

OWNER'S & OPERATOR'S MANUAL



BERM BLASTER



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Read the Owner's & Operator's Manual entirely. When you see this symbol, the subsequent instructions and warnings are serious – follow without exception.

Your life and the lives of others depend on it!

Cover photo may show optional equipment not supplied with standard unit.

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INTRODUCTION

Thank you for purchasing a BERM BLASTER by Russell. We hope you will get many years of productive use from it. The BERM BLASTER is designed to be pulled by a ROPS protected tractor of proper size. The purpose of this manual is to provide a means to operate and service this equipment safely. All product users must read and understand this manual prior to equipment operation. This manual is considered part of your machine and should remain with the machine at all times. Do not allow anyone to operate or maintain this equipment who has not fully read and comprehended this manual. Failure to follow the recommended procedures may result in personal injury or death or equipment damage.

Information in this manual is designed to help owners and operators to obtain the best results and safe operation from their investment. The life of any machine depends largely on the care it is given and we suggest that the manual should be read and understood and referred to frequently. If for any reason you do not understand the instructions and safety requirements, please contact your authorized dealer. The intent of this manual is to provide guidelines to cover general use and to assist in avoiding accidents and injuries.

There may be times when circumstances occur that are not covered in the manual. At those times it is best to use common sense and contact your authorized dealer or our factory.

The requirements of safety cannot be emphasized enough in this publication. We urge you to make safety your top priority when using and maintaining the equipment. We strongly advise that anyone allowed to operate this equipment be thoroughly trained and tested, to prove they understand the fundamentals of safe operation.

Some photographs, diagrams or illustrations in this manual may show doors, guards and shields opened or removed to aid in clarity and understanding of a particular procedure. All guards, shields and safety devices must be in their proper position prior to operation.

The BERM BLASTER is a high output, three point mounted dual blower. It is PTO driven and is capable of towing and powering a pull behind spray rig. The BERM BLASTER is effective for cleaning berms in almond, pistachio, and walnut orchards as well as vineyards. The BERM BLASTER is ideal for use with a pre-emergent spray rig. CLEAN the BERMS off and spray in ONE PASS!

SPECIFICATIONS

Weight 1320 lbs
Width overall with Std 155 or 140 breakaway nozzles 12' 6"
Width overall with Flex Nozzles 14' to 18'
Width without breakaway nozzles 7' 3"
Height 4' 8"
Depth 4' 6"
Recommended PTO horsepower 50+
Standard 540 rpm PTO connection 1-3/8" rd 6 spline
Cat. II Three Point
2" Standard receiver tuber to tow spray rig
Belt deflection left side 1/2" maximum
Belt deflection right side 11/32" maximum

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Read the Owner's & Operator's Manual entirely. When you see this symbol, the subsequent instructions and warnings are serious – follow without exception.

Your life and the lives of others depend on it!



SAFETY

Read and understand this manual and all safety signs before operating and maintaining. Review the safety instructions and precautions annually.

TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.



THIS SYMBOL MEANS

- ATTENTION!
- BECOME ALERT!
- YOUR SAFETY IS INVOLVED!



SAFETY SIGNAL WORDS

Note the use of the signal words DANGER, WARNING and CAUTION with the safety messages. The appropriate signal word for each has been selected using the following guidelines:



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.



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.



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.

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GENERAL SAFETY GUIDELINES

Safety of the operator and any bystanders is one of the main concerns in designing and developing a new piece of equipment. Designers and manufacturers build in as many safety features as possible. However, every year many 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 section. To avoid personal injury, study the following precautions and insist those working with you, or for you, follow them.

Replace any CAUTION, WARNING, DANGER or instruction safety decal that is not readable or is missing. Location of such decals is indicated in this booklet.

Do not attempt to operate this equipment under the influence of drugs or alcohol. Do not use the equipment if alertness or coordination is impaired.

Review the safety instructions with all users annually.

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.**

Do not read, eat, drink, talk or text or use a mobile phone while using this equipment.

To prevent injury or death, use a tractor equipped with a Roll Over Protective System (ROPS). Do not paint over, remove or deface any safety signs or warning decals on your equipment. Observe all safety signs and practice the instructions on them.

Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question - **DON'T TRY IT.**

Stay clear of any moving parts, such as shafts, couplings and universal joints.

If adjustments need to be made, make them in small steps, shutting down all motions for each adjustment.

Do not allow anyone to ride on any part of the equipment for any reason.

Assure that all bystanders are at a safe distance before operating or maintaining this equipment.

