

W & A

RIGID PULVAMIZER

MODEL NO. 3504 & 3544

OPERATOR'S MANUAL

TO THE OWNER:

Congratulations on your purchase of a new W & A Rigid Pulvamizer. Your selection is an indication of your awareness of the need for intensive engineering, research, design, durability and dependability that has gone into its production.

Be sure to read all the instructions in this manual before placing the machine in use. Safety precautions along with adjustments should be learned and also taught to anyone who operates the machine. Remember, an implement which is properly maintained, adjusted, and safely operated saves time, labor and money.

After the operating season, thoroughly clean your folding tool bar and inspect it. Preventive maintenance pays dividends. Your dealer has original equipment parts which assure proper fit and best performance.

Thank you for purchasing this W & A product.

For Your Convenience, Please Fill In The Following:

Model: _____ No: _____

Dealer Name: _____ Date Purchased: _____



Quality Products from

W & A MANUFACTURING COMPANY

P.O. Box 5238, Pine Bluff, Arkansas 71611

Phone: (870) 534-7420

Fax: (800) 336-1318

Website: www.wamfgco.com

SAFETY

SI NO LEE INGLES, PIDA AYUDA A AIGUIEN QUE SI LO LEA PARA QUE LE TRADUZCA LAS MEDIDAS DE SEGURIDAD.



THIS SYMBOL MEANS

-ATTENTION!

-BECOME ALERT!

-YOUR SAFETY IS INVOLVED!

SIGNAL WORDS:

The signal words DANGER, WARNING and CAUTION are used with the safety messages in this manual and with each safety sign. They are defined as follows:

DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded. The color for DANGER is RED.

WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices. The color for WARNING is ORANGE.

CAUTION: Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. The color for CAUTION is YELLOW.

- Safety of the operator and bystanders is one of the main concerns in designing and developing our products. However, every year accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this manual. To avoid personal injury or death, study the following precautions and insist those working with you, or for you, follow them.



If you have any questions not answered in this manual, require additional copies or the manual is damaged, please contact your dealer or W & A Manufacturing Company, P. O. Box 5238, Pine Bluff, Arkansas 71611. (Telephone) 870-534-7420, (FAX) 870-534-1318. Manuals can also be found at www.wamfgco.com



This is the safety alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury or death. Follow the recommended precautions!

SI NO LEE INGLES, PIDA AYUDA A AIGUIEN QUE SI LO LEA PARA QUE LE TRADUZCA LAS MEDIDAS DE SEGURIDAD.



GENERAL SAFETY REQUIREMENTS



- Before operating your W & A Rigid Pulvamer, thoroughly read and understand your operator's manual. If you do not understand any portion of the operator's manual, contact your dealer or W & A Manufacturing Company immediately.
- This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible adult familiar with farm machinery and trained in this equipment's operations. **Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works.**
- Never use alcoholic beverages or drugs which can hinder alertness or coordination while operating this equipment. Consult your doctor about operating this machine while taking prescription medications.
- Clear the area of people, especially children, before starting unit.
- Do not allow anyone to ride on any part of the equipment for any reason.
- If safety signs are missing, unreadable, or damaged, they should be replaced. See list of safety signs. Keep safety signs clean and legible. Do not paint over safety signs.
- Furnish this manual to the new owner if the machine is sold.
- Inspect machine daily for worn parts, hydraulic leaks, frayed hoses, and make necessary repairs. Tighten all bolts and make sure all fasteners are in place.
- Unauthorized modifications to the machine may impair the function and/or safety and affect machine life. Make NO unauthorized modifications.
- Never stand between implement and tractor when hitching. Extreme care should be used to prevent injury to the hands or fingers. *Stop tractor engine and set brake before installing hitch pins.*
- Lower machine before servicing, adjusting, leaving or storing.
- Raised equipment can fall unexpectedly and crush persons underneath. Never allow anyone to enter the area underneath raised equipment during operation.
- Do not read, eat, drink, talk or text or use a mobile phone while using this equipment.
- Review the safety instructions with all users annually.



