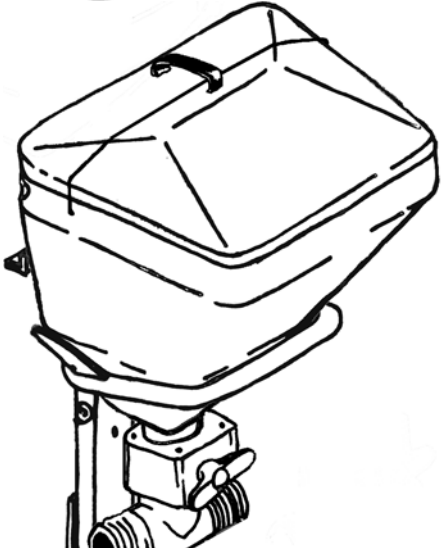
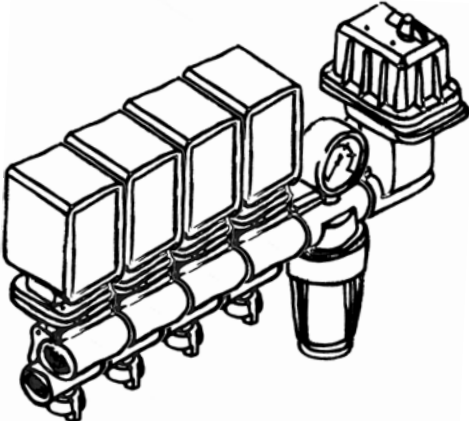


HARDI® SPRAYERS



RECEIVER HITCH SPRAYER
Operator's Manual

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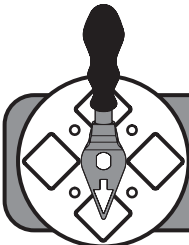




TABLE OF CONTENTS

1.0 INTRODUCTION	3
2.0 SAFETY INFORMATION	4
2.1 Follow Safety Instructions	4
2.2 Operating the Sprayer Safely	4
2.3 Handling Chemical Products Safely	5
2.4 Local Poison Information Center	6
3.0 HOOKING UP THE SPRAYER	7
3.1 Assemble Hitch Tube	7
3.2 Connect Wiring Harness To Sprayer	7
3.3 Connect Wiring Harness To Operating Vehicle ...	8
4.0 OPERATING INSTRUCTIONS	8
4.1 Filling The Tank	8
4.2 Add Chemicals	8
4.3 Activate the 12 Volt Flojet Pump	8
5.0 MAINTENANCE	9
5.1 Cleaning The Sprayer	9
6.0 WARRANTY POLICY AND CONDITIONS	10

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1.0 INTRODUCTION

The HARDI® RECEIVER HITCH sprayer consists of a 25 gallon (95 L) tank, 12 Volt pump, receiver hitch frame and 25 feet of PVC hose with spray lance.

The tank is made of impact proof and chemical resistant polyethylene and is mounted on a heavy-duty black powder painted receiver hitch steel frame. The 12 Volt Flojet pump provides 1.0 GPM flow rate, 35 PSI of pressure and plugs into your existing vehicle connector with the provided wiring harness and connector. The spray lance is attached with 25 feet of 5/16" PVC hose and includes a built-in filter and 25° Flat Fan nozzle tip.

The HARDI® RECEIVER HITCH sprayer uses a standard 4-way flat trailer plug to connect to the operating vehicle. The 12 Volt Flojet pump receives power whenever the vehicle's parking light is "on" and the wiring harness is properly connected. The 12 Volt Flojet pump uses a built-in "on demand" pressure switch, so the pump motor only runs when liquid is being sprayed (and briefly when powered "on").



Fig. 1

25 Gallon Receiver Hitch Sprayer



2.0 SAFETY INFORMATION



RECOGNIZE SAFETY INFORMATION

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. Follow recommended precautions and safe operating practices.

2.1 Follow Safety Instructions

- Carefully read all the safety messages in this manual.
- Learn how to operate the sprayer and how to use the controls properly. Do not let anyone operate the machine without proper instructions.
- Keep your sprayer in proper working condition. Unauthorized modifications or use may impair the function and/or safety and affect the machine's life.
- If you do not understand any part of this manual and need assistance, please contact your authorized HARDI® dealer.

