



**CLASSIC MANURE SPREADER
PTO DRIVE MODELS 50 -125
SETUP GUIDE**

****PLEASE READ AND UNDERSTAND PRIOR TO OPERATION****

WELCOME TO THE FAMILY!

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

These instructions are designed to help you get your new PTO Classic Spreader off the delivery pallet and into use. Once you have put your PTO Classic Spreader to work, if you have any questions, email our Customer Service Team at Support@ABIAttachments.com or give us a call at 877-788-7253.

To order parts for your PTO Classic Spreader email our Customer Service Team at Support@ABIAttachments.com or give us a call at 877-788-7253.

Additional support resources can be found at

www.ABISupport.com

NOTE TO OPERATOR:

The information presented in this manual will prepare you to operate the PTO Classic Spreader in a safe and knowledgeable manner. Operating the PTO 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 PTO Classic Spreader. This manual contains information that will allow you the operator to get years of dependable performance from the PTO Classic Spreader.

This manual will provide you with information on safely operating and maintaining the PTO CLASSIC SPREADER. Operating the PTO CLASSIC SPREADER outside of the stated safety and operations guidelines may result in injury to 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 Absolute Innovations, Inc. continues to improve and upgrade the PTO Classic Spreader for future use. Absolute Innovations, Inc. reserves the right to implement engineering and design changes to the PTO Classic Spreader as may be necessary without prior notification.

OPERATIONAL SAFETY RULES:

Please exercise caution at all times when setting up, operating, or performing maintenance on the PTO Classic Spreader. Remember, any piece of equipment like the PTO 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 PTO Classic Spreader.

- Never permit any person to ride or board the PTO CLASSIC SPREADER at any time. **NEVER ALLOW RIDERS ON THE PTO CLASSIC SPREADER!**
- Use care and maintain minimum ground speed when operating the PTO CLASSIC SPREADER on a hillside, or when operating close to ditches, fences, or water sources.
- Never place any body part under the while the PTO CLASSIC SPREADER is in operation.
- Never allow anyone near the PTO CLASSIC SPREADER while in operation.
- Operate the PTO CLASSIC SPREADER in the daylight or under good artificial light. Operator should always be able to clearly see where they are going.
- Be alert for hidden hazards. Always operate the PTO CLASSIC SPREADER with caution over work environments that may have buried obstacles.
- Stay well and clear of all moving parts. Keep all limbs clear of attachments when making adjustments with all hydraulically operated attachments.
- Use caution when operating the PTO CLASSIC SPREADER in icy, wet, or snowy condition.
- Do not use the PTO CLASSIC SPREADER on highways or public thoroughfares. The PTO CLASSIC SPREADER is designed for off road use only.
- Always follow Tractor Manufacturer's rules for safe Operation of Tractor, and for proper procedures for attaching and disconnecting attachments. Contact your local dealership for an Owner's Manual for any questions related to the safe operation of the Tractor.

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

SPECIFICATIONS

CAPACITY	50ft3	85ft3	125ft3	185ft3
Heaped Capacity	50 cu ft	85 cu ft	125 cu ft	185 cu ft
Struck Capacity	29 cu ft	47 cu ft	84 cu ft	112 cu ft
# of Horses	Up To 8	Up To 15	Up To 22	Up To 35
FEATURES				
Platform	Compact	Commercial Ag	Commercial Ag	Commercial Ag
PTO Driven:	Yes	Yes	Yes	Yes
Steel Type:	COR-TEN	COR-TEN	COR-TEN	COR-TEN
Steel of Gauge:	12	10	10	10
# of Beaters:	2	3	3	3
In-line Shredddding Beater:	Yes	Yes	Yes	Yes
# of Spreading Paddles:	10	8	10	14
# of Shredding Blades:	32	100	120	160
Flow Control Speeds:	4	4	4	Variable
Speed Adjustment:	Pull Rope	Pull Rope	Pull Rope	Hydraulic
Spray Shield:	Yes	-	-	-
Bed Liner:	Yes	Yes	Yes	Yes
Poly Lumber Floor:	Yes	Yes	Yes	Yes
Jack Stand:	Skid Plate	Skid Plate	Skid Plate	Skid Plate
Tires	Radial	Floatation	Flotation	Flotation
Ratcheting Hubs:	-	-	-	-
MIN VEHICLE REQUIRMENTS				
Tractor Type:	Compact & Utility	Compact & Utility	Compact & Utility	Utility
Min. Horsepower:	22 hp	25 hp	35 hp	50 hp
Min. Hydraulic Pump:	-	-	-	8 Gal p/min
Utility Vehicle Type:	-	-	-	-
Min. CC:	-	-	-	-
WEIGHTS				
Unit Weight:	825 lbs	2,095 lbs	2,650 lbs	3,175 lbs
Shipping Weight:	1,001 lbs	2,095 lbs	2,650 lbs	3,175 lbs
Empty Tongue Weight:	57 lbs	150 lbs	200 lbs	250 lbs
UNIT DIMENSIONS				
Total Length:	132" (11')	200" (16' 8")	234" (19' 6")	252" (21')
Total Width:	54" (4' 6")	72" (6')	86" (7' 2")	94" (7' 10")
Total Height:	43" (3' 7")	59" (4' 11")	66" (5' 6")	68" (5' 8")
Box Length:	76" (6' 4")	100" (8' 4")	125" (10' 5")	140" (11' 8")
Box Width:	35" (2' 11")	40" (3' 4")	48" (4')	60" (5')
Box Height:	19" (1' 7")	20" (1' 8")	24" (2')	23" (1' 11")
Box Flared Width:	40" (3' 4")	45" (3' 9")	53" (4' 5")	68" (5' 8")
Loading Height:	34" (2' 10")	43" (3' 7")	50" (4' 2")	53" (4' 5")
WARRANTY				
Mechanical	36 Months	36 Months	36 Months	36 Months
Workmanship:	36 Months	36 Months	36 Months	36 Months
Poly Lumber Floor:	Lifetime	Lifetime	Lifetime	Lifetime