SAFETY TRAINING



- Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by a single careless act of an operator or bystander.
- In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance and storage of this implement.
- It has been said, “The best safety device is an informed, careful operator.” We ask you to be that kind of an operator. Its the operator’s responsibility to read and understand ALL Safety and Operating instructions in the manual and to follow these. Accidents can be avoided.
- Working with unfamiliar equipment can lead to careless injuries. Read this manual, and the manual of your tractor, before assembly or operating, to acquaint yourself with the machines. If this machine is used by any person other than yourself, or is loaned or rented, it is the machine owner’s responsibility to make certain that the operator, prior to operating:
 1. Reads and understands the operator’s manual.
 2. Is instructed in safe and proper use.
- Know your controls and how to stop tractor, engine, and implement quickly in an emergency. Read this manual and the one provided with your tractor.
- Train all new personnel and review instructions frequently with existing workers. Be certain only properly trained and physically able person will operate the implement. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death. If the elderly are assisting with farm work, their physical limitations need to be recognized and accommodated.





TRANSPORTING



- Comply with all federal, state, and local laws for implement transport on public roads.
- Watch for obstructions overhead and to side while transporting.
- Travel speed should be such that you maintain complete control and machine stability at all times.
- Make sure that the brake pedal latch is engaged. You must lock brake pedals together for road travel.
- Slow down and signal before turning. Pull over to allow faster traffic to pass.
- Never transport machine unless hydraulic systems are completely charged with hydraulic oil and transport safety locks are engaged.
- When transporting on a road or highway, the Transport/Depth Control Bar must be latched by bolt into the hole closest to the front of the machine.
- When transporting on a road or highway, use adequate warning symbols, reflectors, and SMV (slow moving vehicle) emblem and appropriate lighting to meet local regulations. Avoid transporting at night or low light conditions.



OPERATIONS



- Never start or operate machine unless sitting on tractor seat.
- Always make sure hydraulic system is fully charged with oil before use. Failure to bleed the system of all air can cause folded wings or entire machine to drop suddenly.
- Make sure front of tractor is properly weighted for safe steering control and operation.
- Clear the area of people, especially children, before starting the unit.
- Do not allow anyone to stand between tractor and implement when hitching.
- Blades are sharp. Use extreme care when adjusting or servicing. Keep hands and feet from beneath sweeps and blades.



SERVICE/MAINTENANCE



- Before working on this machine stop the tractor, set the brakes, disengage the PTO and power drive, shut off the engine and remove the ignition key.
- Securely block machine when working on or under it. To prevent injury in case of hydraulic failure or inadvertent lowering by another person, unfold wings and arms and securely block. Never use a jack to support the implement.
- Always use the proper tools or equipment for the job.
- Properly tighten all hardware.
- Relieve pressure from hydraulic system before servicing or disconnecting from tractor.
- Inspect all hydraulic hoses and components to be sure they are in good condition and that all connections are tight.
- Escaping hydraulic oil under pressure can produce enough force to penetrate the skin, causing serious personal injury or infection. Before applying pressure to the system, be sure all connections are tight and that lines, pipes, and hoses are not damaged. Before disconnecting lines, be sure to relieve all pressure. Hydraulic oil escaping from a very small hole can be almost invisible. Wear proper eye and hand protection and use a piece of cardboard or wood - not your hands - to search for suspected leaks. If injured by escaping hydraulic oil, **seek emergency medical attention immediately**. Serious infection or reaction can develop if proper medical treatment is not administered immediately.
- When remote cylinders are connected to the hydraulic system, cycle the control lever about three times to remove air from the cylinder and hoses. With air in the system, raised equipment can drop accidentally and cause personal injury or damage.
- Never use machine until all guards and safety devices are securely in place.
- After servicing, be sure all tools, parts and service equipment are removed.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. The manufacturer will not claim responsibility for use of unapproved parts and/or accessories and other damages as a result of their use.
- If equipment has been altered in any way from original design, the manufacturer does not accept any liability for injury or warranty.

STORAGE

- Following operation, or when unhooking the implement, stop the tractor, set the brakes, disengage the PTO, shut off the engine and remove the ignition keys.
- Lower wings and machine before servicing or storing machine.
- Extend parking stands and lock pin in place before lowering machine.
- Clean and inspect the machine for worn parts, frayed or leaking hoses, and make necessary repairs before placing unit in storage.
- Store the unit in an area away from human activity.
- Do not allow children to play on or around the stored unit.