HANDLING

The BERM BLASTER can be transported on a Cat II three point. Forklift pockets attached to the bottom of the main frame allow for easy transport on a forklift. The nozzles are spring loaded and designed to breakaway. If necessary the nozzles can be folded back or removed for transport or storage.





SAFETY SIGN LOCATIONS

Safety Sign location is shown below.





REMEMBER: If Safety Signs have been damaged, removed, become illegible or parts replaced without decals, new decals must be applied. New decals are available from your authorized distributor or factory.

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SAFETY DECAL CARE

- 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 Distributor or Dealer Parts Department or the factory.

How to Install Safety Signs:

- Be sure that the installation area is clean and dry.
- Decide on the exact position before you remove the backing paper.
- Remove the smallest portion of the split backing paper.
- Align the decal over the specified area and carefully press the small portion with the exposed sticky backing in place.
- Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.
- Small air pockets can be pierced with a pin and smoothed out using the piece of decal backing paper.





LIGHTING AND MARKING

- It is the responsibility of the customer to know the lighting and marking requirements of the local highway authorities and to install and maintain the equipment to provide compliance with the regulations. Add extra lights when transporting at night or during periods of limited visibility.
- Lighting kits are available from the manufacturer.



BEFORE OPERATION

- Carefully study and understand this manual.
- Do not wear loose-fitting clothing which may catch in moving parts.
- Always wear protective clothing and substantial shoes.
- Give the unit a visual inspection for any loose bolts, worn parts or cracked welds, and make necessary repairs. Follow the maintenance safety instructions included in this manual.
- Be sure that there are no tools lying on or in the equipment.
- Do not use the unit until you are sure that the area is clear, especially of adults, children and animals.
- Don't hurry the learning process or take the unit for granted. Ease into it and become familiar with your new equipment.
- Practice operation of your equipment and its attachments. Completely familiarize yourself and other operators with its operation before using.
- Use a tractor equipped with a Roll Over Protective System (ROPS) and fasten your seat belt prior to starting the engine.
- The manufacturer does not recommend usage of tractor with ROPS removed.
- Move tractor wheels to the widest recommended settings to increase stability.
- Never allow anyone to stand between the three point hitch and the towing vehicle.





OPERATING INSTRUCTIONS

DO NOT OPERATE WITHOUT GUARDS IN PLACE!

DO NOT REMOVE SAFETY & WARNING DECALS!

READ & UNDERSTAND OWNER'S & OPERATOR'S MANUAL!

Couple the BERM BLASTER to the tractor using the category II three point. Attach the driveline to the tractor. Plug in the hydraulic hose and keep them clear of the driveline. Make sure that ALL guards and shields are in place and secure. Engage the PTO and bring the unit up to operating RPM. **DO NOT ENGAGE PTO AT HIGH RPM**, this will decrease the life of the belts and potentially damage transmission components. This misuse can easily be identified by the squealing of the belts.



OPERATION WITH A SPRAY RIG

SHAFT COUPLERS AND YOKES MUST BE SECURED TO THE DRIVE SHAFT WITH SET SCREWS BEFORE OPERATION!

To tow a spray rig. Place a hitch in the standard 2" receiver tube at the rear of the BERM BLASTER. Secure the hitch in the receiver tube with a receiver pin. There is access to the main drive shaft of the BERM BLASTER on the rear guard. This drive shaft will provide the power needed to operate a small roller pump or a driveline driven spray rig. To couple a small roller pump there is a special coupler available, Part # 50-BLSTCOUP937. To couple a driveline it will require a special shaft adapter, Part # 11-H03-32-00433.





DURING OPERATION

- Adults & Children should never be allowed on the equipment.
- Clear the area of adults, children and bystanders before moving the equipment.
- Securely attach equipment to towing unit, using the three point hitch and safety chains if required. Shift towing unit to a lower gear before going down steep downgrades, thus using the engine as a retarding force. Keep towing vehicle in gear at all times. Slow down for corners and rough terrain.
- Make sure you are in compliance with all local and state regulations regarding transporting equipment on public roads and highways. Lights and slow moving signs must be clean and visible by overtaking or oncoming traffic when equipment is transported.
- Beware of bystanders, **particularly children!** Always look around to make sure that it is safe to start the engine of the towing vehicle or move the unit. This is particularly important with higher noise levels and quiet cabs, as you may not hear people shouting.
- **NO PASSENGERS ALLOWED** - Do not carry passengers anywhere on, or in, the tractor or equipment.
- Keep hands and clothing clear of moving parts.
- Always keep all shields and guards in place and securely fastened.
- Do not clean, lubricate or adjust your equipment while it is moving.
- When halting operation, even periodically, set the tractor or towing vehicle brakes, disengage the PTO, shut off the engine and **remove the ignition key**.
- Be especially observant of the operating area and terrain - watch for holes, rocks or other hidden hazards. Always inspect the area prior to operation.
 - **DO NOT** operate near the edge of drop-offs or banks.
 - **DO NOT** operate on steep slopes as overturn may result.





