



60 PIK RITE LANE, LEWISBURG PA 17837

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EMAIL: frontdsk@pikrite.com WEBSITE: www.pikrite.com

Dear Grower,

Welcome to the growing family of satisfied Pik Rite equipment owners. Our goal is to help make your harvest as enjoyable and trouble free as possible by providing equipment that is durable and keeps down time to a minimum

In order to provide customer service and a supply of original equipment parts to keep your machine well maintained, we are continually striving to keep our systems state-of-the-art to utilize all available resources that allow us to provide better and more accurate deliveries on time.

We will continue to give you the service you have come to expect from our dealer representatives and us. In order to avoid any delays during your harvest season we make every effort to have someone available to take your calls 24 hours a day. We have shipping companies in place to deliver your parts as expediently as possible whether you live a few miles down the road or on the other side of the globe. Count on us.

Sincerely,

Andy Kling
Vice President
andy@pikrite.com

Mobile 570-412-0066

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Parts and Service Hotline
800-326-9763

Company History

Pik Rite, Inc., is a designer and manufacturer of innovative, quality-built vegetable harvesting equipment, Ag manure spreader, and commercial waste handling equipment. Located 2 miles west of Lewisburg in Union County, Pennsylvania, Pik Rite operates from manufacturing facilities that encompass 33,000 square feet in addition to office space utilizing an additional 2700 square foot area. Elvin Stoltzfus and Joe Yoder, Pik Rite's original founders, have diverse backgrounds in farming and welding shop activities. Pik Rite was incorporated in July 1986 and presently employs approximately 35 people.

In 1983, the first vegetable harvesting machine was built for the purpose of providing a mechanical method of picking tomatoes for the local processing industry. After three years of testing and modifying the original machine, three Pik Rite harvesters were built in 1986. Two more machines were subsequently manufactured in 1987 and again in 1988. Activities in 1989 were limited to research and further development of the tomato harvester, with concentration in several areas, including a new forced balance shaker system. As a result of these efforts, Pik Rite now holds a patent for a Double Brush Shaker System.

During the 1990's, Pik Rite experienced steady growth in product sales, market coverage, and technological innovations. The pull-type design of the tomato harvester has allowed the growers who purchase the machines a great degree of adaptability for harvesting in different growing environments. Pik Rite has subsequently developed and added new product lines for harvesters that can be used to pick cucumbers, peppers, gourds, zucchini, squash, and pumpkins. A vine windrower was developed in 1994 to assist the growers in preparing for the harvest by rearranging vines prior to picking to allow for more efficient harvesting. In the fall of 1997, Pik Rite introduced a new product to the marketplace - a plastic lifter/wrapper. This piece of equipment will allow fast, efficient removal of plastic mulch from the fields after harvest, and will result in disposal cost savings for the grower. In 1998, Pik Rite initiated its product line diversification plans and began to manufacture vacuum tanks for use in commercial waste handling activities. In 2000, Pik Rite made the decision to manufacture the Hydra-Ram manure spreaders, formerly known as the John Deere Hydra-Push Spreader. In 2001, Pik Rite began manufacturing a vine diverter, which is used primarily in the California market to move the tomato crop from one row to the adjoining row.

Markets

Pik Rite, Inc. is the preeminent seller of tomato harvesters and vegetable harvesting equipment in the Midwest and Eastern sections of North America, including Ontario, Canada. Machines are also presently being used to harvest a variety of crops in Southeastern US, Texas, New Mexico, California, Colorado, and Washington. In addition to the Canadian market, Pik Rite harvesters have also been exported to Russia, Australia, Mexico, Brazil, Israel, Turkey, Spain and Germany.

Pik Rite is currently selling its complete line of equipment throughout the United States and abroad.

As the United States manufacturing sector enters the 21st century, Pik Rite continues to lead the way with production of efficient, dependable equipment, which provides its customers with the best value for the dollar. In the agricultural area, the Commonwealth of Pennsylvania has recognized these efforts as Pik Rite, Inc. was presented with the state's Agribusiness Achievement Award in January 1997.

