bearings.

7. Reinstall chain drive sprocket with key. Tighten set screws once the gear is in plane with the rest of the chain drive system.

8. Reinstall chain and tension unit with the idler sprocket



9. Access the chain via the front opening area where material enters.

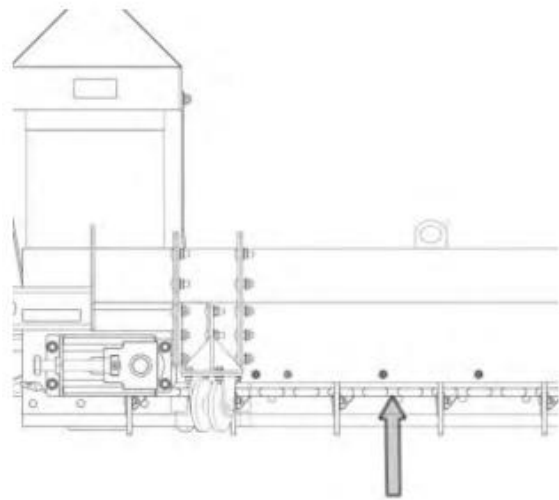


10. At a link between two paddles, apply moderate upward pressure.

The chain should deflect approximately $\frac{3}{4}$ " , or half of the thickness of the chain.

Less deflection indicates that the chain is too tight; more deflection indicates that the chain is too loose.

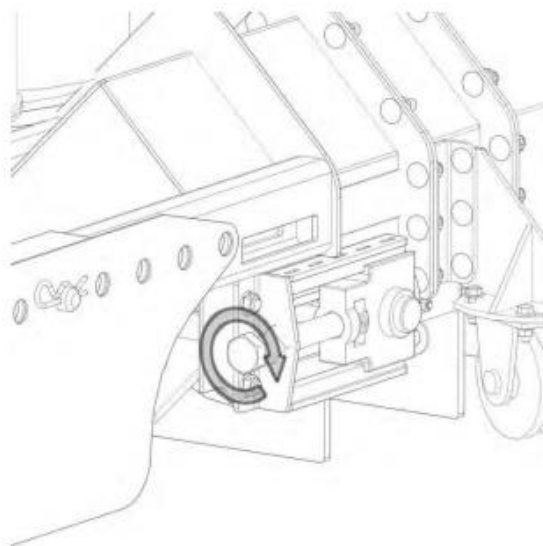
The chain must not lift high enough to contact the sweep housing.



To adjust the chain tension, use the two take-up assemblies at the head of the bin sweep.

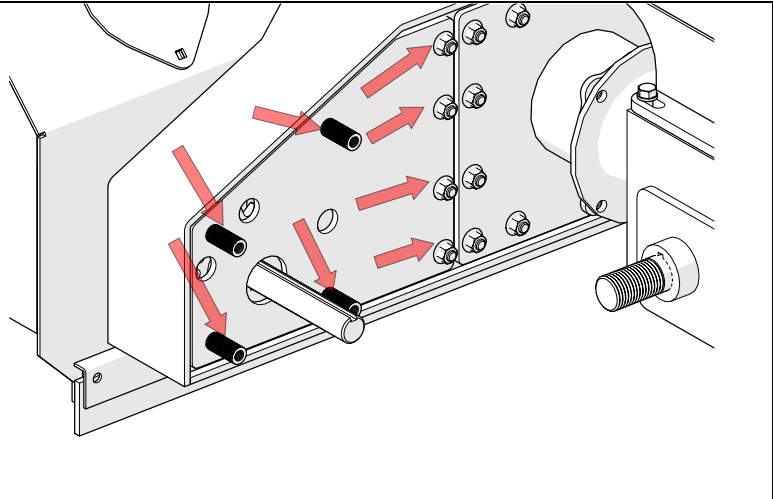
11. Loosen the locking nuts on the adjuster bolt. Turn the adjuster bolt clockwise to increase chain tension or counterclockwise to reduce chain tension.

12. Ensure that both adjusters are equally adjusted to maintain proper sprocket and chain engagement. Once the sweep is assembled and ready for operation, run the sweep for 5 minutes. Check the chain tension again and adjust as needed to achieve $\frac{3}{4}$ " of deflection.

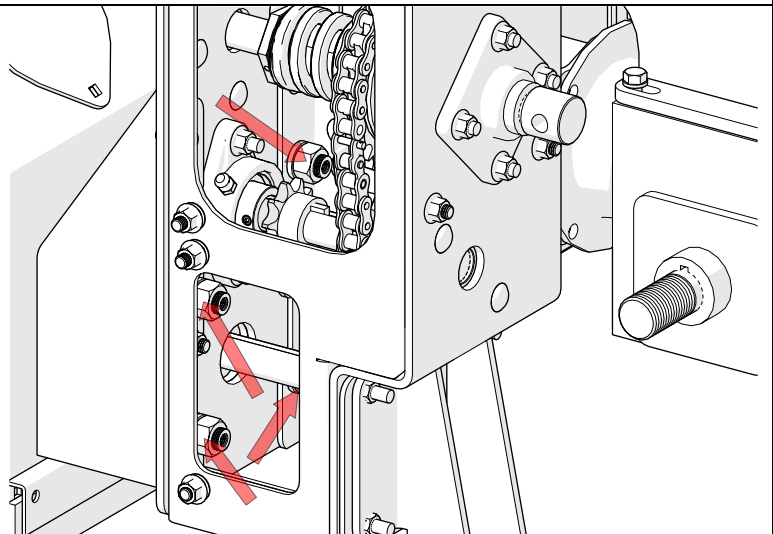


4.3.4 Installing Gearbox

1. Install updated chain gear cover and fasten it with four 3/8 nuts, and four threaded standoffs to hand tight as shown to the right. Refer to preventative maintenance (section 6) for nut torque callouts.



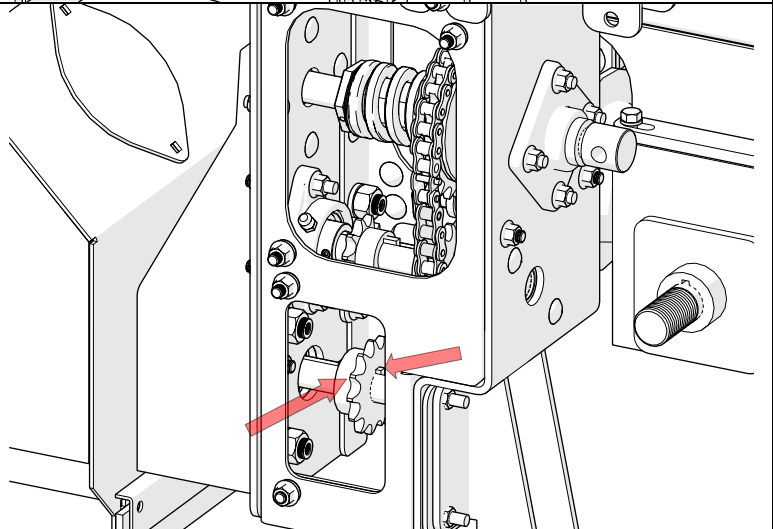
2. Remove wall side access panels
3. Install gearbox, using the 5/8-11 nuts and split washer provided. Torque these nuts on the threaded standoffs to the torque rating for 3/8-16 nuts.



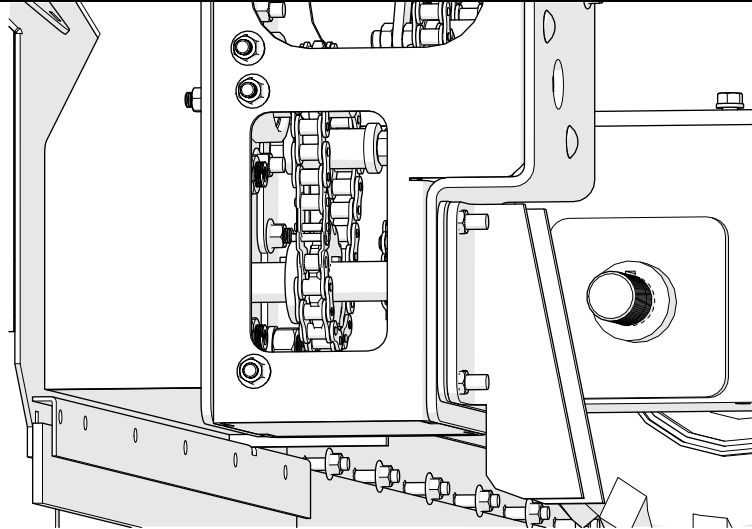
4. Install sprocket provided, make sure the bottom sprocket is in line with the rear sprocket on the intermediate shaft. The sprocket will have two set screws that need to be tightened as well (5/32 Allen key).

Note: Front access plate with zero entry stands can be removed for more access.

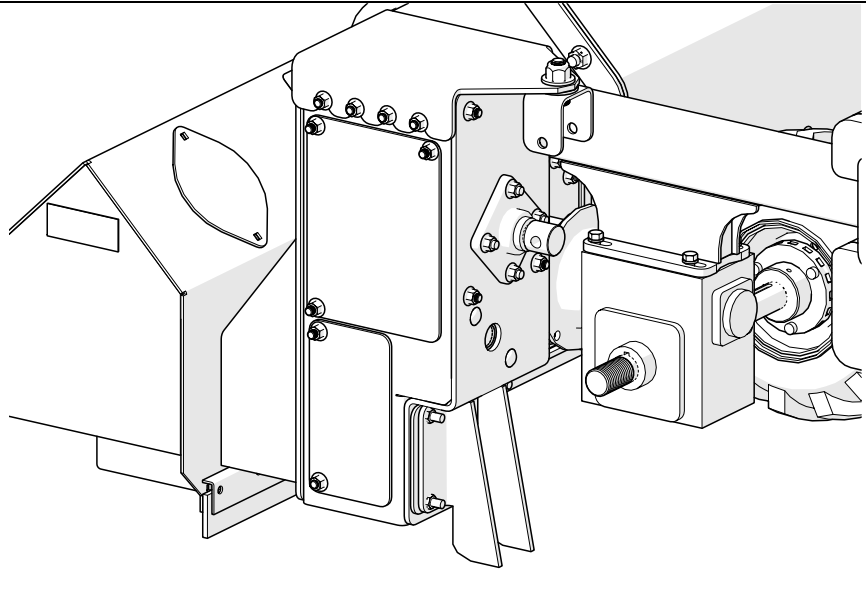
(size in picture may not reflect gear provided with kit depending on sweep ratio)



5. Install bottom chain into gearbox, ensuring that the chain goes AROUND the outside of the chain tensioner. If you are unable to get the master link to connect, use a screwdriver or something you can pry with the pull the idler down towards the floor, this will relieve pressure on the chain and allow for connection.

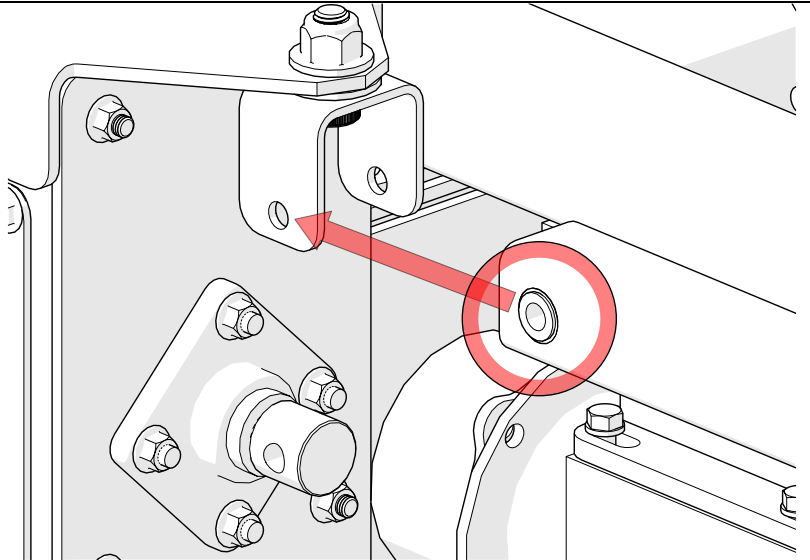


6. Install covers on gearbox.



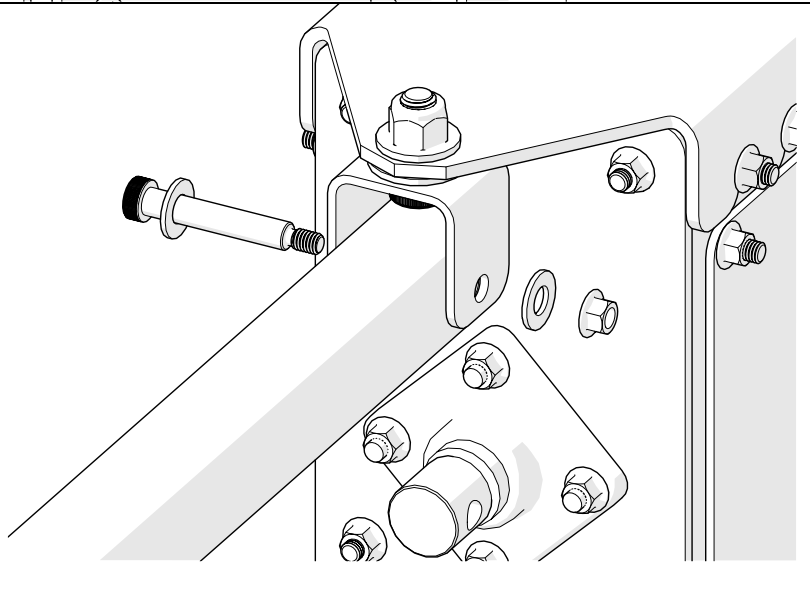
4.3.5 Installing Edge Sweep Brush Head Assembly

1. Install brush head assembly by moving the tube into the yoke. Make sure the flanged bushings are both in the bore of the tube (circled in picture).



