



**abi**  
***CLASSIC SPREADER***

**185 Cu. Ft.  
Set Up Guide**

# Model and Serial Number

Attached to the frame is an ID plate showing the serial number. Record your implement information and serial number in the space provided below. ABI will use this information to give you prompt, efficient service when you order parts.

**Size:** \_\_\_\_\_

**Serial number:** \_\_\_\_\_

**Invoice number:** \_\_\_\_\_

**Purchaser's name:** \_\_\_\_\_

## **Thank you!**

On behalf of the ABI family, we would like to thank you for your recent purchase of your ABI Classic Spreader. Our company's goal is to provide you with innovative, quality tools as well as first rate customer service.

This setup guide will help you to get your new ABI Classic Spreader off the delivery truck and into use. Once you have put your ABI Classic Spreader to work, if you have any questions, please feel free to contact our support department at 855.211.0598.

## **To the Operator:**

The information presented in this manual will prepare you to operate the ABI Classic Spreader in a safe and knowledgeable manner. Operating the ABI Classic Spreader in a proper manner will provide a safer working environment and create a more efficient result. Read this manual fully and understand the entire manual prior to setup, operation, adjusting, performing maintenance, or storing the ABI Classic Spreader. This manual contains information that will allow you to get years of dependable performance from your spreader.

This manual will provide you with information on safely operating and maintaining the ABI Classic Spreader. Operating the ABI Classic Spreader outside of the stated safety and operations guidelines may result in injury to the operator and equipment, or void the warranty.

The information provided in this manual was current at the time of printing. Variations may be present as ABI Attachments, Inc. continues to improve and upgrade the ABI Classic Spreader for future use. ABI Attachments, Inc. reserves the right to implement engineering and design changes to the ABI Classic Spreader as may be necessary without prior notification.

# Safety Precautions

**Please exercise caution at all times when setting up, operation, or performing maintenance on the ABI Classic Spreader. Remember, any piece of equipment like the ABI Classic Spreader can cause injury/damage if operated improperly, or if the user does not understand how to operate the equipment. Exercise caution at all times with using the ABI Classic Spreader.**

1. Never permit any person to ride or board the ABI Classic Spreader at any time. **NEVER ALLOW RIDERS ON THE ABI CLASSIC SPREADER!**
2. Ensure the implement is properly mounted, adjusted and in good operating condition.
3. Be sure the tractor is in neutral before starting the engine.
4. Use care and maintain minimum ground speed when operating the ABI Classic Spreader on a hillside or when operating close to ditches, fences, or water sources.
5. Personal protection equipment including safety glasses, safety shoes, and gloves are recommended during assembly, installation, operation, adjustment, maintaining and/or repairing the implement.
6. Be sure that no one is near the machine prior to engaging or while the machine is working.
7. Operate the ABI Classic Spreader in the daylight or under good artificial light. Operator should always be able to clearly see where they are going.
8. Be alert for hidden hazards. Always operate the ABI Classic Spreader with caution over work environments that may have buried obstacles.
9. Stay clear of all moving parts. Keep all limbs clear of attachments when making adjustments with all hydraulically operated attachments.
10. Use caution when operating the ABI Classic Spreader in icy, wet, or snowy conditions.
11. Do not use the ABI Classic Spreader on highways or public thoroughfares. The ABI Classic Spreader is designed for off road use only.
12. Operate the implement only with a tractor equipped with an approved Roll-Over-Protective-System (ROPS).
13. Always wear your seat belt. Serious injury or even death could result from falling off the tractor.
14. Always follow your tractor manufacturer's rules for safe operation of the tractor and for proper procedures for attaching and disconnecting attachments. Contact your local tractor dealership for an owner's manual for any questions related to the safe operation of the tractor.
15. The use of this equipment is subject to certain hazards which cannot be prevented by mechanical means or product design. All operators of this equipment must read and understand this manual, paying particular attention to safety and operating instructions, prior to using.
16. Do not operate the tractor/ATV and implement when you are tired, sick, or when using medication.
17. Keep all helpers and bystanders at least 50 feet away from the machine. Only properly trained people should operate this machine.
18. The majority of accidents involve operators being knocked off the tractor by low hanging limbs and then being run over by the implement. Accidents are most likely to occur with machines that are loaned or rented to someone who has not read the operator's manual and is not familiar with the implement.
19. Always stop the tractor, set brake, shut off the tractor engine, remove the ignition key, lower implement to the ground, and allow rotating parts to come to a complete stop before dismounting tractor. Never leave equipment unattended with the tractor running.
20. Never place hands or feet under implement with tractor engine running or before you are sure all motion has stopped. Stay clear of all moving parts.