2.2 Operating The Sprayer Safely

1. Read the complete manual carefully before operating the sprayer.
2. Never transport the sprayer on public roads with chemicals in the tank. Mix chemicals on site.
3. Disconnect the wiring harness and make sure spray lance and hose are secure before transporting the receiver hitch sprayer.
4. Always keep children away from your sprayer.



WARNING: ALWAYS DISCONNECT THE WIRING HARNESS FROM THE OPERATING VEHICLE WHEN NOT SPRAYING. REMEMBER THAT THE PUMP COULD BE "ON" EVEN IF THE PUMP MOTOR ISN'T RUNNING. IF THE PARKING LIGHT IS "ON" AND THE PRESSURE IN THE HOSE DROPS (DUE TO A BROKEN OR REMOVED FITTING, FOR EXAMPLE), THE PUMP MOTOR COULD ACTIVATE AND CAUSE CHEMICAL TO BE SPRAYED.

2.3 Handling Chemical Products Safely

1. Direct exposure to hazardous chemicals can cause serious injury. These chemicals can include lubricants, coolants, paints, adhesives and agricultural chemicals. Material Safety Data Sheets (M.S.D.S.) are available for all hazardous chemicals which inform the user of specific details including, physical and health hazards, safety procedures, and emergency response techniques.
2. Protective clothing such as rubber gloves, goggles, coveralls and respirator must be worn while handling chemicals. All protective clothing should be kept in excellent condition and cleaned regularly or discarded.
3. If chemicals come in contact with any exposed skin areas, wash immediately with clean water and detergent. Never place nozzle tips or any other components that have been exposed to chemicals to lips to blow out obstructions. Use a soft brush to clean spray nozzles.
4. Dedicate an area to fill, flush, calibrate and decontaminate sprayer where chemicals will not drift or run off to contaminate people, animals, vegetation, water supply, etc. Locate this area where there is no chance of children coming in contact with this residue.
5. Decontaminate equipment used in mixing, transferring and applying chemicals after use. Follow the instructions on the chemical label for the correct procedure required. Wash spray residue from outside of the sprayer to prevent corrosion.
6. Extreme care should be taken in measuring spray products. Powders should be used in suitable sized packages or weighed accurately. Liquids should be poured into a suitable graduated container. Keep chemical containers low when pouring. Wear a filtered respirator and let the wind blow away from you to avoid dust and/or splashes contacting the skin or hair.
7. Store chemicals in a separate, plainly marked locked building. Keep the chemical in its original container with the label intact.
8. Dispose all empty containers after rinsing in accordance with local regulations & by-laws. Dispose of all unused chemicals and left over fertilizer in an approved manner
9. Keep a first aid kit and fire extinguisher available at all times when handling chemicals.





2.4 Local Poison Information Center

If you live anywhere in the United States, the following toll free number will connect you to your Local Poison Information Center.

PHONE NO. 1 - 8 0 0 - 2 2 2 - 1 2 2 2

If you live outside the United States, find the number for the poison control center in your phone book and write it in the space below:

PHONE NO. _____ - _____ - _____

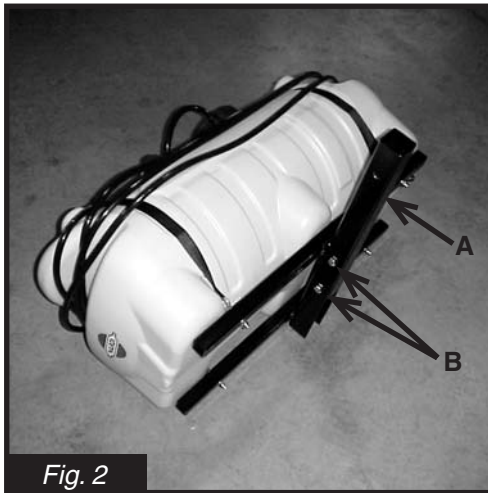
Keep a list, in the space provided below, of all the chemicals that you have in use.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

3.0 HOOKING UP THE SPRAYER

3.1 Assemble Hitch Tube

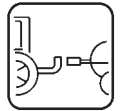
1. Attach hitch tube **A** (**Fig. 2**) to the underside of the frame using the two supplied M10 x 75mm bolts, washers and locknuts **B** (**Fig. 2**).