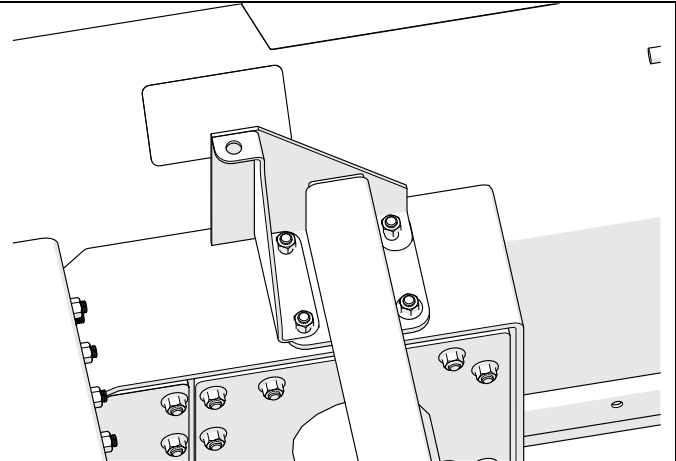
2. Use the provided hardware to attach the tube into the yoke.
1 - 2.75 X 1/2 Shoulder Bolt
2 - 1/2 Washer
1 - 3/8-16 Flange Nut

3. After the hardware is tightened make sure both horizontal and vertical movement can happen at the joint, and that nothing is overtightened. This will include contact with the floor, moving the brush head off the floor, contacting the wall with the brush, and moving the brush away from the wall.

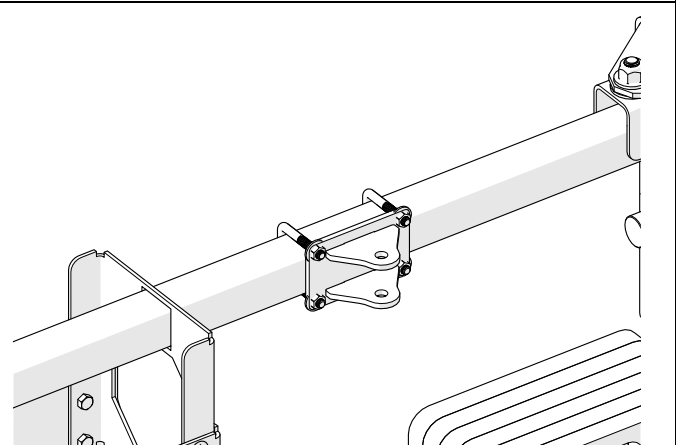


4.3.6 Installing Compression Arm

1. Install the compression arm mount using the three existing studs on the weight bracket.



2. Install the compression arm mount loosely with the square U bolts. In the next steps this mount will have to slide, so the location at the step is not critical.



3. Install the compression arm assembly. Use the provided hardware to connect the stationary and sliding mount.

Note: On the sliding mount make sure not to overtighten the pivot bolt and nut so it can still pivot and work properly

3. Install the Compression Arm Assembly. Use the provided hardware to connect the stationary and sliding mount.

1 – ½-13 x 1.50 Bolt

1 – ½ Lock Washer

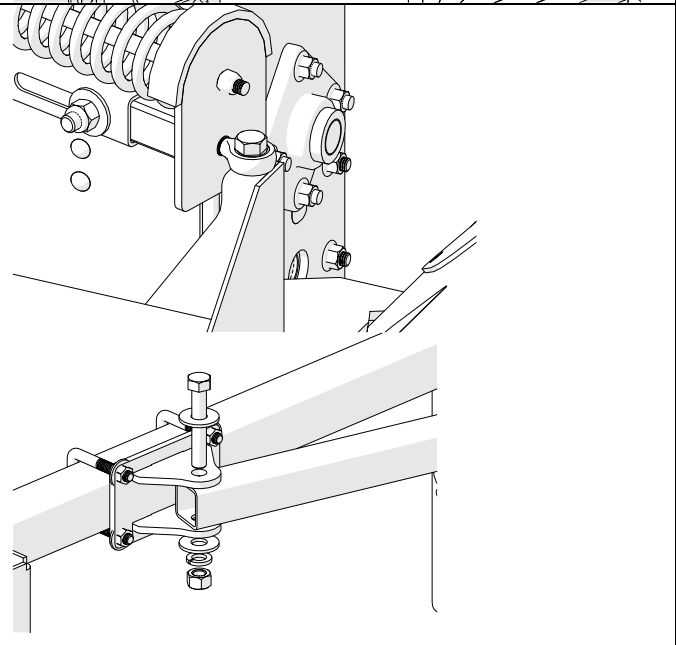
1 – ½ Nut

1 – ½-13 x 3.00 Bolt

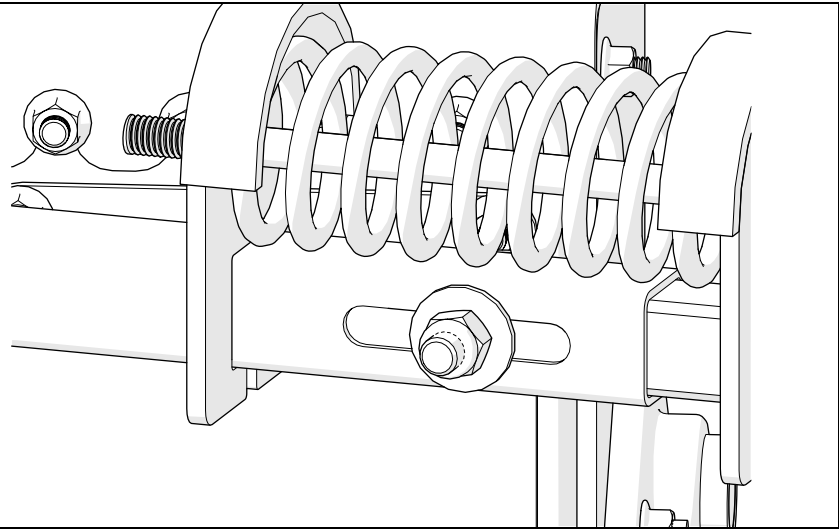
2 – ½ Washer

1 – ½ Lock Washer

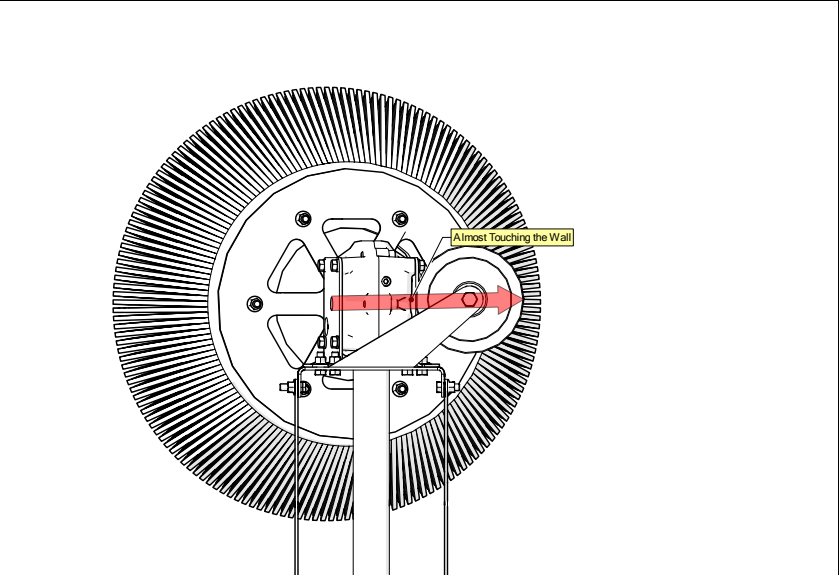
1 – ½ Nut



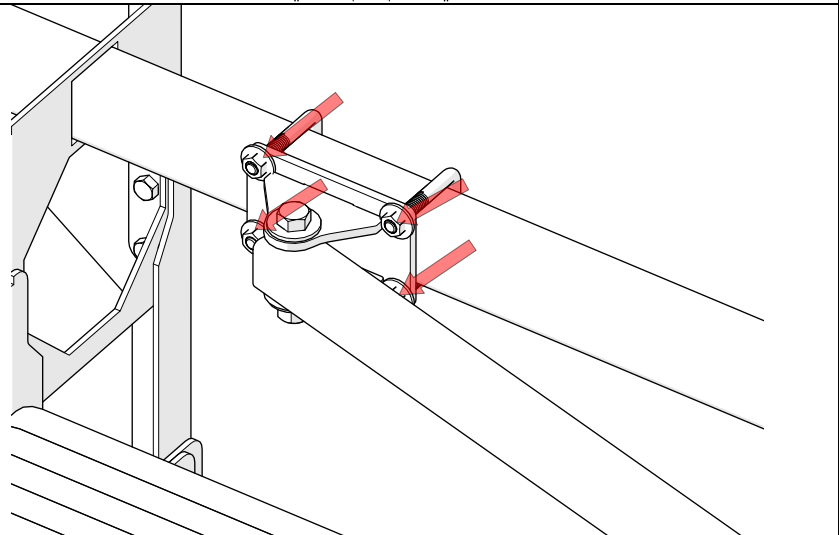
4. Set the pressure against the wall. Not all bins are necessarily perfect circles, which means the Edge Sweep will be making up for the change in distance from the sweep, as well as going around any protrusions from the wall.



5. Referring to the picture above, run the compression nut in until the slide nut is roughly halfway through the slot.

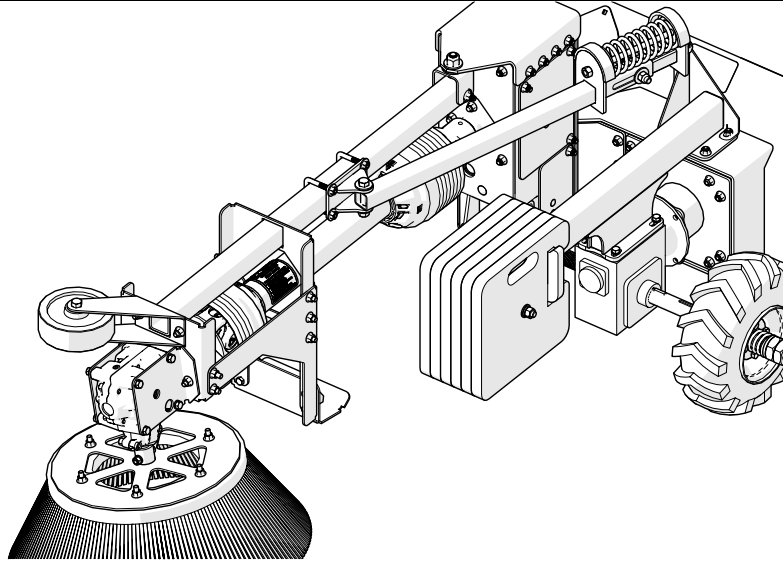


6. Push the Edge Sweep against the wall until the idler wheel almost touches the wall. Then tighten the square U bolts to hold the slide mount in place. Release the compression nut initially tensioned until it's not holding the pressure of the spring anymore.