OUTPUT ADJUSTMENT

There are FIVE ways to adjust the output of air as field conditions vary.

- 1) Raise or lower the BERM BLASTER on the three point of the tractor to the desired height.
- 2) The direction of the air can be adjusted manually at the end of each nozzle.
- 3) Each nozzle door is opened or closed independently by hydraulic cylinders. Nozzle doors can be partially closed. Closing a nozzle door completely will virtually stop the output of air; however the fan will remain in motion.
- 4) PTO RPM can be increased or decreased to achieve the desired output.
- 5) The Vent Adapter located on the bottom of the nozzle can be placed in an open or closed position.

FOR USE IN VINEYARDS THE BREAKAWAY NOZZLES MUST BE REMOVED!



DRIVE BELT ADJUSTMENT

New belts should be re-tightened after the first two hours of use!

To tension belts remove the guard with the attached owner's manual canister. Then remove the rear guard to gain access to drive belts. Loosen the four bolts that secure each fan unit to the frame.

Then use the all thread tensioner to achieve correct belt tension. Proper tension can be measured by the deflection of the belt. The belt should have 1/64" of deflection per every one inch of span between the centers of the sheaves.

(For example: if the span between centers of the sheaves is 8", the proper deflection would be 1/8"). This can be determined by measuring the distance the belt moves when you apply pressure to the belt with your finger. As you are facing the rear of the BERM BLASTER, the left belt should have 27/64" (or 1/2") deflection. The right belt should have 11/32" (or almost 3/8") of deflection. Once the belts have been tensioned, tighten the bolts on the fan units to the main frame. Install the rear guard and the owner's manual canister guard.





HIGHWAY AND TRANSPORT OPERATIONS

- Adopt safe driving practices:
 - Keep the brake pedals latched together at all times. **NEVER USE INDEPENDENT BRAKING WITH MACHINE IN TOW AS LOSS OF CONTROL AND/OR UPSET OF UNIT CAN RESULT.**
 - Always drive at a safe speed relative to local conditions and ensure that your speed is low enough for an emergency stop to be safe and secure. Keep speed to a minimum.
 - Reduce speed prior to turns to avoid the risk of overturning.
 - Avoid sudden uphill turns on steep slopes.
 - Always keep the tractor or towing vehicle in gear to provide engine braking when going downhill. Do not coast.
 - Do not drink and drive!
- Comply with state and local laws governing highway safety and movement of farm machinery on public roads.
- Use approved accessory lighting flags and necessary warning devices to protect operators of other vehicles on the highway during daylight and nighttime transport. Various safety lights and devices are available from your dealer.
- The use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use. Local laws should be checked for all highway lighting and marking requirements.
- When driving the tractor and equipment on the road or highway under 40 kph (20 mph) at night or during the day, use flashing amber warning lights and a slow moving vehicle (SMV) identification emblem.
- Plan your route to avoid heavy traffic.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc.
- Be observant of bridge loading ratings. Do not cross bridges rated lower than the gross weight as which you are operating.
- Watch for obstructions overhead and to the side while transporting.
- Always operate equipment in a position to provide maximum visibility at all times. Make allowances for increased length and weight of the equipment when making turns, stopping the unit, etc.



- Pick a level route when transporting across fields. Avoid the edges of ditches or gullies and steep hillsides.
- Be extra careful when working on inclines.
- Maneuver the tractor or towing vehicle at safe speeds.
- Avoid overhead wires or other obstacles. Contact with overhead lines could cause serious injury or death.
- Avoid loose fill, rocks and holes; they can be dangerous for equipment operation or movement.
- Allow for unit length when making turns.
- Operate the towing vehicle from the operator's seat only.
- Never stand alongside of unit with engine running or attempt to start engine and/or operate machine while standing alongside of unit.
- Never leave running equipment attachments unattended.
- As a precaution, always recheck the hardware on equipment following every 100 hours of operation. Correct all problems. Follow the maintenance safety procedures.



