

# abi ATTACHMENTS®

## ABI WATER TRAILERS 500 – 1000 – 1600 AG/DOT MODELS SETUP GUIDE



\*\*Some features maybe optional/Photos may vary from your Unit\*\*  
1600-GAL DOT and 500-GAL AG Water Trailer Shown

**\*\*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 ABI Water Trailer. 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 ABI Water Trailer out of the delivery crate and into use. Once you have put your ABI Water Trailer to work, if you have any questions, email our Customer Service Team at [Support@ABIAttachments.com](mailto:Support@ABIAttachments.com) or give us a call at 877-788-7253.

To order parts for your ABI Water Trailer, email our Customer Service Team at [Support@ABIAttachments.com](mailto:Support@ABIAttachments.com) or give us a call at 877-788-7253.

Additional support resources can be found at [www.ABISupport.com](http://www.ABISupport.com)

## **NOTE TO OPERATOR:**

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

This manual will provide you with information on safely operating and maintaining the ABI Water Trailer. Operating the ABI Water Trailer 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 ABI Attachments continues to improve and upgrade the ABI Water Trailer for future use. ABI Attachments, Inc. reserves the right to implement engineering and design changes to the ABI Water Trailer 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 ABI Water Trailer. Remember, any piece of equipment like the ABI Water Trailer can cause injury if operated improperly or if the user does not understand how to operate the equipment. Exercise caution at all times with using the ABI Water Trailer.**

- Only operate the ABI Water Trailer with all covers, shields, and safety devices installed and secured prior to operation.
- Never permit any person to ride or board the ABI Water Trailer at any time. **NEVER ALLOW RIDERS ON THE ABI WATER TRAILER!**
- Use care and maintain minimum ground speed when operating the ABI Water Trailer on a hillside, or when operating close to ditches, fences, or water sources.
- Never place any body part under the ABI Water Trailer is in operation.
- Never allow anyone near the ABI Water Trailer while in operation.
- Operate the ABI Water Trailer in the daylight or under good artificial light. Operator should always be able to clearly see where they are going.
- Be alert for holes in the terrain, along with other hidden hazards. Always operate the ABI Water Trailer with caution over rough terrain.
- Use caution when operating the ABI Water Trailer in icy, wet, or snowy condition.
- Do not use the ABI Water Trailers on highways or public thoroughfares. The ABI Water Trailer is designed for off road use only.
- Use caution when backing up with the ABI Water Trailer. Ensure that all hazardous objects, and people are clear of the ABI Water Trailer before backing up.

## SPECIFICATIONS: (OFF ROAD MODELS SPECS):

Part #	WW500SFLABI	WW500DFLABI	WW1000FLABI	WW1600DFLABI
Capacity	500 Gal.	500 Gal.	1,000 Gal.	1,600 Gal.
Dry Weight	1,260 lbs.	1,460* lbs.	1,900* lbs.	2,260 lbs.
Full Weight	5,385 lbs.	5,585* lbs.	10,400 lbs.	15,860 lbs.
Length	151"	151"	204"	213"
Width	74"	74"	84"	100"
Height	70"	70"	75"	79"
Min. Tractor H.P.	35 w/4wd		55 w/4wd	
Frame Construction	6" - 8" Channel Iron			
# of Axles	1	2	2	2
Suspension Type	5 leaf double eye spring suspension			
Standard Tires	WH 235/85/16-8/65 (RADIAL)	WH 9.5L15-6/5.5 Implement Tire		
Optional Road Tires	-	WH 235/85/16-8/65 (RADIAL)		
Hitch Type	Select From A Ball Hitch, Pin Hitch or Clevis Hitch			
Tank Type	Rotationally Molded			
Tank Color	Select From White or UV Resistant Black			
Tank Drainage	Full Drain	Sloped Full Drain	Full Drain Leg	
# of Spray Nozzles	3			
Nozzle Type	Adjustable Brass Flood 3/4" K-210 180 DEG.			
Nozzle Flow Rate	21 Gal. p/min. @ 10 psi			
Spray Coverage	8' - 21'			
Motor Brand	Briggs & Stratton 200 P6 PRO/ Optional Honda Upgrade			
Motor H.P.	6.5 h.p. Gas			
Cylinder Sleeve	Cast Iron			
Overhead Valve	Yes			
Pump Brand	Banjo Self Priming Centrifugal Pump			
Pump Construction	2" Polypropylene			
Open Discharge Rate	190 gal. p/min			
Flow Rate	Pump Spinning @ 3450 RPM/ 140 Gal p/min @ 40 PSI			
Priming	Self-Priming			
Valves Fittings	2" Banjo Brand			
Fire Hose	25' Standard - 50' Optional			
Quick Fill System	Standard			
D.O.T. Compliant	Requires Optional Commercial DOT Package (Brakes, Lights, Fenders, VIN #, etc...)			
Warranty	12 Month Limited			