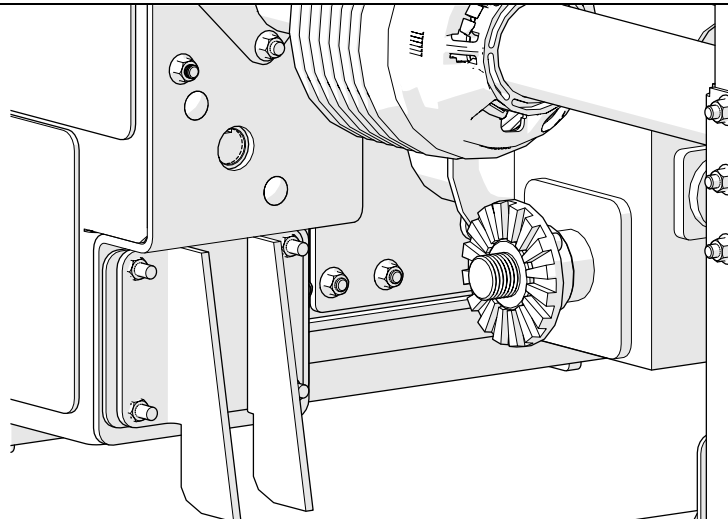


4.3.7 Installing PTO Shaft and Final Components

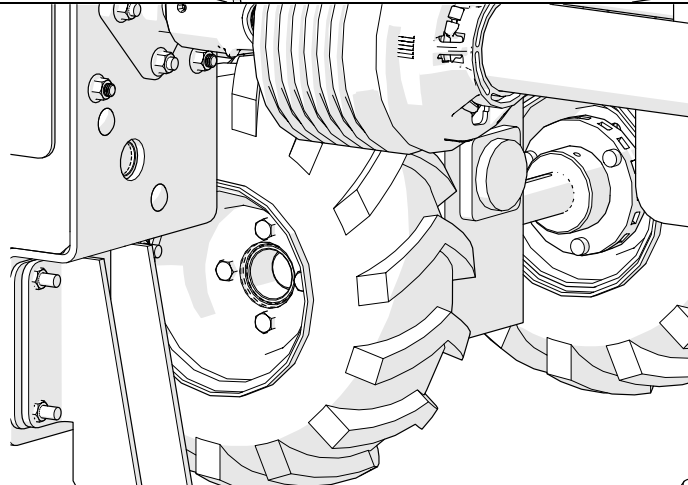
1. The PTO shaft has the six spline quick connect on the brush side, and a shear bolt on the gearbox side. Collapse the unit and thread it through the grain loading support. Attach connected safety chain to the main support tube to prevent the safety guards from rotating.



2. Assemble the inner ratchet on the Edge Sweep side tractor drive including key.



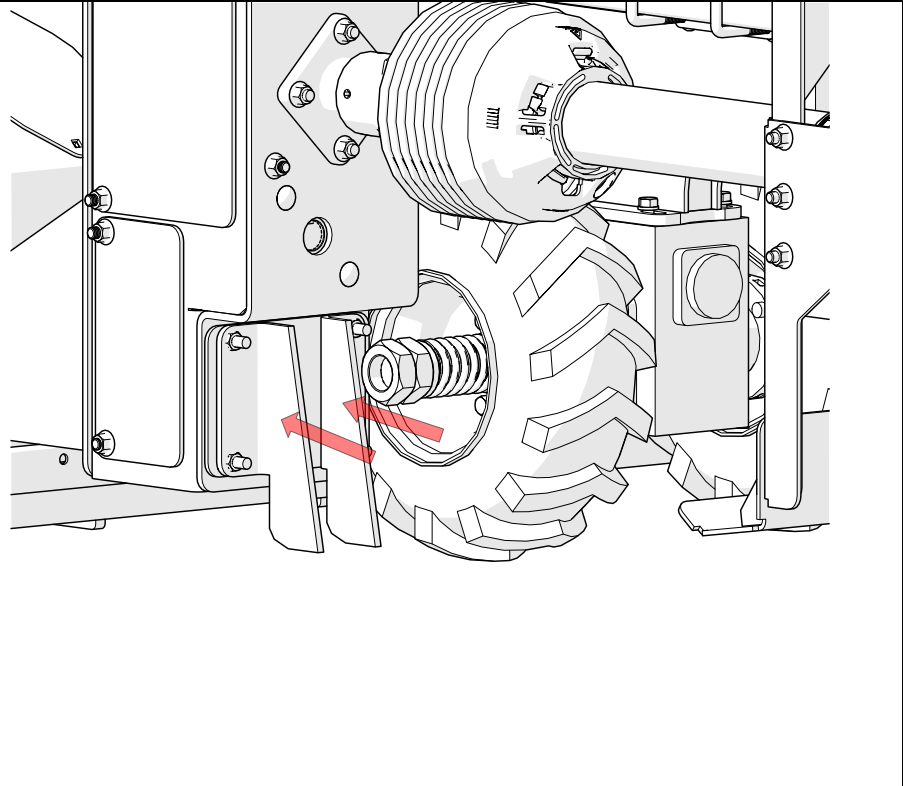
3. Align tire and outer ratcheting assembly including the bushing with the shaft.



4. Refer to diagram in tile below for reinstalling ratchet assembly and tire. Springs have specific force required to operate properly, which is explained in the tile below.

Note: If the fit is too tight, remove the zero-entry pad supports from the front of the edge sweep to gain more room (red arrow).

Reattach zero entry pad supports if they were removed for tire installation.



Remove all tools, equipment, and anything being used to hold the sweep up during work being done.

SPRING LENGTH NEEDS TO BE COMPRESSED TO 2.00" FOR 60 FT/LBS

SECTION A-A

ONCE SPRING IS SET A SECOND JAMNUT IS TO BE INSTALLED TO SECURE THE FIRST NUT.

FOC 1. IF EQU NOT BETV BRA

INSTALLATION NOTES:

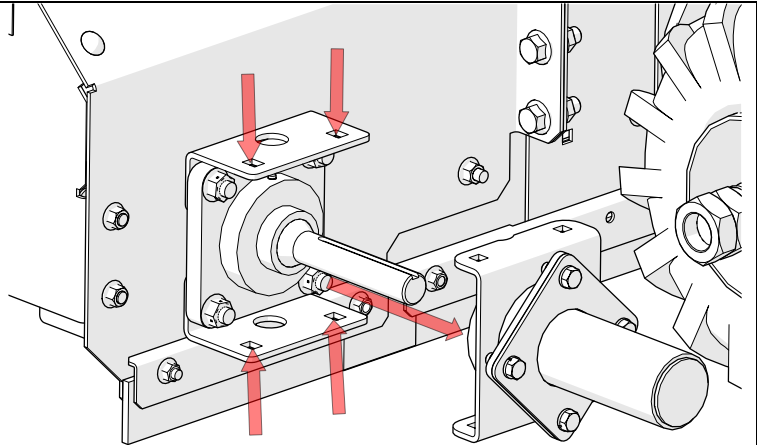
1. INSERT 2" KEY AND INSTALL/CENTER SHAFT INTO GEARBOX.
2. KEY AND INSTALL INNER RATCHET JAW AND TIGHTEN SET SCREWS
3. PRESS BRONZE BUSHING INTO OUTER RATCHET. INSTALL ONTO SHAFT ATTACHED TIRES. SECURE WITH FASTENERS
4. INSTALL SPRING, WASHERS & JAMNUTS. SEE ABOVE NOTE FOR SPRING SETTING.

4.4 DPS G2 Paddle Sweep Installation

4.4.1 Installing Gearbox

1. Remove the tail shaft cover attached with four bolts (9/16 socket).

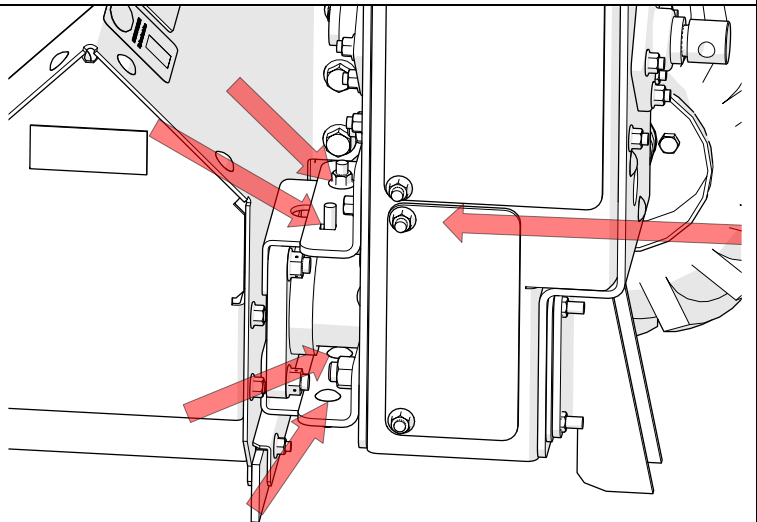
Note: This two-piece cover can be discarded, it will not be used anymore.



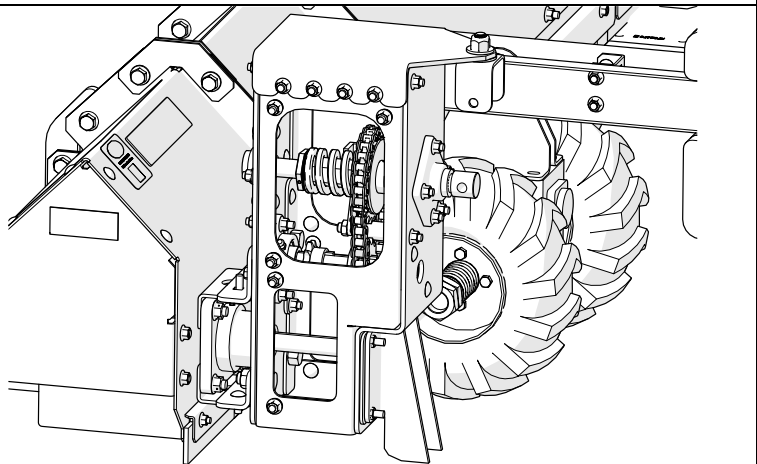
2. Use the four exposed mounting slots to mount the gearbox onto the sweep tail section. The gearbox flanges sit on top on the tail section flanges.

Snug up the sweep as close as it will go to the tail section.

Also ensure that the gearbox is parallel with the sweep in the vertical direction. It may be helpful to have a second set of eyes look at it from down the sweep closer to the sump to ensure alignment.

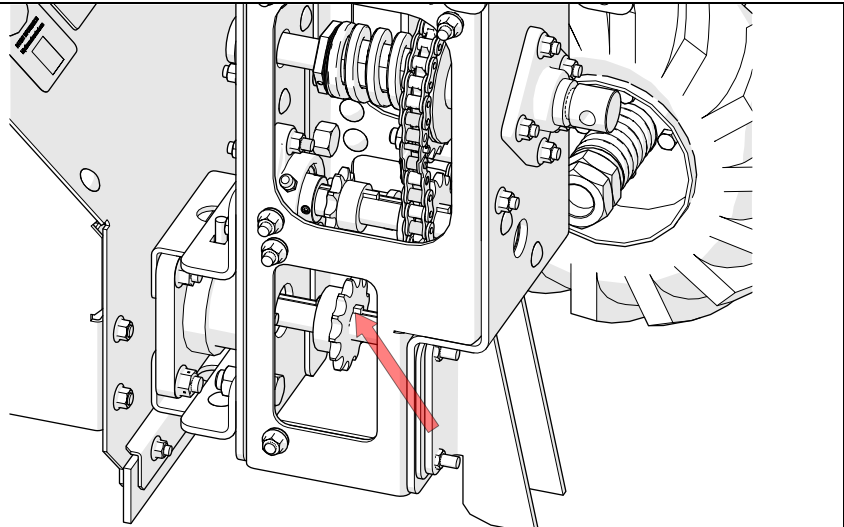


3. Remove gearbox covers on the wall side.

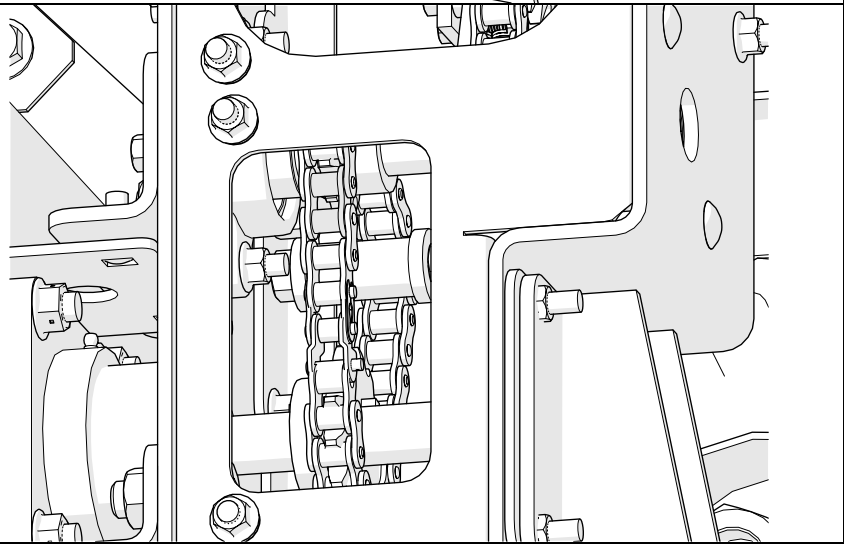


4. Install sprocket provided, make sure the bottom sprocket is in line with the rear sprocket on the intermediate shaft. The sprocket will have two set screws that need to be tightened as well.

