

# **AGRISHIELD**

## **SINGLE PTO BERM BLOWER OWNER'S & OPERATORS MANUAL**



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## **TO OUR CUSTOMERS:**

Thank you for choosing AGRISHIELD. We are proud to deliver to you equipment of the highest quality. Regularly performed preventative maintenance will keep your equipment in the best working order possible. Please take the time to review this manual and understand the maintenance and operation before using your equipment.

## **WARRANTY**

AGRISHIELD warrants each new piece of equipment and parts manufactured by it to be free of defects in material and workmanship under normal use and service. The obligation of AGRISHIELD shall be limited to replacing any part which shall, within 1 year (1 season) after delivery to the original purchaser, be returned to AGRISHIELD with transportation charges prepaid and which an examination by AGRISHIELD discloses defective. This warranty does not obligate AGRISHIELD to bear the cost of labor, travel time or hauling in connection with the replacement or repair of the defective parts and in no event will be liable for consequential damages including but not limited to loss of crop, rental or substitute equipment or other commercial loss.

No warranties or representations made by persons other than representatives of AGRISHIELD expressly authorized in writing to do so shall be valid and binding upon AGRISHIELD. No dealer shall be authorized to bind AGRISHIELD in this respect.

AGRISHIELD makes no warranty with respect to component parts not manufactured by AGRISHIELD. This warranty shall not apply to any equipment which has been altered in any way outside of manufacturer's factory, or which has been subject to misuse, neglect or accident.

**This warranty is expressly in lieu of all other warranties and representations, expressed, implied, or statutory, including warranties of merchantability and fitness for a particular use, and all other liabilities or obligations on the part of AGRISHIELD, foreseeable or not.**

## **USERS'S RESPONSIBILITY**

It is the responsibility of the user to read the Operator's Manual and understand the safe and correct operating procedures as pertains to the operation of the product and to lubricate and maintain the product according to the maintenance schedule in the Operator's Manual.

## **WARRANTY SERVICE**

Warranty service may be obtained through and authorized dealer or AGRISHIELD service facility. Write or call: AGRISHIELD, 7507 N Podesta Ln, Linden, CA 95236, telephone (209) 662-5063.

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## **A. SAFETY INSTRUCTIONS**

### **IMPORTANT SAFETY NOTICE**

**Improper practices or carelessness can cause bodily injury or death.**

**Always instruct the operator in proper operating procedures. The operator must read and understand all safety instructions in the Owner's and Operator's Manual and those placed on the equipment.**

### **SAFETY INSTRUCTIONS**

- 1. The operator of this machine should remain seated at all times during operation.**
- 2. Always use proper eye, ear, and head protection to protect from flying debris and noise.**
- 3. Always shut off the tractor engine before making any adjustments or performing any maintenance on the blower.**
- 4. All personnel should be clear of the blower before starting or operating it.**
- 5. Keep hands and loose clothing away from all moving parts.**
- 6. Stop operation of the blower if excessive dust or debris is obscuring people or drivers' vision.**
- 7. Always start the tractor engine from the drivers' seat.**
- 8. Never operate the blower without both the belt guard and fan inlet guards secured in place.**
- 9. Warning: Always wear protective eye goggles when checking for hydraulic leaks. Do not check hydraulic lines for leaks with your hands. High pressure oil leaking through a small hole will penetrate the skin. This will cause serious bodily injury or death.**
- 10. Caution: Always replace safety labels and signs if they become illegible.**

## B. SPECIFICATIONS

<b>Minimum Tractor Horsepower Required</b>	<b>35</b>
<b>Weight</b>	<b>675 lbs</b>
<b>Length</b>	<b>39"</b>
<b>Height</b>	<b>44"</b>
<b>Width (excluding nozzle)</b>	<b>53"</b>
<b>Air Volume</b>	<b>~13,000 CFM</b>
<b>Air Velocity</b>	<b>~125 mph</b>