- INTRODUCTION -



This safety alert symbol identifies important safety messages in this manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

"Right-hand" and "left-hand" sides are determined by facing in the directions the tomato harvester will travel.

Record your tomato harvester serial number in the space provided below:

S. N. _____

Purchase Date

Please review the warranty for this tomato harvester which appears on the harvester order that was signed when the harvester order was placed. This warranty provides you the assurance that Pik Rite will back its products where defects appear within the warranty period. Pik Rite also provides field improvements, in some circumstances without charge to the customer, even if the product's warranty is expired.

Warranty and field improvements are a part of Pik Rite's product support program for customers who operate and maintain their equipment as described in this manual. If the equipment is abused or modified causing a change in its performance beyond the original factory specifications, the warranty will become void and field improvements may be denied.

For information and service call or write to:

Pik Rite, Inc.
60 Pik Rite Lane
Lewisburg PA 17837
800-326-9763

Operators Manual

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Section 1
SAFETY

SAFETY

The operator's safety was one of the prime considerations in the minds of Pik Rite engineers when designing Pik Rite equipment. Shielding, simple adjustments, and other safety features were built into the windrower wherever possible.

WARNING: Modifications to the equipment may adversely affect its safety features as well as its efficiency and longevity.

Recognize Safety Information

This is the safety-alert symbol. When you see this symbol on your machine or in this manual, be aware of the potential for personal injury.

Follow recommended precautions & safe operating practices.



Understand Signal Words

A signal word—DANGER, WARNING or CAUTION—is used with the safety-alert symbol.

- DANGER identifies the most serious hazards.
- DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs.



Follow Safety Instructions

Carefully read all safety messages in this manual and on your machine safety signs.

- Keep safety signs in good condition.
- Replace missing or damaged safety signs.
- Be sure that all new equipment components and repair parts include the current safety signs. *Replacement safety signs are available from Pik Rite.*
- Learn how to operate the machine and how to use controls properly.
CAUTION: *Do not allow anyone to operate your machine without instruction.*
- Keep your machine in proper working condition. Unauthorized modifications to the machine may impair function and/or safety and affect machine life.

NOTE: *If you do not understand any part of this manual and need assistance, please contact your Pik Rite representative.*



Operate Windrower Safely

All machinery must be operated by responsible persons who have been properly instructed and delegated to do so.

WARNING: The machine may move suddenly or fall while detaching. Use blocks under the wheels and release all stored energy from pickup float system before detaching unit.

WARNING: To avoid injury or death, disengage drives, shut off engine, and make sure electrical power off before servicing or unplugging the tomato harvester.

- Do not stand between equipment and tractor when detaching equipment.

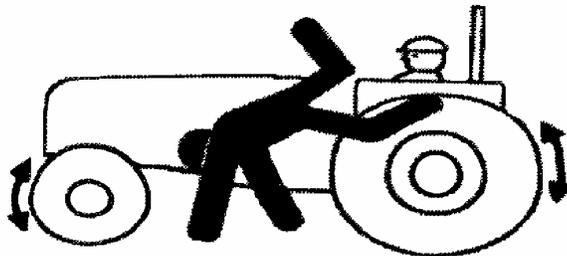
WARNING: This machine is intended for mobile field operation only. Never use machine in a stationary position or modify it to be used in one.

Keep Riders Off Machine and Tractor

- Allow *only* the operator on the tractor. Keep riders off.

CAUTION:

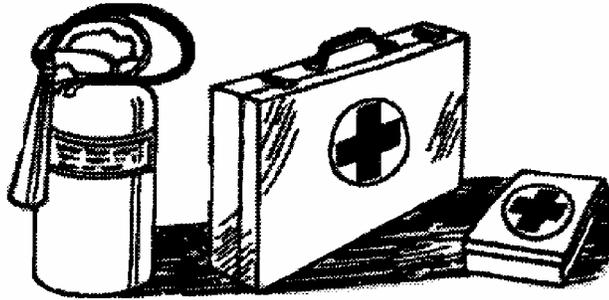
- *Riders on machine are subject to injury such as being struck by foreign objects and being thrown off of the machine.*
- *Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.*



Prepare for Emergencies

Be prepared if a fire starts.