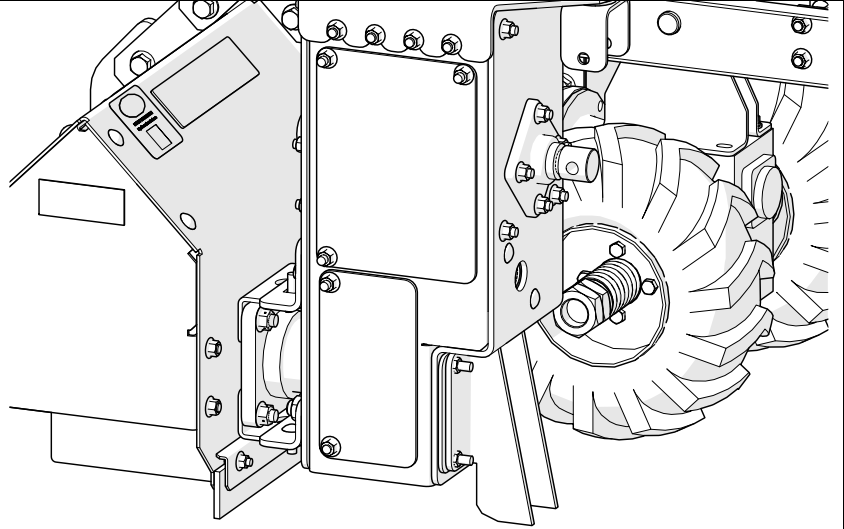
(Size in picture may not reflect gear provided with kit depending on sweep ratio)



5. Install bottom chain into gearbox, ensuring that the chain goes AROUND the outside of the chain tensioner. If you are unable to get the master link to connect, use a screwdriver or something you can pry with the pull the idler down towards the floor, this will relieve pressure on the chain and allow for connection.

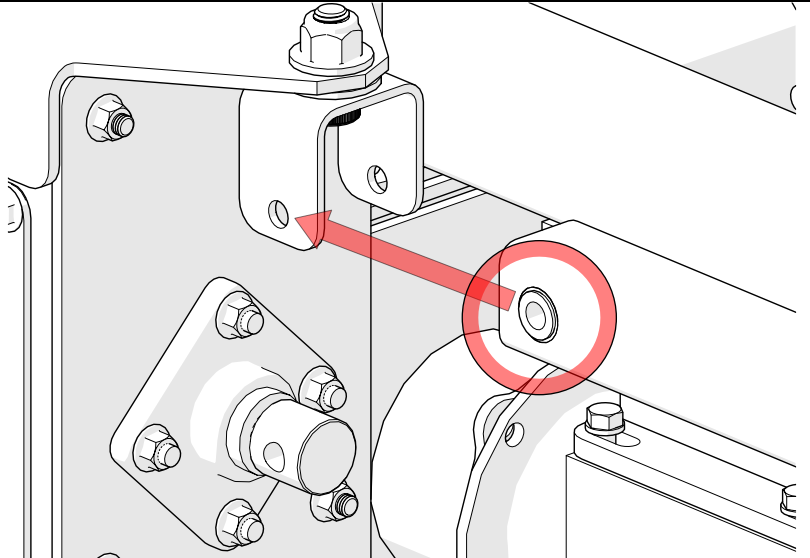


6. Reinstall gearbox covers.



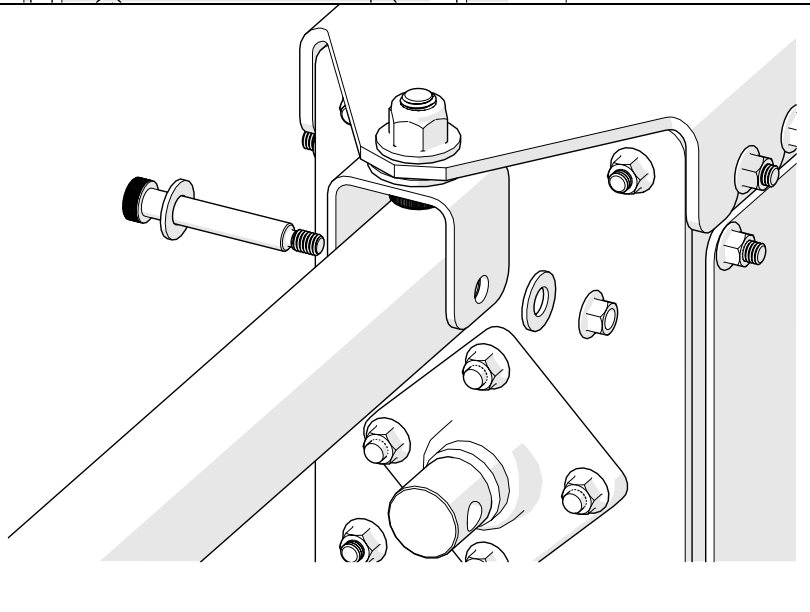
4.4.2 Installing Edge Sweep Brush Head Assembly

1. Install brush head assembly by moving the tube into the yoke. Make sure the flanged bushings are both in the bore of the tube (circled in picture).



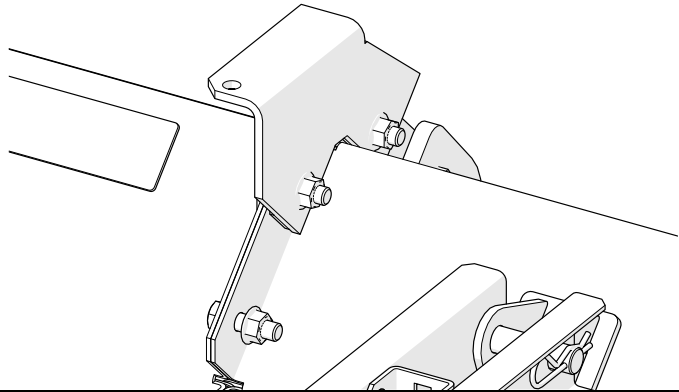
2. Use the provided hardware to attach the tube into the yoke.
1 - 2.75 X 1/2 Shoulder Bolt
2 - 1/2 Washer
1 - 3/8-16 Flange Nut

3. After the hardware is tightened make sure both horizontal and vertical movement can happen at the joint, and that nothing is overtightened. This will include contact with the floor, moving the brush head off the floor, contacting the wall with the brush, and moving the brush away from the wall.

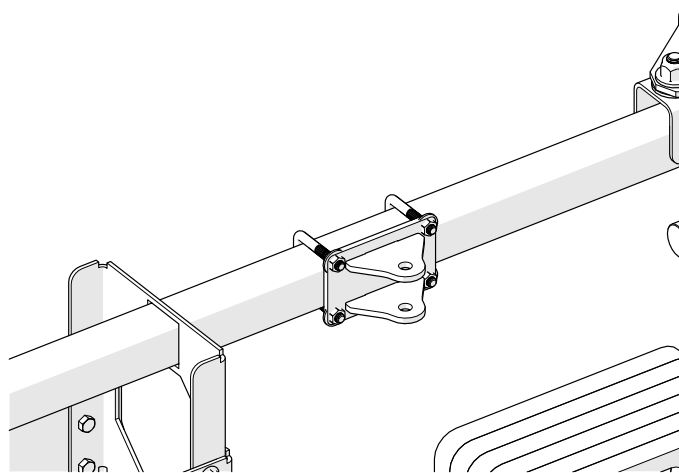


4.4.3 Installing Compression Arm

1. Install the compression arm sweep side mount with the existing hardware on the peak (two bolts and nuts).

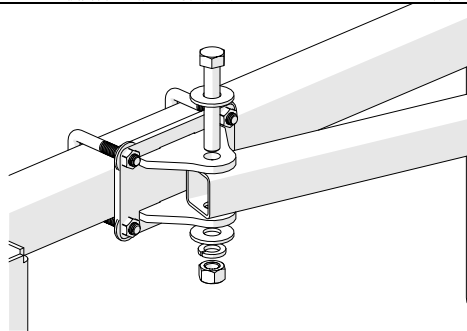


2. Install the compression arm mount loosely with the square U bolts. In the next steps this mount will have to slide, so the location at the step is not critical.

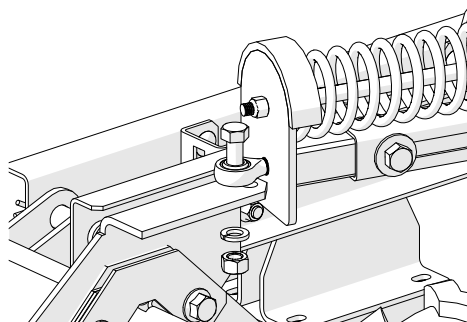


3. Install the Compression Arm Assembly. Use the provided hardware to connect the stationary and sliding mount.

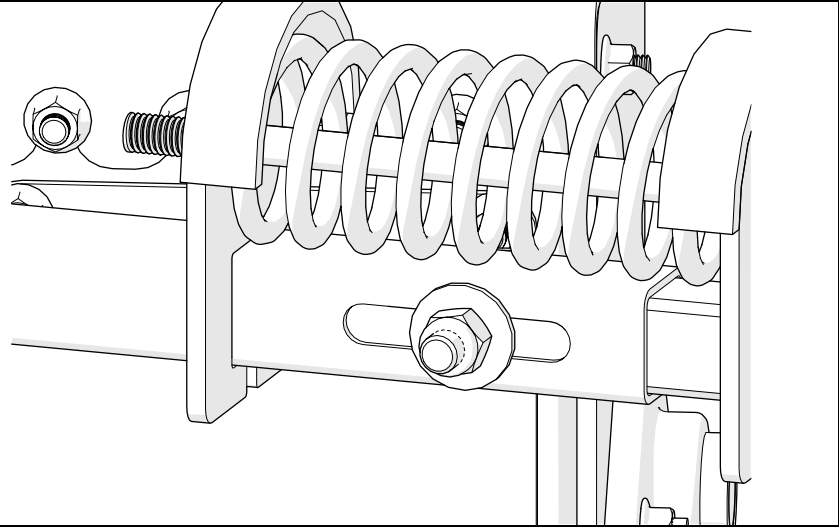
- 1 – ½-13 x 3.00 Bolt
- 2 – ½ Washer
- 1 – ½ Lock Washer
- 1 – ½ Nut



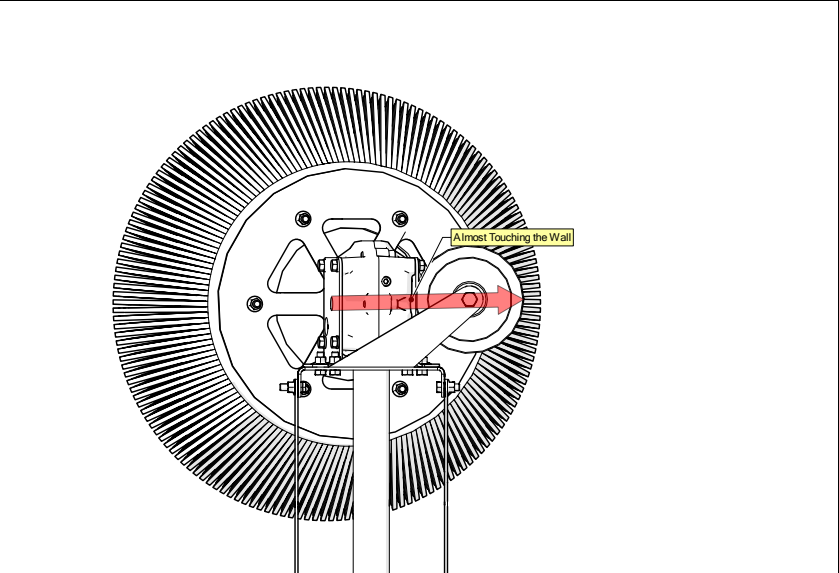
- 1 – ½-13 x 1.50 Bolt
- 1 – ½ Lock Washer
- 1 – ½ Nut



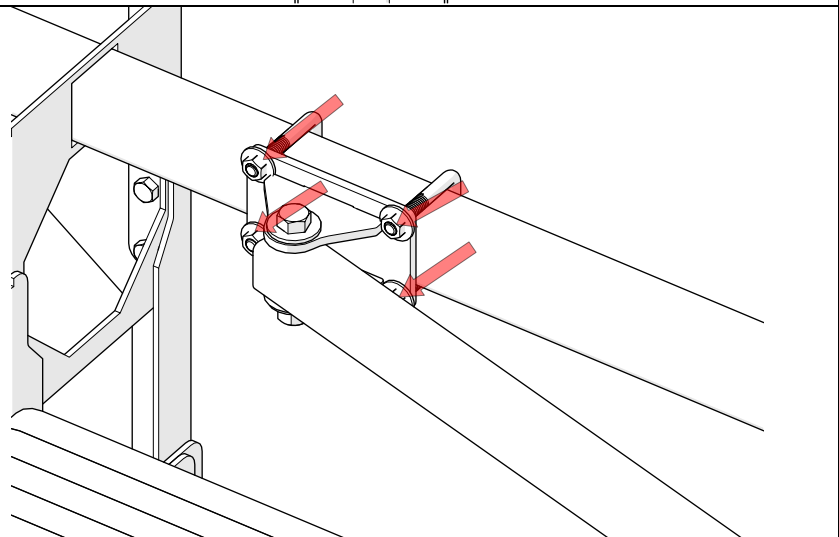
4. Set the pressure against the wall. Not all bins are necessarily perfect circles, which means the Edge Sweep will be making up for the change in distance from the sweep, as well as going around any protrusions from the wall.