21. Do not reach or place yourself under equipment until it is blocked securely.
22. Never place hands or feet under implement with tractor engine running or before you are sure all motion has stopped. Stay clear of all moving parts.
23. Keep hands, feet, hair, and clothing away from moving parts.
24. Never operate tractor and implement under trees with low hanging limbs. Operators can be knocked off the tractor and then run over by implement.
25. Reduce speed on slopes and sharp turns to minimize tipping or loss of control. Be careful when changing directions on slopes.
26. Inspect the entire machine periodically. Look for loose fasteners, worn or broken parts, and leaky or loose fittings.
27. Pass diagonally through sharp dips and avoid sharp drops to prevent “hanging up” tractor and implement.
28. Avoid sudden starts and stops while traveling up or downhill.
29. Always use down slopes; never across the face. Avoid operation on steep slopes. Slow down on sharp turns and slopes to prevent tipping and/or loss of control.

Use caution when operating the ABI Classic Spreader. Using the ABI Classic Spreader outside of stated safety and operations guidelines may result in injury to operator or others, property damage, or a void of warranty.

**CAUTION: Our machines are designed considering safety as the most important aspect and are the safest available in today’s market. Unfortunately, human carelessness can override the safety features built into our machines. Injury prevention and work safety, aside from the features on our tools, are very much due to the responsible use of the equipment. It must always be operated prudently following with great care, the safety instructions laid out in this manual.**

# Information on the ABI Classic Spreader

## **1/3 Heavier than most competitor's**

When it comes to equipment made of steel; weight is a good thing. The heavier the manure spreader, the more high density steel is being used. Using higher density steel means the manure spreader will last longer and perform better. Weight is a quality metric you can feel.

## **Shredded output**

Shredding the material has a number of advantages. It exposes more of the manure to sunlight, which reduces eggs/fly larva and allows manure to decompose far more quickly than non-shredded material. It also enables the manure to decompose quickly to encourage a healthy pasture and greatly reduces the amount of time between spreading and horses grazing again on the pasture.

## **Variable flow control**

Variable flow control enable ts the operator to apply just the right amount of material to the ground. This ensures proper application rates of material to maximize its nutritional value, while also minimizing waste and reducing nitrogen burn to vegetation. All ABI Classic manure spreaders feature the ability to control the flow rate of manure being applied to the ground. Both the PTO and ground drive manure spreaders have 4 different speed settings that are controlled by the lever (ground drive models) or a pull rope (PTO models). Flow control is accomplished by speeding up or slowing down the apron chain (conveyor) that feeds the manure to the back beaters. You now have the choice of emptying the spreader as fast as possible or applying controlled amounts of manure.

The combination of shredded output, controlled spread, and variable flow control makes the ABI Classic Spreader one of the most eco-friendly spreaders on the market.

## **All welded COR-TEN steel construction**

All ABI Classic Spreaders are fully welded for a long life and made of COR-TEN steel to resist rust and corrosion. Unlike standard mild steel used by competitors, COR-TEN is “weathering” steel originally engineered as a corrosion resistant steel for the construction industry. This steel may be exposed to the elements, even unpainted, and not rust of many years (ABI spreaders are painted for black for cosmetic reasons, however). Most competitors bolt together many components of of their spreaders. ABI Classic Spreaders are fully welded to take on the most punishing situations for many years.

## **Unique chain engagement mechanism**

To virtually eliminate drive chain slip when engaging or disengaging the drive chain, ABI Classic Spreaders utilize a mechanism that gradually lifts the chain off the sprocket one tooth at a time to disengage. To re-engage, this mechanism then gently lays the chain back on the sprocket seating the chain on each tooth of the sprocket. This process keeps the chain and sprocket in alignment and reduces the possibility the chain will slip or fall off the sprocket causing unneeded repair, wear and tear, and breakage. This mechanism is controlled by the front right operating lever (as you are looking toward the rear of the spreader). Most competitor engagement mechanisms do not keep the chain and sprocket in alignment and do not assist in the reseating of the chain on each sprocket tooth.

