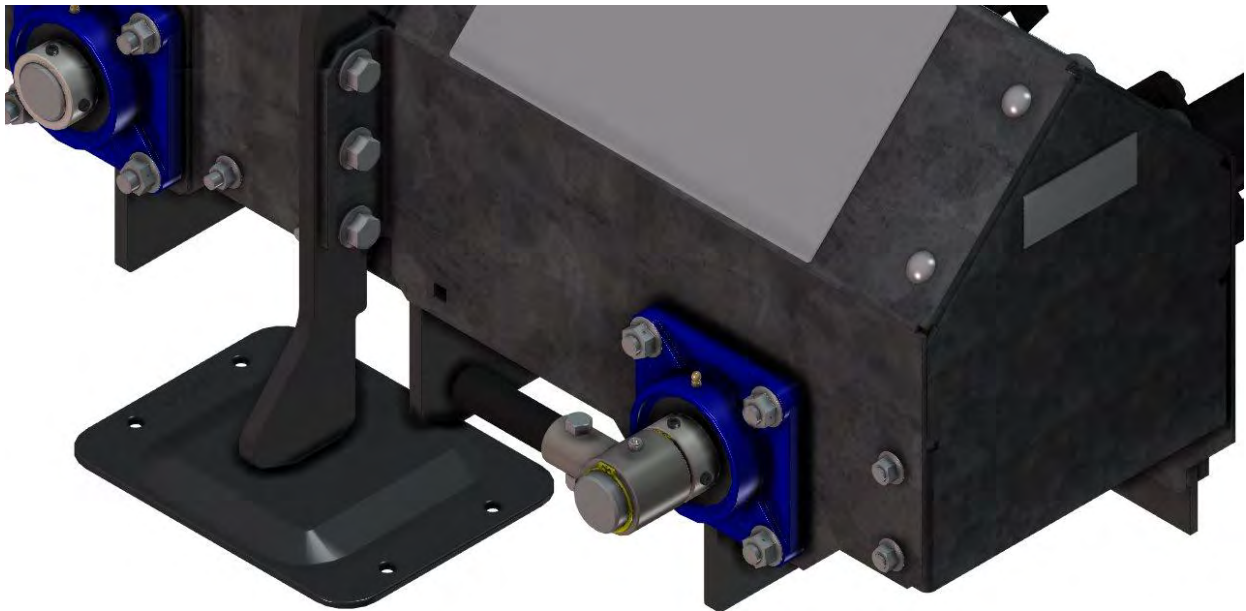


OWNERS MANUAL

EDGE B U S T E R



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
196 1/2 East 6th Street
Sioux Falls, SD 57101-1265

Phone: 1-800-557-4689

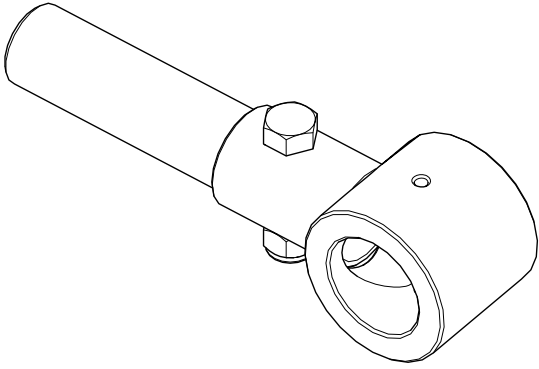
www.edgesweep.com

Contents

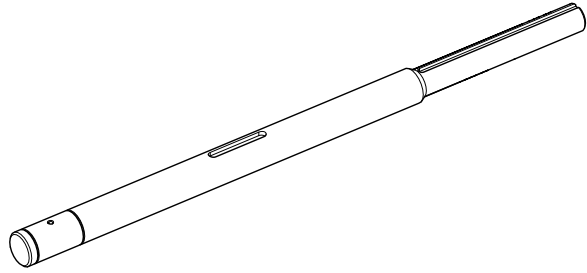
- 1 Edge Buster Terminology 1
- 2 Safety Information 2
 - 2.1 Safety Alert Symbol 3
- 3 Specifications 4
 - 3.1 Features 4
 - 3.2 Overall Dimensions & Weights 4
- 4 Setup 5
 - 4.1 Installation 5
 - 4.2 Daay Bin Paddle Sweep Edge Buster Installation 6
 - 4.2.1 Un-Tensioning Chain and Removing Chain and Tail Shaft 6
 - 4.2.2 Installing New Tail Shaft and Edge Buster 8
 - 4.2.3 Re-Tensioning Chain 11
 - 4.3 DPS G2 Edge Buster Installation 12
 - 4.3.1 Un-Tensioning Chain and Removing Chain and Tail Shaft 12
 - 4.3.2 Installing New Tail Shaft and Edge Buster 14
 - 4.3.3 Re-Tensioning Chain 16
 - 4.4 Power Farm Edge Buster Installation 17
 - 4.4.1 Un-Tensioning Chain and Removing Chain and Tail Shaft 17
 - 4.4.2 Installing New Tail Shaft and Edge Buster 19
 - 4.4.3 Re-Tensioning Chain 22
 - 4.5 Interceptor Edge Buster Installation 23
 - 4.5.1 Un-Tensioning Chain and Removing Chain and Tail Shaft 23
 - 4.5.2 Installing New Tail Shaft and Edge Buster 25
 - 4.5.3 Re-Tensioning Chain 28
 - 4.6 DPS 12K Edge Buster Installation 29
 - 4.6.1 Un-Tensioning Chain and Removing Chain and Tail Shaft 29
 - 4.6.2 Installing New Tail Shaft and Edge Buster 30
 - 4.6.3 Re-Tensioning Chain 32
- 5 Operation 33
 - 5.1 First Time Operation 33
- 6 Trouble Shooting 33
- 7 Parts Diagrams 34

1 Edge Buster Terminology

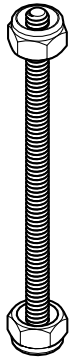
Edge Buster



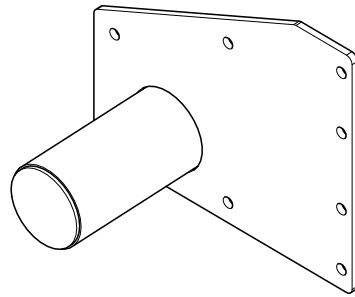
Tail Shaft



Shear Pin



Tail Shaft Cover



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.

3 Specifications

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

3.1 Features

- **Edge Agitation** – Agitates directly in front of the edge of the sweep, allowing for the dislodging of foreign material that collects around the edges of the bin. This keeps the sweep moving forward without being wedged by the foreign material buildup.
- **Shear Bolt Design** – Protects the user and the sweep from being caught in the Edge Buster. The Edge Buster is designed to shear the bolt when it meets something that does not move over a given torque rating.

3.2 Overall Dimensions & Weights

Model	Height	Width	Length	Weight
K712491 (DPS G2)	2.5 in.	6.6 in.	22.4 in.	10.6 lbs.
K712485 (Daay Bin Paddle Sweep)	9.5 in.	11.3 in.	23.4 in.	16.0 lbs.
K712469 (Interceptor / Power Farm)	2.5 in.	6.1 in.	18.0 in.	7.2 lbs.
K712471 (DPS 12K)	3.8 in.	12.9 in.	18.0 in.	37.3 lbs.

4 Setup

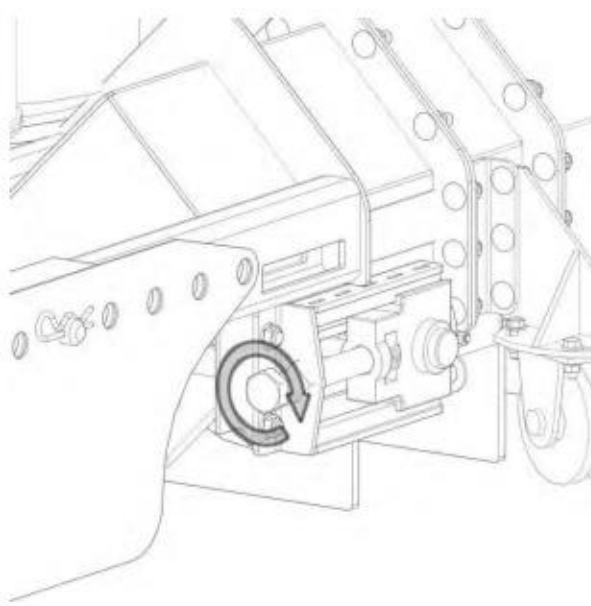
4.1 Installation

- It is recommended that the bin be empty and free of grain when the Edge Buster is installed. If this can't be achieved, then a large enough area must be cleared that the Edge Buster can be installed on a clean floor and free from entrapment danger.
- Tools Needed
 - Cordless Driver
 - Ratchet
 - 1/2", 9/16" shallow socket
 - 1/2" & 9/16" deep socket
 - 9/16" wrench
 - (1) 2 ¼" wrench (for DPS 12K Install Only)
 - An adjustable wrench with this width will be acceptable
 - (2) 15/16" wrench (for Daay Power Farm and Interceptor)
 - An adjustable wrench with this width will be acceptable
 - (2) 1 1/4" wrench (for DPS G2 and Daay Bin Paddle)
 - An adjustable wrench with this width will be acceptable
 - (2) 1 ½" wrench (for DPS G2 and Daay Bin Paddle)
 - An adjustable wrench with this width will be acceptable
 - 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
 - Snap ring pliers

4.2 Daay Bin Paddle Sweep Edge Buster Installation

4.2.1 Un-Tensioning Chain and Removing Chain and Tail Shaft

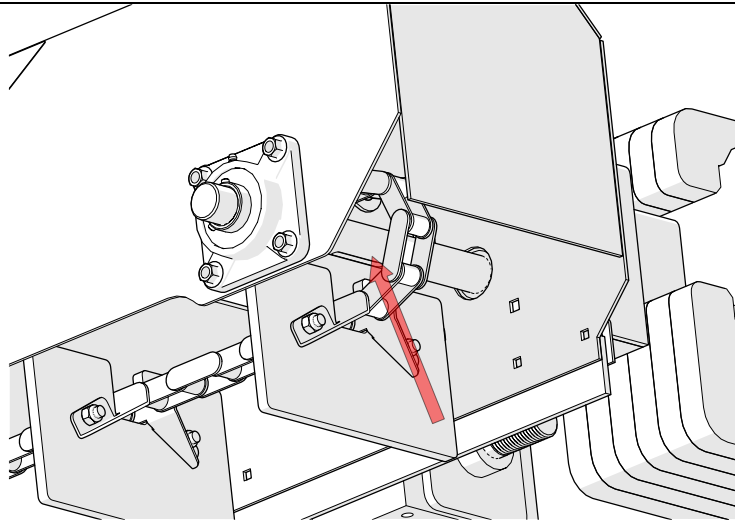
1. Loosen take up bearing assemblies located by the center sump to take pressure off the chain.



2. Loosen and remove split sprocket on the tail shaft of the sweep pictured to the right. (Two 1/4-20" cap screws). There will be a key that must be removed under the split sprocket as well.

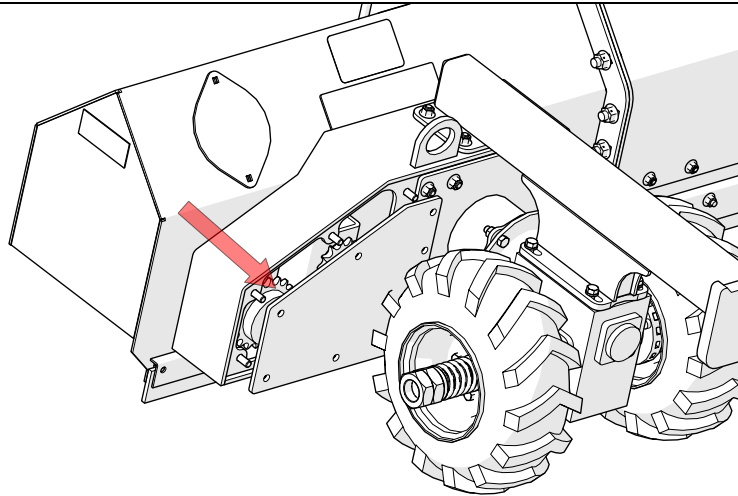
Note: Keep track of key after removal as it will be needed later.

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.



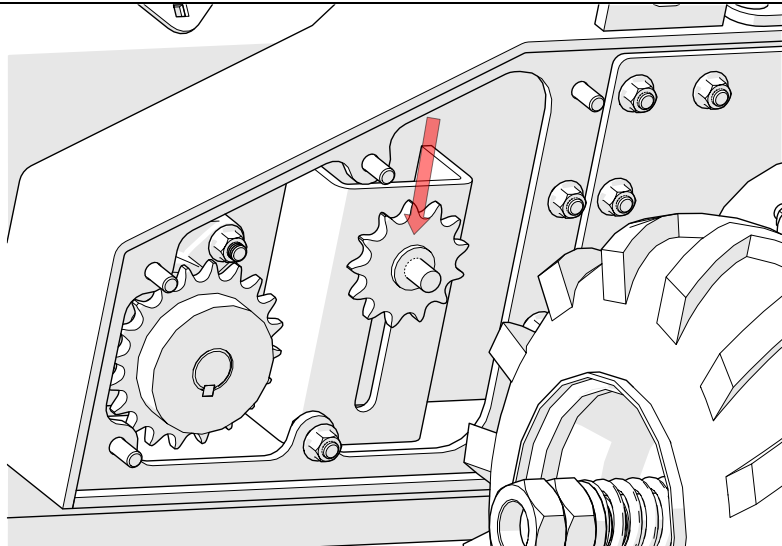
3. Remove the (8) nuts retaining the rear cover using a $9/16''$ socket or wrench. Keep the (8) nuts as they will be needed to install the new cover.

This cover may be discarded, there will be an updated version included in the kit.



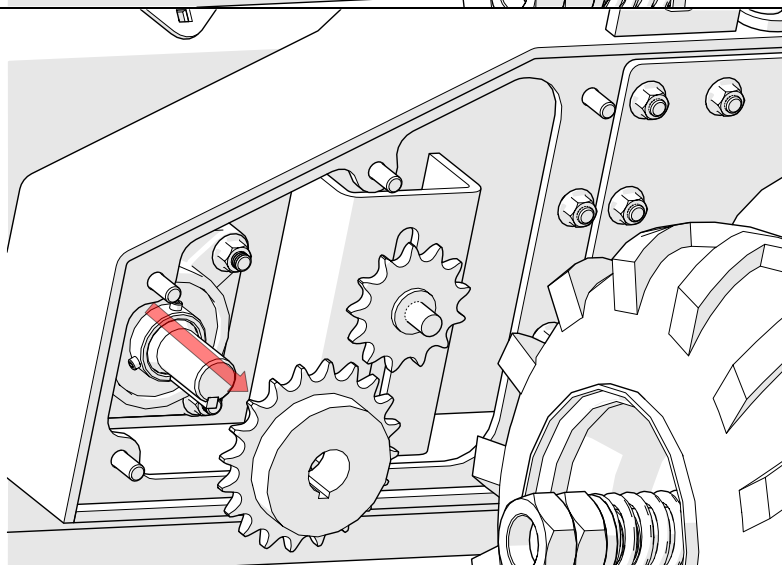
3. Loosen the nut retaining the tensioner with a $3/4''$ socket or wrench, but **do not** remove fully. Tensioner should be able to freely move up and down.