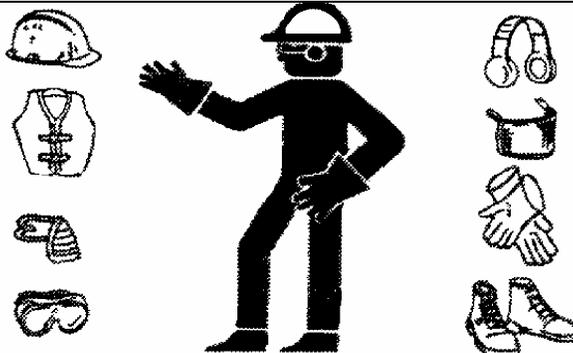
- Keep a first aid kit and fire extinguisher handy.
- Keep emergency numbers for the ambulance service, hospital, fire department, and doctors near your telephone.



Wear Protective Clothing

- Wear close fitting clothing and safety equipment appropriate to the job.

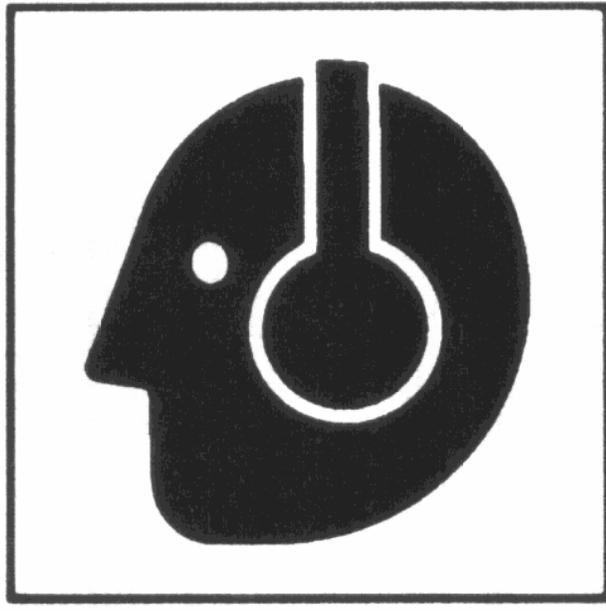
CAUTION: *Do not wear radio or music headphones while operating machine. Operating equipment safely requires the full attention of the operator.*



Protect Against Noise

WARNING: Prolonged exposure to loud noise can cause impairment or loss of hearing.

- Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.

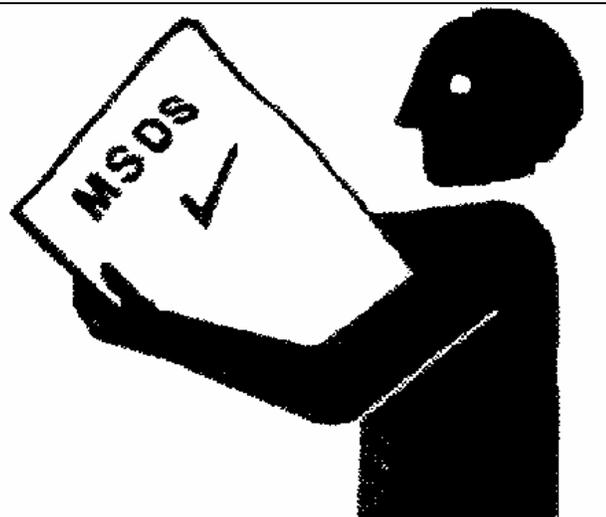


Handle Chemical Products Safely

WARNING: Direct exposure to hazardous chemicals can cause serious injury. Potentially hazardous chemicals used with Pik Rite equipment include *lubricants* and *paints*.

- A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical and health hazards, safety procedures, and emergency response techniques.
- Check the MSDS before you start any job using a hazardous chemical. That way you will know exactly what the risks are and how to do the job safely. Then follow the advised procedures and make use of the recommended equipment.

NOTE: Contact the Pik Rite Lewisburg, PA office for MSDSs on chemical products used with Pik Rite equipment.



Stay Clear of Rotating Drive lines

WARNING: Entanglement in rotating driveline can cause serious injury or death.