## **Coal tar epoxy box liner and tongue & groove poly floor**

To further prevent corrosion and rust, the inside of the box is sprayed with a coal tar epoxy liner. This box liner is not a traditional truck bed plastic insert liner that can cause corrosion underneath and it is not a soft rubbery material that can tear. This box liner is ideally suited for the unique demands of a manure spreader. Coal tar epoxy offers great “flex”, so it is perfectly suited to expand and contract with climate and can handle the abrasion and acidity of manure flowing through the spreader. Coal tar epoxies are famous for protection from moisture and are commonly used on garage floors, underground pipelines/tanks, and even the hulls of barges. The floor of the ABI Classic Spreader is constructed of a tongue and groove poly lumber, so it will never rot or rust. The tongue and groove construction prohibits the individual poly boards that make up the floor from warping, which would cause the apron chain to get caught and bind on the flooring. This is a premium maintenance free flooring that will last and comes with a limited lifetime warranty.

### **“5 Point” Corrosion and Rust Resistance**

Corrosion and rust resistance is one of the top concerns customers have in buying manure spreaders. ABI does not take this concern lightly. To ensure our spreaders will last for many years to come, we have implemented a suite of measures to prevent against corrosion and rust.

1. We start with corrosion resistant COR-TEN Steel.
2. All steel components are sandblasted before painting. This cleans the impurities off the steel and opens the pores to absorb the paint for the best bond.
3. Rust-Oleum “Stops-Rust” paint is applied. This paint is easy to repair and touch up. Unlike powder coating, moisture cannot get behind the paint to rust from the underside.
4. Coal tar epoxy box liner is applied inside the box.
5. Tongue and groove (plastic lumber) floor will not rust, corrode, or rot. This floor has a limited lifetime warranty.

# Setup

Prior to shipment of your ABI spreader all grease points have been packed with grease and the hydraulic gear boxes were filled with the correct amount of fluid. All chains have been adjusted and set to the right tensions.

## Attaching the Spreader to Tow Vehicle

### Step 1

Back the tractor up to the spreader and align tractor draw bar hitch with the hitch of the spreader. Turn off the tractor, put it in park, and remove the keys from the ignition. With the hitch lined up, insert the  $\frac{3}{4}$ " hitch pin and secure with the R-clip.

### Step 2

Next you will attach the hydraulic lines to the back of the tractor. If your tractor has the optional hydraulic end gate installed, then tractor will need to be equipped with two sets of hydraulic ports to run the ABI Spreader.

The two larger diameter hoses are for the web drive/conveyor system. The check valve (indicated in Figure 1) goes to the outward flow hydraulic port of your tractor. The other hose goes to the inward flow.



Figure 1

### Step 3

The smaller diameter hydraulic lines are for the optional hydraulic end gate. Neither line has a check valve and can be inserted in the two remaining hydraulic ports.

### Step 4

With the tractor shut off placed in park and the keys removed from the ignition of the tractor, line up the splines on the tractor to the splines of the PTO shaft. Push down on the spring loaded locking pin and slide the PTO shaft on as far as possible. Release the spring-loaded pin and pull outward slowly on the PTO shaft until the spring-loaded pin pops out and locks into place. Next repeat this process and connect the other end of the PTO shaft to the manure spreader.

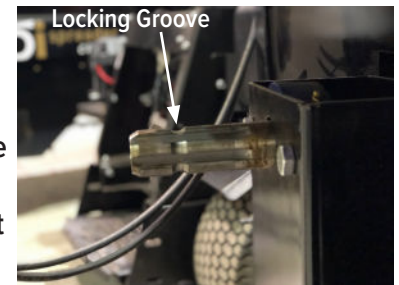


Figure 2

## Adjusting PTO Shaft Length

*CAUTION: Be sure to use protective eyewear, gloves, and ear plugs when following these adjustment steps.*

Depending on the tractor you have, it may be necessary to shorten the PTO shaft to fit your tractor and tool. To do so, first measure the distance between the locking groove of the PTO shaft on your tractor and the locking groove of the PTO shaft on the spreader. Next, measure the length of the PTO shaft with it completely slid together. Subtract the distance between the tractor and spreader from the length of the PTO shaft. Add two inches for ease of attaching the shaft. Divide this number by two. This will be the length to cut off each half of the PTO shaft.