FOLLOWING OPERATION

- Following operation, or when unhitching, stop the tractor or towing vehicle, set the brakes, disengage the PTO and all power drives, shut off the engine and **remove the ignition keys**.
- Store the unit in an area away from human activity.
- Do not park equipment where it will be exposed to livestock for long periods of time. Damage and livestock injury could result.
- Do not permit children to play on or around the stored unit.
- Make sure all parked machines are on a hard, level surface and engage all safety devices.
- Wheel chocks may be needed to prevent unit from rolling.





PERFORMING MAINTENANCE

- Bearings can be easily greased from above without removing any guards or housings. There are six greaseable bearings on each BERM BLASTER. Grease the bearings once per every three days of use. **DO NOT OVER GREASE.** Over greasing can be identified by grease pushing out around the seal of the bearing. If this occurs you should replace the bearing immediately.
- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble. Proper servicing and adjustments are key to the long life of any implement. With careful inspection and routine maintenance, costly downtime and repairs can be avoided.
- Some parts and assemblies can be quite heavy. Before attempting to unfasten any part or assembly, arrange to support it by means of a hoist, by blocking or by use of an adequate arrangement to keep it from falling, tipping, swinging or moving in any manner which may hurt somebody or damage the equipment.
- Always use lifting equipment that is adequately rated to do the job. Never lift equipment over people.
- Make sure there is plenty of ventilation. Never operate the engine of the towing vehicle in a closed building. The exhaust fumes may cause asphyxiation.
- Before working on the equipment, stop the towing vehicle, set the brakes, disengage the PTO and all power drives, shut off the engine and **remove the ignition keys.**
- Be certain all moving parts on attachments have come to a complete stop before attempting to perform maintenance.
- **Always** use a safety support and block the wheels. Never use a jack to support the equipment.
- Always use the proper tools or equipment for the job at hand.
- Use extreme caution when making adjustments.
- Never replace hex bolts with less than grade five bolts unless otherwise specified.
- 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.



- If repairs require the use of a torch or electric welder, be sure that all flammable and combustible materials are removed.
- Do not weld or cut on any tank containing oil, fuel or their fumes or other flammable material, or any container whose previous contents are unknown.
- Cleaning solvents should be used with care. Petroleum based solvents are flammable and present a fire hazard. Don't use gasoline. All solvents must be used with adequate ventilation and their vapors should not be inhaled.



HYDRAULIC FLUID AND EQUIPMENT SAFETY

Only adequately trained and qualified persons should work on hydraulics systems. You may be severely injured or killed by being crushed under a falling piece of equipment. Always have transport locks in place and frame sufficiently blocked when working on any implement.

Hydraulic fluid escaping under pressure can have sufficient force to cause injury. Keep all hoses and connections in good serviceable condition. Failure to heed may result in serious personal injury or death. Escaping hydraulic fluid under pressure can have sufficient pressure to penetrate the skin causing serious injury. Avoid the hazard by relieving the pressure before disconnecting lines or performing work on the system.

Make sure hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before applying pressure to the system. Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. DO NOT DELAY! If an accident occurs, see a doctor familiar with this type of injury immediately. Any fluid injected into the skin or eyes must be treated within a few hours or gangrene may result.

Always secure equipment with solid supports before working on or under it. Never work under equipment supported by hydraulics. Hydraulics can drop equipment if controls are actuated or hydraulic lines burst or pressure is lost while disconnecting lines. Either situation can drop machinery instantly even when power to hydraulics is off. Do not attempt to disconnect a hydraulic cylinder or hose while the system is under pressure!

Check hydraulic hoses and fittings frequently. Brush and other debris can damage hoses and fittings. Inspect and maintain equipment daily. Loose, broken, and missing hardware can cause equipment to not perform properly and can result in bodily injury or death.

Hydraulic systems and oil can be hot and cause burns. Before working on any system, wait until the oil has cooled.





LOCKOUT / TAGOUT

Think, plan and check. **Think** through the entire procedure and identify all the steps that are required. **Plan** what personnel will be involved, what needs to be shut down, what guards need to be removed, and how (and under what conditions) the power will be restarted. **Check** the machine over to verify all power sources and stored energy have been identified including engines, hydraulic and pneumatic systems, springs and accumulators, and suspended loads, Shutoff and lockout power before adjusting, servicing, maintaining, or clearing an obstruction from this machine. Failure to heed may result in serious injury or death. Communicate with everyone involved in a repair or maintenance operation, including bystanders, that work is being done which involves keeping this machine safety at a ZERO ENERGY STATE.