INITIAL SETUP

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

Attaching the Spreader to a Tow Vehicle:

1. Back your tractor up to the spreader and align tractor draw bar hitch with the hole in the hitch of the spreader. Shut off the tractor, put it in park, and remove the keys. Then insert the $\frac{3}{4}$ " hitch pin and secure it with the R clip.
2. Connecting the optional end gate hydraulic lines is simple. The smaller diameter lines go to the end gate. Neither one has a check valve so just hook them up to your two remaining, hydraulic ports.
3. To connect the PTO shaft, ensure tractor is shut off, placed in park, and the keys are removed from the ignition. Align the splines on the tractor with 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 onto place. Repeat this process and connect the other end of the PTO shaft to the spreader.
4. Sometimes due to their being so many different brands and models of tractors in the marketplace you may need to shorten the PTO shaft to fit your unit.



STEP 1: With your tractor attached to the manure spreader, measure from the locking groove of the PTO shaft to the locking groove of the PTO shaft of your Tractor.

STEP 2: With your PTO shaft slid together completely, measure the length of your PTO shaft and subtract the length of the PTO shaft from the length between the two locking grooves.

STEP 3: Add two inches to the calculated measurement from STEP TWO to make attaching easier.

STEP 4: Divide the final number from STEP 3 by two and cut the divided amounts off each end of the PTO sections. EQUAL CUTS MUST BE MADE TO BOTH SIDES, DO NOT REMOVE ALL FROM ONE SIDE!

NOTE: Prior to cutting the shaft, you will first need to measure and cut off the plastic safety cover to the desired length. Before sliding both sections back together be sure to use a file to remove all the burrs from both steel sections of the shaft.

OPERATING THE PTO SPREADER

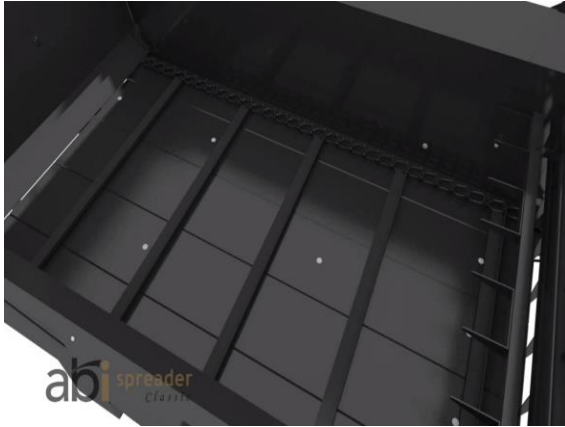
1. Use caution when filling the spreader from a manure pile not to dig too deep with your tractor bucket and scoop up rocks or debris that could damage your spreader.
2. Caution: Once you reach the desired area where you intend to apply your manure if you purchased a spreader with a hydraulic end gate be sure to raise the end gate before attempting to engage the spreader. If not, you can damage your web drive or conveyor system.
3. Always be sure to engage your PTO first before engaging your hydraulic of your tractor. Failure to do so will cause the web drive or conveyor system to jam the manure up against the beater and widespread and then it will have to be manually shoveled out. Idle your tractor down and then engage the PTO, next idle your tractor up to maximum 540 RPMs. If you don't want to spread as wide you can idle the tractor down some.
4. To adjust the speed of your web drive or conveyor system of your spreader there is a rope that runs down the right side of your spreader. Lightly pull the rope one time for the first or slowest speed, it has four total speeds plus neutral. Each time you lightly pull the rope it will advance the speed of your web drive which will put the manure down thicker. Pull it hard all the way forward and it will return to neutral.