## **C. INSTALLATION & REMOVAL**

**WARNING: Never stand between the tractor and blower when connecting or disconnecting until the tractor engine has been stopped.**

- 1. Always check that the PTO drive shaft is of proper length for the tractor that the blower is being installed on.**

**To check for proper length, install both halves of the drive shaft with the tubes side by side. Make sure that the ends of the tubes do not “bottom out” at any point within the lifting range of the tractor 3-point hitch, and that a minimum of 1/3 of the tube length is overlapping at all times. Make adjustments as needed.**

- 2. After ensuring that the drive shaft is the proper length, install it with the tubes telescoped together. Ensure that both ends of the drive shaft are properly locked into position.**
- 3. Always use stabilizer bars on the 3-point hitch to prevent the blower from swinging side to side.**
- 4. Adjust the 3-point top link so that the blower sits level during operation.**
- 5. Connect the two hydraulic hoses to the remote ports on the tractor to control the damper.**

## **D. ADJUSTMENTS**

**WARNING: Never make any adjustment to the blower without first stopping the tractor engine.**

**The blower nozzle can be adjusted vertically for varying field conditions. To adjust, shorten or lengthen the support chain and insert a chain link into the slotted tab on the top of the blower for your desired position.**

**The nozzle also has two adjustable vanes on the outlet to further direct the airflow. Both the vertical and horizontal vane can be adjusted by loosening the bolts and rotating to the desired position. Be sure to re-tighten all hardware after adjustments are made.**

## **E. OPERATING PROCEDURES**

**Do not allow anyone to operate the blower who has not been properly trained in its safe operation. Ensure that all personnel are at least 10 feet clear of the implement and tractor and clear of the air path out of the blower nozzle before starting the engine and during operation.**

**WARNING: Stop the tractor engine before making any adjustments to the blower.**

**Prior to operation the following items must be checked and/or adjusted to obtain maximum performance and avoid necessary wear and stoppages:**

- 1. Check that the drive belts are properly tensioned.**
- 2. Check hydraulic system for leaks and proper connections.**

### **Running the Blower**

#### **PTO Control:**

**The blower is powered by the tractor PTO which is engaged using the lever on your tractor. Always engage and disengage the lever slowly, and with a low engine speed below 1,000 rpm. Be sure that the lever is fully engaged. Increase engine speed slowly until the required blowing power is met. Do not exceed 540 rpm on the tractor PTO output shaft.**

**The air output of the blower can be adjusted by varying the engine speed. It is always recommended to use the minimum speed necessary for satisfactory results in order to maximize efficiency and minimize dust.**

#### **Hydraulic Damper Control:**

**The blower comes equipped with a hydraulically actuated damper to further aid in airflow adjustments without changing engine or ground speed. To operate, use the corresponding remote valve lever on your tractor to open or close the damper as needed.**

**The damper can also be used when turning around at the end of rows to stop nearly all airflow and prevent blowing in undesired directions, without the need to disengage the PTO.**

## **F. MAINTENANCE PROCEDURES AND SCHEDULES**

### **REGULAR MAINTENANCE:**

1. Check the general condition of the blower for hydraulic leaks, loose bolts, worn or damaged parts.
2. Regularly inspect and adjust drive belts if needed. Proper tension will maximize performance and lifespan of the belts.
3. Lubricate the PTO driveline universal joints once daily.
4. Every 15-20 hours of operation, lubricate the telescoping section of the PTO driveline.
5. Every 30-40 hours of operation, lubricate all bearings on the blower. Do not over grease bearings, as this can shorten the lifespan.
6. Replace all worn, damaged or illegible labels.

### **YEARLY MAINTENANCE:**

1. Check and repair worn or damaged parts.
2. Replace all worn, damaged or illegible labels.

### **STORAGE OFF SEASON:**

1. Wash and clean.
2. It is recommended that the PTO driveline be removed and stored inside for long-term storage to prevent rust on the telescoping parts.