## BASIC OPERATION:

### Average Needed Water Amounts\*:

Indoor	Weekly
80' x 100'	500 – 800Gal
100' x 150'	1000–1500Gal
150' x 200'	1500–3000Gal
Outdoor	Weekly
60' Round	800 – 1200Gal
150' x 200'	2000–3000Gal
180' x 300'	4000–5000Gal

*\*Numbers are averages. Footing, drainage and climate will determine proper application for a specific arena.*

## SETUP INSTRUCTIONS



### The Ratcheting Valve

When the ears of the tab on the ratcheting valve are in line with pipe, water will flow to the rear sprayer. When the tab is not in line with the pipe coming from the valve, the sprayer is off. The rope needs to be pulled completely to fully turn the tab on top in order to work. A partial pull will result in partial flow out of the rear sprayers. To reset a partially open ratchet valve, it pull the rope fully again to turn off flow and then re-pull the rope fully to open again.

To ensure the sprayer is "on" make sure the silver "eared" tab is fully in line with the tubing.

To ensure that the sprayers are "off" make sure the silver tab is not in line with the tubing. The tab will run perpendicular to the tubing.

Additional information on proper Ratchet Valve care and use can be found on page 9.

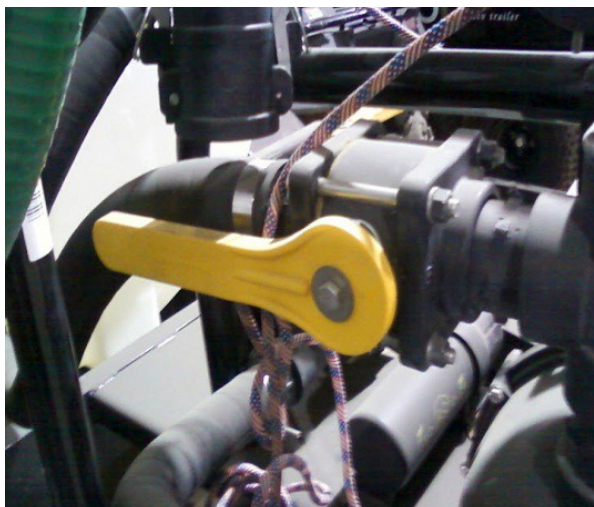


**Tank Valve:**

(bottom valve in photo)

Crack open this valve when sending water to the sprayers or the fire hose. One way to control the amount of water coming out of the sprayers is by adjusting how far open or closed this valve is.

When the valve arm is in line with the valve the water flow is fully open (see photo). When it is not in line with the valve is closed. Crack this valve open when using the optional fire hose, close this valve fully when using the optional pond fill system



**Return Valve:**

(right hand side from tractor seat)

This valve allows water to recirculate back into the tank. This valve should be opened just a little when using the sprayers or optional fire hose. Opening fully will reduce the flow of water to the sprayers or optional fire hose, closing will increase water to the sprayers or optional fire hose. For use with the optional pond fill hose this valve must be fully opened to fill the tank.



**Sprayer Boom:**

The sprayers are able to spray between 8' --- 21' by setup. You can adjust these by turning the brass heads to cover more area. The 2 outside sprayers can both be shut off to control how much of an area is covered. This also gives you even more control over how much water is applied.

**Hose Connector:**

This is where the optional hose will connect. In order for the hose to work properly you need to shut off the ratcheting top valve (covered above). Shut off the ratcheting valve, open the tank valve and crack the return valve when using the optional hose.

**Pond Fill system:**

This optional feature allows you to fill the tank using a pond, river, creek, etc. to operate this attachment you will need to shut off the sprayers, using the ratcheting valve, and open the pond fill valve shown in the picture. Close the tank valve, and you will open the return valve fully. Make sure the pump has been primed and either remove the top fill lid or open it slightly to allow water to fill the tank. You will also need to secure the fill head into a small bucket to help prevent sucking up debris into the hose and tank.

## **Basic Maintenance:**

### **Pump/Motor**

Refer to the manuals provided by the pump and motor manufacturer for maintenance instructions for the respective components. This can be located in the document holder connected to the frame on the front of the Water Trailer

- Never run the Motor and Pump for long periods of time without water in the system. Operating the Pump and Motor while the system is empty may result in damage to the Pump seals or impeller. When the Water Trailer is empty shut off the Motor to prevent any damage to the Pump and Motor.
- Always use a gas stabilizer in the gas used in the motor for the Water Trailer. Failure to use gas stabilizer in the fuel may result in issues with the Motor functionality.
- When the motor is not in use, during transport or after operation; make sure to shut off the gas flow to the engine. Information on shutting off the gas flow to the engine can be found in the Motor Manual for the Water Trailer. Failure to shut off gas flow when motor is not in use may result in gas mixing with the oil or may cause damage to the motor carburetor causing the motor not to function.
- Always follow Manufacturer suggested maintenance requirements and manufacturer recommendations for any replacement parts.
- Check oil levels before any use to ensure the oil level is at proper operational levels. See Manufacturers guide for information on oil types and levels.