- Keep the tractor master shield and drive line shields in place at all times. Make certain that rotating shields turn freely.
- Wear close fitting clothing. Stop the engine and be sure that the PTO drive line is stopped before making adjustments, connections, or cleaning out the PTO-driven equipment.

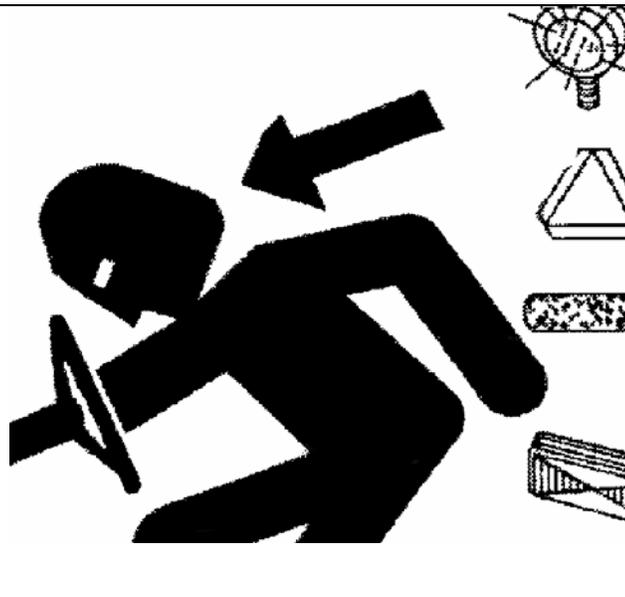


Use Safety Lights & Devices

WARNING: Slow moving tractors and towed implements are difficult to see, especially at night, and may create a hazard when driven on public roads.

Avoid personal injury or death resulting from collision with a vehicle.

- Use flashing warning lights and turn-signals when driving on public roads.
- To increase visibility, use the lights provided with your machine.



Practice Safe Maintenance

Understand service procedure before doing work. Maintain cleanliness and dryness in work area.

- Never lubricate or service the machine while it is in motion.

WARNING: Be sure to keep hands, feet, and clothing away from power-driven parts.

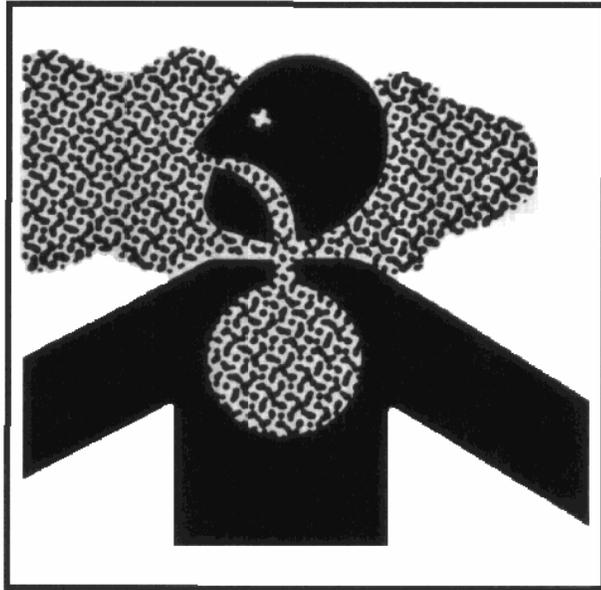
1. Disengage all power and manipulate controls to relieve pressure.
 2. Lower equipment to the ground.
 3. Stop the engine.
 4. Remove the key.
 5. Allow machine to cool.
- Securely support any machine elements that must be raised for service work.
 - Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.
 - Disconnect battery ground cable (-) and unplug main power supply cord on sorter before making adjustments on electrical systems or welding on machine.



Remove Paint Before Welding or Heating

WARNING: Avoid potentially toxic fumes and dust. Hazardous fumes can be generated when paint is heated by welding, soldering or using a torch.

