

Classic Manure Spreader Ground Drive 85/110 Models Setup Guide



\*\*Model 25 shown/some features may be optional

THIS MANUAL SHOULD BE READ AND UNDERSTOOD BEFORE OPERATING!

Version 2.1.2

# Thank You,

On behalf of the ABI family we would like to thank you for your recent purchase of your 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, the customer; get your new Classic Spreader off the delivery pallet and into use. Once you have put your Classic Spreader to work, if you have any questions, please feel free to call and talk with our friendly and knowledgeable Customer Service Department. To contact our Customer Service Department call 855-211-0598, M- Th 8am-8pm EST and Friday 8am-5pm EST.

To order parts for your Classic Spreader please contact our Customer Support Department by phone at: 855-211-0598 M-TH 8am – 8pm and Friday 8am-5pm EST

# Additional Contact Information -

Additional information on the Classic Spreader can be found on the ABI Support site at: <u>www.abisupport.com</u>

To contact ABI's Customer Service Department after hours go to the Help Desk on the ABI Support page at: <u>www.abisupport.com</u> and send our Customer Service Department an email regarding any issue you may be experiencing with the Classic Spreader.

# To the Operator –

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

This manual will provide you with information on safely operating and maintaining the Classic Spreader. Operating the 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 Classic Spreader for future use. Absolute Innovations, Inc. reserves the right to implement engineering and design changes to the 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 Classic Spreader. Remember, any piece of equipment like the 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 Classic Spreader.

- Never permit any person to ride or board the CLASSIC SPREADER at any time. **NEVER ALLOW RIDERS ON THE CLASSIC SPREADER!**
- Use care and maintain minimum ground speed when operating the CLASSIC SPREADER on a hillside, or when operating close to ditches, fences, or water sources.
- Never place any body part under the while the CLASSIC SPREADER is in operation.
- Never allow anyone near the CLASSIC SPREADER while in operation.
- Operate the 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 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 CLASSIC SPREADER in icy, wet, or snowy condition.
- Do not use the CLASSIC SPREADER on highways or public thoroughfares. The 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 CLASSIC SPREADER. Using the CLASSIC SPREADER outside of stated safety and operations guidelines may result in injury to operator or others, property damage, or a void in warranty.

# Information on the ABI Classic Spreader -

## 1/3 Heavier Than Most Competitor's Equivalent:

When it comes to equipment made of steel; weight is a good thing. The heavier the manure spreader is the more high density steel is being used the longer the manure spreader will last and the better it will perform. Weight is a quality metric you can feel. In this case it is significant. ABI Classic manure spreaders are 1/3 heavier for about the same price!

#### **Shredded Output:**

Shredding the material offers a number of advantages. It exposes more of the manure to sunlight which reduces parasite eggs/fly larva and allows the manure to decompose far more quickly than non-shredded material. It enables the manure to decomposition quickly to encourages 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 enables 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; minimizing waste and reduces nitrogen burn to vegetation. All ABI Classic manure spreaders feature the ability to control the flow rate of manure being applied to the ground. The ground drive manure spreaders have 4 different speed settings that are controlled by the lever (ground drive units). Flow control is accomplished by speeding up or slowing down the apron chain (or conveyor) that feeds manure to the back beaters. You now have a choice of emptying the spreader as fast as possible or applying controlled amounts of manure.

## **Eco Smart Results From A Classic Design:**

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

## All Welded COR-TEN Steel Construction: \*\*Exclusive Feature\*\*

All ABI Classic manure spreaders are fully welded for long life and made of COR-TEN steel to resist rust and corrosion. COR-TEN steel is a "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 through for many years. (ABI manure spreaders are painted black for cosmetic purposes however.) ABI classic manure spreaders are fully welded to take on the most punishing situations for many years. ABI classic manure spreaders weigh about 1/3 more than most competitors!

#### **Easy Operating Levers:**

ABI Classic Manure Spreaders have two levers at the front of the spreader that control the unit. These easy to use levers control the engagement of the apron chain (conveyer) and the beaters. As you look from the front to the back of the manure spreader the left lever engages the apron chain and has 4 web speed settings and the right lever controls the beater engagement

#### 4 Speed Variable Flow Control: \*\*Exclusive Feature\*\*

All ABI Classic Manure spreaders feature the ability to control the flow rate of manure being applied to the ground. The ground drive units have 4 different speed settings that are controlled by the lever (ground drive units). Flow control is accomplished by speeding up or slowing down the apron chain (or conveyor) that feeds manure to the back beaters. You now have a choice of emptying the manure spreader as fast as possible or applying controlled amounts of manure to specific areas to maximize the nutrient fertilizer value of the manure and minimize negative environmental issue such as run-off into water supply.