LEARN ALL SAFETY RULES FOR THIS RIGID PULVAMIZER AND TEACH THEM TO ANYONE WHO MIGHT OPERATE IT.



UNDERSTAND THAT YOUR SAFETY AND THE SAFETY OF OTHER PERSONS IS MEASURED BY HOW YOU SERVICE AND OPERATE THIS MACHINE.

The use of this equipment is subject to certain hazards which cannot be protected against by mechanical means or product design. All operators must read and understand this entire manual, paying particular attention to safety and operating instructions prior to using. If there is something in this manual you do not understand, ask your supervisor, your dealer or contact W & A Manufacturing Company to have it explained to you.

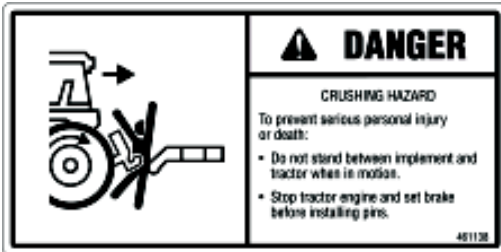
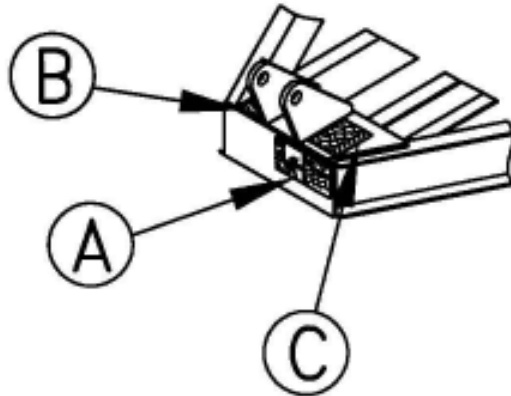


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SAFETY SIGNS

- Keep safety signs clean and legible at all times.
- Replace safety signs that are missing or have become illegible.
- Replaced parts that displayed a safety sign should also display the current sign.
- Safety signs are available from your dealer or W & A Manufacturing Company.



A. DANGER - Crushing Hazard
Sign Number 461138

B. WARNING - High pressure
Fluid Hazard Sign
Number 461113



C. WARNING - Operator's
Manual Sign Number 461123

N/I Yellow Reflector. Sign Number 461200. Two required. One at each end of front side of reel frame.

N/I Red Reflector. Sign Number 461201. Two required. One at each end of rear side of reel frame.

ASSEMBLY INSTRUCTIONS



EXTREME CARE SHOULD BE USED DURING ASSEMBLY TO PREVENT INJURY TO HANDS, FINGERS AND FEET.



1. Place Main Frame over Reel Frame Assembly and bolt together with twelve 5/8" x 2" bolts, nuts, flat washers and lock washers.
2. Position Lift Frame behind Reel Frame and bolt into place with the three 3/4" x 5" bolts provided. Note that these 3/4" x 5" bolts serve as pivot points for the lift frame. Attach the Depth Control Chain to the Lift Frame and through adjusting slot found at center of the Main Frame.
3. Unroll Harrow Sections and position behind Reel Frame and under Harrow Carrying Frame. Connect the Harrow Pull Links to the Reel Frame Arms using the 5/8" x 2" clevis pins and secure with 5MM x 1 1/4" roll pins. Place 1/4" Harrow Lift Chains through key hole slots in rear of Main Frame and secure with lap links.
5. Attach the Drag Board Legs to the rear of Main Frame with 1/2" x 3" bolts and lock nuts. Note that these 1/2" x 3" bolts serve as pivot points for the Drag Board and should not be over tightened. Put the 5/8" x 8" bolt through the 5/8" Concave Washer and the 7" Coil Compression Spring and then insert through the hole in the attaching bracket on the Main Frame and secure to the leg with 5/8" lock nuts.
6. Attach Tongue Assembly to the underside of Main Frame and the Leveling Crank to the brackets welded to the upper side of Main Frame.
7. Bolt the Hydraulic Hose Support to front of Main Frame in set collar with set screw provided.
8. Install 8" stroke hydraulic cylinder with 1/2" x 1/2" swivel elbows and two 15 foot hydraulic hoses to the main frame lug and to the floating arm of the Lift Frame. Place hoses through Hydraulic Hose Support on Main Frame.