Components:



Swing away Jack:

The swing away jack is used to hold the spreader in a safe level position when not connected to a tow vehicle. Use the jack to raise or lower the spreader for easy connection to the tow vehicle. To rotate the jack, remove the attached pin from the holder, rotate, and reinsert pin. To keep the jack from catching during use, always raise and rotate the jack before operating the Spreader.



Spreader Bed:

Make sure to rinse out the bed of the spreader after every use. It is important to avoid putting soil and stones into the spreader. The ABI Classic spreader was not designed to spread soil or stone. Using the ABI Classic spreader to spread soil or rocks will cause damage to unit and will not be covered under Warranty. Please do not store ABI Classic Spreader in direct sunlight as it may cause damage to the Tongue and Groove Poly Flooring.

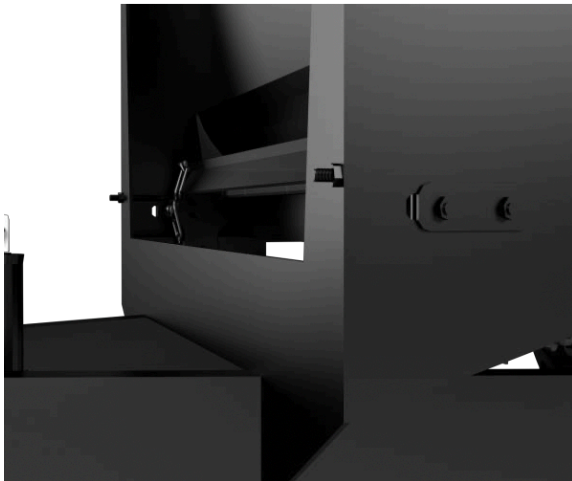
****Use caution when spreading wet manure. You will want to use a slow speed to prevent bridging or build up, and to allow the manure to properly spread. ****

Apron Chain Adjustment:

Over time you will need to adjust the tension on the apron chain. To adjust the apron chain, you will need to loosen the two bolts labeled #1. Then turn the nut labeled #2 to adjust the tension on the apron chain. For proper set up you want to have no more than 3" of lift in the middle of the bed on the apron chain.

Once you have adjusted the apron chain remember to retighten Bolt set #1 before using the spreader again.

**** You will need to make the adjustment to both sides, so make sure to keep track of how many times you turn the adjustment nut. To keep the apron chain level, you must adjust both sides the same. ****





PTO Shaft:

Make sure the PTO is fully locked in place before engaging the PTO drive. To prevent damage to the PTO, disengage the PTO before making any sharp turns. When engaging the PTO to operate the apron chain and Beater Bars you will want to follow the following procedure. Throttle down the engine and engage the PTO system. Engage the apron chain, and once running increase the throttle on the PTO to run the Beater Bars at full speed. When done spreading, disengage the apron chain (covered under speed adjustable rope section below) and disengage the PTO when bed is empty or returning to refill the Spreader. Repeat the process every time you use the spreader to prevent damage to the PTO shaft.

Do not engage the PTO while the optional End Gate is down.

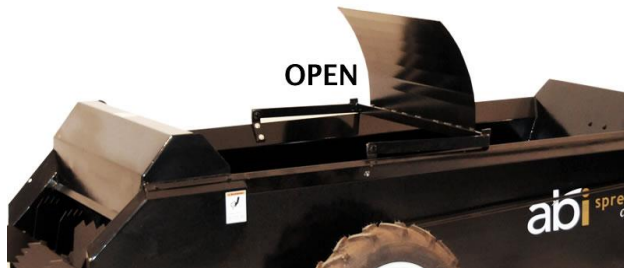
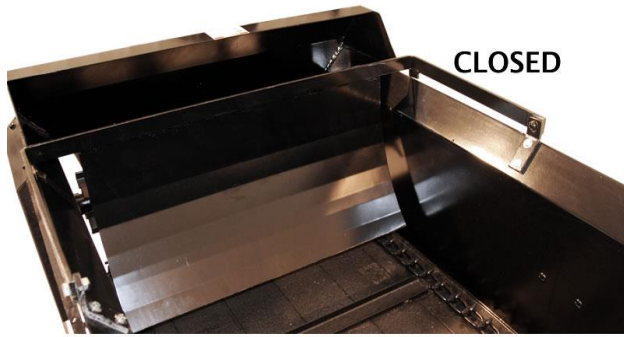


Speed Adjustable Rope:

The speed adjustable rope controls the speed of the apron chain. Pull the rope forward slowly to allow the lever to lock into each slot as you pull forward. This allows for multiple spreading speeds. When you want to stop the apron chain pull the rope fully forward and allow the lever to fully reset. This will disengage the apron chain.