### **Lubrication**

The wheel bearings should be packed every 6 months or every 6,000 miles (whichever comes first). Lubrication may be needed more often if the trailer is used in severe conditions. The wheel hubs should be checked regularly for excess heat. Heat buildup is an indication that the bearings need greased and may soon fail. It is imperative that the 5th wheel and pivot pins be lubricated daily in the Hi-Rise trailer front end to prevent premature wear and failure of the pivoting joints.

### **Cleaning Your Tank for Potable Water Usage**

When cleaning out the tank first drain the system completely. Once the water has been drained out, refill the tank  $\frac{3}{4}$  full of non-contaminated water. Add 2 gallons of bleach. Drive tank around briefly to agitate the water around the tank. Then let it soak for a few hours. Drive around again then dispose of water in compliance with local regulations. Rinse out tank.

### **Winterizing Preparation:**

The tank and fittings are susceptible to rupture in freezing conditions if water or other fluids are left in tank or plumbing. To prevent freeze damage, the tank and plumbing should be drained. Remove all the drain plugs from the system allowing the water to drain out including the pump drain plug, and then open valves to allow any of the excess water to drain from the system.



Then run 3-4 gallons of RV antifreeze through entire system - all hoses, nozzles, and pumps. This will lubricate and prevent freezing and breakage. After circulating through pumps, open ratchet valve until the pink antifreeze begins spraying out the back nozzles indicating that it has circulated and the entire system has been properly lubricated.

Leave about 2 gallons of the RV Antifreeze in the tank to store for winter.

*\*\* Failure to properly Winterize/Freeze Protect your Water Trailer may result in damage to the Water Trailer components that may not be covered by Manufacturer Warranty. Be sure to properly flush already winterized units before use.*

### **Ratcheting Valve Information:**

The Ratcheting Valve works on a spring and pin system. The spring located on the outside of the handle returns the handle back to neutral after every pull. Pulling the handle past the designed distance to turn the ball valve may damage the spring. Additionally, the pin on the inside of the handle may become damaged, or the housing around the pin or retainer points may become damage. ABI advises taking time to familiarize the operator with how to operate the Ratcheting Valve prior to operation. The silver tab on the top of the valve will turn at 90-degree turns indicating that the ball inside the valve has been properly turned.

The Ratcheting Valve handle is bolted to the valve body via a bolt. This bolt should be snug but never tight. If the bolt is tightened down fully it will prevent the spring from pulling the handle back to neutral. If the bolt is too loose then the handle will not turn properly and may cause the pin inside the handle to fall out. The bolt is factory set and should not be adjusted, unless the handle becomes difficult to turn, or is able to be moved up and down when in the neutral position. Any adjustment should be made to allow the handle to move freely front to back without having to be forced.

## **SAFETY INSPECTION CHECK LIST:**

### **The following items should be inspected before use:**

- Check for Water leakage from tank, valves, piping, or hoses.
- Check ratcheting valve rope for any damage
- Check cradle straps to ensure they are tight and bolted in properly
- Make sure vent cap is secured in place properly
- Inspect hoses for any tears or damage to hoses or connectors
- Inspect spray boom for any damage to boom or nozzles.
- Check engine for fuel or oil leakage – if found refer to motor manufacturer manual
- Check engine for fuel level and oil level before operating the motor. Refer to motor manufacturer manual for running instructions
- Inspect hand jack for any damage and ability to raise or lower the Water Trailer
- Check tow receiver, safety chains, and hooks for any damage
- Check wheels, and rims for damage. Check lugs or studs to ensure they are tight.
- Check tires for proper air pressure. Refer to PSI rating on the tire for proper air pressure
- DOT models--- Check to make sure the standard electrical connector is properly connected, and free of damage.
- DOT models – Check to make sure breakaway brake line is secured and free of damage
- DOT models – Ensure Running/Brake lights are working before driving on any public road
- DOT models – Ensure that reflectors are visible and not damaged
- DOT models – Make sure fenders are not hitting the tires and are free of damage
- DOT models – Make sure all hoses are properly secured before driving on any public road

**CAUTION: Correct any discovered defects before continuing use!**

## **CONTACT INFORMATION:**

For any additional information on your ABI Water Trailer please check out our support page at [www.ABISupport.com](http://www.ABISupport.com).

To order parts or to speak to one of ABI's Customer Service Representatives contact us Monday to Friday 9am to 5pm EST.

**Phone:** 877-788-7253

**Email:** [support@ABIAttachments.com](mailto:support@ABIAttachments.com)