**EXAMPLE:** If the distance between your tractor and spreader is 30" and the length of your PTO shaft slid together is 34", you will remove 3" from each end of the shaft.

To cut the shaft, first measure and cut the plastic safety cover to the desired length. Once the safety cover is cut, you can cut the shaft to the desired length on both sides. Before sliding the shaft sections back together, be sure to use a file to remove any burrs from both steel sections of the shaft.

# Operation

Use caution when filling the spreader from a manure pile to not dig too deep with your tractor bucket and scoop up rocks or debris that could damage your spreader.

Once, you reach the area where you intend to apply your manure, be sure to raise the end gate (if applicable) before attempting to engage the spreader. If not, you can damage your web drive/conveyor system.

Always be sure to engage your PTO first before engaging the hydraulics of your tractor. Failure to do so will cause the web drive/conveyor system to push the manure up against the beaters and wide spread paddles. This will result in having to manually shovel out the spreader. Idle your tractor down prior to engaging the PTO. Once the PTO is engaged, idle your tractor up to a maximum of 540 RPMs. If you don't want to spread as wide you can idle the tractor down until you reach your desired spread.

## Adjusting Web Drive/Conveyor Speed

To adjust the speed of your web drive (how fast the manure runs out the back) there is a lever located on the right side of the spreader by the PTO shaft. The small lever on the control valve has a thumb screw that when tightened in all the way locks the lever into the desired location. To adjust the lever, loosen the thumb screw and then set to your desired speed. Retighten the thumb screw to lock in speed. All the way to the left of the dial is no movement and the further you advance to the right, the faster the manure moves. ABI recommends starting out half way on the dial until you discover your ideal speed.



# Maintenance

**DANGER:** Disconnect PTO And hydraulics from tractor before performing any maintenance or repair work. If removing a tire, use a jack and jack stand with correct weight ratings. If working under the spreader, park on level surface, block wheels, and secure front tongue.

## Greasing the Spreader

Your spreader has a total of 17 grease zerks on it, 7 of which are to be greased every 30 days or 30 uses and before long periods of storage. The remaining 10 are to be greased annually. We suggest using a high-temperature synthetic grease.

Near the location of all 7 of the 30 day or 30 use grease points you will find a sticker with an image of a grease gun (Shown in Figure 1) to assist you in locating the grease points. Keeping your unit greased properly will extend the life of your tool, will reduce down time, and reduce the need for replacement parts.



Figure 1

On the front of the spreader you will see two access panels. One at the front left bottom corner and the other at the right bottom corner (see Figure 2). These grease points are not sealed bearings, so you can't over grease these. In fact, it's better to grease them until the grease comes out of the bearings to help flush out dirt and debris. These should be greased every 30 uses or 30 days.

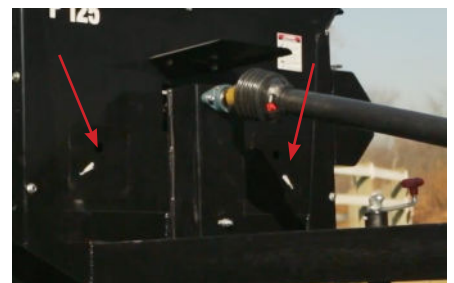


Figure 2



The next two grease points are at the right rear side of the spreader, with the safety shield removed. (The right or left side of the spreader is determined by standing behind the spreader looking forward). The first grease point is on the upper sprocket (Figure 1) and the second grease point is on the lower bearing (Figure 2). These are not sealed bearings, so they need to be greased until the grease comes out every 30 uses or 30 days.



Figure 1



Figure 2

At the rear of the spreader are two more grease points at the bearings on each end of the wide spread beater bar (Figure 3). These grease points need to be greased every 30 days or 30 uses. Reminder, these are not sealed bearings, so grease them until grease comes out.

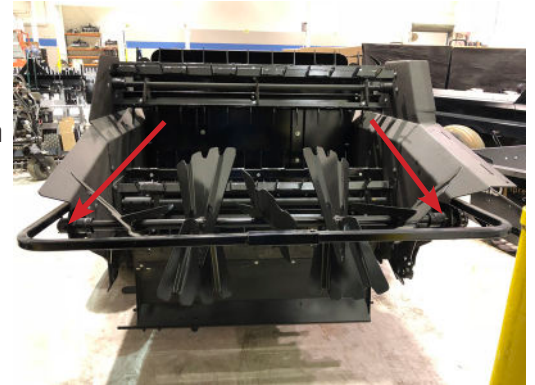


Figure 3

On the left rear of the spreader is the last of the 30 day or 30 use grease points (Figure 4). Reminder, this is not a sealed bearing, so grease it until the grease flows out to flush out debris.