*** Make sure to disengage the apron chain after every use and before starting the PTO shaft to prevent damaging the spreader. ***





Optional End Gate:

The optional end gate is used to prevent manure from spilling out during filling or transportation, and to help further deflect material from the operator during spreading. For ABI Classic Spreader models 25-50 the end gate must be operated manually. For larger models 85 – 130 there is an optional hydraulic lift arm for added convenience. Having this down during use will cause damage to the ABI Classic Spreader. Make sure to fully open the End Gate before use or engaging the Apron Chain at any time.



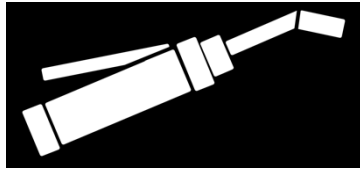
Optional Shredder Hood & Spray Shield:

This optional feature only available on the 25 and 50 cu ft spreader models.

The Shredder Hood and Spray Shield offers two features. First it prevents manure from flowing over the beaters and shredder bars, and second it acts as a shield for spray off. This helps with “clean” spreading and prevents material off from hitting the operator.

MAINTENANCE

Lubrication:



Spreader Grease points are indicated by this symbol.

50 cubic foot spreaders have 5 grease zerks that need to be greased every 30 days or 30 uses. Larger models have an additional grease zerk located on each end of the top beater bar assembly for a total of 7 grease zerks that need to be greased every 30 days or 30 uses or when putting in storage.

50 cubic food spreaders have 10 annual grease zerks needing two to three pumps of grease per year. All other PTO spreaders have a total of 11 annual grease zerks that should receive two to three pumps of grease once a year.

A full video showing lubrication points can be found at: <https://youtu.be/kx3A0bF6XUM>

Specific Grease Locations can be found according to the table below.

50CF – 185CF : 30 DAY / 30 USE GREASE POINTS**			
LOCATION	# OF ZERKS	AMOUNT	GREASE TYPE
Rear right side web drive shaft	1	2 - 3 Squirts	Synthetic High Temperature
Rear, right widespread paddle bearing	1	2 - 3 Squirts	Synthetic High Temperature
Rear, left widespread paddle bearing	1	2 - 3 Squirts	Synthetic High Temperature
Rear bottom right side (web drive bearing)	1	2 - 3 Squirts	Synthetic High Temperature
Rear bottom left side (web drive bearing)	1	2 - 3 Squirts	Synthetic High Temperature
85CF – 185CF : ADDITIONAL 30 DAY / 30 USE GREASE POINTS**			
Rear, right, top beater bar bearing (underneath shield)	1	2 - 3 Squirts	Synthetic High Temperature
Rear, left, top beater bar bearing	1	2 - 3 Squirts	Synthetic High Temperature
50CF – 185CF : ANNUAL GREASE POINTS			
Left side drive assembly (Back)	1	1 squirt	Synthetic High Temperature
Left side assembly (Middle) *Not present on 50cf models*	1	1 squirt	Synthetic High Temperature
Left side assembly (Front)	2	1 squirt	Synthetic High Temperature
Front, left, bottom corner (behind the safety shield)	1	2 - 3 Squirts	Synthetic High Temperature
Front, right, bottom corner (behind the safety shield)	1	2 - 3 Squirts	Synthetic High Temperature
Ends of PTO shaft	2	2 - 3 Squirts	Synthetic High Temperature
Front Swing Jack	1	2 - 3 Squirts	Synthetic High Temperature
Behind right hub	1	4 - 5 Squirts	Synthetic High Temperature
Behind left hub	1	4 - 5 Squirts	Synthetic High Temperature