#### Unique Chain Engagement Mechanism: \*\*Exclusive Feature\*\*

To virtually eliminate drive chain slip when engaging and disengaging the drive chain, ABI Classic Manure spreaders utilize a mechanism that gradually lifts the chain off the sprocket one tooth at a time to disengage. To reengage, 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 back 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.

#### **Dual Wheel Ground Drive With Ratcheting Hubs:**

Unlike many ground drive systems all ABI Classic Ground Drive Manure Spreaders incorporate a sophisticated system that enables better ground traction and provides constant power to the apron chain and beater bars. As you look from the front to the back of the spreader the left wheel primarily drives the apron chain (conveyer) and the right wheel primarily drives the beater bars, however both wheels also work in unison to maximize traction and prevent the apron and beater from running at different speeds. This works similar in concept to a locking differential on a truck which is designed to "lock" both wheels on an axle together as if on a common shaft. This forces both wheels to turn in unison, regardless of the traction (or lack thereof) available to either wheel individually. This eliminates slipping and binding of the moving parts and reduces wear and tear and breakage to the chains, sprockets & gears. But that is not all! The hubs on the ABI manure spreaders have a ratcheting override when moving in reverse or taking sharp corners. This allows the wheels to move independently when taking sharp corners or moving in reverse even while engaged. This smart design makes maneuverability a breeze and protects moving parts from damage.

#### Shredder Beaters: \*\* Exclusive Feature\*\*

Unlike most manure spreaders that use one beater bar to spread material, ABI Classic manure spreaders use 2 or 3 beaters depending on the unit size. On 85 - 110 cu ft units ABI Classic manure spreaders have 2 shredder beaters. One small beater at the top of the spreader to shred the top of mounded material and a large shredder beater just in front of the wide spread beater. The shredder beaters are geared slower than the wide spread beater to maximize shredding power. the 85 cu ft units feature 100 shredder blades, 110 cu ft units feature 120 shredder blades. The top shredder bar also helps to deflect flying material away from the operator and tow vehicle.

#### Wide Spread Beater:

The component that actually throws the manure from the manure spreader is the wide spreader beater. These beaters are expertly designed to further break down the manure and evenly distribute it on the ground. The 85 cu ft manure spreaders have 8 larger paddles and the 110,cu ft manure spreaders have 10 larger paddles.

#### All Welded COR-TEN Steel Box Design: \*\*Exclusive Feature\*\*

The box on the ABI classic manure spreaders is very different from most competitors. The ABI box is not bolted together; it is fully welded and made of 12 gauge COR-TEN steel. This is thicker gauge steel than any other spreader, in this class, that we know of. ABI has chosen not to use galvanized steel as it is toxic to weld; therefore most competitors that use galvanized steel have resorted to bolt together construction. With the corrosion resistance of COR-TEN steel and the ability to have a fully welded box we feel our design is the best of both worlds. The box has flared sides to maximize capacity, lower the loading height and aid in keeping heaping loads of manure in the box when in transit. These flared side also add further structural strength to the box.

#### 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 box liner. This box liner is not a traditional truck bed plastic insert liner that can cause corrosion under it and it is not a soft rubbery material that can rip. 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 & 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 even the hulls of barges. The floor of the ABI Classic Manure Spreader box is not steel and it is not wood. It is plastic! The floor is constructed of a tongue and groove poly lumber so it will never rot or rust. Even better yet the "tongue and groove" construction prohibits the individual poly boards that make up the floor from warping that would cause the apron web to get caught and bind on the flooring. This is premium maintenance free flooring that will last and comes with a limited lifetime warranty.

#### "5 Point" Corrosion & 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 Classic Manure Spreaders will last for many years to come we have implemented a suite of measures to prevent corrosion and rust.

- 1. We start with corrosion resistant COR-TEN steel.
- 2. All steel components are sand blasted 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 and 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 poly (plastic lumber) floor will not rust, corrode or rot. This floor has a Limited Lifetime Warranty.