5. Referring to the picture above, run the compression nut in until the slide nut is roughly halfway through the slot.

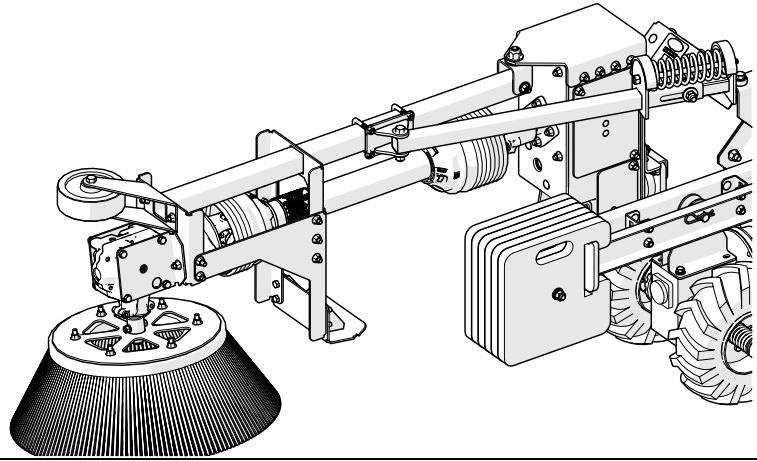


6. Push the Edge Sweep against the wall until the idler wheel almost touches the wall. Then tighten the square U bolts to hold the slide mount in place. Release the compression nut initially tensioned until it's not holding the pressure of the spring anymore.



4.4.4 Installing PTO Shaft and Final Components

1. The PTO shaft has the six spline quick connect on the brush side, and a shear bolt on the gearbox side. Collapse the unit and thread it through the grain loading support. Attach connected safety chain to the main support tube to prevent the safety guards from rotating.



Remove all tools, equipment, and anything being used to hold the sweep up during work being done.

4.5 Final Check

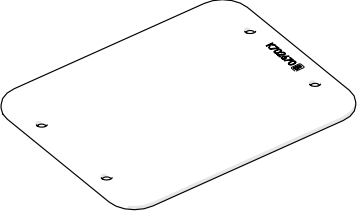
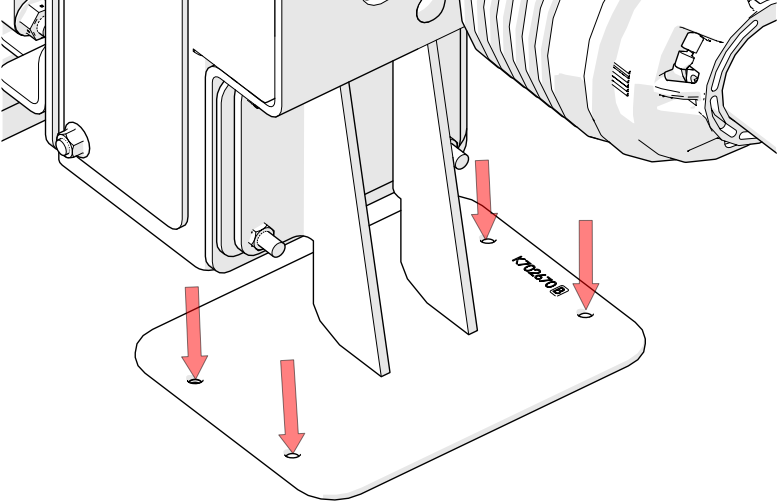
- Check that all covers, and PTO shaft guards are in place
- Check for tools or anything used in installation is clear of bin and operating area

4.6 Initial Operation

4.6.1 Adjusting Initial Torque

- If after initial operation you may notice, there is stuttering or hesitation in the brush head from the slip clutch slipping. This means the Edge Sweep's torque must be adjusted before use and burial.
 - Remove top access panel closest to the wall of the bin
 - Use Allen wrench to loosen, but not remove, set screws on tensioner nut
 - Use 2-inch wrench, or adjustable wrench to tighten tensioner nut one full turn
 - Re-tighten set screws
 - Install cover
 - Test new adjusted torque by running edge sweep again, if it is hesitating or slipping on flat wall with no obstructions, the process must be repeated
 - If the brush head is hesitating or slipping on bin obstructions, this is normal
 - **NOTE:** Over-torqueing tensioner nut will result in improper Edge Sweep operation that may result in poor performance or broken parts
- Run the sweep for 5 minutes. Check the chain tension again and adjust as needed to achieve $\frac{3}{4}$ " of deflection.

4.7 Setting Zero Entry Pad

<p>1. After the sweep with the edge sweep has made at least one complete pass verifying everything is operating properly, the zero-entry pad for the edge sweep must be installed.</p>	
<p>2. Bring the sweep up until it is sitting over all zero entry pads and where it would be placed for burial.</p> <p>If there are no zero entry pads present in your bin, park the sweep where you would normally park it, and use that for a reference to place the edge sweep zero entry pad.</p>	
<p>3. Mark all four zero entry pad holes with the pad centered on the Edge Sweep supports.</p>	
<p>4. Move the sweep forward and install the pad with the four bolts provided for the given floor type.</p> <p>NOTE: There must be 1/8" of clearance between the supports and the zero-entry pad. Failure to do so will cause damage to the Edge Sweep, the Sweep, or both.</p>	

5 Operation

5.1 First Time Operation

- If this is the first time the sweep is being used, refer to your sweep manual for proper first-time operation, along with all other operations after.
- The edge sweep at this point is ready for operation.
- Going forward refer to section six, *Preventative Maintenance*, for required maintenance and items that may need adjustment after use.

6 Preventative Maintenance

- All Preventative Maintenance can be followed using the service schedule below
- This service is used in addition to the service required for the sweep, make sure to follow both manuals for proper maintenance
- Service Schedule

Service Description	After Initial Use	After 4 Operations or Every Year	After 12 Operations or Every 3 Years
Check oil level in Brush Head Gearbox	X	X	X
Check Hardware	X	X	X
Grease Fittings		X	X
Check Wall Contact		X	X
Check Slip Clutch Torque		X	X
Clean Off Excess Debris			X
Check Brush Head Wear			X
Check Chain tensioners			X
Oil Chain			X

- SAE Recommended Torque Settings

Size	Grade 5				Grade 8			
	Lubricated		Dry		Lubricated		Dry	
	N*m	Lb-ft	N*m	Lb-ft	N*m	Lb-ft	N*m	Lb-ft
1/4"	9.5	7	12	9	13.5	10	17	12.5
5/16"	20	15	25	18	28	21	35	26
3/8"	35	26	44	33	50	36	63	46
7/16"	55	41	70	52	80	58	100	75
1/2"	85	63	110	80	120	90	150	115
9/16"	125	90	155	115	175	130	225	160
5/8"	170	125	215	160	215	160	300	225
3/4"	300	225	375	280	425	310	550	400

- Gearbox Oil Level – The center plug on the gearbox indicates the level needed for proper gear lubrication.
- Total lubrication when changed is 14 ounces of 80W90

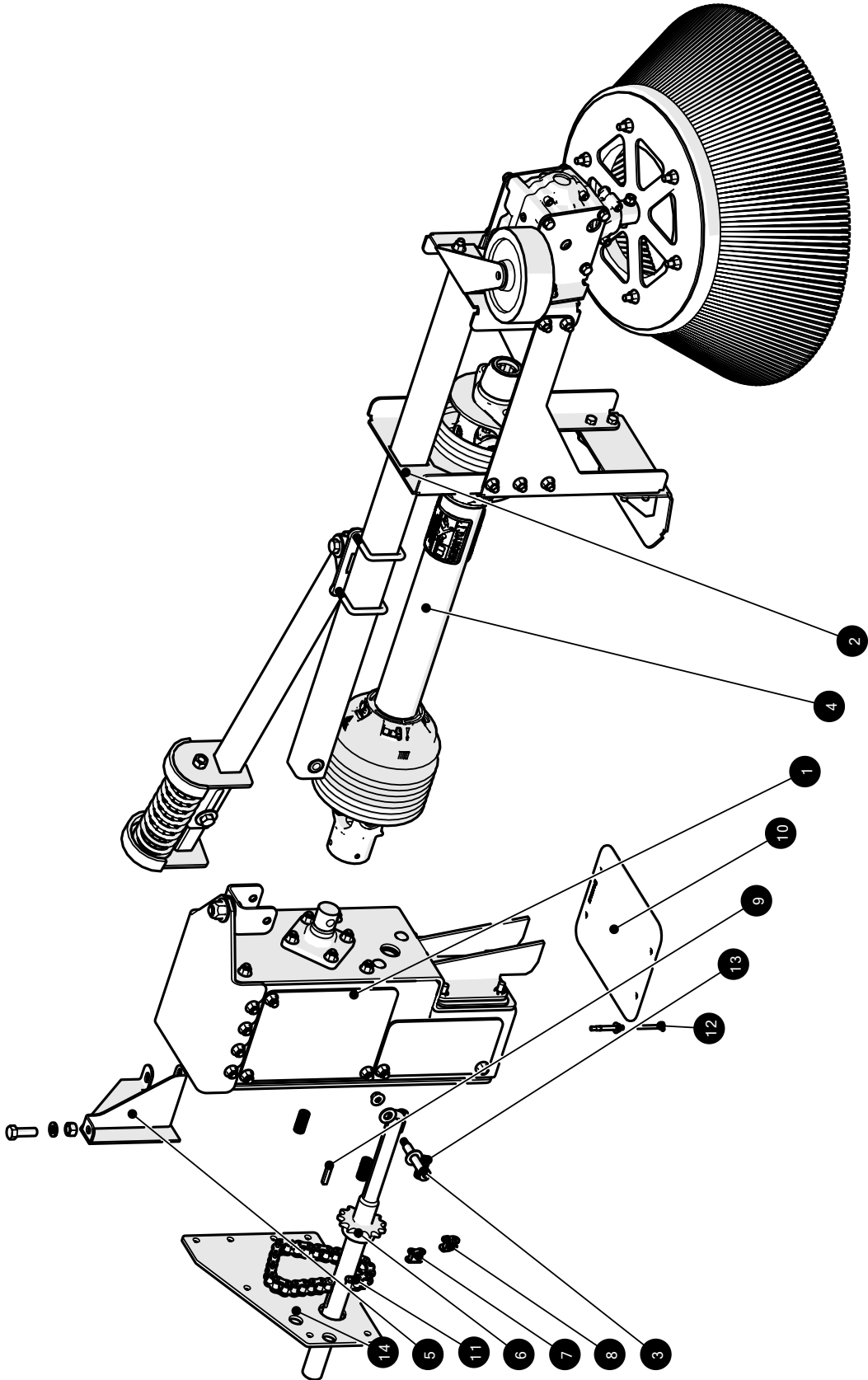
7 Trouble Shooting

Problem	Solution
1. Brush head is hesitating or not spinning when out of grain pile	Slip Clutch needs to be adjusted. Tighten slip clutch nut (1) turn Check chain and sprockets for missing components
2. Shear pin on brush head is breaking	Slip Clutch needs to be adjusted. Loosen slip clutch nut (1) turn
3. Edge Sweep is not contacting wall	Refer to section 4.3.6 for Daay Bin Paddle Sweeps or 4.4.3 for DPS G2 Sweeps for compression arm adjustment, pressure needs to be increased when set against wall
4. Edge Sweep is not clearing obstacle on wall	Refer to section 4.1 to ensure that the obstacle doesn't exceed allowable size of obstacles Loosen the compression arm to allow for more travel away from the wall
5. Chain is hopping inside of gearbox	Check chain tensioners and ensure both springs are intact. Order more springs if springs are broken Chain has stretched beyond what the idler can take up, replace chain Torque is set too high on slip clutch, loosen slip clutch nut (1) turn
6. Brush head assembly support is dragging on ground during operation	Brush head is wearing out, replace brush head