****NOTE:** 30 day/use bearings should be filled until grease flows out. This flushes dirt and debris.

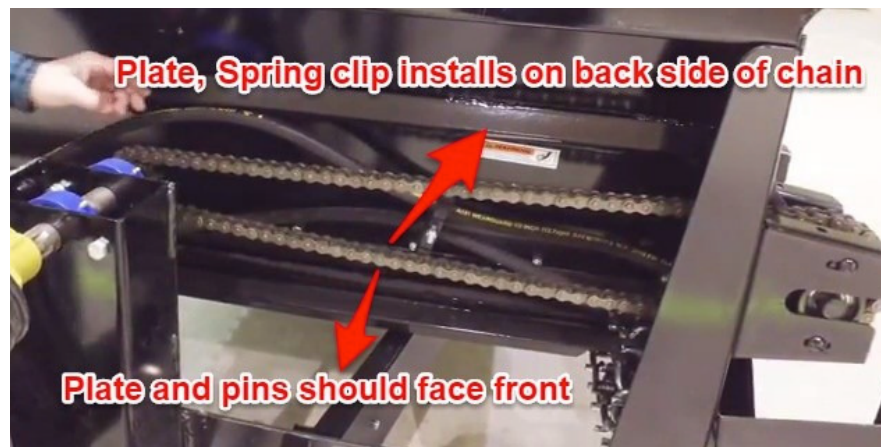
Chain Care:



Lubricate drive chains (pictured above) every three to six months – depending on frequency of use – with aerosol chain lubricant or regular motor oil which can be applied with a paint brush

Chains should be inspected regularly to make sure they are lubricated. Dry chains stretch and wear quicker and are prone to rust which can cause them to bind and break.

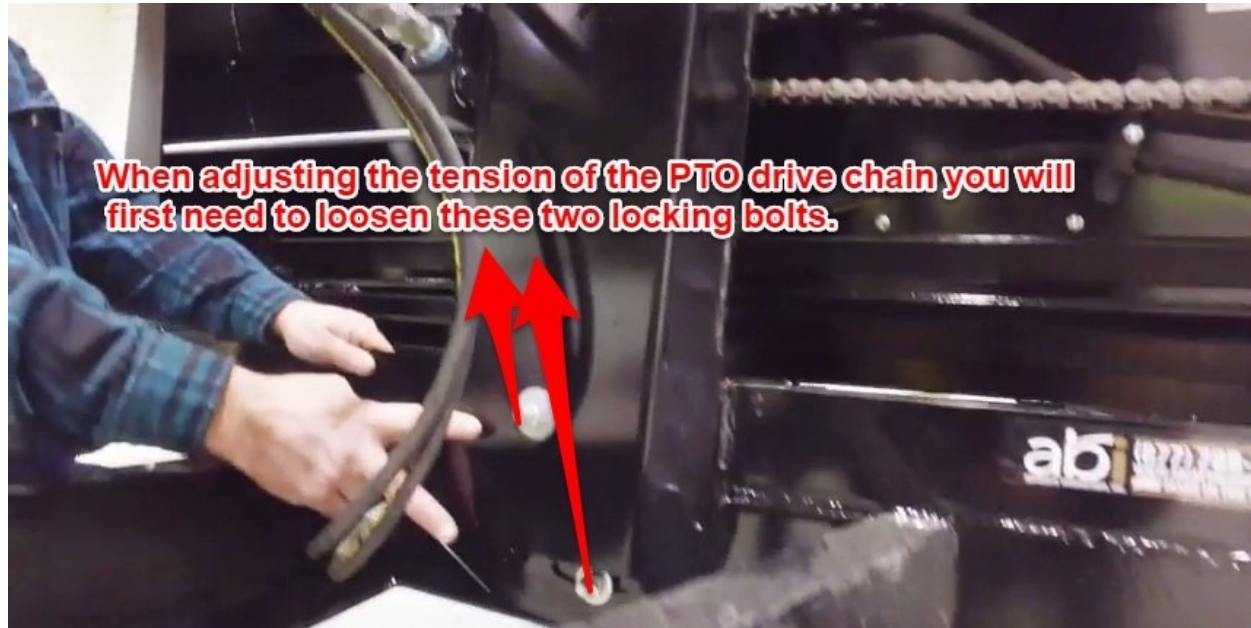
How to Replace or Install a Master Link:



The master link is made up of three pieces. The plate and pins, the plate, and spring clip.

As seen in the pictures above, when installing a master link on a chain, be sure that the plate and pin section are inserted so that the base of the plate faces towards the housing of the bearing or ratchet gear. Otherwise, the spring clip can rub against the housing or gear and cause it to come unclipped resulting in the chain coming off. After inserting the plate and pins into both ends of chain, install the plate and lock it on with the spring clip. Be sure the spring clip is attached fully to both pins.