Note: If there is enough slack it will not be necessary to completely remove the chain for step four.



4. Remove Gear pictured below attached to the tail shaft using a $5/32''$ hex key. There will be (2) set screws located on the collar of the gear.

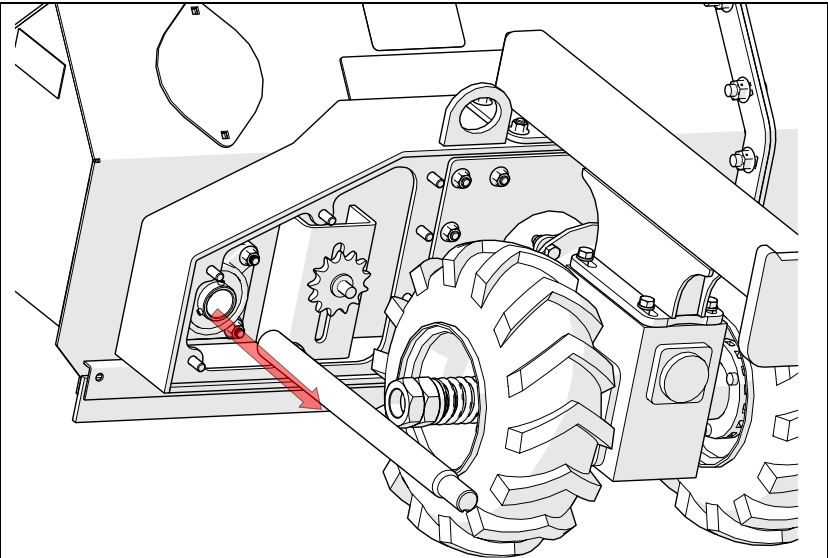
Note: If the gear cannot be removed it may be necessary to split the chain. This is done by finding the master link and removing the retaining clip.



5. Remove the Tail Shaft by loosening the (4) set screws using a 1/8" hex key on the front and rear bearings. This shaft can be removed in either direction, whichever is easier

NOTE: It is recommended that a dead blow hammer and soft material punch of used to avoid "mushrooming" the end of the shaft while driving it out.

The shaft may be discarded after removal.

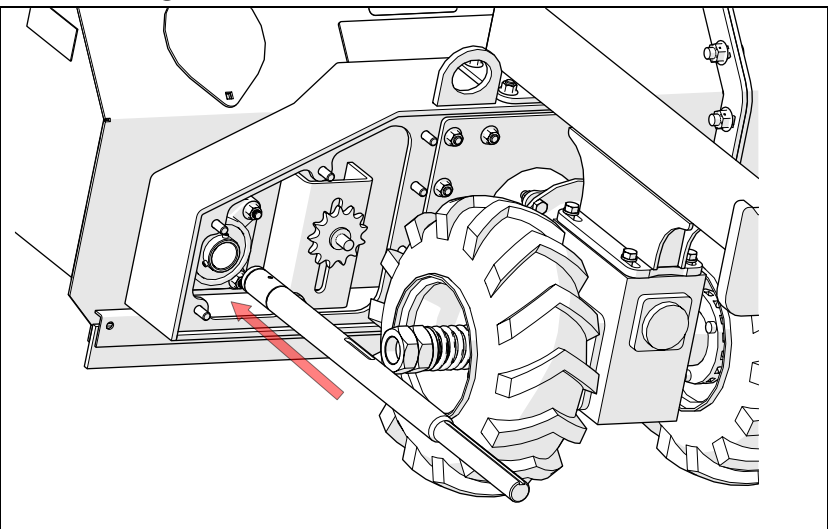


4.2.2 Installing New Tail Shaft and Edge Buster

1. Insert new shaft that comes with the edge sweep kit.

2. When inserting the new shaft ensure that it passes through the chain, and split sprocket

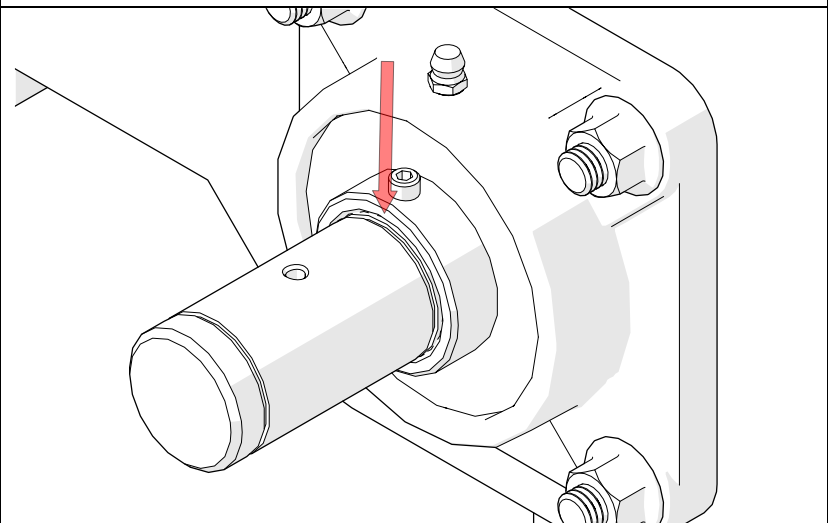
NOTE: The step in the shaft needs to be facing rearward as shown in diagram.



NOTE: Have the 2nd snap ring groove flush with the edge of the front bearing.

NOTE: Ensure that a snap ring will fit in this groove after tightening.

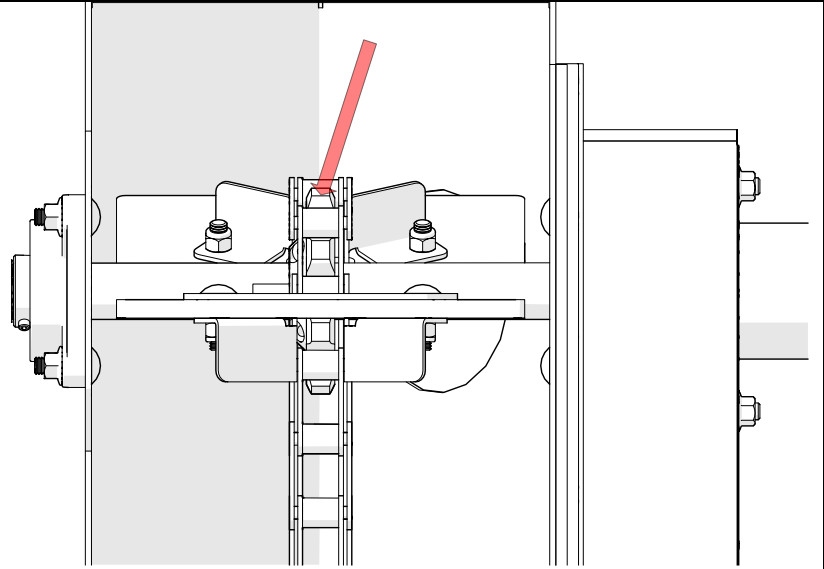
3. Tighten (4) set screws using a 1/8" hex key on the front and rear bearings.



3. The **MOST IMPORTANT** part is that the split sprocket is centered in the sweep housing, so the paddle chain tracks properly. Use a measuring device to confirm the sprocket is centered in the housing.

4. Tighten the split sprocket and reset the paddle chain.

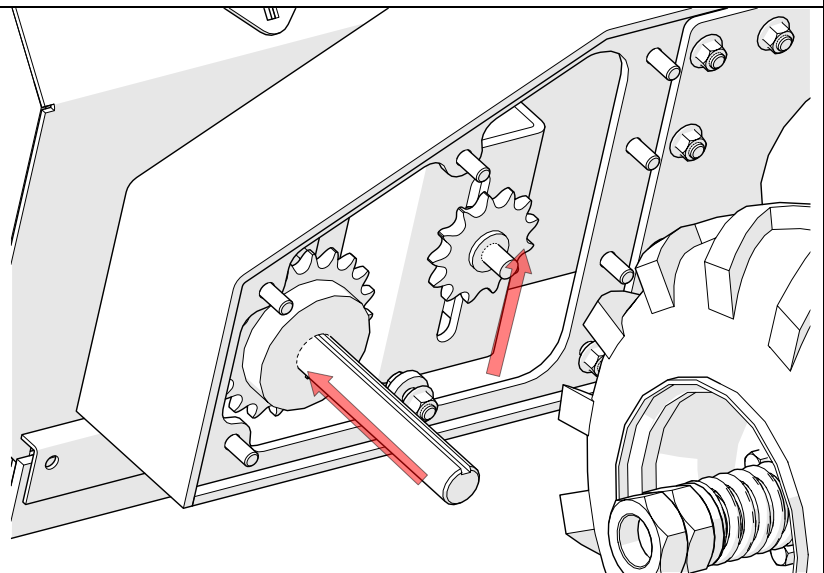
Note: Torque (2) 1/4"-20 socket head screws in eight tooth sprocket to 30 ft-lbs. secure with blue Loctite or medium strength thread locker.



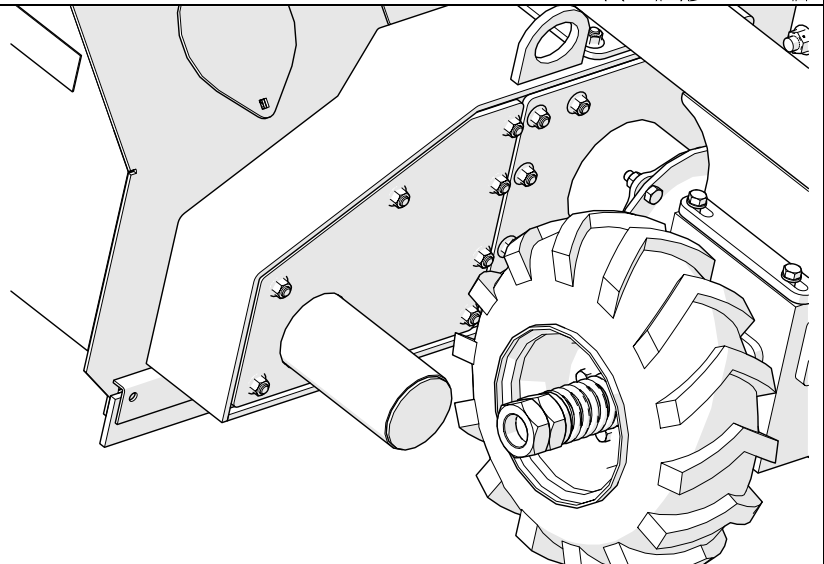
5. Reinstall drive sprocket with key and tighten both set screws with a 5/32" hex key.

Ensure that the drive sprocket and the tensioner sprocket are in line, so the chain tracks properly.

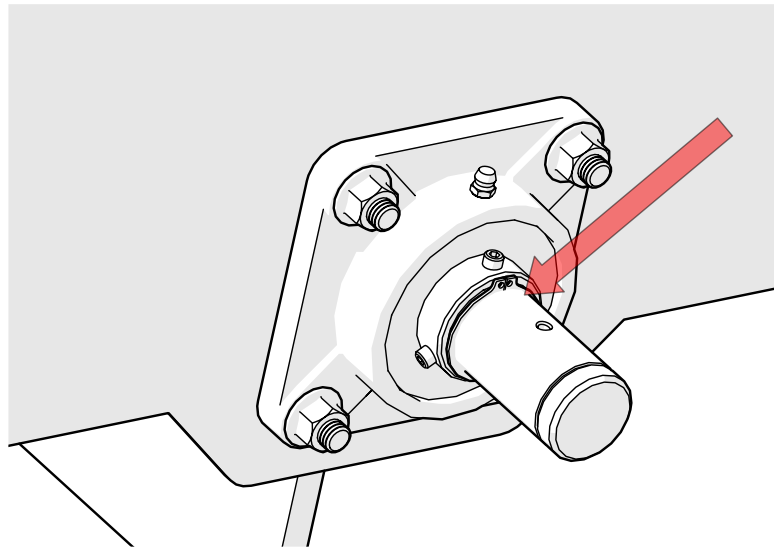
With the chain reinstalled set the tensioner sprocket and tighten it with a 3/4" wrench.



6. Install the new rear cover using the (8) nuts removed from the previous cover using a 9/6" socket.



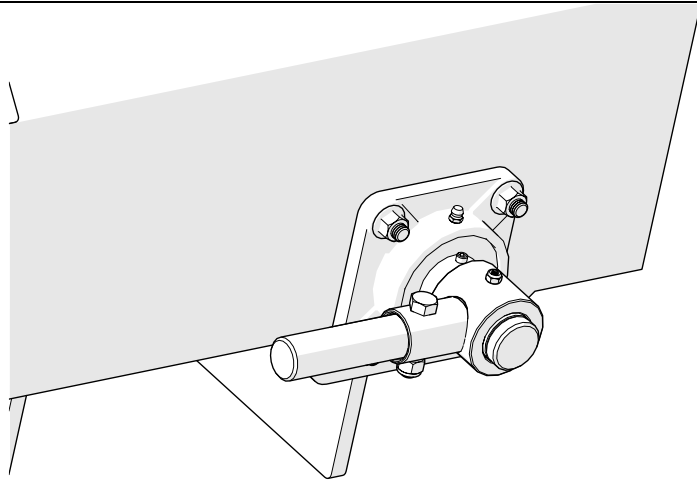
7. On the front of the sweep install the first external snap ring closest to the bearing.