Figure 4

The remaining 10 grease points are not marked by a sticker and are sealed bearings, meaning they receive a limited amount of grease.

There are 4 grease points on the left side of the spreader behind the shield, which will need to be removed prior to greasing (see Figure 5). Two of the grease points are on each side of the sprocket in at the front. The next grease point is toward the center of the shaft and the last one is at the rear of the shaft near the gear box. These are sealed bearings and require just one pump of grease annually or before long periods of storage.

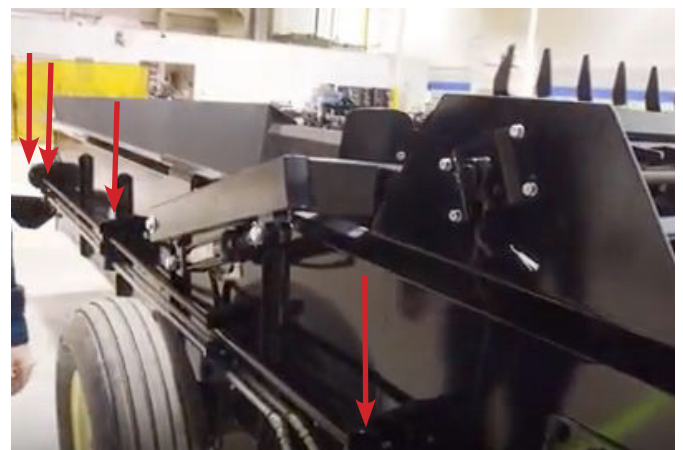


Figure 5

Behind the wheels on each side of the spreader is a grease point on the axle. These are sealed bearings and should get 4 to 5 pumps of grease annually.

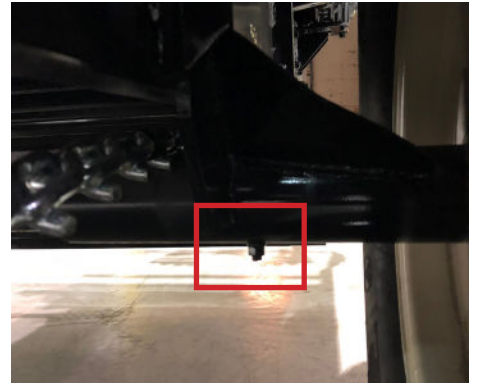


Figure 1

Behind the front guard there are two bearings where the PTO shaft enters the unit. These will get 2 pumps of grease annually. The front guard can be removed by removing the single top center bolt and sliding the shield upward.

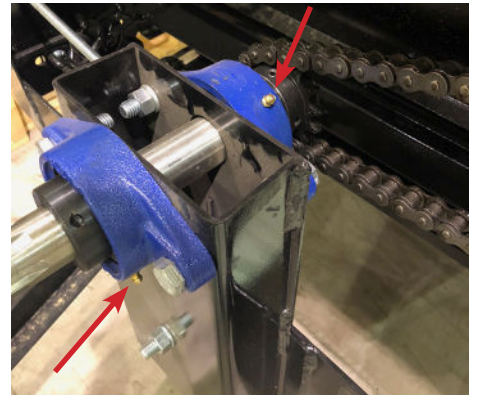


Figure 2

The last two grease points are on the PTO shaft itself. You can turn the safety cover to line up the hole in the cover to the grease point to reach it with a grease gun. There is one at each end of the PTO shaft and they both receive two pumps of grease annually.