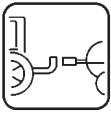


2. Replace the existing receiver hitch in the operating vehicle with the Receiver Hitch sprayer.

3.2 Connect Wiring Harness to Sprayer

1. Connect the "2-pin" plug on the 12 Volt Flojet pump to the 4-way flat plug on the supplied wiring harness as shown in (**Fig. 3**).





3.3 Connect Wiring Harness to Operating Vehicle

1. Make sure the operating vehicle's parking light is "off" before connecting the wiring harness.
2. Connect the 4-way flat plug on the free end of the wiring harness to the operating vehicle's trailer plug.

Note: The Hardi® Receiver Sprayer is designed to be used with a standard 4-way flat trailer plug. When properly wired, the 12 Volt Flojet pump will receive (+) 12 Volts to the red wire on the pump and (-) ground to the black wire on the pump when the operating vehicle's parking light is "on".



4.0 OPERATING INSTRUCTIONS

4.1 Filling The Tank

Water is filled into the tank by removing the tank lid. It is recommended to use water as clean as possible for spraying purposes.



WARNING: DO NOT LET THE FILLING HOSE ENTER THE TANK. KEEP IT OUTSIDE THE TANK, POINTING TOWARDS THE FILLING HOLE (FIG. 4). IF THE END OF THE HOSE IS BENEATH THE SURFACE OF THE TANK CONTENTS AND THE WATER SUPPLY STOPS, CHEMICALS MAY BE SIPHONED BACK AND CONTAMINATE THE WATER SUPPLY SOURCE AND LINES.

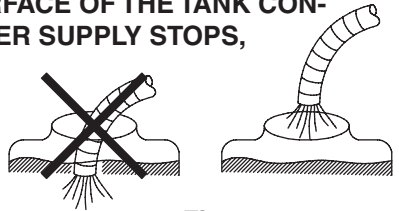


Fig. 4

4.2 Add Chemicals

Follow instructions on chemical container for proper filling and mixing.

4.3 Activate the 12 Volt Flojet Pump

Turn the parking lights on in the operating vehicle. This supplies power to the 12 Volt Flojet pump through the wiring harness. Uncoil the supply hose and squeeze the trigger on the spray lance to start spraying. The pump motor will automatically run when spraying and stop when not spraying.

WARNING: ALWAYS DISCONNECT THE WIRING HARNESS FROM THE OPERATING VEHICLE WHEN NOT SPRAYING. REMEMBER THAT THE PUMP COULD BE "ON" EVEN IF THE PUMP MOTOR ISN'T RUNNING. IF THE PARKING LIGHT IS "ON" AND THE PRESSURE IN THE HOSE DROPS (DUE TO A BROKEN OR REMOVED FITTING, FOR EXAMPLE), THE PUMP MOTOR COULD ACTIVATE AND CAUSE CHEMICAL TO BE SPRAYED.



5.0 MAINTENANCE

5.1 Cleaning The Sprayer

Read the whole label for the chemical used. Take note of any particular instructions regarding recommended protective clothing, deactivating agents, etc. Read the detergent and deactivating agent labels. If cleaning procedures are given, follow them closely.



Be familiar with local legislation regarding disposal of pesticides washings, mandatory decontamination methods, etc. Contact the appropriate body (e.g. Dept. of Agriculture).

It is good practice to clean the sprayer immediately after use, thereby rendering the sprayer safe and ready for the next application. This also prolongs the life of the components.

It is sometimes necessary to leave spray liquid in the tank for short periods - overnight, or until the weather becomes suitable for spraying again. Unauthorized persons and animals must not have access to the sprayer under these circumstances.

1. Dilute remaining spray liquid in the tank with at least 10 parts water and spray the liquid out in the area you have just sprayed.
2. Drain the tank and let pump run dry. Rinse inside of tank, including the tank roof. Rinse and operate all components and any equipment that has been in contact with the chemical, again letting the pump run dry.
3. Rinse and clean sprayer externally. Use detergent if necessary.