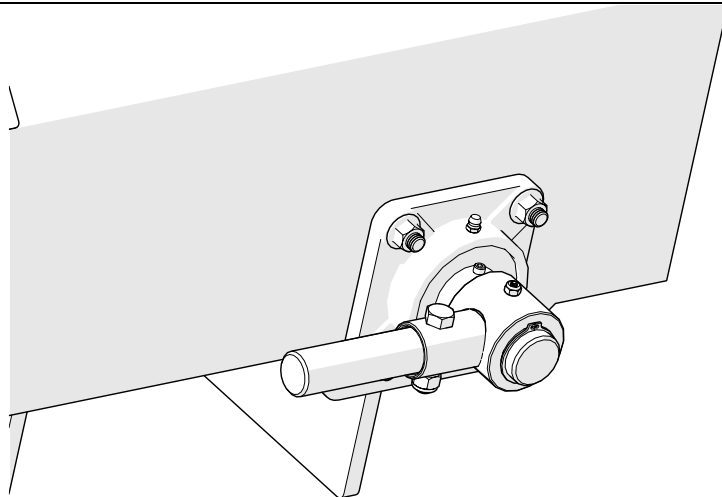
8. Install the Edge Buster onto the tail shaft.

With the holes aligned drop in the shear bolt and fasten it using the included nylon insert nuts and a 3/8" socket or wrench.

These nuts only need to be tightened to 10 IN-LBS



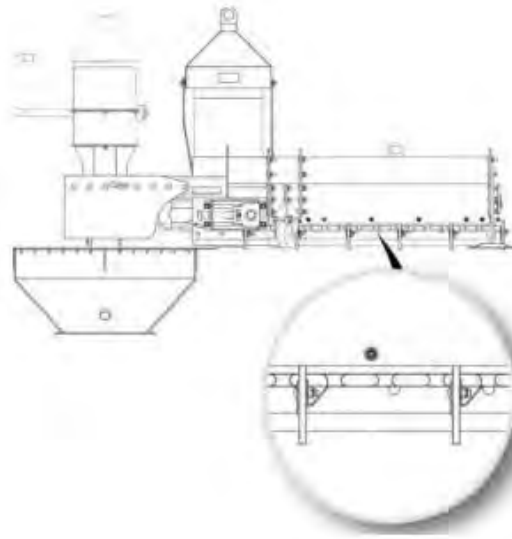
9. Install the exterior external snap ring. The edge buster is now installed.



4.2.3 Re-Tensioning Chain

The chain must be reset to operate properly after loosening.

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

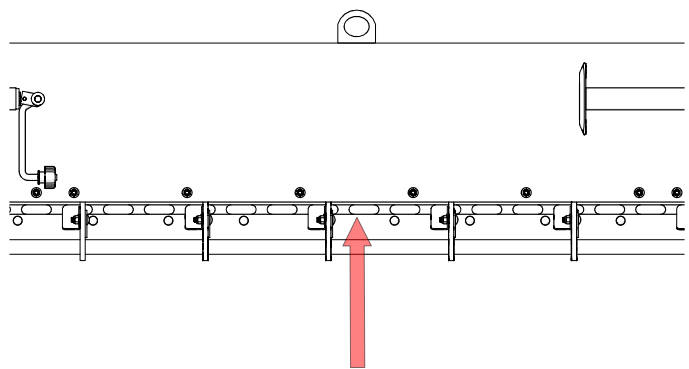


2. Check the chain tension at the CENTER of the sweep (i.e., on a 30ft. sweep go to 15 ft. front the sump).

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

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

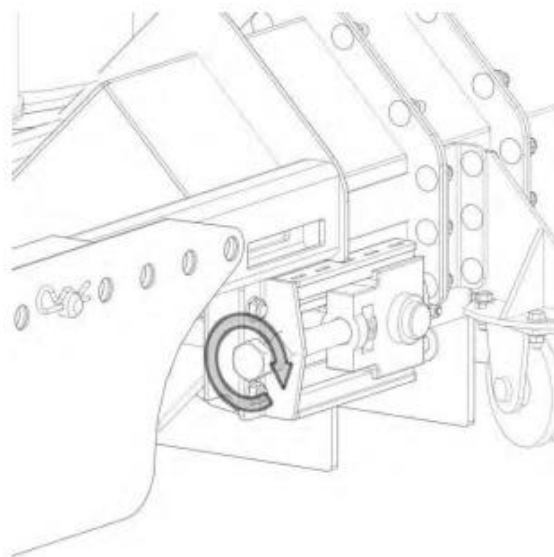
The chain must not lift high enough to contact the sweep housing.



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

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

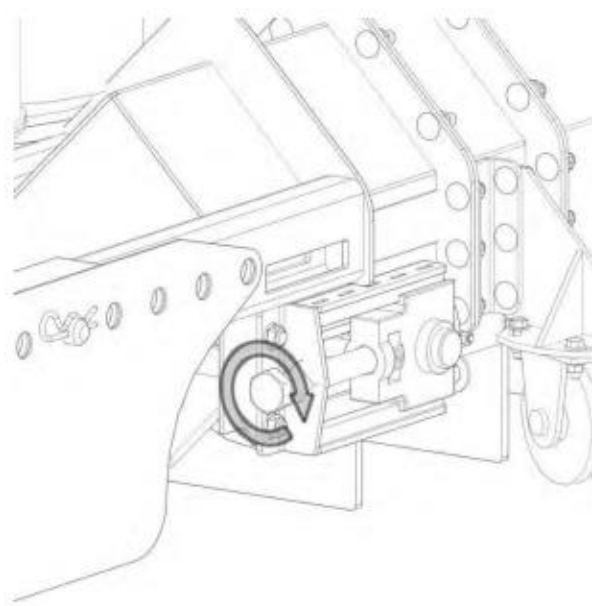
4. Ensure that both adjusters are equally adjusted to maintain proper sprocket and chain engagement. Once the sweep is assembled and ready for operation, run the sweep for 5 minutes. Check the chain tension again and adjust as needed to achieve $\frac{3}{4}$ " of deflection.



4.3 DPS G2 Edge Buster Installation

4.3.1 Un-Tensioning Chain and Removing Chain and Tail Shaft

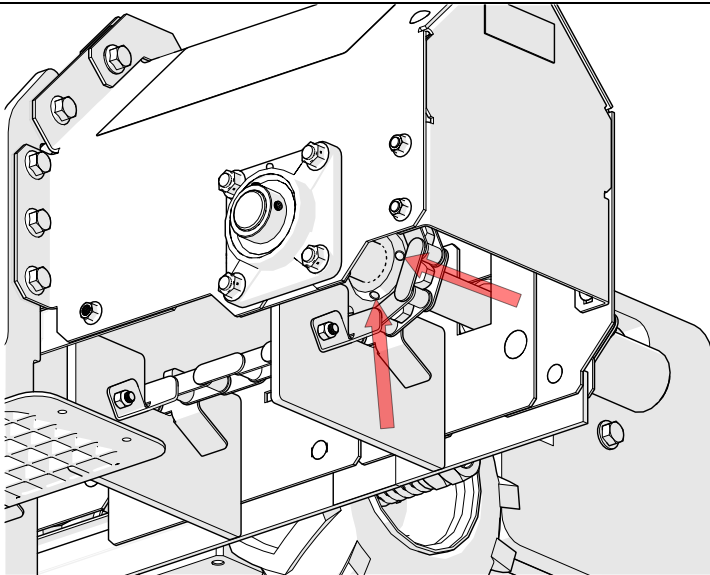
1. Loosen take up bearing assemblies located by the center sump to take pressure off the chain.



2. Loosen the sprocket using a 5/32" hex key loosen the (2) set screws, and slide the sprocket over a remove the key from the keyway.

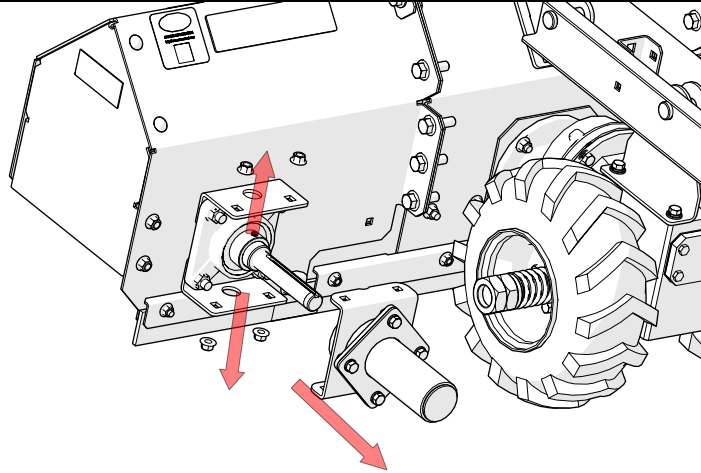
Note: Keep track of key after removal.

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



1. Remove rear cover of the tail shaft.

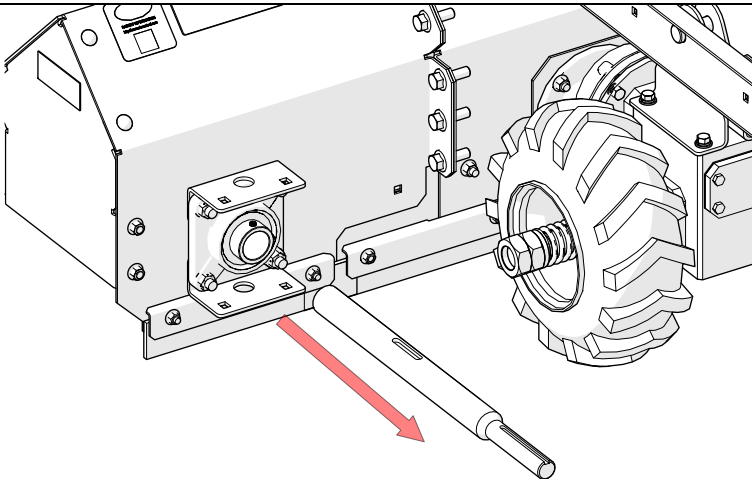
The tail shaft cover is mounted using (4) nuts and carriage bolts, use a 9/16" socket to remove the nuts.



2. Remove the Tail Shaft by loosening (4) set screws using a 1/8" hex key on the front and rear bearings. This shaft can be removed in either direction, whichever is easier

NOTE: It is recommended that a dead blow hammer and soft material punch of used to avoid "mushrooming" the end of the shaft while driving it out.

The shaft may be discarded after removal.



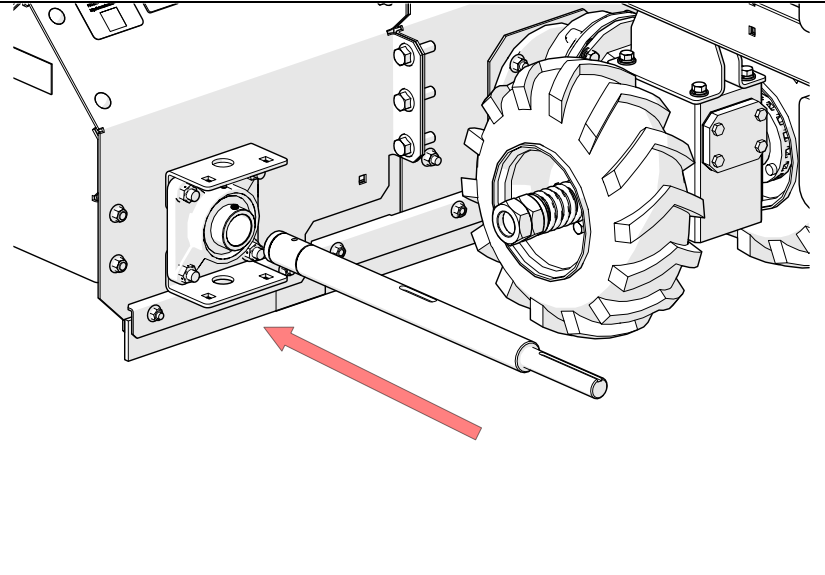
4.3.2 Installing New Tail Shaft and Edge Buster

1. Insert new shaft that comes with the edge sweep kit.

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

The shaft must also be inserted through the loop of the paddle chain.

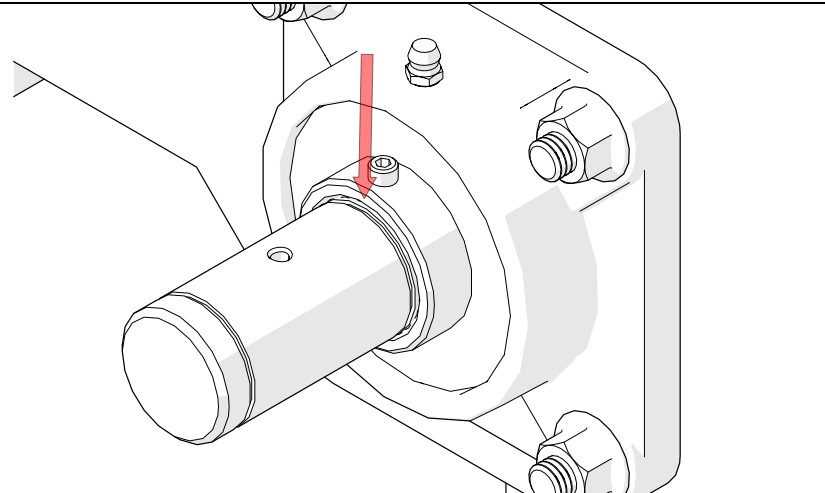
NOTE: The step in the shaft needs to be facing rearward as shown in diagram.



NOTE: Have the 2nd snap ring groove flush with the edge of the front bearing.

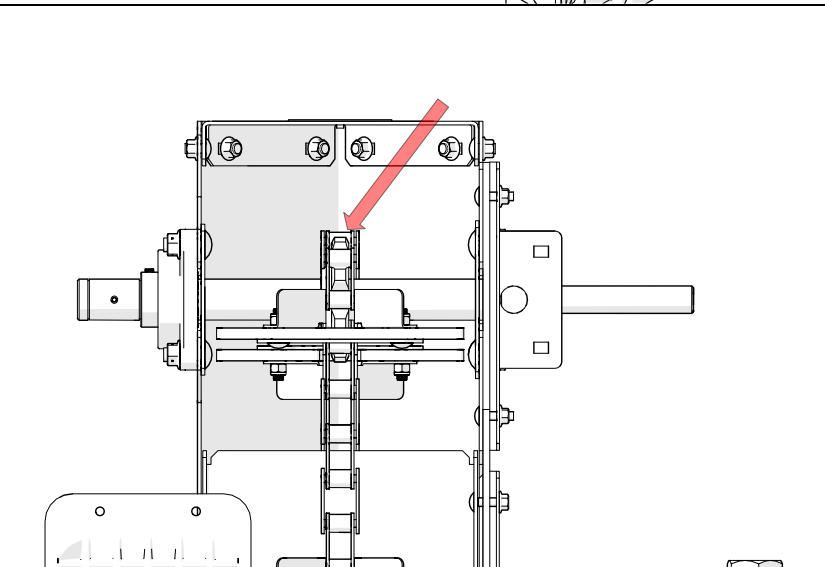
NOTE: Ensure that a snap ring will fit in this groove after tightening.