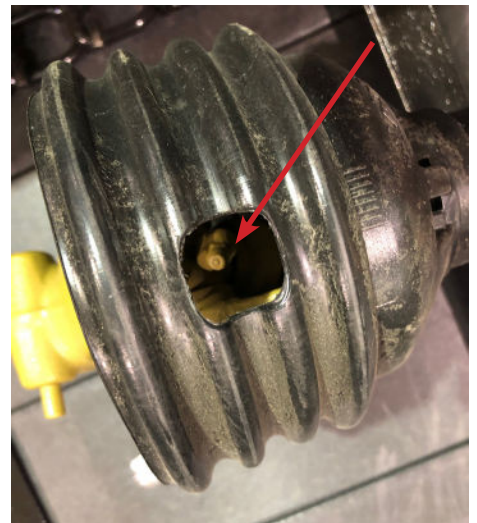


Figure 3

## Cleaning the Spreader

Pressure washing your spreader will help keep the nitrogen produced in the manure from eating away at the spreader. The more often you wash it the longer it will last. After washing you should oil all the drive chains that turn the sprockets on the spreader. Your unit has two at the right rear of the spreader, behind the guard. There is a double roller chain behind the guard on the left side of the spreader. To oil these you can use standard motor oil or use a spray can of chain lube found at most local hardware or auto parts stores. This will last longer than oil. The chains should never become dry as this can lead to rust and reduce their flexibility, causing them to break or malfunction. If you are going to store your spreader for a long period of time you can use an old paint brush and some motor oil and lubricate the web drive/conveyor chains.

Annually or before long periods of storage slide apart the PTO shaft and spray the inside of the larger half of the PTO shaft with a spray can of lithium grease. This will help prevent rust from forming, which can lead to the two shafts seizing together.

## Adjusting the Tension of the Web Drive/Conveyor System

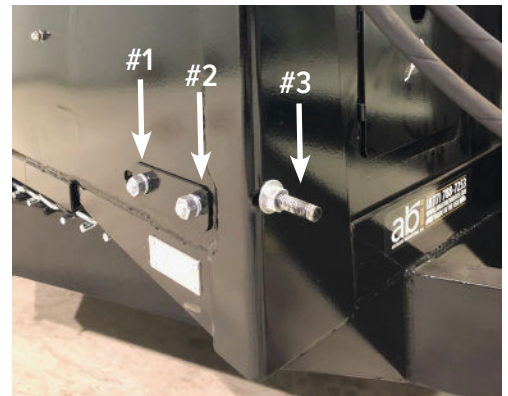
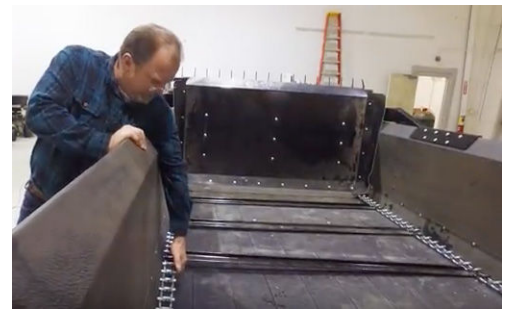
### Step 1

To determine if the web drive/conveyor system is in need of adjustment, go to the center of either side of the spreader, reach over the side, and pull up on the chain. There should be about 3 inches of slack between the chain and the floor of the spreader. If there is more, then an adjustment will be necessary.

### Step 2

On each side of the spreader at the front are two bolts (#1 and #2). Loosen, but do not remove these bolts. These bolts lock in the tensioner so it cannot move after the adjustment is set.

On the front of each side of the spreader is a nut on a threaded rod (#3). Turn the nut clockwise to tighten up the slack in the chain counting how many turns you make on each side. Adjust both sides the same amount of turns so the chains continue to run straight. Check the slack in the bed as shown in step 1. Once the web drive/conveyor is set at the desired tension on both sides, retighten the locking bolts (#1 and #2) on both sides.



## Adjusting the PTO Drive Chain Tensioner

After removing the front guard panel, loosen but do not remove the front two PTO housing locking bolts (Figure 1).

On the side of the spreader there is a threaded rod (Figure 2). By turning it counter clockwise you will increase the tension on the chain. If you grab the top chain, you should be able to push it down in the center approximately 1 inch when you reach the proper tension. Be sure to retighten down the two locking bolts and replace the front guard panel. Use caution not to over tighten which can cause excess wear on the sprocket and chain.