# **Specifications-**

Model	85G	110G
# of Horses	Up To 20	Up To 25
Capacity Heaped	85cu.ft.	110cu.ft.
Capacity Struck	47cu.ft.	76cu.ft.
Total Length	200"	216"
Total Width	72"	80"
Total Height	59"	66"
Box Length	100"	114"
Box Width	40"	48"
Box Height	20"	24"
Box Flared Width	45"	53"
Loading Height	43"	47"
Frame & Hitch Construction	All Welded Corrosion Resistant High Strength COR-TEN Steel!	
Box Sides Construction	All Welded 12 Gauge Corrosion Resistant High Strength COR-TEN Steel!	
Box Floor	Corrosion Proof Poly Tongue & Groove Lumber!	
Outside Body Finish	Rust-Oleum Rust-Stop Paint Applied To Sandblasted COR-TEN Corrosion Resistant Steel!	
Inside Box Sides Finish	Rust-Oleum Rust-Stop Paint + Hard Shell Epoxy Box Liner (Spray-On) Applied To Sandblasted COR-TEN Corrosion Resistant Steel!	
Tires	Ag Traction Tires For Extra Grip & Power	
Hubs	In Forward Motion Both Tires Move In Sync For Powerful Non-Slip Performance. In Reverse Hubs Ratchet To Auto-Disengage For Ease Of Maneuvering & To Prevent Apron Binding and Damage.	
Drive Mechanism	No Slip - No Bind - Dual Tire Ground Drive System. With Independent control over Apron Speed & Beater Engagement.	
Roller Chain	CA550	
Apron Chain	High Strength T-Rod Web	
Spread Speed	Variable Apron Web Speed - 4 Speed Settings	
Total # of Beaters	Three	
Wide Spread Beater	Single Wide Spread Beater With 8 Large Aggressive Paddles	Single Wide Spread Beater With 10 Large Aggressive Paddles
Shredder Beater	Dual Shredder Beaters With 10 Bars & 100 Blades	Dual Shredder Beater With 10 Bars & 120 Blades
Shedder Hood & Spray Shield	N/A	
Hitch Stand	2,000 lbs. Swing Away Jack Stand With Skid Plate	
Unit Weight	1670	2,130
In lbs.		
Empty Tongue Weight	170 lbs.	250 lbs.
Tractor Requirements	25+ hp Standard	30+ hp Standard
ATV / UTV Requirements	N/A	N/A
Warranty	Two (2) Year Limited Warranty Limited Lifetime Warranty on Poly Floor	

# Usage:

Swing Away Jack(with optional wheel 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. With optional wheel attachment the spreader can be easily maneuvered around without having to attach the spreader to a 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 the jack when in operation.

Never Disconnect the Spreader from the Tow Vehicle without securing the swing away jack in the down position.

#### Spreader Bed:



Make sure to rinse out the bed of the ABI Classic spreader after every use. This will help to ensure longevity of your spreader. It is important to avoid putting excess soil or stones into the spreader. The ABI Classic spreader was not designed to spread soil or stone. Getting stones caught in the bed will damage the Classic Spreader and is not covered under warranty.

\*\*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 be properly shredded and spread.

#### **Operating Levers:**



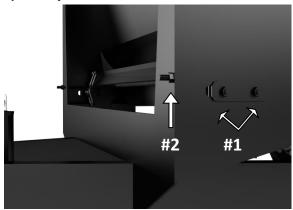
**Chain engagement Mechanism:** 

The operating levers engage the apron chain as well as the beater bars. The operation lever labeled #1 is used to engage and disengage the apron chain. There are 4 speeds to choose from when engaging the apron chain for use. The top slot is fully disengaged and the bottom slot is fully engaged. To engage either lever squeeze the latch handle fully, and lower the lever. Make sure the latch is fully set in its slot before operating the Spreader. When the spreader is not in being used to spread, set the levers back to the disengaged position; for transporting.



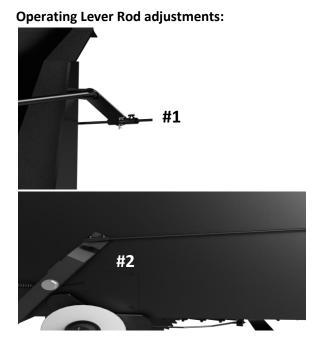
The operating lever labeled #2 in the above photo controls the chain engagement mechanism. This allows the chain to be disengaged and engaged one tooth at a time and helps keep the chain and sprocket in alignment. This also helps reduce unneeded repair, wear and tear, and breakage.