8 Parts Diagrams

PARTS DIAGRAM & LIST

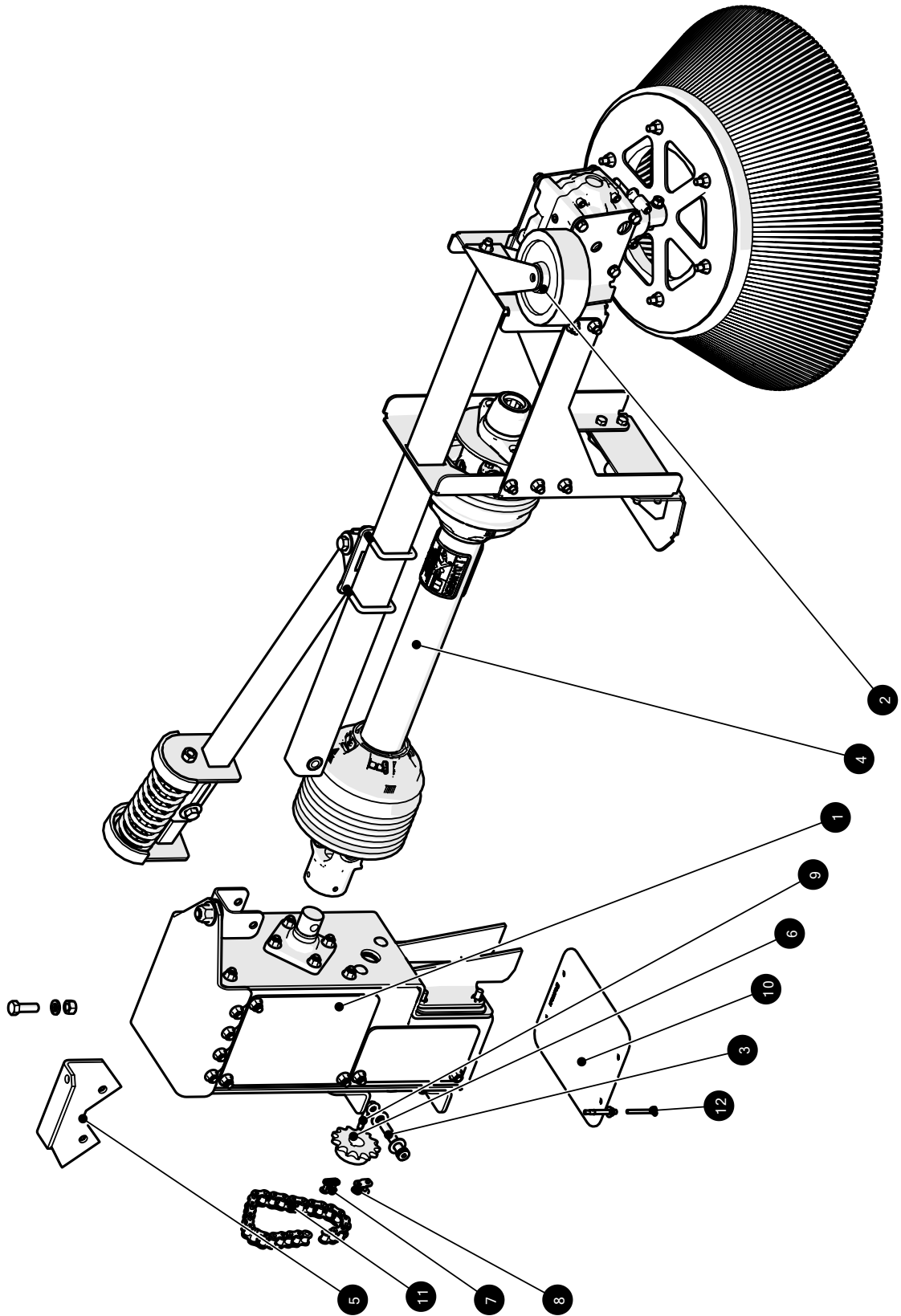
G1 EDGE SWEEP (712606 - 712611)			
ITEM	PART #	DESCRIPTION	QTY
1	712606	ASSY - GEARBOX G1 5:1/ EDGE SWEEP	1
1	712607	ASSY - GEARBOX G1 7.5:1/ EDGE SWEEP	1
1	712608	ASSY - GEARBOX G1 10:1/ EDGE SWEEP	1
1	712609	ASSY - GEARBOX G1 15:1/ EDGE SWEEP	1
1	712610	ASSY - GEARBOX G1 20:1/ EDGE SWEEP	1
1	712611	ASSY - GEARBOX G1 30:1/ EDGE SWEEP	1
2	712033	ASSY - EDGE SWEEP	1
3	712147	BOLT - SHOULDER .50 X 2.75LG ALLOY STEEL	1
4	712180	SHAFT - PTO EDGE SWEEP	1
5	712174	WLDT- COMPRESSION ARM MOUNT	1
6	686195	5:1 SPROCKET - #50 10 TOOTH 1.00 BORE	1
6	687973	7.5:1 SPROCKET - #50 14 TOOTH 1.00 BORE	1
6	687973	10:1 SPROCKET - #50 14 TOOTH 1.00 BORE	1
6	686198	15:1 SPROCKET - #50 14 TOOTH 1.00 BORE	1
6	707369	20:1 SPROCKET - #50 14 TOOTH 1.00 BORE	1
6	707369	30:1 SPROCKET - #50 14 TOOTH 1.00 BORE	1
7	686186	#50 CONNECTOR LINK	1
8	686187	#50 HALF LINK	1
9	686358	.250 X .250 X 1.500 KEY	1
10	702670	ZERO ENTRY PAD	1
11	712152	5:1 CHAIN ROLLER #50 27 LINKS	1
11	712152	7.5:1 CHAIN ROLLER #50 27 LINKS	1
11	712152	10:1 CHAIN ROLLER #50 27 LINKS	1
11	712158	15:1 CHAIN ROLLER #50 31 LINKS	1
11	712151	20:1 CHAIN ROLLER #50 33 LINKS	1
11	712151	30:1 CHAIN ROLLER #50 33 LINKS	1
12	697999	ANCHOR BOLT BAG	1
13	712170	BOLT- STANDOFF/ EDGE SWEEP	4
14	712168	PLATE- EDGE SWEEP ADAPTER	1



PARTS DIAGRAM & LIST

G2 EDGE SWEEP (712606 - 712611)

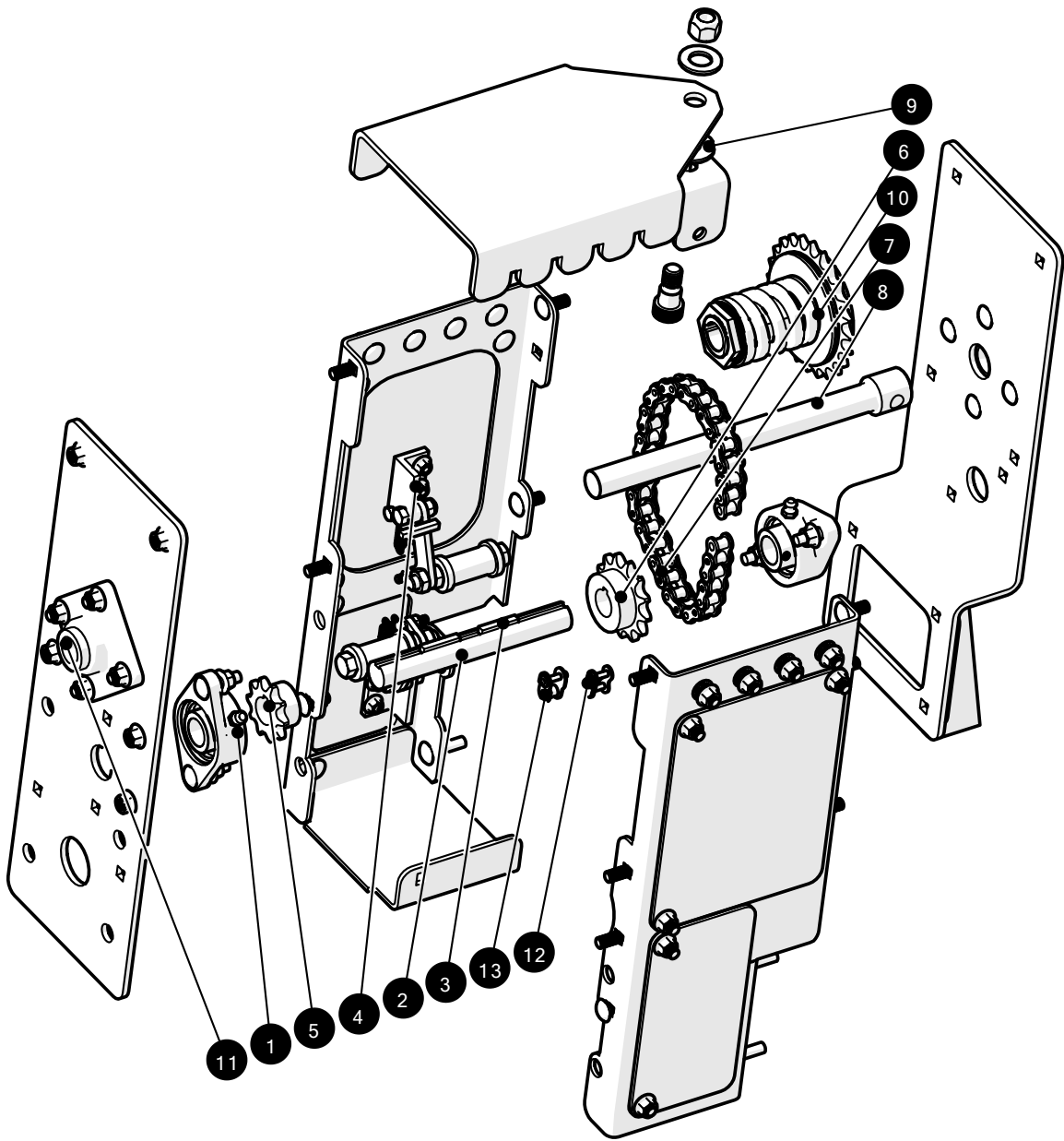
ITEM	PART #	DESCRIPTION	QTY
1	712600	ASSY - GEARBOX G2 5:1/ EDGE SWEEP	1
1	712601	ASSY - GEARBOX G2 7.5:1/ EDGE SWEEP	1
1	712602	ASSY - GEARBOX G2 10:1/ EDGE SWEEP	1
1	712603	ASSY - GEARBOX G2 15:1/ EDGE SWEEP	1
1	712604	ASSY - GEARBOX G2 20:1/ EDGE SWEEP	1
1	712605	ASSY - GEARBOX G2 30:1/ EDGE SWEEP	1
2	712033	ASSY - EDGE SWEEP	1
3	712147	BOLT - SHOULDER .50 X 2.75LG ALLOY STEEL	1
4	712180	SHAFT - PTO EDGE SWEEP	1
5	712096	MOUNT - EDGE SWEEP	1
6	686195	5:1 SPROCKET - #50 14 TOOTH 1.00 BORE	1
6	687973	7.5:1 SPROCKET - #50 14 TOOTH 1.00 BORE	1
6	687973	10:1 SPROCKET - #50 14 TOOTH 1.00 BORE	1
6	686198	15:1 SPROCKET - #50 14 TOOTH 1.00 BORE	1
6	707369	20:1 SPROCKET - #50 14 TOOTH 1.00 BORE	1
6	707369	30:1 SPROCKET - #50 14 TOOTH 1.00 BORE	1
7	686186	#50 CONNECTOR LINK	1
8	686187	#50 HALF LINK	1
9	686358	.250 X .250 X 1.500 KEY	1
10	702670	ZERO ENTRY PAD	1
11	712152	5:1 CHAIN ROLLER #50 27 LINKS	1
11	712152	7.5:1 CHAIN ROLLER #50 27 LINKS	1
11	712152	10:1 CHAIN ROLLER #50 27 LINKS	1
11	712158	15:1 CHAIN ROLLER #50 31 LINKS	1
11	712151	20:1 CHAIN ROLLER #50 33 LINKS	1
11	712151	30:1 CHAIN ROLLER #50 33 LINKS	1
12	697999	ANCHOR BOLT BAG	1