3. Tighten (4) set screws using a 1/8" hex key on the front and rear bearings.

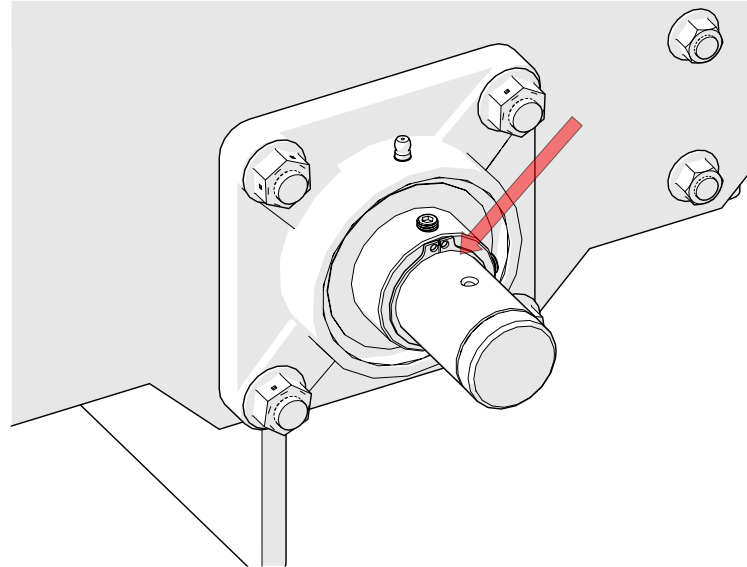


3. The **MOST IMPORTANT** part is that the sprocket is centered in the sweep housing, so the paddle chain tracks properly. Use a measuring device to confirm the sprocket is centered in the housing.

4. Tighten the sprocket using the (2) set screws and reset the paddle chain.



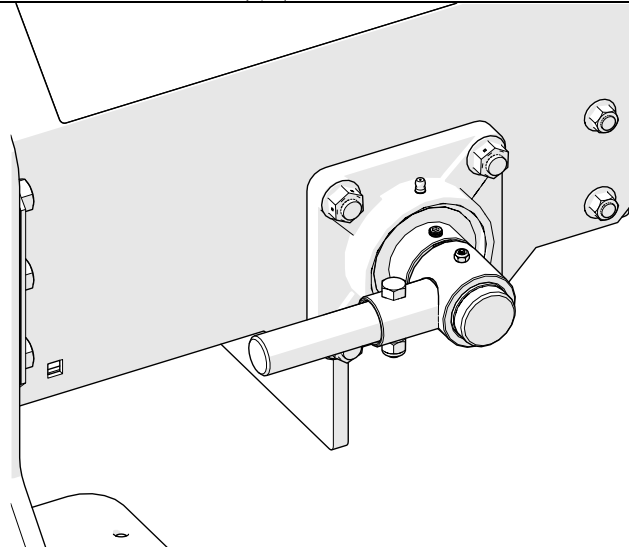
6. On the front of the sweep install the first external snap ring closest to the bearing.



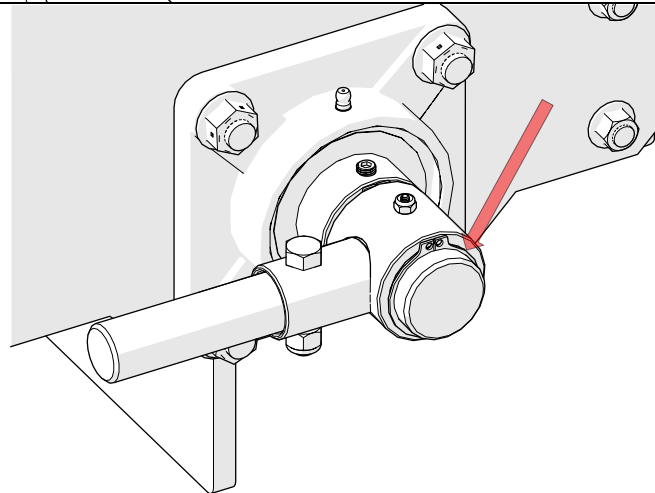
7. Install the Edge Buster onto the tail shaft.

With the holes aligned drop in the shear bolt and fasten it using the included nylon insert nuts and a 3/8" socket.

These nuts only need to be tightened to 10 IN-LBS



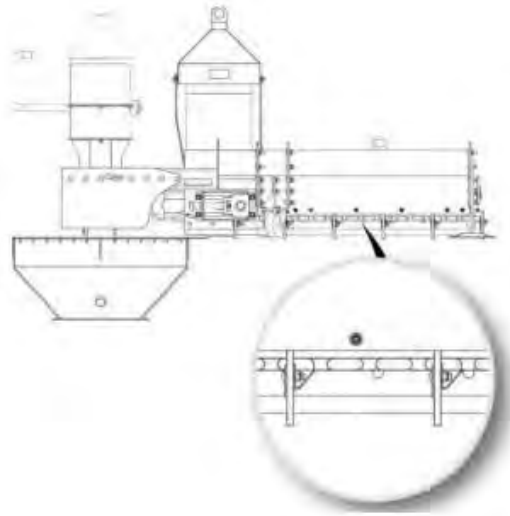
8. Install the exterior external snap ring. The edge buster is now installed.



4.3.3 Re-Tensioning Chain

The chain must be reset to operate properly after loosening.

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

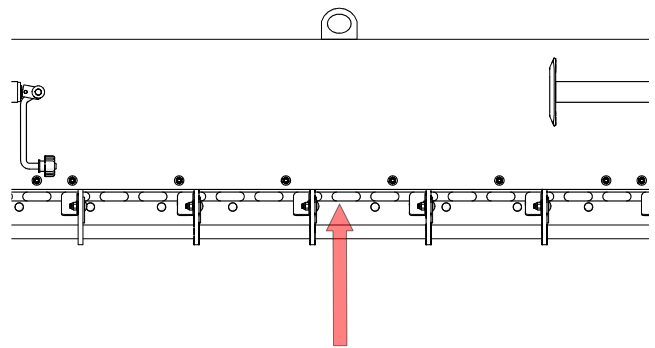


2. Check the chain tension at the CENTER of the sweep (i.e., on a 30ft. sweep go to 15 ft. front the sump).

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

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

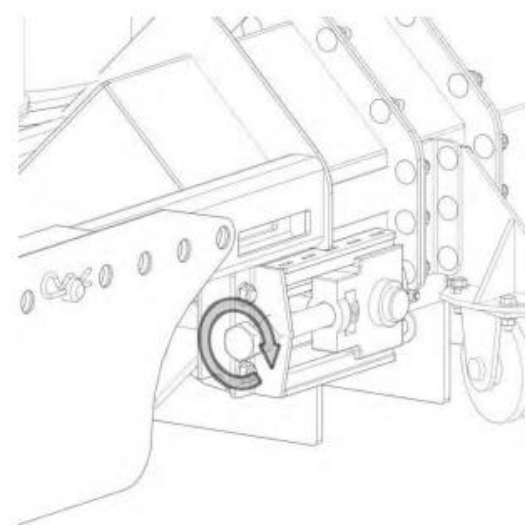
The chain must not lift high enough to contact the sweep housing.



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

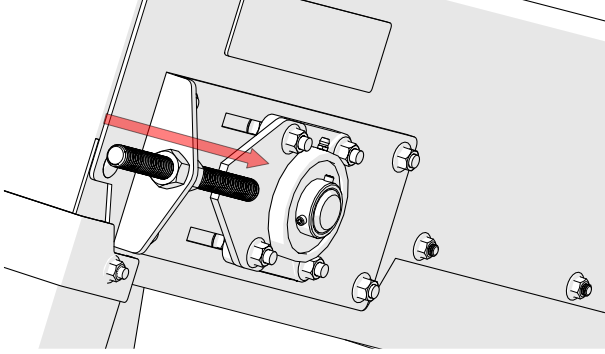
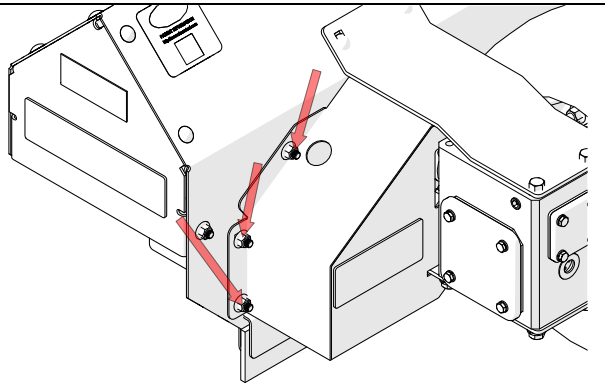
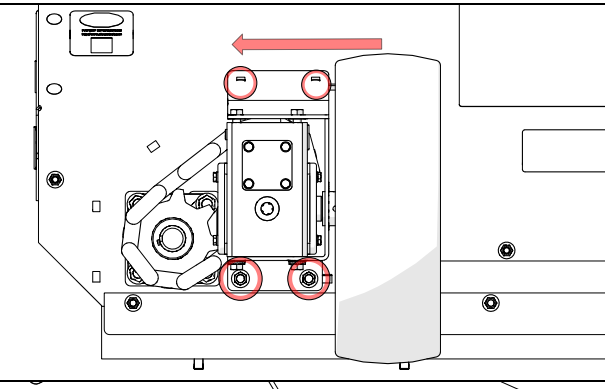
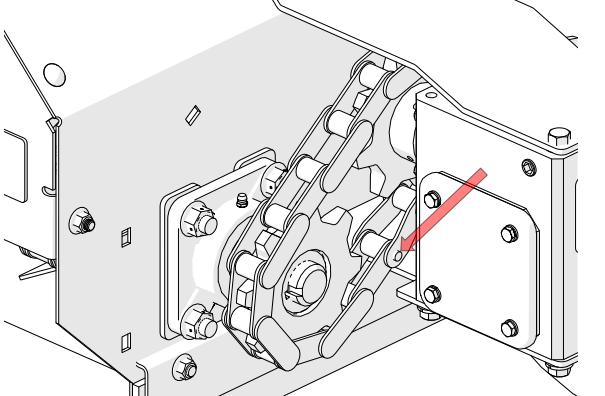
3. Loosen the locking nuts on the adjuster bolt. Turn the adjuster bolt clockwise to increase chain tension or counterclockwise to reduce chain tension.

4. 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.

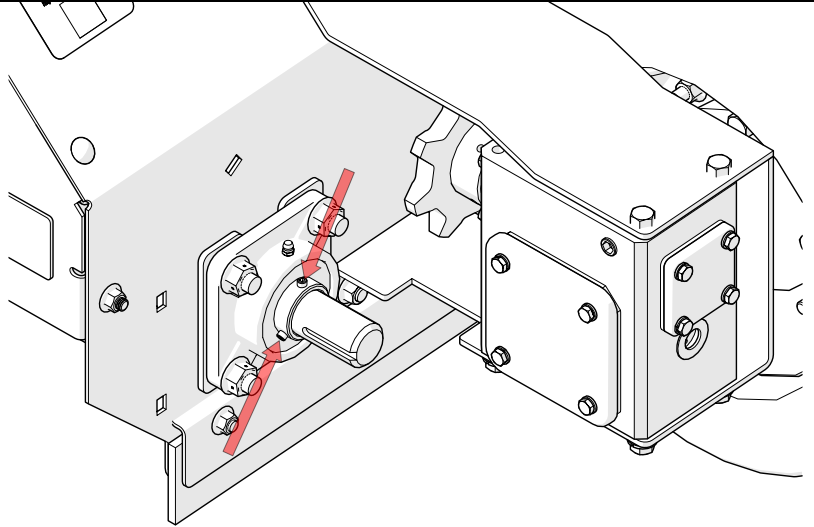


4.4 Power Farm Edge Buster Installation

4.4.1 Un-Tensioning Chain and Removing Chain and Tail Shaft

<p>1. Loosen chain take up bearing above the center sump. Both sides will need to be loosened to allow for the tail shaft to be removed.</p> <p>This will require loosening both tensioning nuts on the bent flange of the assembly with a 1" wrench, along with the (4) bolts the bearing rides on to allow for free movement.</p>	
<p>2. Remove the rear cover of the tail shaft to allow access to the tractor drive chain.</p> <p>To remove the cover, you will need to use a 9/16" socket on the (3) pictured nuts, then completely remove the carriage bolts to allow the cover to slide out.</p>	
<p>3. Un-tension tractor drive chain by loosening (4) nuts circled by using a 9/16" socket.</p> <p>Move the tractor drive assembly to the left (bin wall) to take pressure off chain.</p>	
<p>3. Find the master link on the tractor drive chain and remove the cotter pins so the master link can be disconnected, and the chain can be removed.</p> <p>Loosen the (2) set screws on the tail shaft gear using a 5/32" hex key, and then slide it off the tail shaft, along with the keyway leaving the exposed shaft.</p>	

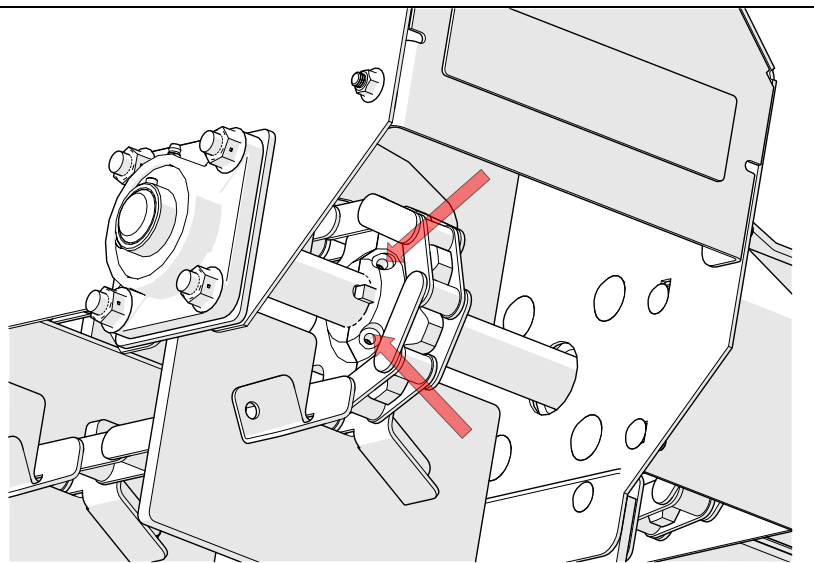
4. Loosen the (4) total set screws on the tail shaft bearings with a 1/8" Allen wrench.



5. Using an 3/16" Allen wrench to loosen the split sprocket on the tail shaft.

Depending on chain condition and tightness, it may not be necessary to drop the paddle chain, and the split can be left on the tail shaft LOOSE to allow for the shaft to be driven out.