Apron adjustment:



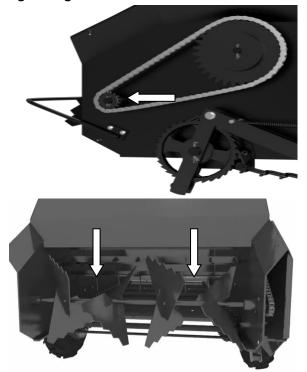
To adjust the apron chain you will need to loosen the two bolts labeled #1 in the attached photo. Then turn the adjustment nut labeled #2 to adjust the tension on the apron chain. For proper tension on your apron chain you want to have no more than 3" of lift in the middle of the bed, on the apron chain. You will need to make this adjustment to both sides of the apron chain. Make sure to keep track of how many times you turn the adjustment nut. To keep the apron level you must adjust both sides of the apron chain the same amount.

\*\* Once you have adjusted the apron chain remember to retighten bolt set #1 before use.



Both operating levers are attached to a rod used to engage parts of the spreader. These rods may need to have the play taken out over time. To remove this play from the rods put the levers in the top or disengaged position. Loosen the bolts holding the rod in place and take up any of the play in the rods. Then retighten the bolts when done. For the Chain drive mechanism rod, the adjustment is located toward the front (labeled #1 in the photo to the left) for the apron rod adjustment the adjuster is located in the back above the left side hub (labeled #2 in the photo to the right).

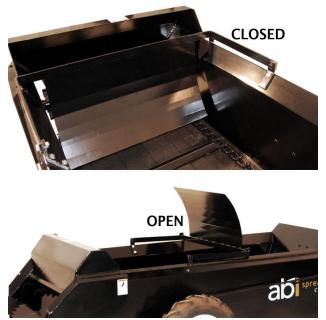
Tightening Beater Bar Chain:



Over time the chain that controls the Beater bars my get slack in it. To take this slack out you will need to loosen the two bolts located on the sprocket holder pointed out in the picture. There is a sprocket holder with two bolts on both sides of the beater bar (a total of 4 bolts) that will need to be loosened. Once the bolts have been loosened, have someone help by gently pulling the whole beater bar back till most of the slack is gone from the chain. Make sure that the beater bar is not sitting at an angle before using the spreader. If the beater bar is sitting at an angle please readjust the bar as it may cause damage to your spreader.

Once the excess slack is gone from the chain re-tighten all 4 bolts back down. Make sure to allow some slack so that the sprockets do not seize up when in use. Over tightening may cause damage to chain, sprockets, spreader, or all parts previously mentioned.





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. The end gate should never be down when spreader is in use. For models 25 - 50the end gate must be operated manually. For larger models 85 - 130 there is an optional hydraulic lift arm. Having this down during use may cause damage to the hood or tool.

**Exclusive Feature:** 

Shredder Hood & Spray Shield:



This exclusive feature offers two features. First is prevents any manure from flowing over the beaters, and second it acts as a shield for spray off. This helps with "clean" spreading and prevents spray off from hitting the operator.

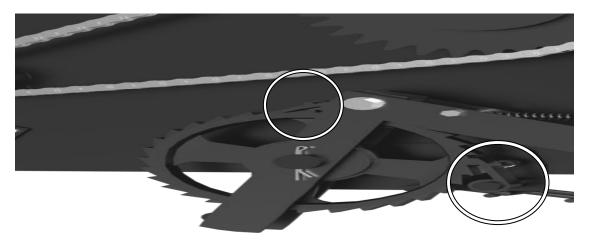
# Maintenance:

Grease/Lubrication Points:



- Each area where the arrows point indicates where a grease/Lubrication point is located. Stickers on the Spreader body further indicate where grease/lubrication points are located.
- The spreader should be greased using a grease gun every 25-30 loads and before storage. Make sure to grease all available grease areas before any period of storage. Use caution to not over grease fittings as it may damage the bearings.
- When greasing the hubs for the ABI Classic Ground Drive Spreader use caution to make sure you do not over grease the hubs. You will want to put about 2-3 full pumps of grease into each hub using a manual grease gun every 30-35 loads. Hubs may need to be cleaned out once a year to remove old grease build up.

• Every 30 -50 loads you may want to clean off the paws on the sprockets located on the right side of the spreader from the back of your ABI Spreader. Grease from the hub may gather on the paws and will need to be cleaned to prevent damage to the paws.



- Clean chains after every use and oil chains after every 25-30 loads, or before and periods of storage. Oiling the chains before periods of storage will help prevent rusting of the chains. For oiling the chains you can use SAE 30 or higher rated oil for all the chains. It is not recommended to pour oil directly into the bed when oiling the apron chain. To oil the apron chain you may want to use a cloth with oil on it to apply oil to the apron and drive chains.
- Make sure to check all nuts and bolts to ensure they are tight after every 25-30 loads. If any nuts or bolts are found to be loose, be sure to tighten them properly before use.