PARTS DIAGRAM & LIST

G1 GEARBOX (712606 - 712611)

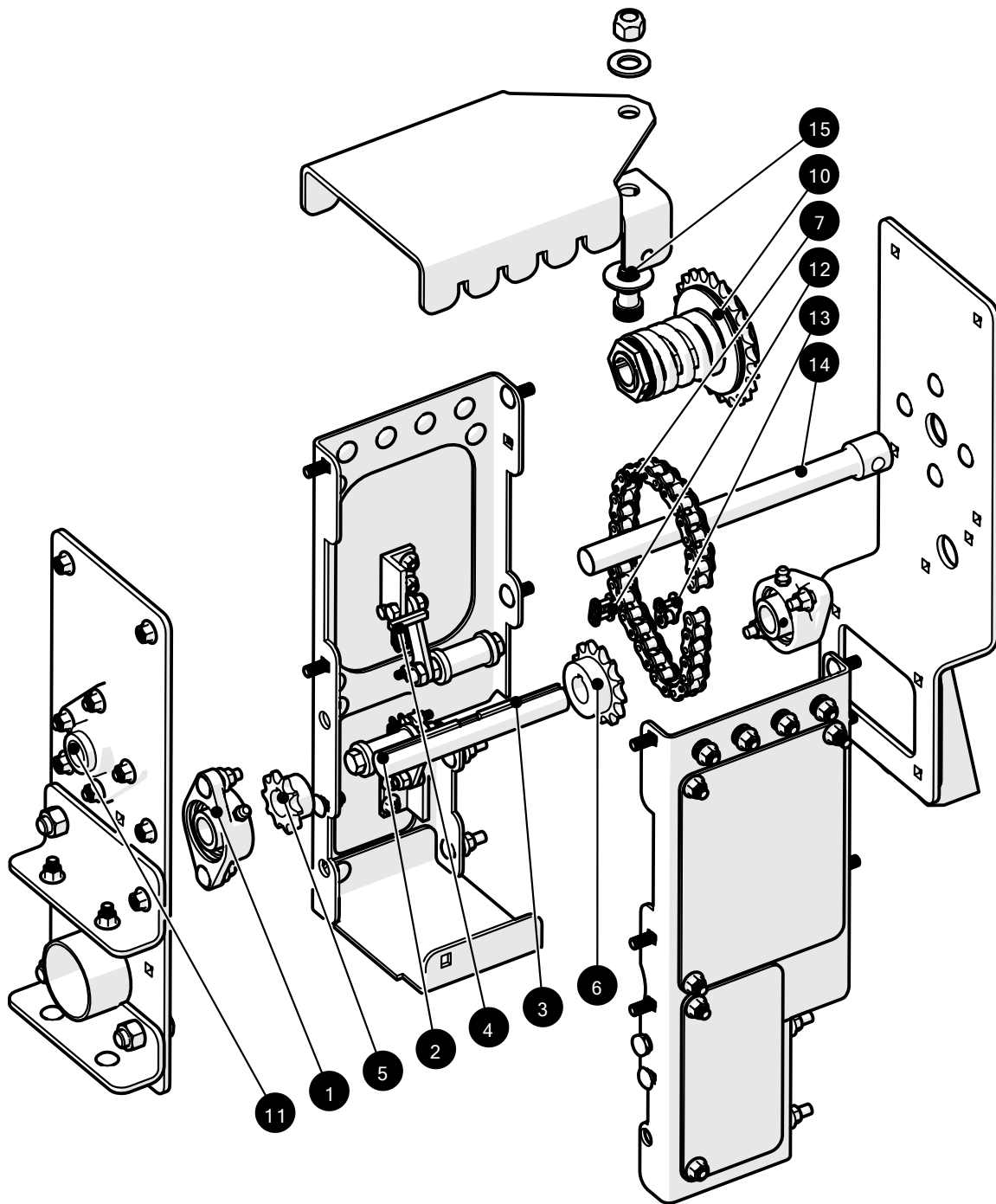
ITEM	PART #	DESCRIPTION	QTY
1	686038	BEARING- 1.00 DIA MOUNTED W/ 2 BOLTS	2
2	712074	SHAFT- IDLER/EDGE SWEEP	1
3	686358	.250 X .250 X 1.500 KEY	2
4	712140	CHAIN TENSIONER ASSY	2
5	686195	5:1 SPROCKET - #50 10 TOOTH 1.00 BORE	1
5	686195	7.5:1 SPROCKET - #50 10 TOOTH 1.00 BORE	1
5	686195	10:1 SPROCKET - #50 10 TOOTH 1.00 BORE	1
5	686195	15:1 SPROCKET - #50 10 TOOTH 1.00 BORE	1
5	686195	20:1 SPROCKET - #50 10 TOOTH 1.00 BORE	1
5	686195	30:1 SPROCKET - #50 10 TOOTH 1.00 BORE	1
6	686195	5:1 SPROCKET - #50 10 TOOTH 1.00 BORE	1
6	686379	7.5:1 SPROCKET - #50 12 TOOTH 1.00 BORE	1
6	687973	10:1 SPROCKET - #50 14 TOOTH 1.00 BORE	1
6	686218	15:1 SPROCKET - #50 16 TOOTH 1.00 BORE	1
6	686218	20:1 SPROCKET - #50 16 TOOTH 1.00 BORE	1
6	684882	30:1 SPROCKET - #50 17 TOOTH 1.00 BORE	1
7	712151	5:1 CHAIN- ROLLER #50 33 LINKS	1
7	712151	7.5:1 CHAIN- ROLLER #50 33 LINKS	1
7	712151	10:1 CHAIN- ROLLER #50 33 LINKS	1
7	712157	15:1 CHAIN- ROLLER #50 35 LINKS	1
7	712157	20:1 CHAIN- ROLLER #50 35 LINKS	1
7	712157	30:1 CHAIN- ROLLER #50 35 LINKS	1
8	712093	SHAFT- OUTPUT/EDGE SWEEP	1
9	712148	BEARING- .75ID X 1.75OD X.125THK THRUST/BRONZE	1
10	712165	CLUTCH- SLIP 350 INLBS 1 INCH BORE/EDGE SWEEP	1
11	686038	1" SQUARE FLANGE BEARING	2
12	686186	#50 CONNECTOR LINK	1
13	686187	#50 HALF LINK	1



PARTS DIAGRAM & LIST

G2 GEARBOX (712600 - 712605)

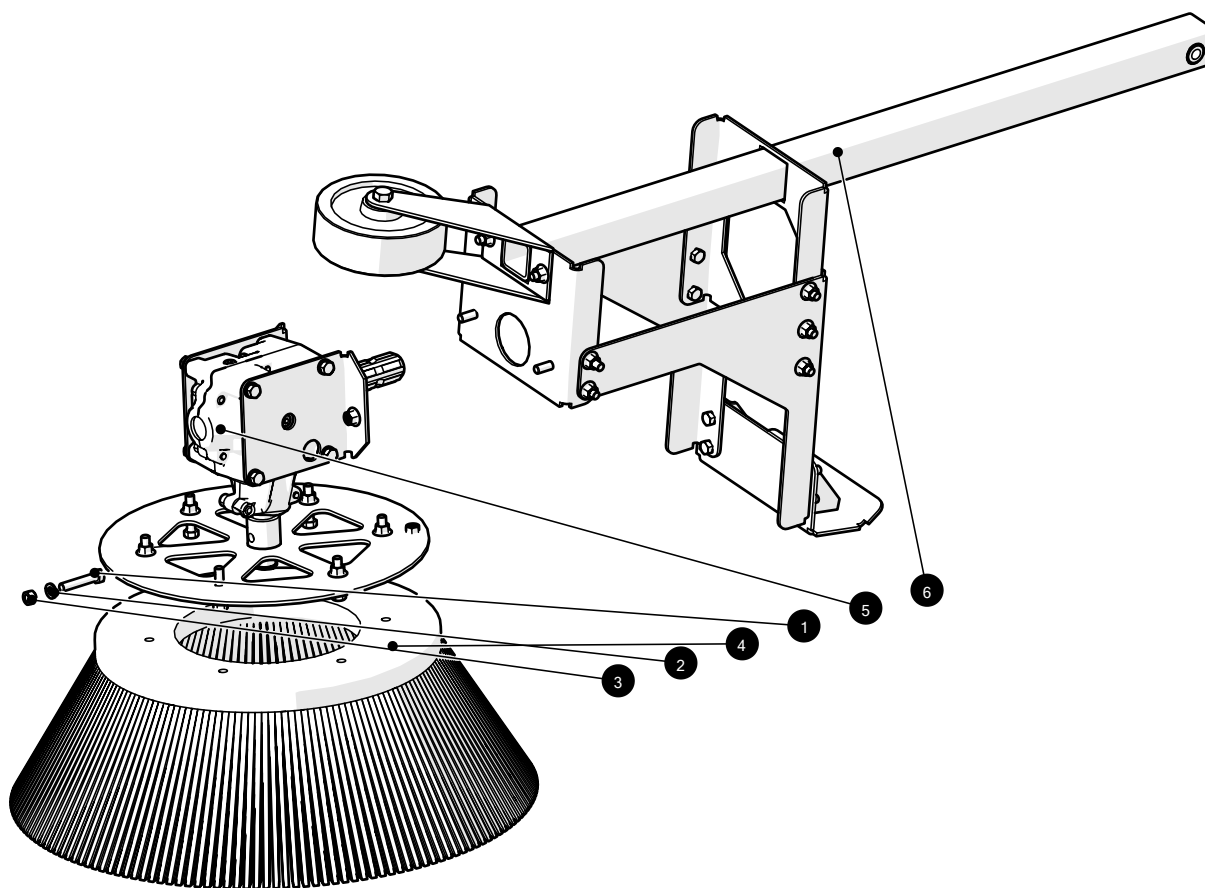
ITEM	PART #	DESCRIPTION	QTY
1	686038	BEARING- 1.00 DIA MOUNTED W/ 2 BOLTS	2
2	712074	SHAFT- IDLER/EDGE SWEEP	1
3	686358	.250 X .250 X 1.500 KEY	2
4	712140	CHAIN TENSIONER ASSY	2
5	686195	5:1 SPROCKET - #50 10 TOOTH 1.00 BORE	1
5	686195	7.5:1 SPROCKET - #50 10 TOOTH 1.00 BORE	1
5	686195	10:1 SPROCKET - #50 10 TOOTH 1.00 BORE	1
5	686195	15:1 SPROCKET - #50 10 TOOTH 1.00 BORE	1
5	686195	20:1 SPROCKET - #50 10 TOOTH 1.00 BORE	1
5	686195	30:1 SPROCKET - #50 10 TOOTH 1.00 BORE	1
6	686195	5:1 SPROCKET - #50 10 TOOTH 1.00 BORE	1
6	686379	7.5:1 SPROCKET - #50 12 TOOTH 1.00 BORE	1
6	687973	10:1 SPROCKET - #50 14 TOOTH 1.00 BORE	1
6	686218	15:1 SPROCKET - #50 16 TOOTH 1.00 BORE	1
6	686218	20:1 SPROCKET - #50 16 TOOTH 1.00 BORE	1
6	684882	30:1 SPROCKET - #50 17 TOOTH 1.00 BORE	1
7	712151	5:1 CHAIN- ROLLER #50 33 LINKS	1
7	712151	7.5:1 CHAIN- ROLLER #50 33 LINKS	1
7	712151	10:1 CHAIN- ROLLER #50 33 LINKS	1
7	712157	15:1 CHAIN- ROLLER #50 35 LINKS	1
7	712157	20:1 CHAIN- ROLLER #50 35 LINKS	1
7	712157	30:1 CHAIN- ROLLER #50 35 LINKS	1
8	712093	SHAFT- OUTPUT/EDGE SWEEP	1
9	712148	BEARING- .75ID X 1.75OD X.125THK THRUST/BRONZE	1
10	712165	CLUTCH- SLIP 350 INLBS 1 INCH BORE/EDGE SWEEP	1
11	686038	1" SQUARE FLANGE BEARING	2
12	686186	#50 CONNECTOR LINK	1
13	686187	#50 HALF LINK	1