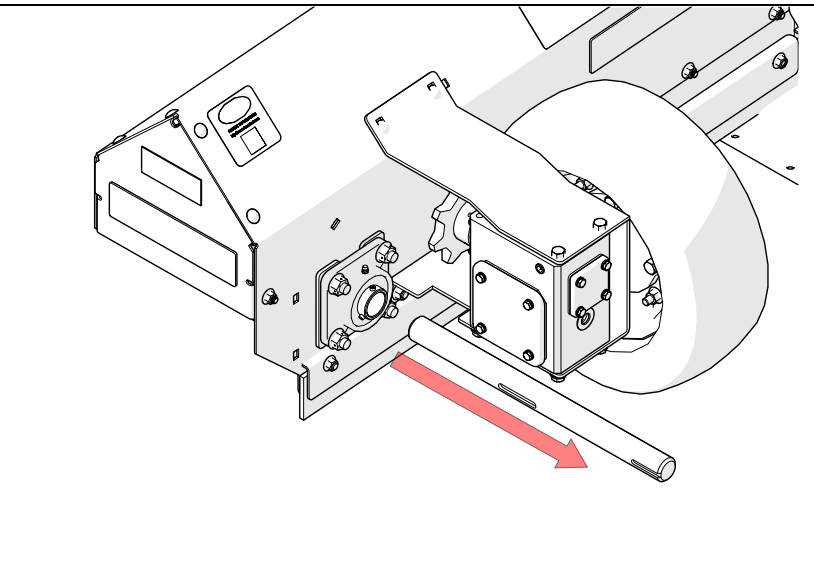
NOTE: If this is not possible, the master link must be found and removed so the chain can be dropped completely and removed from the split sprocket.



6. Remove the tail shaft, this shaft can be slid out of the front or the rear of the sweep, whichever is easier.

NOTE: It is recommended that a dead blow hammer and soft material punch be used to avoid "mushrooming" the end of the shaft while driving it out.

The shaft can be discarded after removal.



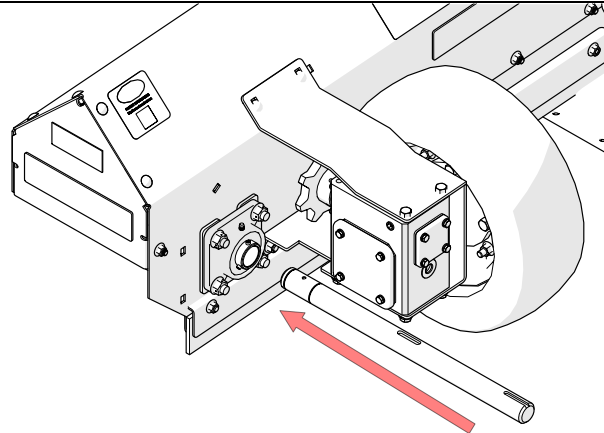
4.4.2 Installing New Tail Shaft and Edge Buster

1. Insert new shaft that comes with the edge sweep kit.

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

The shaft must also be inserted through the loop of the paddle chain.

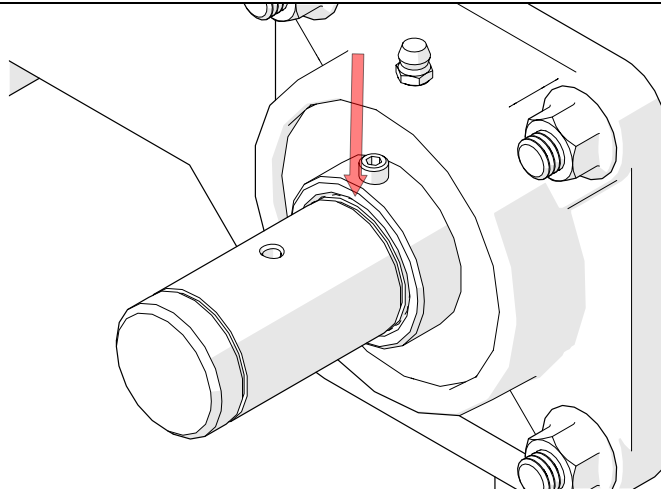
NOTE: The thru hole and snap ring grooves must be oriented to the front of the sweep.



NOTE: Have the 2nd snap ring groove flush with the edge of the front bearing.

NOTE: Ensure that a snap ring will fit in this groove after tightening.

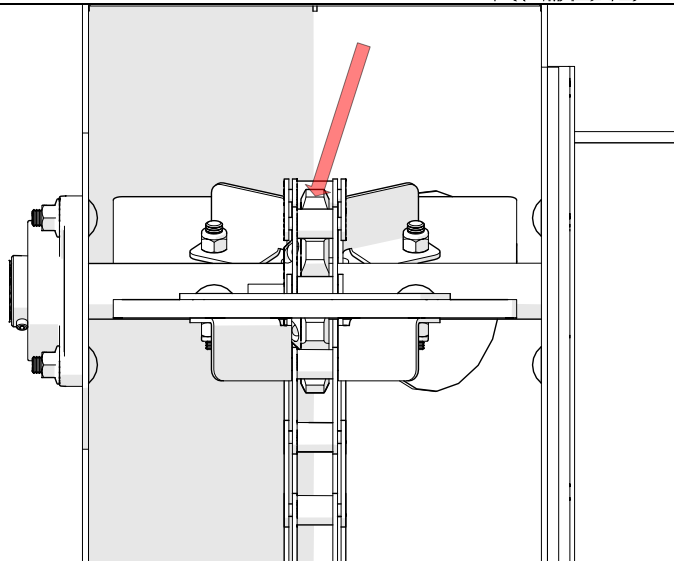
3. Tighten (4) set screws using a 1/8" hex key on the front and rear bearings.



4. The **MOST IMPORTANT** part is that the **split sprocket is centered in the sweep housing, so the paddle chain tracks properly. Use a measuring device to confirm the sprocket is centered in the housing.**

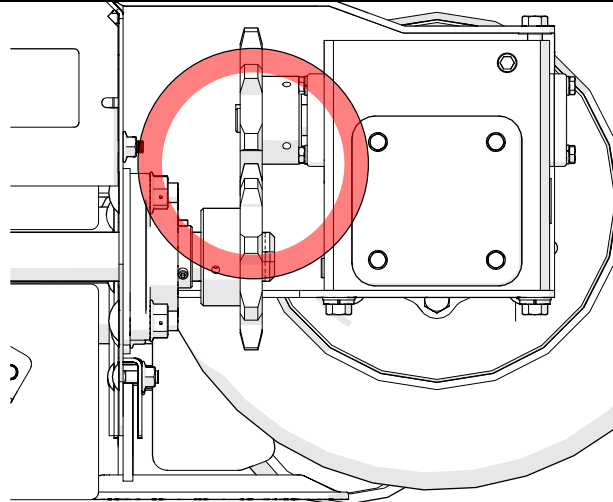
5. **Tighten the split sprocket and reset the paddle chain.**

Note: Torque (2) 1/4"-20 socket head screws in eight tooth sprocket to 30 ft-lbs. secure with Blue Loctite or equivalent strength thread locker.



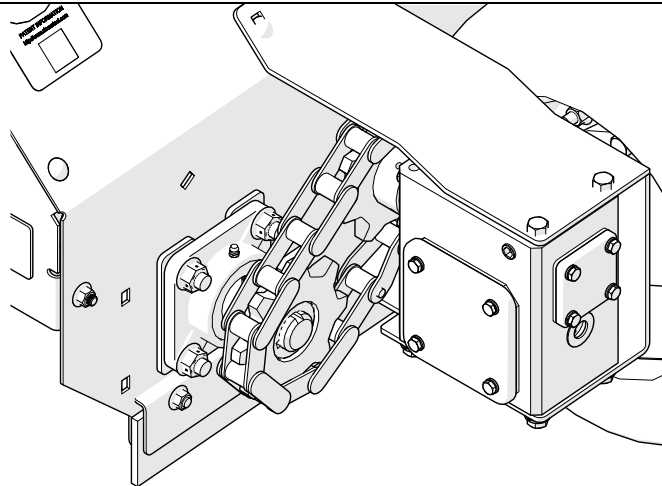
6. Install tractor drive gear on the tail shaft, ensure that the (2) set screws are tightened on the gear using a 5/32" hex key.

NOTE: Set the gear on the shaft so that it is aligned with the gear still fitted to the tractor drive



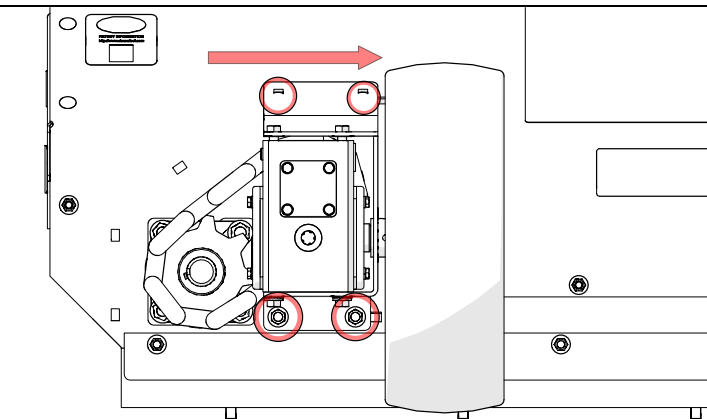
7. Re-install the tractor drive chain.

NOTE: Ensure that the cotter pins are reinstalled on the master link.

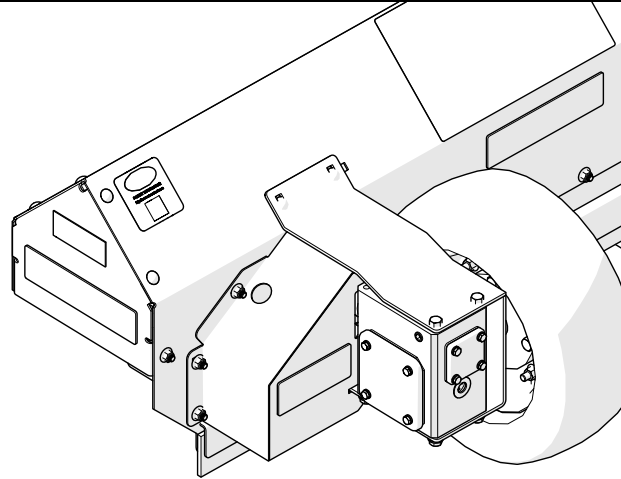


8. Re-tension the tractor drive chain by sliding the tractor drive to the right (towards center sump).

Then tighten (4) nuts circled to the right with a 9/16" socket.



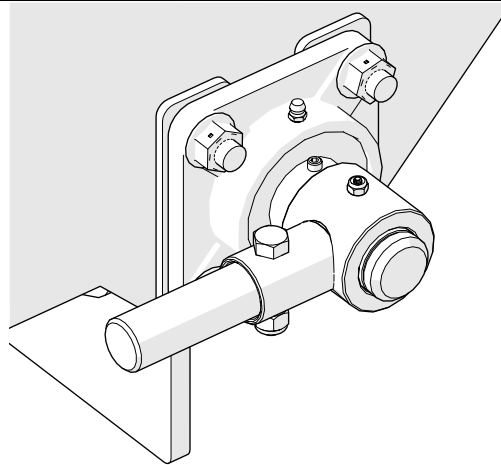
9. Re-install the cover over the tractor drive using the (3) carriage bolts and nuts removed earlier using a 9/16" socket.



10. Install Edge Buster assembly.

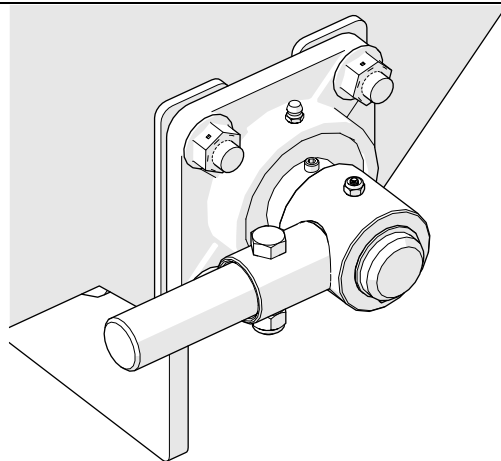
With the holes aligned drop in the shear bolt and fasten it using the included nylon insert nuts and a 3/8" socket.

These nuts only need to be tightened to 10 IN-LBS

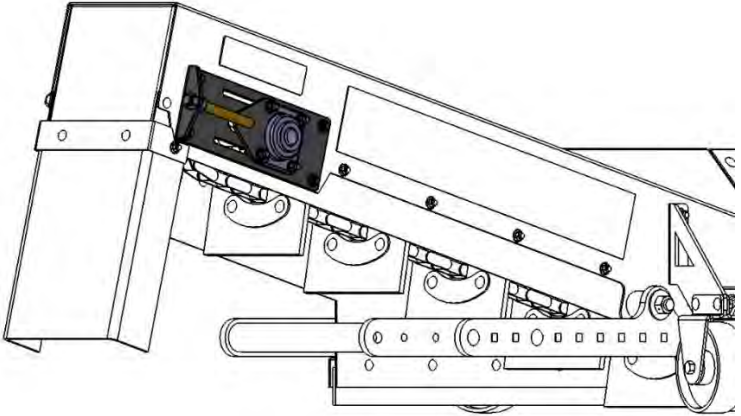
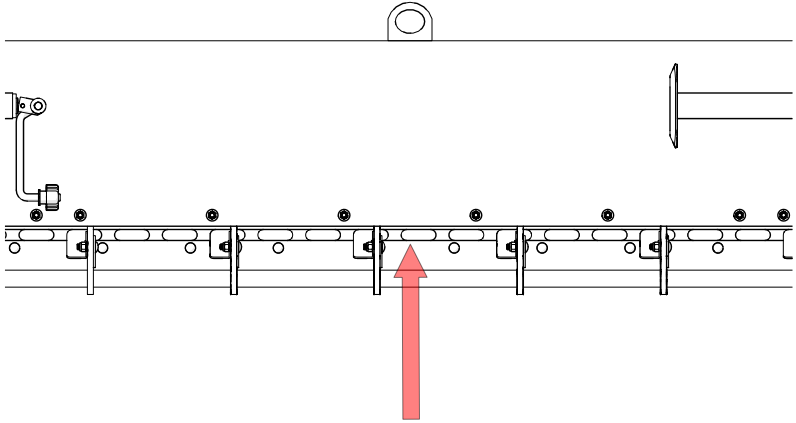


8. Install the outer external snap ring.

The Edge Buster is now installed.