OSHA's requirements for lockout/ tagout are covered in Section 1910.147 of the OSHA standards. The LOTO standard establishes the employer's responsibility to protect workers from hazardous energy. Employers are required to train each worker to ensure that they know, understand, and are able to follow the applicable provisions of the hazardous energy control procedures:

- Proper lockout/ tagout (LOTO) practices and procedures safeguard workers from the release of hazardous energy. The OSHA standard for The Control of Hazardous Energy (Lockout/ Tagout) for general industry, outlines specific action and procedures for addressing and controlling hazardous energy during servicing and maintenance of machines and equipment. Employers are also required to train each worker to ensure that they know, understand, and are able to follow the applicable provisions of the hazardous energy control procedures. Workers must be trained in the purpose and function of the energy control program and have the knowledge and skills required for the safe application, usage and removal of the energy control devices.
- All employees who work in the area where the energy control procedure(s) are utilized need to be instructed in the purpose and use of the energy control procedure(s) and about the prohibition against attempting to restart or reenergize machines or equipment that is locked or tagged out.
- All employees who are authorized to lockout machines or equipment and perform the service and maintenance operations need to be trained in recognition of applicable hazardous energy sources in the workplace, the type and magnitude of energy found in the workplace, and the means and methods of isolating and/or controlling the energy.
- Specific procedures and limitations relating to tagout systems where they are allowed.
- Retraining of all employees to maintain proficiency or introduce new or changed control methods.

OSHA outlines a six-step procedure for controlling hazardous energy:

- **Step 1: Prepare for shutdown.** It must be determined what type of power system is going to be deactivated including electrical, hydraulic, pneumatic or other energy sources. Knowledge of shut down methods is necessary.



- **Step 2: Shutdown the equipment.** This should be completed consistent with the manufacturer's instructions for the shutdown procedure and could be as simple as placing a switch in the "off" position or pressing a button.
- **Step 3: Isolate the equipment.** This step involves closing of valves, throwing the main disconnects or circuit breakers and disconnecting or capping any auxiliary power sources or secondary electrical systems.
- **Step 4: Apply the lockout/tagout device.** This is done to prevent restoration of the flow of energy and is done at all disconnect switches, valves or other energy isolating devices. Locks are the preferred method of controlling energy and should be supplemented with tags. Various lockout devices are available including group lockout hasps. Locks should be individually assigned and have only one key.
- **Step 5: Control the stored energy.** This step includes the release, disconnect or restraint of any residual hazardous energy which may be present and a check that all moving parts have stopped moving. It may also include the installation of "pancakes" or blanking of pipe flanges, the installation of ground wires to discharge electrical capacitors and the blocking or supporting of elevated equipment.
- **Step 6: Verify isolation of equipment.** Double-check the steps and verify that the equipment indeed has been shut down and that the lock and tag do control the stored energy. Employees should be warned and the system tested, including pressing of all start buttons to assure that the equipment will not start.



PARTS

PART #	DESCRIPTION	QTY PER UNIT
50-BLASTRAM	HYDRAULIC CYLINDER	2
50-BLSTSPRING	Spring for breakaway nozzles	2
50-BLSTBX83	83" 2BX83 POWERBAND	1
50-BLSTBX85	85" 2BX85 (2007-19 Only)	1
50-BLSTBX93	93" 2BX93 POWERBAND	1
50-BLSTBELT95	95" B95 V-BELT (2007-8 Only)	2
50-BLSTBERMDECAL	BERM decal only	2
50-BLSTBLASTERDECAL	BLASTER decal only	2
50-BLSTCAUTION	Caution Flying Debris Stay Clear Decal	2
50-BLSTCROSKIT	DRIVELINE CROSS KIT	2
50-BLSTDNGROT	Danger Rotating Driveline Decal	3
50-DANGER	Do not Operate w/o guards decal	1
50-BLSTDRIVLN	Driveline Complete w/ shield	1
50-BLSTFLANGETT	Bearing Flangette Nozzle Door	4 pair
50-BLSTFANONLY	Fan & Shaft Assembly	2
50-BLSTINST1	1" Nozzle Door Bearing Only	4
50-BLSTRSDSBUSH	Bushing for 2 groove Sheave	2
50-BLSTRSFBUSH	Bushing for 4 groove Sheave	1
50-BLSTSHEAV20	4 groove Sheave	1
50-BLSTSHEAVE5	5"right hand side Sheave	1
50-BLSTSHEAVE6	6" left hand side Sheave	1
50-BLSTYOKE138	1-3/8" 6 spline Yoke	1
50-BLSTYOKE150	1-1/2" round Yoke	1
50-BLSTBRG150	Pillow Block Bearing	6