Adjusting the PTO Drive Chain:



Adjusting the Web Drive Conveyor System Tension:

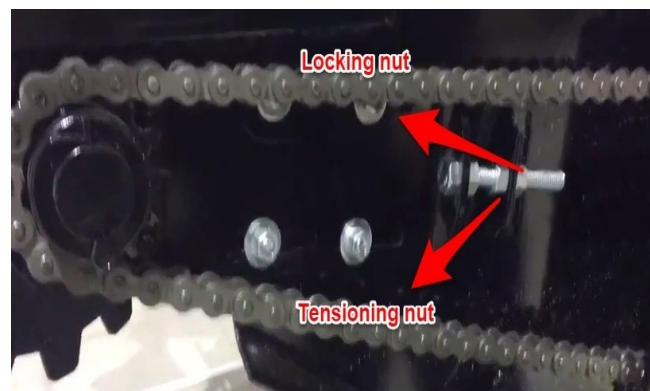
The web drive or conveyor system tension can be checked by reaching over the side of an empty spreader towards the center of the bed and picking up on the chain. There should be between 3 and 5 inches of slack. If additional slack exists, locate and loosen both bolts on both of the front, bottom, side corners of the spreader.



Then locate the threaded nut on the front bottom corner of the spreader. Tightening the nut increases the tension of your web drive chain. Be sure to count your turns of the nut so you can tighten the other side to the same tension, ensuring the conveyor system remains in alignment. After setting tension so only 3 -5 inches of slack exists between the bed and the chain, tighten the two locking bolts back down on both sides of the spreader.

Adjusting the Widespread Chain Tension on 85cf – 125cf Larger Models:

The pictures below show how to tighten the widespread chain on the right rear of 85cf and larger spreaders. After removing the safety cover, loosen but DO NOT remove the four bolts as seen in the left picture below. Next, loosen the outer nut and then turn the tensioner nut to reach desired tension. Repeat on opposite side of the spreader to verify that your shaft will be running straight.



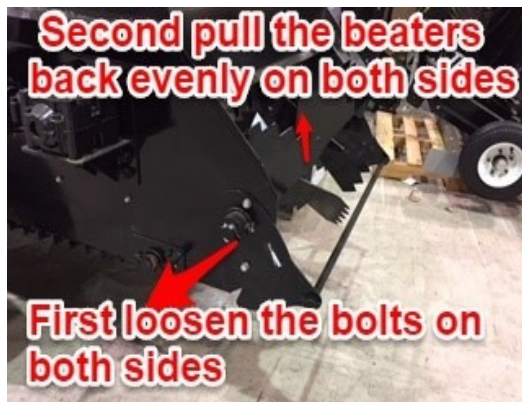
CAUTION: Do not over tighten! Chain should be able to be pulled upward about an inch after setting the tension.

Adjusting the Widespread Chain Tension on 85cf – 125cf Continued:



On the 85 and larger spreaders due to them having two sets of shredding bars there is a second chain that attaches the widespread beaters and lower set of beaters to the upper set of shredders. To tighten the chain tension, loosen but do not remove the two locking bolts and then slide the tensioner towards the rear of the spreader then tighten back down both locking bolts. Use caution not to overtighten there should be slack in the chain. Overtightening will cause excessive wear to the chain and the bearings.

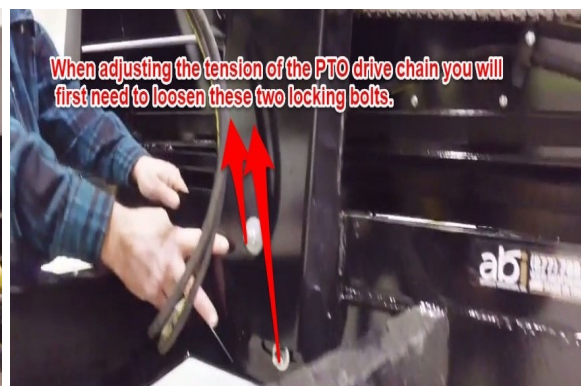
Adjusting the Widespread Chain Tension on 50cf – 65cf:



On spreaders smaller than the 85 cubic feet you will need to loosen both bearing plates on each side of the spreader. This will require two people. Have one person pull the widespread beater shaft back to the proper tension being careful to make sure it is straight, then have the second person tighten the two bolts on each side back down to hold it in place. If you can't get it tight enough then you can remove a chain link.

Adjusting the Tensioner on the PTO Shaft:

The pictures below show how to adjust the chain tensioner that ties the PTO shaft to the drive line that then links to the hydraulic gear box. In the first picture on the left you will need to loosen but not remove the two housing locking bolts. Next, on the right side of your spreader you will see a threaded rod with a nut on it. To adjust the drive chain tighter simply turn the nut clockwise until you reach the desired tension. Then tighten the two housing bolts back down to lock it in place. CAUTION: Do not overtighten. You should be able to grab the chain after tightening and pull it up about an inch when tight.