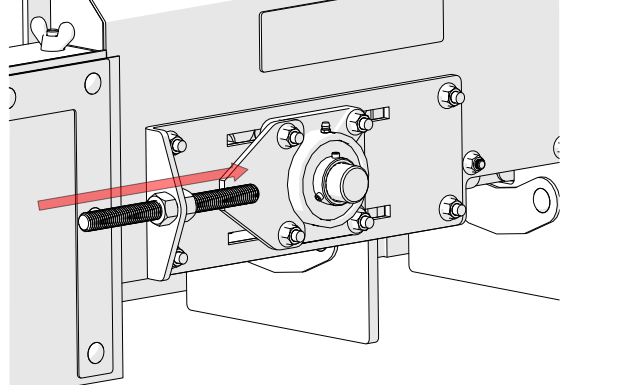
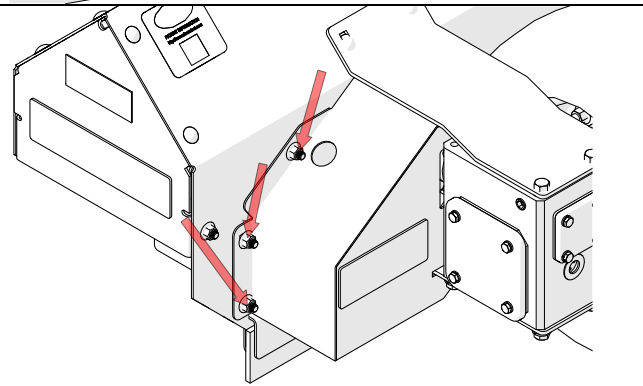
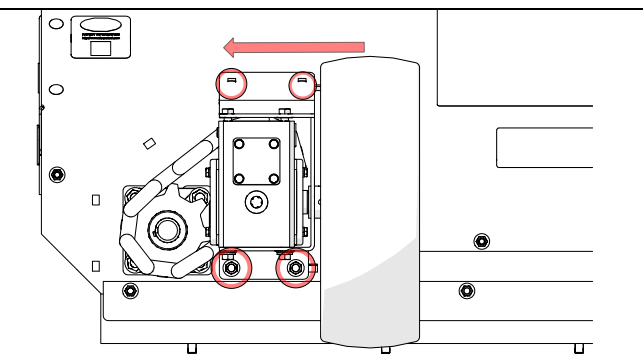
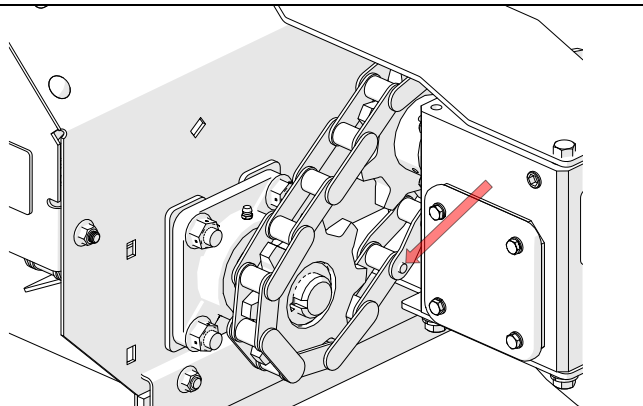


4.4.3 Re-Tensioning Chain

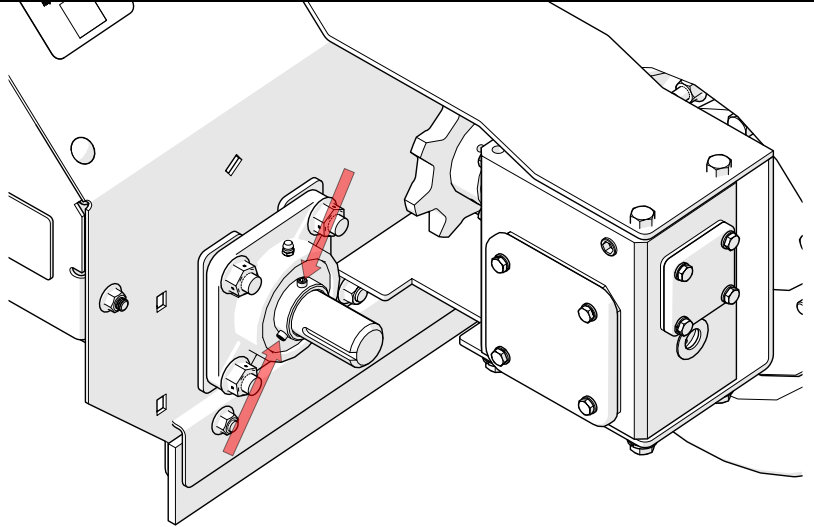
<p>1. Adjust the nuts on the paddle chain tightener</p> <p>2. Keep the shaft as perpendicular as possible by alternating tensioning on both sides only a couple of turns at a time</p> <p>3. Once at the correct tension for the chain is met, tighten the (4) bolts the bearing uses with a 9/16" socket.</p>	
<p>2. Check the chain tension at the CENTER of the sweep (i.e., on a 30ft. sweep go to 15 ft. front the sump).</p> <p>The chain should deflect approximately $\frac{3}{4}$" , or half of the thickness of the chain at the middle of the sweep.</p> <p>Less deflection indicates that the chain is too tight; more deflection indicates that the chain is too loose.</p> <p>The chain must not lift high enough to contact the sweep housing.</p>	
<p>5. 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.</p>	

4.5 Interceptor Edge Buster Installation

4.5.1 Un-Tensioning Chain and Removing Chain and Tail Shaft

<p>1. Loosen chain take up bearing above the center sump. Both sides will need to be loosened to allow for the tail shaft to be removed.</p> <p>This will require loosening both tensioning nuts on the bent flange of the assembly with a 1" wrench, along with the (4) bolts the bearing rides on to allow for free movement.</p>	 A technical drawing of a mechanical assembly. A red arrow points to a bolt on a bent flange. The assembly includes a bearing and a tail shaft.
<p>2. Remove the rear cover of the tail shaft to allow access to the tractor drive chain.</p> <p>To remove the cover, you will need to use a 9/16" socket on the (3) pictured nuts, then completely remove the carriage bolts to allow the cover to slide out.</p>	 A technical drawing of the rear cover of the tail shaft. Three red arrows point to nuts on the cover. The cover is shown being lifted away from the main assembly.
<p>3. Un-tension tractor drive chain by loosening (4) nuts circled by using a 9/16" socket.</p> <p>Move the tractor drive assembly to the left (bin wall) to take pressure off chain.</p>	 A technical drawing of the tractor drive chain assembly. Four red circles highlight the nuts to be loosened. A red arrow points to the left, indicating the direction to move the assembly.
<p>3. Find the master link on the tractor drive chain and remove the cotter pins so the master link can be disconnected, and the chain can be removed.</p> <p>Loosen the (2) set screws on the tail shaft gear using a 5/32" hex key, and then slide it off the tail shaft, along with the keyway leaving the exposed shaft.</p>	 A technical drawing of the tractor drive chain assembly. A red arrow points to the master link. The diagram shows the cotter pins being removed and the master link being disconnected.

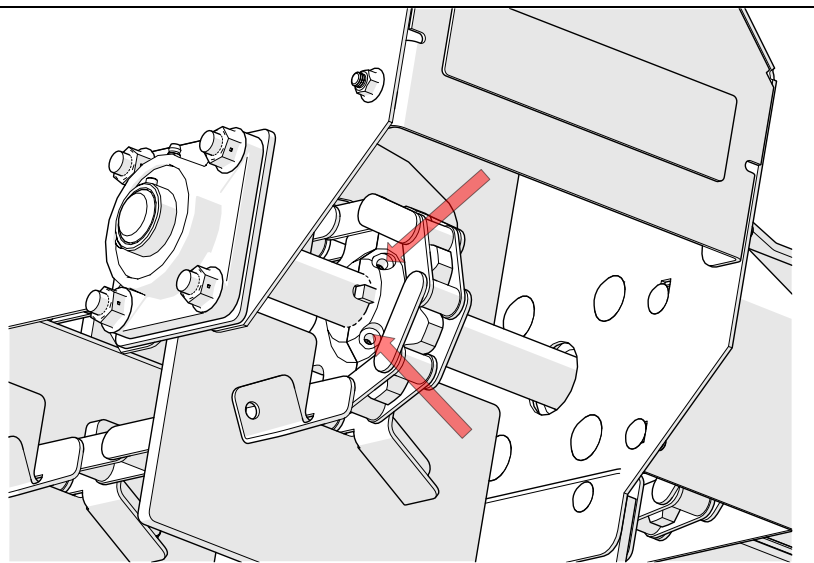
4. Loosen the (4) total set screws on the tail shaft bearings with a 1/8" Allen wrench.



5. Using an 3/16" Allen wrench to loosen the split sprocket on the tail shaft.

Depending on chain condition and tightness, it may not be necessary to drop the paddle chain, and the split can be left on the tail shaft LOOSE to allow for the shaft to be driven out.

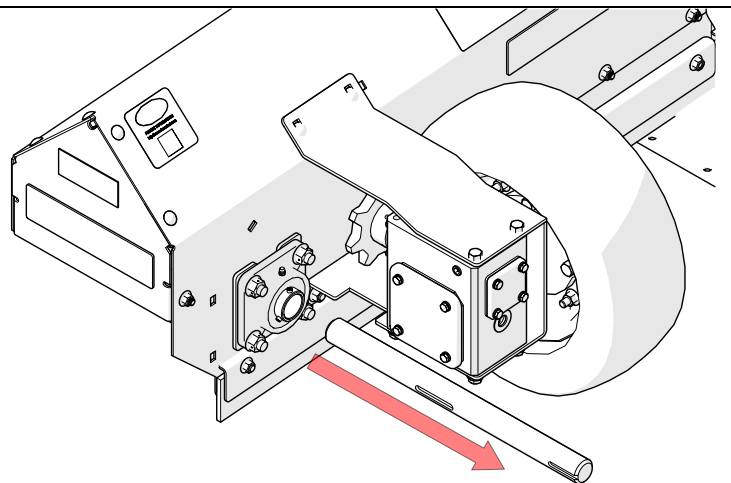
NOTE: If this is not possible, the master link must be found and removed so the chain can be dropped completely and removed from the split sprocket.



6. Remove the tail shaft, this shaft can be slid out of the front or the rear of the sweep, whichever is easier.

NOTE: It is recommended that a dead blow hammer and soft material punch be used to avoid "mushrooming" the end of the shaft while driving it out.

The shaft can be discarded after removal.



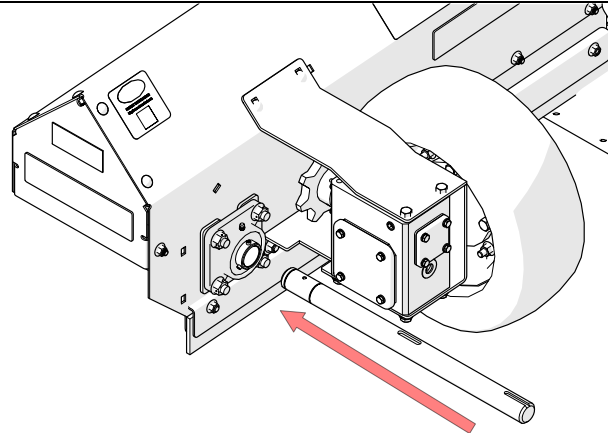
4.5.2 Installing New Tail Shaft and Edge Buster

1. Insert new shaft that comes with the edge sweep kit.

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

The shaft must also be inserted through the loop of the paddle chain.

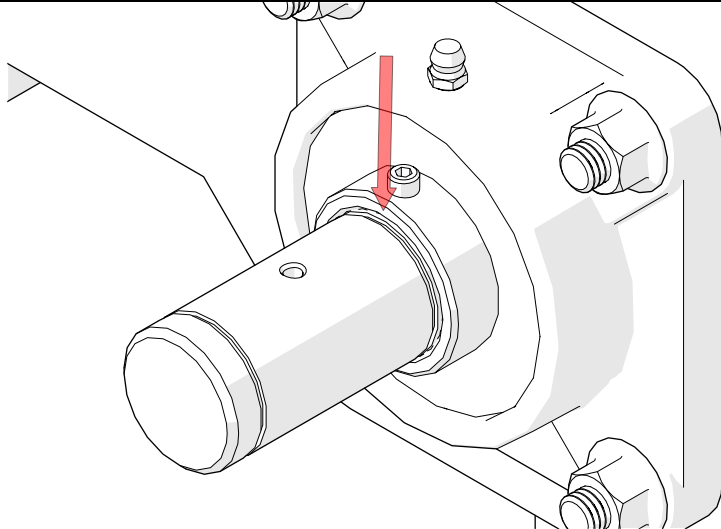
NOTE: The thru hole and snap ring grooves must be oriented to the front of the sweep.



NOTE: Have the 2nd snap ring groove flush with the edge of the front bearing.

NOTE: Ensure that a snap ring will fit in this groove after tightening.

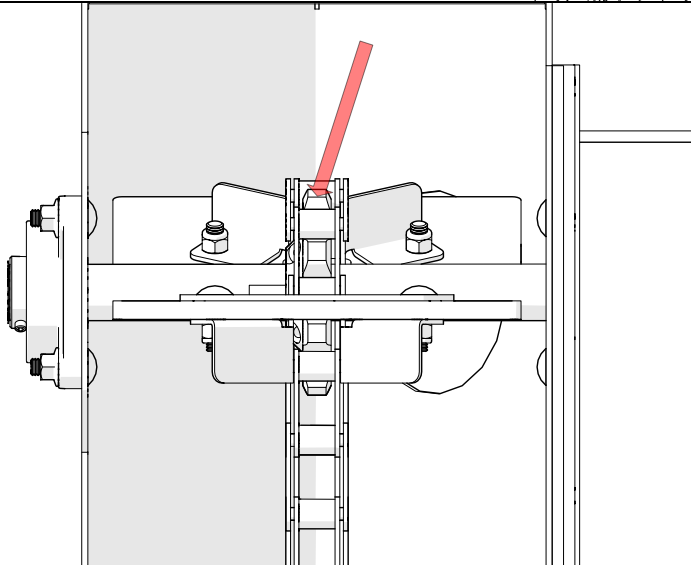
3. Tighten (4) set screws using a 1/8" hex key on the front and rear bearings.



4. The **MOST IMPORTANT** part is that the split sprocket is centered in the sweep housing, so the paddle chain tracks properly. Use a measuring device to confirm the sprocket is centered in the housing.