MAINTENANCE CHART

ITEM	INTERVAL
Inspect & Tighten Drive Belts	2 hours after initial use
Inspect & Tighten Drive Belts as necessary	Every 8 hours of run time
Grease Zerks as needed	Every 8 hours of run time
Review safety instructions with operators	Monthly
Clean and paint.	As needed
Replace All Safety Guards	Always



TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Drive Belt Squealing	Belts not tensioned properly	Tighten / Replace Drive Belts
Sheaves hot or discolored	Belts not tensioned properly	Tighten / Replace Drive Belts



LIMITED WARRANTY STATEMENT

Warranty assures the purchaser that should a defect in material or workmanship occur during the warranty period, Frank Russell Inc. will assume specific repair responsibilities, as listed in this warranty statement. Warranty begins on the date the product is delivered to the original purchaser of the product. Once the warranty period has begun, it cannot be stopped or interrupted.

Frank Russell Inc. warrants each new Frank Russell Inc. product to be free from defects in material and workmanship. Genuine Frank Russell Inc. replacement parts and components, excluding drive belts and driveline, will be warranted for 365 days from date of purchase. Under no circumstances will Frank Russell Inc. cover any merchandise or components thereof, which, in the opinion of Frank Russell Inc., has been subject to misuse, unauthorized modifications, alteration, an accident or if repairs have been made with parts other than those obtainable through Frank Russell Inc..

Our obligation under this warranty shall be limited to repairing or replacing, free of charge to the original purchaser, any part that, in our judgment, shall show evidence of such defect, provided further that such part shall be returned within thirty (30) days from date of failure to Frank Russell Inc., transportation charges prepaid.

This warranty shall not be interpreted to render Frank Russell Inc. liable for injury or damages of any kind or nature to person or property. This warranty does not extend to the loss of crops, loss because of delay in harvesting, or any expense or loss incurred for labor, substitute machinery, rental or for any other reason. Except as set forth above, Frank Russell Inc. shall have no obligation or liability of any kind on account of any of its equipment and shall not be liable for special or consequential damages. Frank Russell Inc. makes no other warranty, expressed or implied, and, specifically, Frank Russell Inc. disclaims any implied warranty or merchantability or fitness for a particular purpose.

This warranty is subject to any existing conditions of supply which may directly affect our ability to obtain materials or manufacture replacement parts.

Frank Russell Inc. reserves the right to make improvements in design or changes in specifications at any time, without incurring any obligation to owners of units previously sold.

ASSISTANCE

If you have questions not answered in this manual, or require additional copies, or the manual is damaged, please contact your dealer or: FRANK RUSSELL INC., 341 PACIFIC AVE., SHAFTER, CA. 93263. PH 661-746-4939



ACCESSORIES

155 (Std) NOZZLE SET per pair

140 (Opt) NOZZLE SET per pair

FLEX NOZZLE SET (Opt) per pair

12" Nozzle Extensions per pair

24" Nozzle Extensions per pair

7/8" Pump Drive Coupler

15/16" Pump Drive Coupler

Drive Beyond Adapter 1-1/2" fm Rd x 1-3/8"m 6 spline

Touch up Paint aerosol



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WARRANTY REGISTRATION FORM & INSPECTION REPORT

WARRANTY REGISTRATION

This form must be filled out by the dealer and signed by both dealer and customer at time of delivery. Then returned via email accounting@frankrussellinc.com or mail to FRANK RUSSELL INC., 341 PACIFIC AVE, SHAFTER, CA. 93263

Customer name _____ Dealer name _____
Address _____ Address _____
City, state, code _____ City, state, code _____
Phone number () _____ Purchasers Email Address _____
Model **BERM BLASTER** Serial Number _____ Purchase Date _____

DEALER INSPECTION REPORT

_____ Fasteners tight
_____ Guards and shields installed

SAFETY

_____ All decals installed
_____ Review operating and safety instructions

I have thoroughly instructed the buyer on the above-described equipment; review included the operator's manual content, equipment care, adjustments, safe operation and applicable warranty policy.

Date _____ Dealer's signature _____

The above equipment and operators manual have been received by me, and I have been thoroughly instructed as to care, adjustments, safe operation and applicable warranty policy.

Date _____ Owner's signature _____