ADJUSTMENTS & OPERATION



LOWER UNIT BEFORE SERVICING, ADJUSTING, OR LEAVING MACHINE.

- For tractor equipped with swinging drawbar, the drawbar should be located in a fixed position in the center of the tractor.
- Leveling – Front to Rear: The implement should be level in operation. Adjustments can be made at the adjusting crank.
- Depth Control: Set transport/depth control chain by putting the chain thru main frame slot in appropriate position for desired working depth.
- Adjust harrow chains to allow harrow teeth to penetrate at desired depth.
- Adjust the tension springs on the dragboard legs to give boards sufficient down pressure to firm the soil as desired.
- Recommended working speed is five to seven miles per hour.
- Never attempt to turn around with machine in the down and working position.



WHEN TRANSPORTING, THE TRANSPORT/DEPTH CONTROL CHAIN , MUST BE LATCHED INTO MAIN FRAME DEPTH SLOT AT THE CLOSES LINK AVIALABLE AFTER THE LIFT FRAME HAS BEEN RAISED.



INSTALL PROPER BALLAST ON FRONT OF TRACTOR TO INSURE SAFE AND PROPER STEERING AT ALL TIMES.



EXTREME CARE SHOULD BE USED WHEN HITCHING BAR TO TRACTOR TO PREVENT INJURY TO HANDS OR FINGERS. DO NOT STAND BETWEEN THE TOOL BAR AND TRACTOR WHEN IT IS IN MOTION. STOP TRACTOR ENGINE AND SET BRAKE BEFORE INSTALLING PINS.

LUBRICATION & MAINTENANCE



Lower Unit Before Servicing, Unplugging, Adjusting or Leaving Unit.

DAILY OR AFTER 10 HOURS OF OPERATION:

Grease all reel bearings.

Retighten all bolts and check that all fasteners and keepers are in place and secure.

PERIODICALLY:

Thoroughly clean and inspect your Rigid Pulvamizer. Tighten all bolts as needed and check that all fasteners and keepers are in place and secure.



Be sure all hydraulic connections are tight and hoses are not worn or damaged. Hydraulic oil leaking under pressure can penetrate the skin and cause infection or other injury.

TO PREVENT PERSONAL INJURY:

Relieve all pressure before disconnecting lines. Before applying pressure, make sure all connections are tight and in good condition. Never use your hand to check for suspected leaks under pressure. Wear proper eye and hand protection and use a piece of cardboard or wood for this purpose. If injured by leaking fluid, **Seek Emergency Medical Attention Immediately.**

Check pull pin for wear and replace as required.

Grease all bearing assemblies and clean and repack wheel bearings before storing implement for an extended period of time.

Review safety instructions with all operators annually.



*Be Extra Cautious
around Moving Machinery!*

WARRANTY

W & A Manufacturing Company warrants all products manufactured and sold by it to be free of defects in material and workmanship and to perform as represented, subject to the following conditions

- (A) Warranty applies only if installed and operated according to instructions.
- (B) Written authorization must be obtained prior to return of material for inspection. Material is to be returned prepaid.
- (C) Warranty does not apply to labor for parts replacement, nor does it apply to damage by accident, abuse, misuse or failure caused by not operating according to instructions.
- (D) Warranty is void if changes are made in the product in the field by other than a W & A representative or by instructions from the factory.

W & A Manufacturing Company reserves the right at any time to make changes in the design, materials and/or specifications of any of its products without thereby becoming liable to make similar changes in equipment previously manufactured.

Written authorization must be obtained prior to the return of any equipment purchased from W&A Manufacturing Company. No penalties will be charged if equipment had been placed on display by a W & A representative or if reasons for return are errors or faults of W & A Manufacturing Company. If return is for the benefit of the customer and the equipment is returned by prepaid freight in a new, unused and resalable condition, credit (based on original purchase price) will be issued less a 10% fee for restocking and other handling expenses.



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