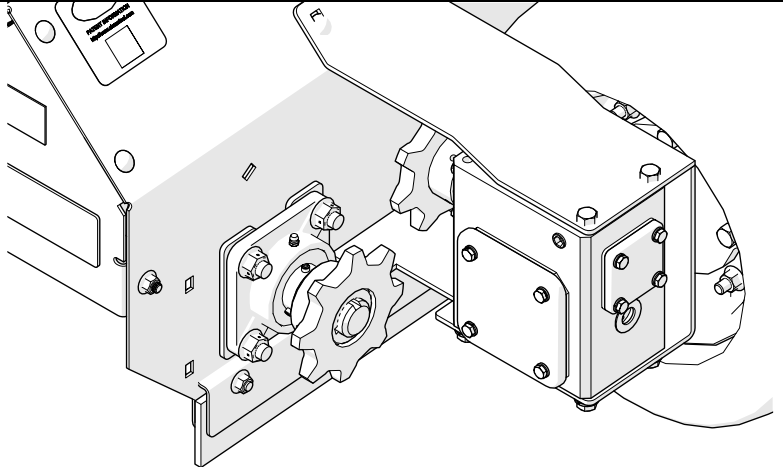
5. Tighten the split sprocket and reset the paddle chain.

Note: Torque (2) 1/4"-20 socket head screws in eight tooth sprocket to 30 ft-lbs. secure with blue Loctite or medium strength thread locker.



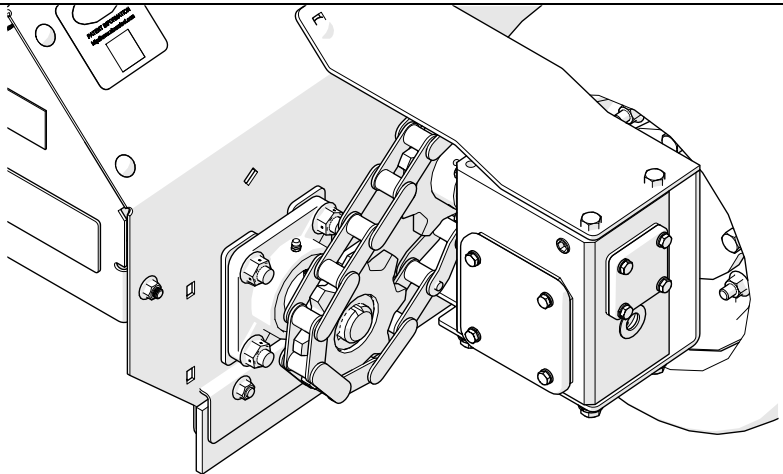
6. Install tractor drive gear on the tail shaft, ensure that the set screws are tightened on the gear using a 5/32" hex key.

NOTE: Set the gear on the shaft so that it is aligned with the gear still fitted to the tractor drive



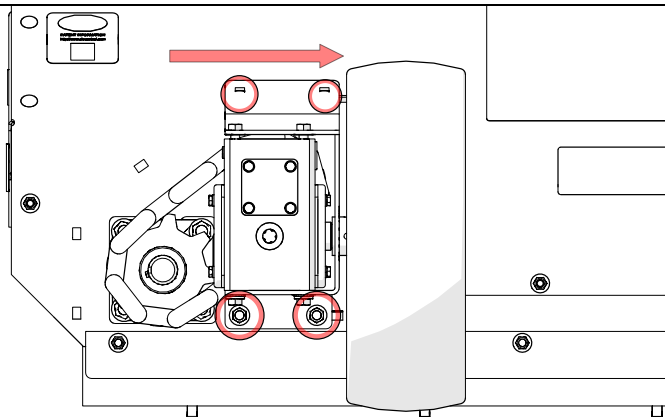
7. Re-install the tractor drive chain.

NOTE: Ensure that the cotter pins are reinstalled on the master link.

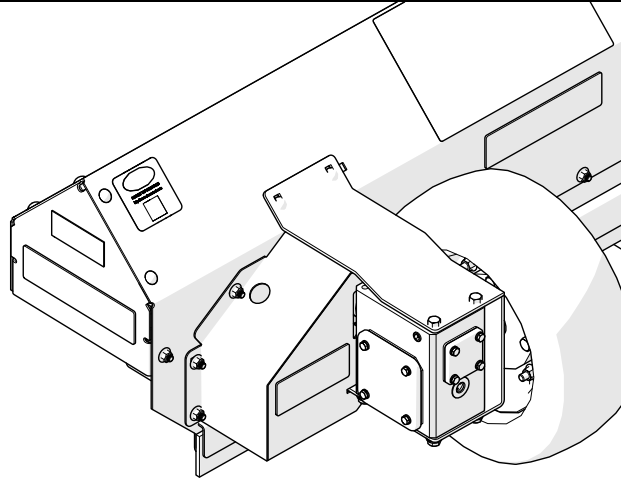


8. Re-tension the tractor drive chain by sliding the tractor drive to the right (towards center sump).

Then tighten (4) nuts circled to the right with a 9/16" socket.



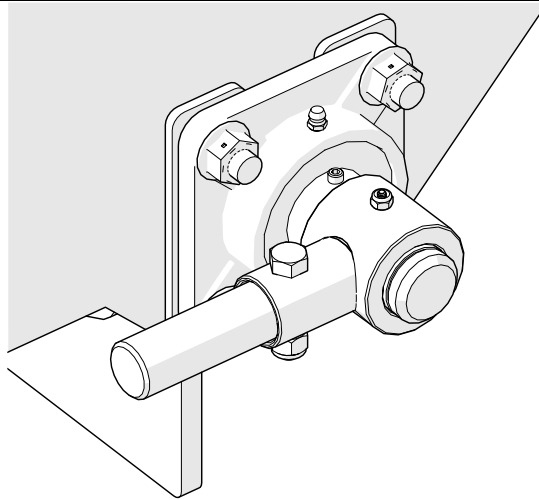
9. Re-install the cover over the tractor drive using the (3) carriage bolts and nuts removed earlier using a 9/16" socket.



10. Install Edge Buster assembly.

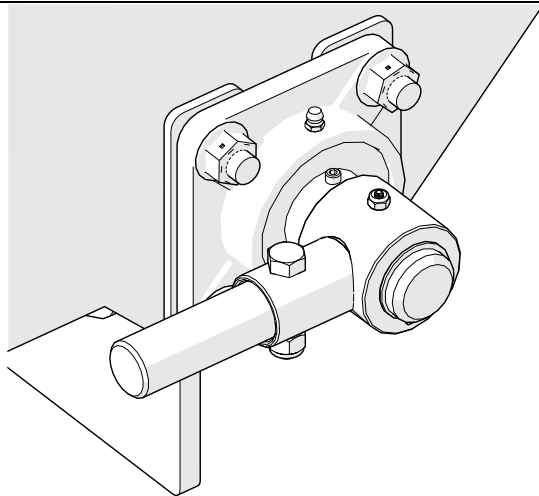
With the holes aligned drop in the shear bolt and fasten it using the included nylon insert nuts and a 3/8" socket.

These nuts only need to be tightened to 10 IN-LBS

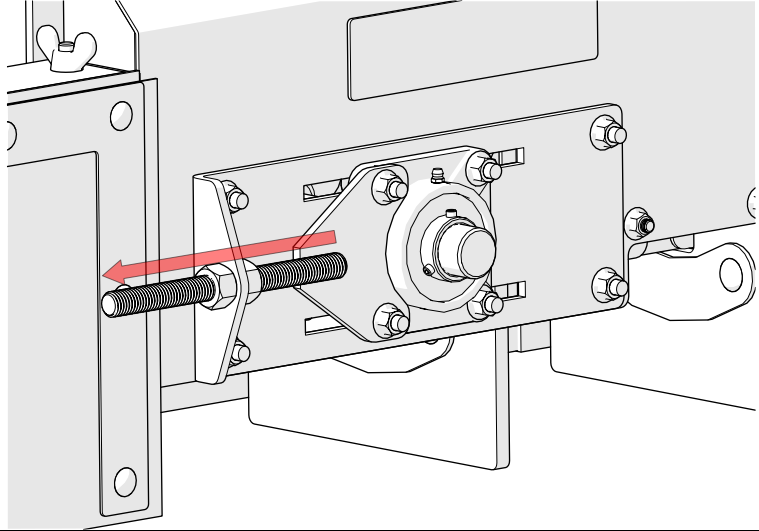
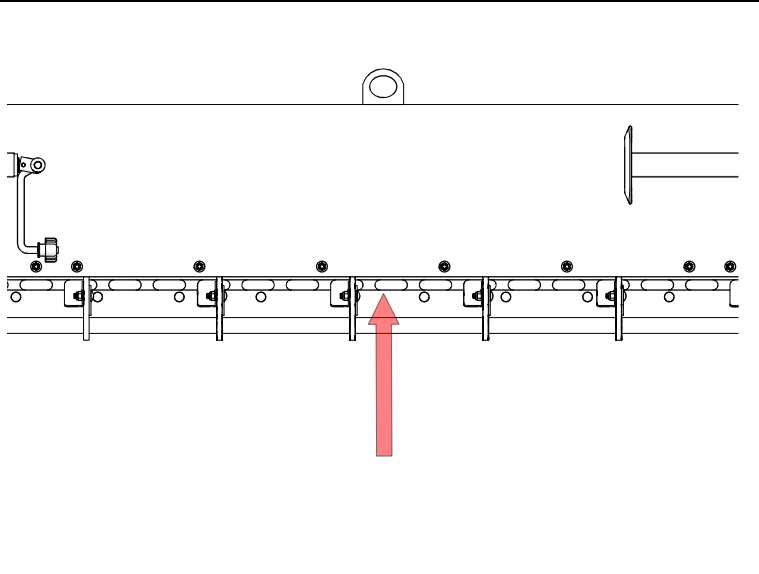


8. Install the outer external snap ring.

The Edge Buster is now installed.



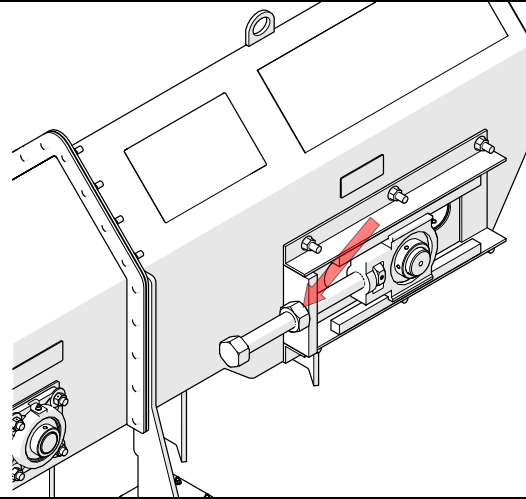
4.5.3 Re-Tensioning Chain

<ol style="list-style-type: none"> 1. Adjust the nuts on the paddle chain tightener 2. Keep the shaft as perpendicular as possible by alternating tensioning on both sides only a couple of turns at a time 3. Once at the correct tension for the chain is met, tighten the (4) bolts the bearing uses with a 9/16" socket. 	
<ol style="list-style-type: none"> 4. Check the chain tension at the CENTER of the sweep (i.e., on a 30ft. sweep go to 15 ft. front the sump). <p>The chain should deflect approximately $\frac{3}{4}$", or half of the thickness of the chain at the middle of the sweep.</p> <p>Less deflection indicates that the chain is too tight; more deflection indicates that the chain is too loose.</p> <p>The chain must not lift high enough to contact the sweep housing.</p>	
<ol style="list-style-type: none"> 5. 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. 	

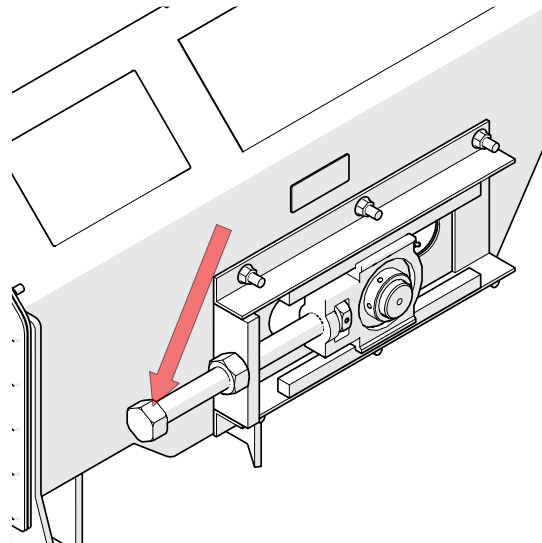
4.6 DPS 12K Edge Buster Installation

4.6.1 Un-Tensioning Chain and Removing Chain and Tail Shaft

1. Loosen the tensioner nuts on the front and rear adjustable bearings with a 2 ¼" wrench.



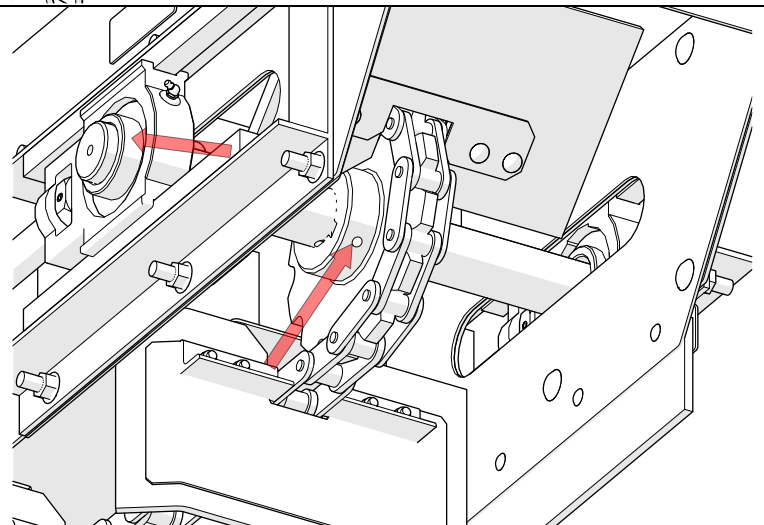
2. Adjust the tail shaft towards the center sump to take pressure off the paddle chain.



3. Loosen all (6) set screws on the tail shaft. The bearings use a 3/16" hex key, and the main gear uses a 5/16" hex key.

There will be (2) located on the front bearing as well as the rear bearing.