Tire Maintenance:

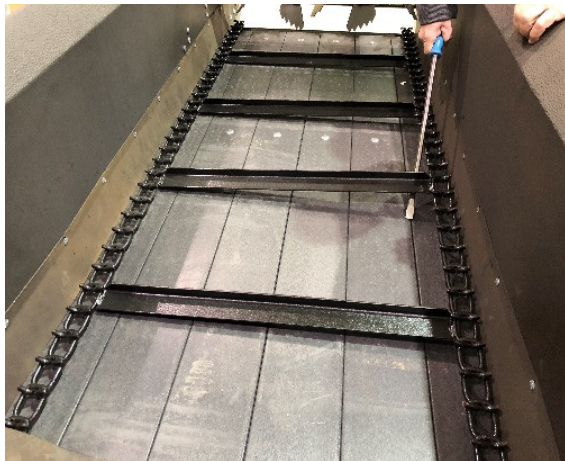
The tires on the spreader should be torqued down to 100-foot pounds after the first use and then checked annually. Tire pressure should be checked upon delivery to verify they are inflated to the proper specifications of the tire manufacturer. The tire pressure specs can be found on the sidewall of the tire. Visually inspect the tires before loading and manually check the pressure annually. Maximum transport speed for the spreader is 30 MPH.

Pressure Washing:

Pressure washing your spreader will help prevent rust. It will help remove the nitrogen residue left on the spreader from the manure. After washing you should oil the chains, ratchet wheels, and springs to keep them from rusting and keep them moving freely.

Cold Weather Precaution:

Use caution during cold weather to make sure the web drive or conveyor system is not frozen down to the bed of the spreader. Use a shovel or a prybar (as shown in the picture to the left) and lift the chin away from the bed to make sure they are not frozen together.



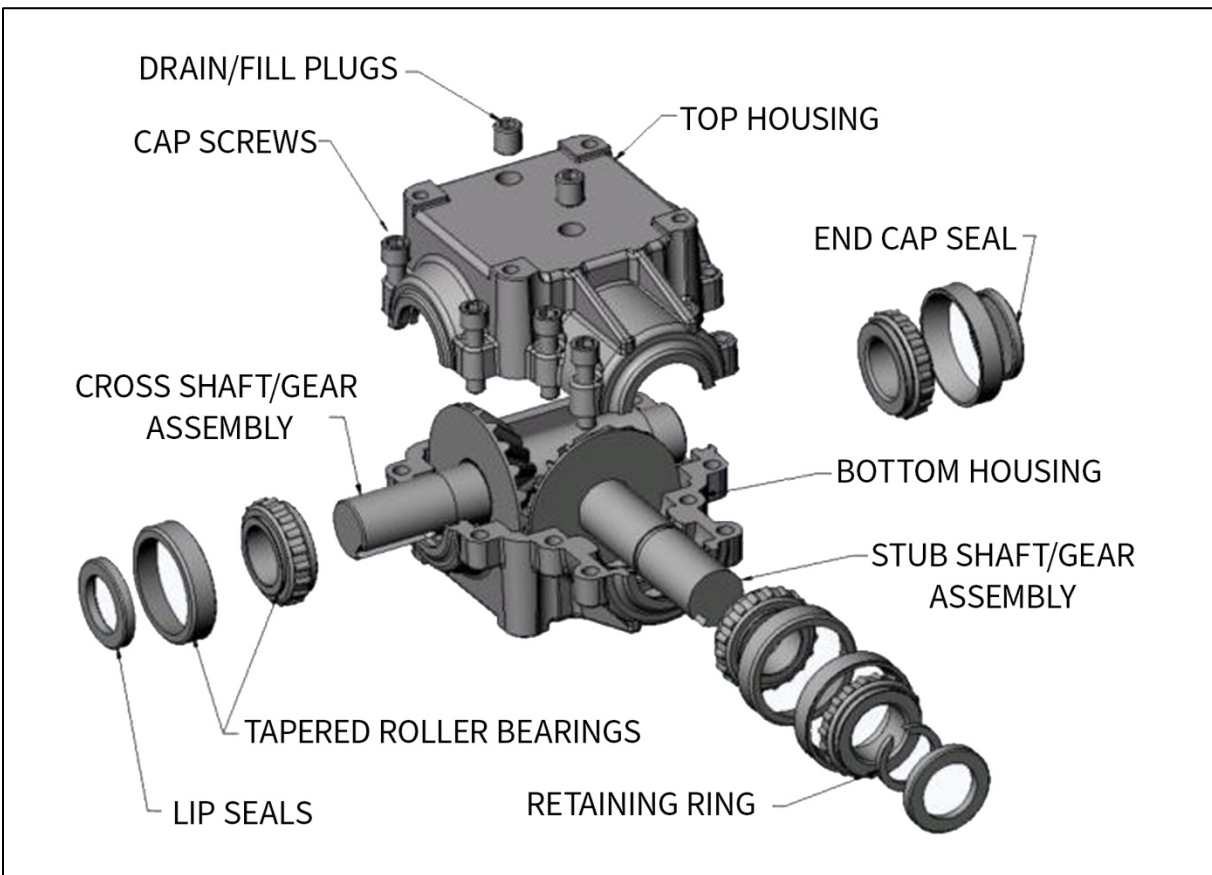
Be sure to get all slats and both sides pried free prior to operating.