PARTS DIAGRAM & LIST

ASSY - EDGE SWEEP (712033)

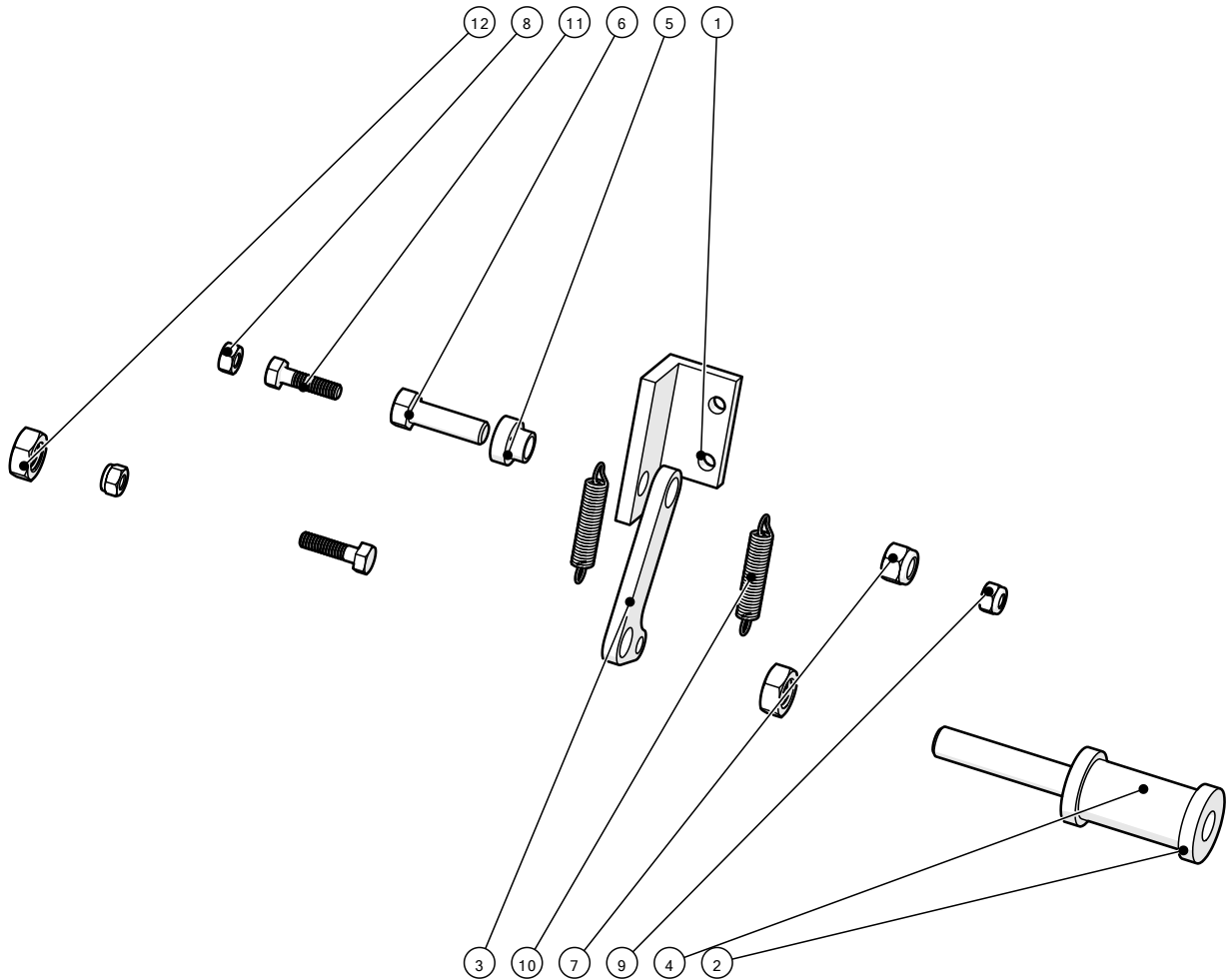
ITEM	PART #	DESCRIPTION	QTY
1	668270	SCREW- .375-16 X 2.00 GR5 HHC	1
2	640153	WASHER - SPRING LOCK .375	1
3	640132	NUT - 0.375 - 16 GR 2 HEX	1
4	707115	BRUSH HEAD- EDGE SWEEP	1
5	712135	GEARBOX - SUPERIOR 1.5:1/EDGE SWEEP	1
6	712125	ASSY - TORQUE TUBE	1



PARTS DIAGRAM & LIST

CHAIN TENSIONER ASSY (712140)

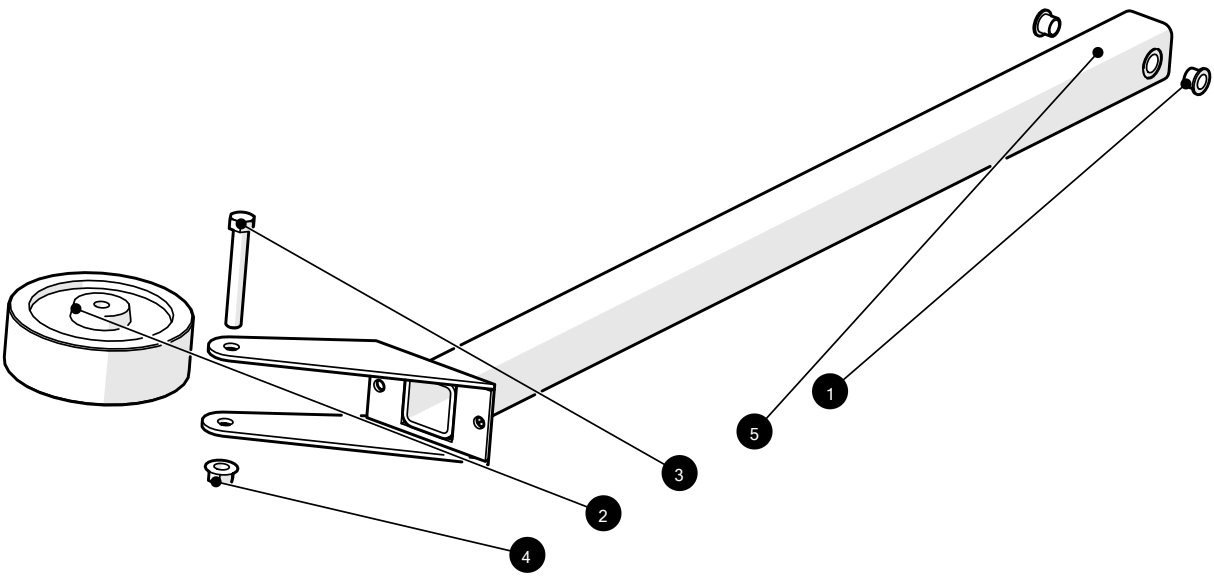
ITEM	PART #	DESCRIPTION	QTY
1	712175	MOUNT - IDLER PIVOT/EDGE SWEEP	1
2	712120	ROLLER - IDLER/EDGE SWEEP	1
3	712139	ARM - PIVOT/EDGE SWEEP	1
4	640067	SCREW- .50-13 X 3.50 GR 5 HHC	1
5	712176	BUSHING- IDLER FLANGE/EDGE SWEEP	1
6	640032	SCREW - .375-16 X 1.25 GR 5 HHC	1
7	654453	NUT - .250-20 GR 2 LOCK NYLON INSERT	2
8		NUT - .250-20 HEX	2
9	654121	NUT - .375 - 16 GR 2 LOCK NYLON INSERT	1
10	712179	SPRING - EXTENSION .36 OD X 2.00 LG X.049 WIRE DIA	2
11	640008	SCREW - .250-20 X 1.00 GR 5 HHC	2
12	194502	NUT - .500 HEX JAM-20 GRA ZP	2



PARTS DIAGRAM & LIST

ASSY TORQUE TUBE (712125)

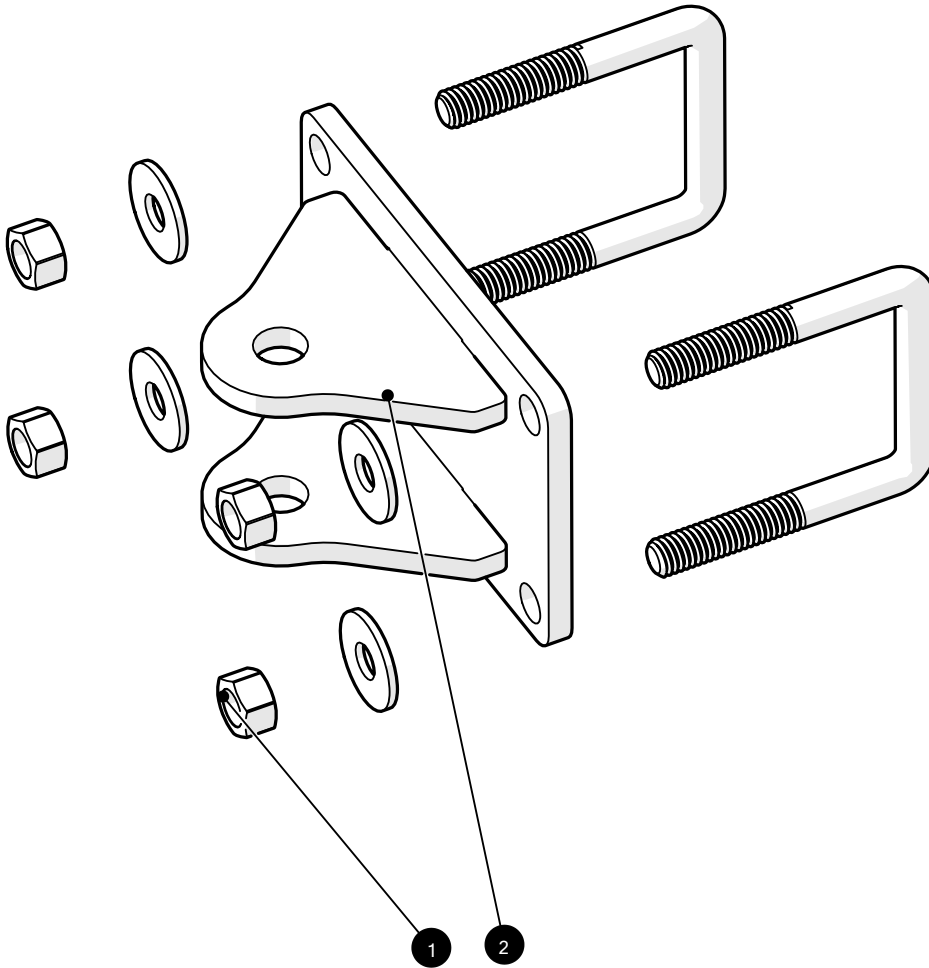
ITEM	PART #	DESCRIPTION	QTY
1	712145	BUSHING- FLANGE .50 ID X .625 OD X .500 LG BRONZE	2
2	712146	WHEEL- 6.00 DIA X 2.00 WD W/ROLLER BEARING .500 SHAFT	1
3	190006	SCREW - .500 HHC - 13 X 3.50 GR 5 ZP	1
4	683932	NUT - .50 X 13 FLANGE	1
5	712171	WLDT- TORQUE TUBE	1



PARTS DIAGRAM & LIST

ASSY - ADJUSTABLE TORQUE TUBE MOUNT (712114)

ITEM	PART #	DESCRIPTION	QTY
1	712111	WLDT - ADJUSTABLE TORQUE TUBE MOUNT	1
2	712169	BOLT - U SQUARE .375-16 X 2.00 INSIDE	2



PARTS DIAGRAM & LIST

ASSY - TORQUE ARM/ EDGE SWEEP (712021)

ITEM	PART #	DESCRIPTION	QTY
1	712019	WLDT - TORQUE ARM - MALE/ EDGE SWEEP	1
2	712016	WLDT - TORQUE ARM - FEMALE/ EDGE SWEEP	1
3	712142	ROD END- .50 BALL JOINT/ .500-20 MALE	1
4	712141	SPRING- COMPRESSION 2.688X8.0	1
5	712020	ROD- SPRING GUIDE	1
6	712144	WASHER - .500 X 1.00 OD PTFE	2
7	640158	WASHER - 1/2" FLAT	2
8	660638	NUT - .500-13 GR2 LOCK NYLON INSERT	1
9	663701	SCREW- .50-13 X 2.75 GR 5 HHC	1
10	154054	NUT - .500-13 HEX GRA ZP	1
11	159781	NUT- .375-16 NYLOCK	1