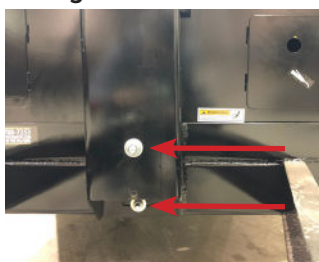


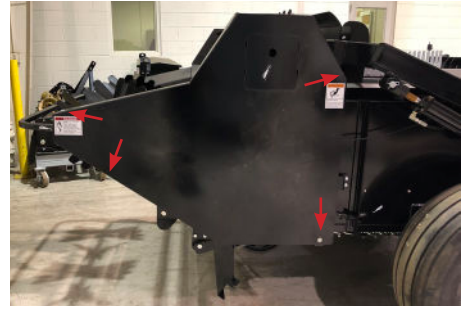
Figure 1



Figure 2

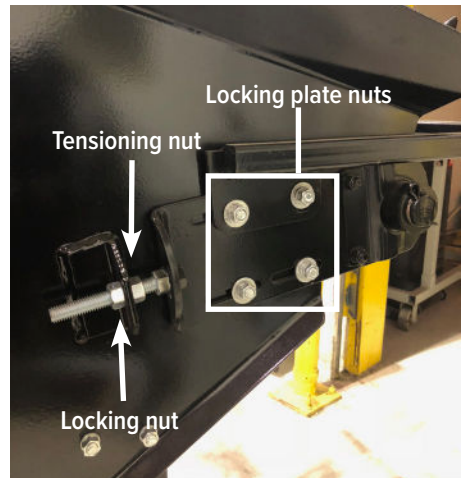
## Adjusting the Wide Spread Chain Tensioner

Remove the right rear safety guard by removing all four bolts and then lifting upward on the guard until it clears the locking slots. Place the guard safely off to the side.



Next loosen but do not remove all four locking plate bolts.

On the tensioner bolt, the locking nut is the nut closer to the front of the spreader. You will want to loosen this nut several turns. Tighten the tensioning nut and count the turns. It is important to adjust the wide spread the same amount on each side of the spreader. Afterwards tighten all four locking nuts down. Then, be sure to tighten the locking nut on the tensioning bolt and replace the safety guard. Just a reminder, be sure to adjust the opposite side the same amount of turns, to prevent the shaft from riding sideways, shortening the life of your bearings.



## Adjusting the Wide Spread and Beater Bar Chain Tensioner

*Remove the right rear safety guard as instructed in the previous section*

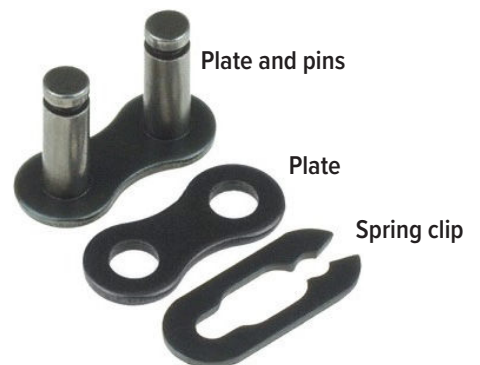
To set the tension on the chain, loosen the two locking bolts and slide the tensioner towards the rear of the spreader. Retighten the bolts once in place and replace the guard. Do not over tighten the chain or it will cause excessive wear to the chain.



## Replacing the Master Link on a Chain

A master link for a chain is comprised of three parts; the plate and pins, the plate, and the retaining spring clip that holds everything in place.

Whenever replacing a master link always have the plate and pin side of the link facing towards the sprocket housing and the retaining spring clip facing away from any sprocket. If not, the retaining spring clip can rub up against the housing and come off causing the chain to come apart. Insert the plate and pin section first then on the other side install the plate followed by the retaining spring clip to lock it in place.

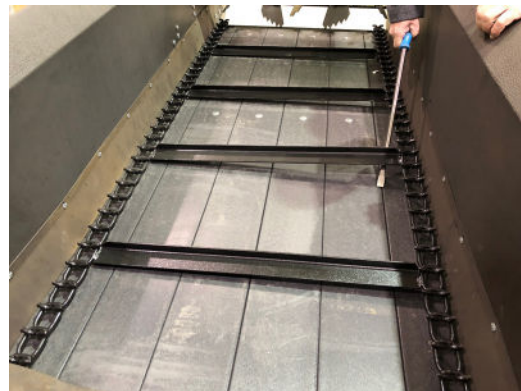


## Wheel Maintenance

The wheels on the spreader should be torqued down to 100- foot pounds after first use and be retightened annually. The recommended tire pressure is 52 PSI to maintain maximum performance. The tires should be visually inspected before each use and checked semi-annually with an air pressure gage. Maximum transport speed is 30 miles per hour.