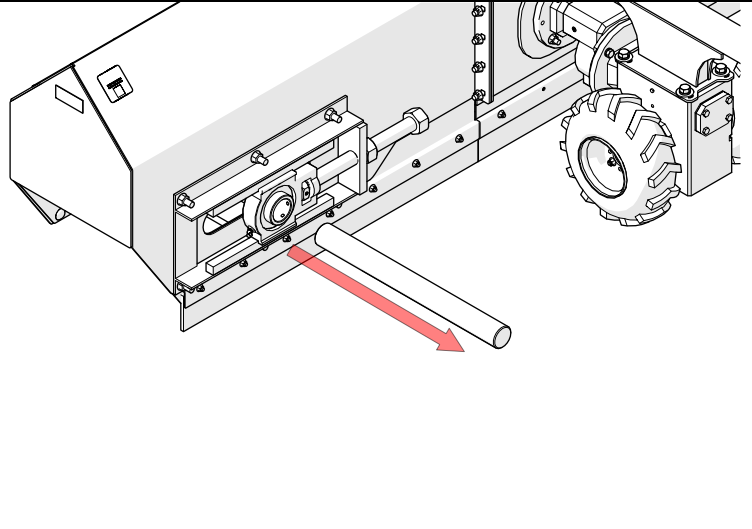
There will also be (2) set screws located on the tail shaft sprocket.



4. Drive the tail shaft out of both bearings and tail shaft sprocket. Remember to remove the key from the keyway and keep it for the new shaft once it is clear of the sprocket.

The shaft will be discarded after, a new one will be provided.

NOTE: The shaft can be driven out from in either direction, whichever is easier to access.

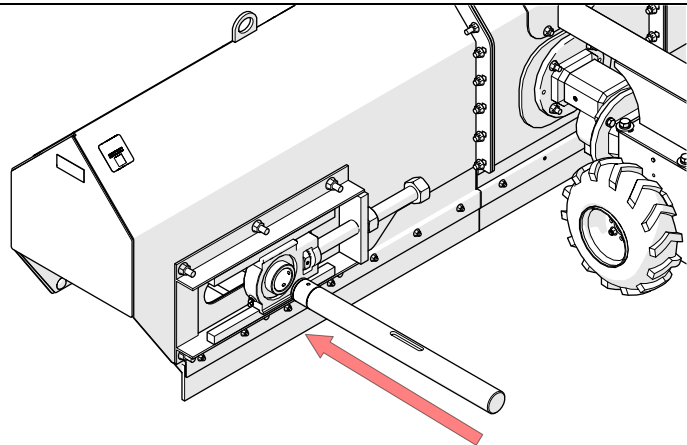


4.6.2 Installing New Tail Shaft and Edge Buster

1. Insert new shaft provided with the Edge Buster kit.

NOTE: The shaft must be inserted so that the through hole and snap rings are oriented to the front of the sweep.

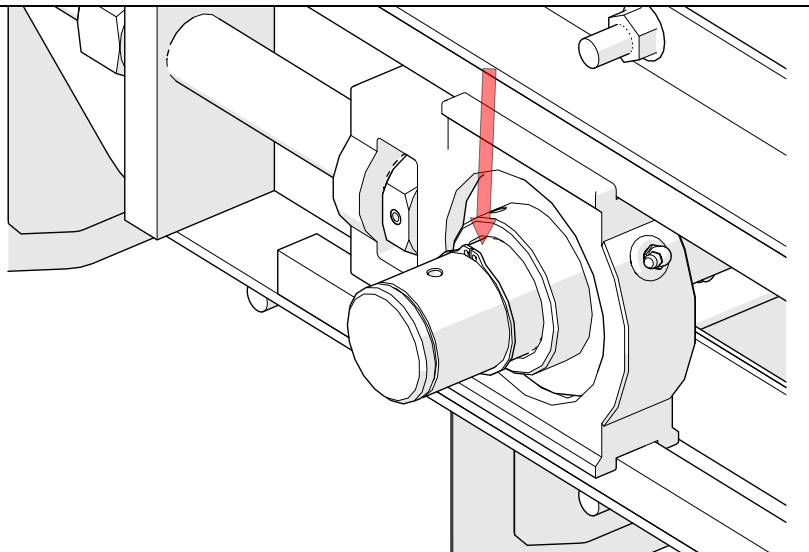
The shaft must also be inserted through the sprocket, as well as installing the key. At this point in the process leave it LOOSE on the shaft.



2. When locating the shaft back and forth the exposure on the front will be about three inches. (Arrow points at point to measure from to edge of shaft).

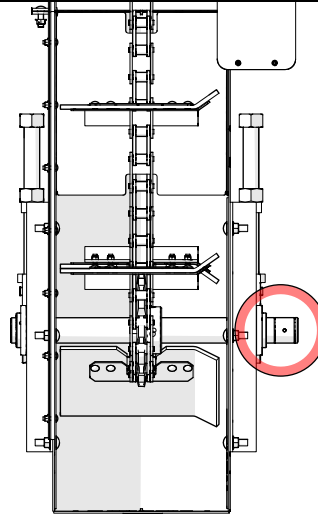
3. Tighten all (4) set screws with a 3/16" hex key on both bearings

4. Install the internal snap ring.



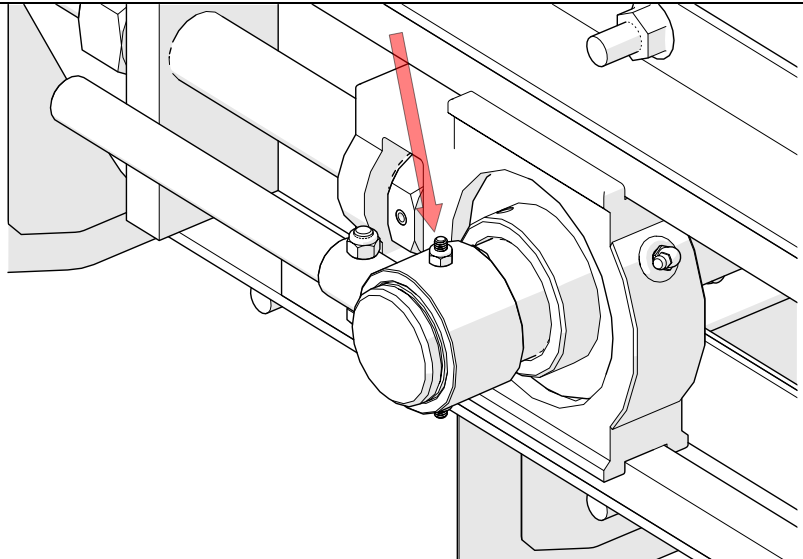
5. The **MOST IMPORTANT** part is that the sprocket is centered in the sweep housing, so the paddle chain tracks properly. Use a measuring device to confirm the sprocket is centered in the housing.

6. Once the sprocket is centered in the housing, tighten the (2) set screws on the sprocket with a 5/16" hex key.



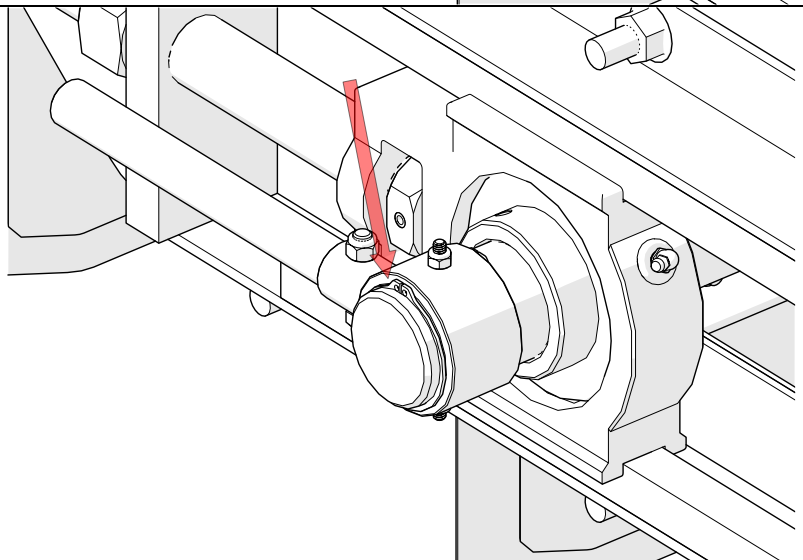
5. Install the Edge Buster using the shear pin with Ny-lock nuts to locate the assembly using a 3/8" socket.

These nuts only need to be tightened to 80 IN-LBS.

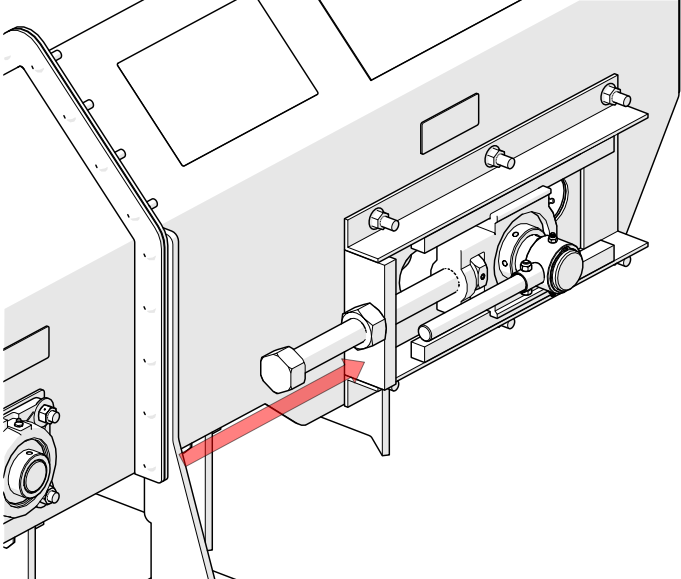
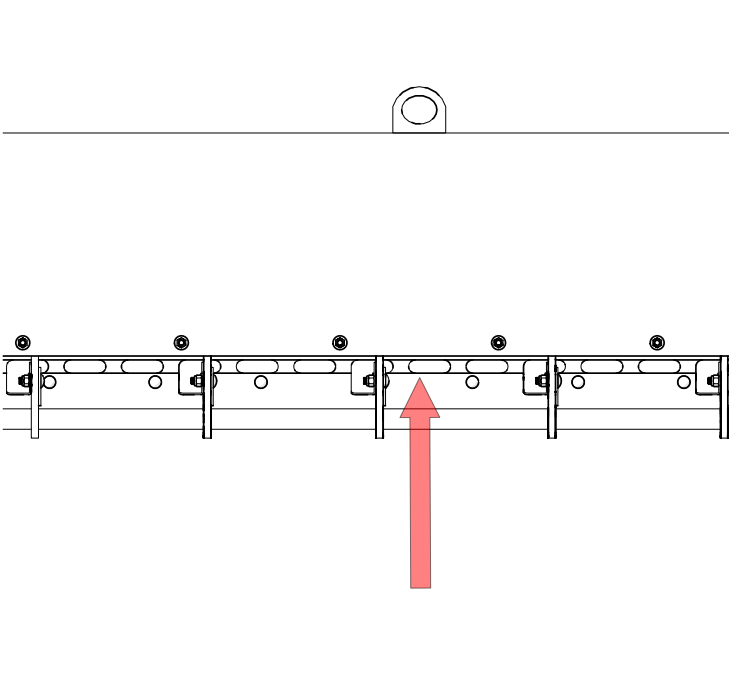


6. Install the outer snap ring.

The Edge Buster is now installed.



4.6.3 Re-Tensioning Chain

<p>1. Adjust the nuts on the paddle chain tightener</p> <p>2. Keep the shaft as perpendicular as possible by alternating tensioning on both sides only a couple of turns at a time</p> <p>3. Once at the correct tension for the chain is met ($3/4''$ deflection at center of sweep).</p>	
<p>4. Check the chain tension at the CENTER of the sweep (i.e., on a 30ft. sweep go to 15 ft. front the sump).</p> <p>The chain should deflect approximately $3/4''$, or half of the thickness of the chain at the middle of the sweep.</p> <p>Less deflection indicates that the chain is too tight; more deflection indicates that the chain is too loose.</p> <p>The chain must not lift high enough to contact the sweep housing.</p>	
<p>5. 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 $3/4''$ of deflection.</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 Buster at this point is ready for operation.

6 Trouble Shooting

Problem	Solution
1. Shear pin continues to break during operation	<p>A. Check for proper torque on nuts used with shear pin</p> <p>B. Check for physical barrier that plastic finger is contacting during operation</p>
2. Plastic finger, or other components breaking during operation	A. Shear pin being used is incorrect material. Refer to parts diagram for ordering correct shear pin.

Refer to the diagram below for proper torque settings on any bolt or nut that is installed or removed during installation.

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

7 Parts Diagrams

PARTS DIAGRAM & LIST

EDGE BUSTER ASSEMBLIES (712469, 712471, 712485, 712491)			
ITEM	PART #	DESCRIPTION	QTY
	712469	ASSY – EDGE BUSTER – DAAY POWER FARM / INTERCEPTOR	1
	712471	ASSY – EDGE BUSTER – DPS 12K	1
	712485	ASSY – EDGE BUSTER – DAAY BIN PADDLE SWEEP	1
	712491	ASSY – EDGE BUSTER – DPS G2	1
1	712468	SHAFT- ARM/ POWER FARM- INTERCEPTOR/ EDGE BUSTER	1
1	712478	SHAFT- ARM/DPS 12K/ EDGE BUSTER	1
1	712498	SHAFT- ARM/DPS G2- DAAY BIN PADDLE/ EDGE BUSTER	1
2	712476	WLDT- COLLAR DPS 12K/ EDGE BUSTER- YLW	1
2	712487	WLDT- COLLAR/DBPS-PWR FARM/ EDGE BUSTER- YLW	1
2	712495	WLDT- COLLAR DPS G2/ EDGE BUSTER- YLW	1
3	712472	RING- EXTERNAL SNAP – 2.438 SHAFT	2
3	681359	RING- EXTERNAL SNAP – 1.25 SHAFT	2
3	681358	RING- EXTERNAL SNAP – 1.50 SHAFT	2
4	712470	SHAFT – TAIL/POWER FARM- INTERCEPTOR/ EDGE BUSTER	1
4	712473	SHAFT – TAIL/DPS 12K/ EDGE BUSTER	1
4	712484	SHAFT – TAIL/DAAY BIN PADDLE SWEEP/ EDGE BUSTER	1
4	712499	SHAFT – TAIL/DPS G2/ EDGE BUSTER	1
5	712463	WLDT- TAIL SHAFT COVER DBPS/ EDGE BUSTER- BLK	1
6	654453	NUT- .250 – 20 GR2 NYLON INSERT LOCK	2
6	687383	NUT- #6 – 32 GR2 NYLON INSERT LOCK	2
6	712490	NUT- #4 – 40 GR2 NYLON INSERT LOCK	2
7	712480	ROD- #6-32 THREADED X 2.5	1
7	712700	ROD- 0.250-20 THREADED X 4.0 ZP	1
8	640035	SCREW- .375-16 X 1.75 GR5 HHC	1
9	654121	NUT- .375-16 GR 2 LOCK NYLON INSERT	1