CAUTION: Do not let loaded manure set in the bed during freezing conditions. Once it freezes it will have to be thawed out completely before operating the spreader without risking damage to the spreader. Damage due to improper use – including freeze damage – is not covered by the manufacturer's warranty

PTO Shaft Maintenance:

The PTO shaft should be slid apart annually into two sections and the larger of the two metal sections should be sprayed with lithium grease to prevent them from rusting and possibly getting stuck together.

GEAR BOX MAINTENANCE



- All ABI Model Classic Spreaders come with Mobilube HD 80W-90 oil in the gear box. When replacing the oil in the gear box put in Mobilube HD 80W-90 (or equivalent) oil only. Do not combine synthetic with non-synthetic oils inside the gear box.
- Routinely inspect mounting bolts, couplers, and other hardware to ensure that all hardware is secure, and to ensure the gear box is firmly anchored.
- Inspect daily for oil leaks and unusual noises. If leaks or unusual sounds are found, discontinue use of the Classic Spreader and contact ABI Customer Service.
- Check oil levels after every 24 hours of operation. See below for information on adding or changing oil.
- Change oil in the gear box after the first 50 hours of use. Normal changes after initial oil change should occur between 250 and 1000 hours of operation. Oil changes may need to more frequent for high volume use or when used in severe environments. Always replace oil in gear box with Mobilube HD 80W-90 oil or equivalent only.

Adding or Changing Gear Box Oil:

Locate the fill plug with breather on the top of the gear box. Using the appropriate tools, remove the fill plug from the gear box to add oil. Check to make sure the oil level inside the gear box does not exceed more than half full. If the oil in gear box is overfull, it may cause damage to the gear box.

TROUBLESHOOTING

Problem:	Possible Cause/Solution:
<p>PTO shaft is turning but the shredder bars and widespread paddles are not functioning.</p>	<div data-bbox="544 378 1161 976" data-label="Image"> </div> <p>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 has broken. If so in the hood are extra 5/16" x 1 1/4" grade two bolts with nuts and washers.</p> <p>You will need to align the hole in the locking collar with the hole in the sprocket and then replace the bolt, washer, and nut and tighten down. Replacement shear bolts can be purchased at a local hardware store just be sure to get a grade two bolt.</p>
<p>PTO shaft is turning but the shredder bars and widespread paddles are not functioning, but shear bolt is not broken.</p>	<div data-bbox="534 1249 1218 1885" data-label="Image"> </div> <p>Verify that your double roller chain is still attached. To do this, remove the guard on the left side of the spreader.</p>

<p>PTO shaft is turning but the shredder bars and widespread paddles are not functioning, but shear bolt is not broken, and the double roller chain is attached.</p>	<p>Verify the keyways for the long drive shaft and the shaft that extends out of the gearbox are not broken. To check this, remove the master link for the double roller and slide back the sprockets and see if the keyway is intact. If the keyway is bad you can purchase it at a local hardware store, it is a ¼" x ¼" x 1" keyway.</p>
<p>PTO shaft is turning but the shredder bars and widespread paddles are not functioning, but shear bolt is not broken, and the double roller chain is attached, and keyways are intact.</p>	<div data-bbox="529 590 1049 1272" data-label="Image"> </div> <p>Check the keyway at the rear of the spreader (left side) inside the coupler that connects the gearbox to the lower beater bar shaft to make sure it is intact. If broken, replace with ¼" x ¼" x 1" keyway.</p>

ADDITIONAL INFORMATION

If you have any other questions about your ABI PTO Classic Spreader, please feel free to contact our Customer Support staff at 877-788-7253 9am – 5pm EST Monday to Friday. You can also check out our support page at www.ABISupport.com for more information on your ABI Classic Spreader, or any of our other quality products.

For videos on the ABI PTO Classic Spreader check out our support page/Sales page at www.ABIAttachments.com. There you will find videos on basic walk throughs, setups, and use for each tool.