## Winter Use

Use caution in winter months or during periods of freezing weather as the web drive/conveyor system can become frozen to the floor of the spreader. If it is frozen, take a pry bar and pry up on the web drive in several places on both sides of the spreader making sure it is free of ice. Next, before loading slowly run the web drive or conveyor making sure all mechanical parts are functioning properly. If equipped with the optional end gate, be sure to raise it before advancing the web drive. Do not let manure sit for long periods in the spreader during freezing conditions. The ABI warranty does not cover damages due freezing.



# Troubleshooting

## The PTO shaft is turning but the shredder bars and wide spread paddles are not turning

### Step 1

On the left front corner of your spreader there is a hinged hood area, unlatch and lower the hood. Check to see if the shear bolt (#1) has broken. If so, in the hood you will find extra 5/16" x 1 1/4" grade 2 bolts with nuts and washers. You will need to align the hole in the locking collar (#2) with the hole in the sprocket (#3) and then replace the bolt, washer, and nut and tighten down. Replacement shear bolts can be purchased at a local hardware store and are a grade 2 bolt.

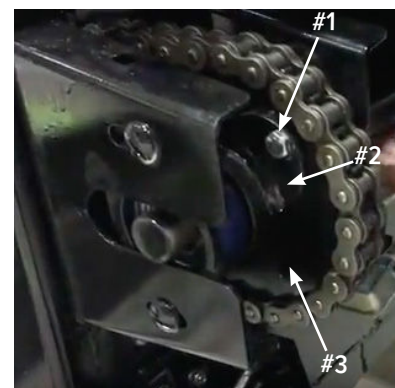


Figure 1

### Step 2

If the shear bolt is intact and the shredder bars and wide spread paddles still aren't turning, then you need to remove the guard on the left side of your spreader and verify that your double roller chain is still attached. On either side of the roller chain, there is a keyway that secures the sprockets to the shafts. To check this, remove the master link for the double roller chain and slide back the sprockets and see if the key way is intact. If the Key way is damaged, a replacement can be purchased at a local hardware store. It is a 1/4" x 1/4" x 1" key.



Figure 2

### Step 3

If the shredder bars and the wide spread paddles are not moving after completing steps 1 and 2, check the rear of the spreader on the left side lower beater bar shaft. There is a connection coupler with two set screws on this shaft (Figure 3). While the spreader is running, see if the shaft coming out of the gear box is turning and the beater shaft isn't turning. If this is the case, the key inside the coupler that connects the gear box to the beater bar shaft is broken and will need to be replaced. It is a 1/4" x 1/4" x 1" key.

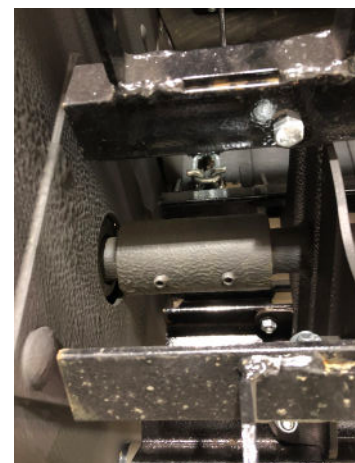


Figure 3

If steps 1 through 3 are completed and the beater bars and wide spread paddles are still not turning, contact our support team at 855.211.0598.

## The Web Chain/Conveyor System is not working

If the hydraulic hose are attached to the tractor and the spreader and the speed dial is turned on but the web chain or conveyor system is not working, the check valve may have been attached to the inward flow side of the tractor. If this happened, then the check valve has closed and stays closed until the pressure is released inside of the valve. To relieve the pressure first cover the check valve in an old rag (when pressure is relieved the hydraulic oil will spray out of the hose) and push or hit the nipple at the end of the coupler against a hard surface to relieve the oil and pressure. Next, plug the check valve into the outward flow side of the tractor and you should be up and running.



# abi **CLASSIC SPREADER**

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*For additional information on the use or setup of the ABI Classic Spreader, please contact the ABI customer support team at 855.211.0598.*

*Additional support videos are available at the ABI support page ([abisupport.com](http://abisupport.com)) under each tool.*

*Warranty Information and Return Policy - Warranty and return policy information can also be found on the ABI support page under each tool. For additional questions regarding warranty or return policy, contact the ABI customer support team at 855.211.0598.*