6.0 WARRANTY POLICY AND CONDITIONS

HARDI® INC., 1500 West 76th Street, Davenport, Iowa USA: 5646 W. Barstow, Fresno, CA, USA; and 290 Sovereign Road, London, Ontario, Canada hereinafter called "HARDI®", offers the following limited warranty in accordance with the provisions below to each original retail purchaser of HARDI® new equipment of its own manufacturer, from an authorized HARDI® dealer, that such equipment is at the time of delivery to such purchaser, free from defects in material and workmanship and that such equipment will be warranted for a period of one year from the date of delivery to the end user providing the machine is used and serviced in accordance with the recommendations in the Operator's Manual and is operated under normal farm conditions.

1. This limited warranty is subject to the following exceptions:
 - a) Parts of the machine not manufactured by HARDI®, (i.e. engines, tires, tubes, electronic controls, and other components or trade accessories, etc.) are not covered by this warranty but are subject to the warranty of the original manufacturer. Any claim falling into this category will be taken up with the manufacturer concerned.
 - b) This warranty will be withdrawn if any equipment has been used for purposes other than for which it was intended or if it has been misused, neglected, or damaged by accident, let out on hire or furnished by a rental agency. Nor can claims be accepted if parts other than those manufactured by HARDI® have been incorporated in any of our equipment. Further, HARDI® shall not be responsible for damage in transit or handling by any common carrier and under no circumstances within or without the warranty period will HARDI® be liable for damages of loss of use, or damages resulting from delay or any consequential damage.
2. We cannot be held responsible for loss of livestock, loss of crops, loss because of delays in harvesting or any expense or loss incurred for labor, supplies, substitute machinery, rental for any other reason, or for injuries either to the owner or to a third party, nor can we be called upon to be responsible for labor charges, other than originally agreed, incurred in the removal or replacement of components.
3. The customer will be responsible for and bear the costs of:
 - a) Normal maintenance such as greasing, maintenance of oil levels, minor adjustments, etc.
 - b) Transportation of any HARDI® product to and from where the warranty work is performed.
 - c) Dealer travel time to and from the machine or to deliver and return the machine from the service workshop for repair.
 - d) Dealer traveling costs.
4. Parts defined as normal wearing items, (i.e. tires and V-belts) are not in any way covered under this warranty.
5. This warranty will not apply to any product which is altered or modified without the express written permission of HARDI® and/or repaired by anyone other than an Authorized Service Dealer.
6. Warranty is dependent upon the strict observance by the purchaser of the following provisions:
 - a) That this warranty may not be assigned or transferred to anyone.
 - b) That the Warranty Registration Certificate has been correctly completed by dealer and purchaser with their names and addresses, dated, signed and returned to the appropriate address as given on the Warranty Registration Certificate.
 - c) That all safety instructions in the operator's manual shall be followed and all safety guards regularly inspected and replaced where necessary.
7. No warranty is given on second-hand products and none is to be implied.
8. HARDI® reserves the right to incorporate any change in design in its products without obligation to make such changes on units previously manufactured.

WARRANTY POLICY AND CONDITIONS



9. The judgement of HARDI® in all cases of claims under this warranty shall be final and conclusive and the purchaser agrees to accept its decisions on all questions as to defect and to the exchange of any part or parts.
10. No employee or representative is authorized to change this warranty in any way or grant any other warranty unless such change is made in writing and signed by an officer of HARDI® at its head office.
11. Any warranty work performed which will exceed \$400.00 MUST be approved IN ADVANCE by the Service Manager.
12. Claims under this policy must be filled with HARDI® within thirty (30) days of work performed or warranty shall be void.
13. Parts requested must be returned prepaid within thirty (30) days for warranty settlement.
14. Warranty claims must be COMPLETELY filled out properly or will be returned.

DISCLAIMER OF FURTHER WARRANTY

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, EXCEPT AS SET FORTH ABOVE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION OF THE PRODUCT CONTAINED HEREIN. IN NO EVENT SHALL THE COMPANY BE LIABLE FOR INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES (SUCH AS LOSS OF ANTICIPATED PROFITS) IN CONNECTION WITH THE RETAIL PURCHASER'S USE OF THE PRODUCT.

For Product, Service or Warranty Information:

- Please contact your local HARDI® dealer.

To contact HARDI® directly:

- Please use the HARDI® Customer Service number: 1-866-770-7063

- Or send your email to: CUSTSERV@hardi-us.com

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