- Do all work outside or in a well-ventilated area. Dispose of paint and solvent properly.
- Remove paint before welding or heating.
- If you sand or grind paint, avoid breathing the dust. Wear an approved respirator.
- If you use solvent or paint stripper, remove stripper with soap and water before welding.
- Remove solvent or paint stripper containers and other flammable material from the area.
- Allow fumes to disperse at least 15 minutes before welding or heating.



Avoid Heating Near Pressurized Fluid Lines

WARNING: Flammable spray can be generated by heating near pressurized fluid lines, resulting in severe burns to you and bystanders.

- Do not heat by welding, soldering, or using a torch near pressurized fluid lines or other flammable materials. Pressurized lines can be accidentally cut when heat goes beyond the immediate flame area.



Avoid High-Pressure Fluids

WARNING: Fluid escaping under pressure carries the potential to penetrate the skin resulting in serious injury.

- Avoid this hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.
- Search for leaks with a piece of cardboard.
- Protect hands and body from high-pressure fluids.
- If an accident occurs, see a doctor immediately.

WARNING: Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source.



Section 2
PREPARATION, OPERATION & MAINTENANCE

PREPARATION, OPERATION & MAINTENANCE

2 - 1: Preparing the Tractor & Mounting the Windrower

Remove the tractors' front weight bracket and install the front windrower support bracket. Install both the right and left windrower brackets near the rear of the engine on the tractor frame. Install both the right and left side support tubes. Insert the right and left retaining pins into the rear mounting brackets. Be sure the support tubes do not exceed 18" measuring from the front support bracket to the height mounting plate.

Bolt the cylinder bracket to the height mounting plates. The mounting height is largely determined by the tractor height with the tractor and windrower level. The gathering belts should be angled down. The front of the gathering chains should be 1" lower than the rear. Hook the hydraulic line to the tractor (see Hydraulic System Requirements). For the start up or until the operator is familiar with the function of the hydraulic system, block the toolbar up so the gathering chains are not touching the ground. This will prevent damage to the belts because the belts need to run in order to operate the lift cylinder.

2 - 2: Operators Instructions

The gathering chains should skim the ground pushing the viny crop into a windrow. The gathering chains should match the ground speed thus eliminating fruit shatter. The windrow width can be adjusted by sliding the individual units on the toolbar.

The approaching angle of the gathering chains can be adjusted by the bolt holes in the gathering chain brackets at the mounting point or by exchanging the gathering chain tightener brackets, right or left or vice versa.

The height and angle are controlled by the electro-hydraulic valve and control box. The angle adjustment prevents one side from going deeper into the ground or gouging, thus leveling the windrower.

2 - 3: Hydraulic System Requirements

The windrower uses the tractor's hydraulic power to operate. Insert the hoses into the tractor outlet follow the tractor's owner's manual for instruction on running the orbital motor. **IMPORTANT: Follow the tractor's instructions on overheating of the tractor's hydraulic system.** Adjust the tractor's hydraulic flow valve to pump 10 to 15 gallons per minute. This regulates the speed of the gathering chain belts. The belt's rotation should match the ground speed for best results of minimal fruit shattering.

Adjust the flow control on the windrower for the valve speed. The flow to the valve determines the speed of the hydraulic cylinder's travel. If this is adjusted too fast, it will divert all of the oil flow to the cylinders. When they are actuated, this causes the gathering chains to momentarily stop operation. To avoid this momentary stopping, adjust the flow to the valve as low as possible and maintain enough speed to the hydraulic cylinders.

2 - 4: Maintenance of the Windrower

- Grease and tilt (angle) adjustment linkage periodically (approximately every 50 hours of use). There are 3 grease fittings.
- Gathering chains should maintain a taut and snug tension. Over-tightening will result in premature sprocket wear.
- Maintain the rollers needed. Replace them when bound up or when the flanges wear off. Keep rollers running freely by removing any vines or dirt from behind the rollers. This avoids wearing flat spots on the rollers.
- In general, the belts need to run freely and smoothly.
- The electrical box may be outdoors as it is water resistant but not water proof. Keep it in an upright position. To winterize, remove the box and store in a dry place.
- Always clean the hydraulic connections on both the tractor and the hose ends. Dirt ingested into the hydraulic system **will** cause sticking and malfunctioning of the valve.

NOTES