IF YOU HAVE ANY QUESTIONS OR CONCERNS, OR ARE MISSING PARTS DO NOT RETURN SPRAYER TO THE STORE!

PLEASE CALL OUR CONSUMER HOTLINE AT 1-800-9-SPRAYER

(1-800-977-7293)

Visit us on the Internet: www.hdhudson.com E-mail: ladybug@hdhudson.com

Instruction 871-785 Model 13194

LIMITED WARRANTY

H. D. Hudson Manufacturing Company warrants to the original purchaser only that this product will continue to function as intended if used in accordance with operating instructions (under NORMAL CONSUMER USE) for one year. If the product fails to function as intended—DO NOT RETURN IT TO THE STORE—call our CONSUMER SERVICE HOTLINE AT 1-800-9-SPRAYER (toll free) for fast service. We will, at our option, repair or replace any non-functioning parts without charge (shipping and handling charges will apply) H. D. Hudson Manufacturing Company shall have the option of requiring the return of the non-functioning product to the address listed below, together with the proof of purchase, to establish a claim under this warranty. This warranty does not apply to damage resulting from accident, misuse, neglect, alterations, operation not in accordance with instructions, commercial use, or normal wear.

ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR CONSUMER USE, ARE LIMITED TO THE DURATION SPECIFIED ABOVE. H. D. HUDSON MANUFACTURING COMPANY'S LIABILITY IS LIMITED SOLELY TO THE REPAIR OR REPLACEMENT OF THE NON-FUNCTIONING PRODUCT OR PART. H. D. HUDSON MANUFACTURING COMPANY EXCLUDES LIABILITY UNDER THIS WARRANTY FOR ANY AND ALL INCIDENTAL AND CONSEQUENTIAL LOSS OR DAMAGE.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

IF YOU HAVE QUESTIONS OR CONCERNS: PLEASE CALL OUR CONSUMER HOTLINE AT 1-800-9-SPRAYER. (1-800-977-7293)

WARNING!

WARNING!!! THIS PRODUCT IS DESIGNED TO APPLY CHEMICALS THAT MAY BE HARMFUL AND COULD CAUSE SERIOUS PERSONAL INJURY IF INHALED OR BROUGHT INTO CONTACT WITH THE USER. FAILURE TO READ AND FOLLOW OWNER'S MANUAL INSTRUCTIONS BEFORE USE AND/OR MISUSE OF THIS PRODUCT COULD RESULT IN EXPLOSIVE FAILURE WITH MAJOR INJURIES.

MAIN FUNCTION

This commercial Bak-Pak® sprayer is comfortable to use and sprays evenly. It's especially suitable for the prevention and cure of diseases and insect infestation on crops, blowers, plants and gardens, for the environmental sanitation of public places, and for the epidemic prevention and sanitation of livestock poultry sheds.

STRUCTURE OF SPRAYER

1. Container to hold liquids

4. Operation arm and components

2. Pump and air chamber

- 5. Backpack belt system
- 3. Spraying System (including rubber hose and components, switch, sprayer spindle and head)

WORKING PRINCIPLE

Through the swing of the operation arm and components, the pump bowl rises up and down so that the sealing ball turns on and off, which makes the pressure in the air chamber also rise up and down, impeling the liquid to get into the chamber. The liquid goes through the spraying system and flows out as spray.

CHARACTERISTICS:

- 1. The external form is the imitation of the human body's back curve. The combination of the air chamber and pump located in the liquid container makes the whole structure compact, safe and leak-resistant.
- 2. The operation arm uses an action connecting style so that it can be installed on both sides. It's convenient and quick in action, and while it is in use, the operation arm does not separate easily-making it easier for the user to operate the sprayer with the right or left hand.
- 3. Use the various spray heads for different tasks and to adjust between fine spray and coarse spray patterns.
- 4. Chosen materials for the sprayer are excellent, resistant to acid, corrosion, and alkalinity. The sprayer is sealed hermetically and very durable.

OPERATION METHOD

After the sprayer carton is opened, please check to see that all parts conform to the packing list. Then assemble the sprayer, using the diagram as reference. Before use, please twist off the cap of the container. Fill the liquid through the filter into the container slowly. Then close the cap tightly and place the sprayer on your back. Swing the operation arm, after the pressure of the air chamber is boosted. Pinch the switch component to begin spray operation. It can be point-spray and also can be used as continuous spray.

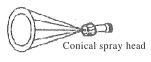
> Choose the different spray head for spraying correctly. 3 types of spray heads are included.





- 1. Fan style spray head: This sprays evenly, suitable for spraying on medium-height and short plants. For spraying weed killer, keep the spray head stable and spray with the direction of any wind.
- 2. Cone spray head: This can be used for spraying pesticides and insecticides and to prevent diseases.







3. 4-hole adjustable spray head: Used for spraying tall bushes and fruit trees.

PARAMETERS AND SPRAY-HEAD FLOW RATE

1. Type: Bak-Pak® Sprayer

2. Container Capacity: 4 gallons, 15 liters

3. Operation Pressure: 0.3~0.4 MPA (43.5~58 psi)

4. Operation Travel: 60-80mm (2-3/8 ~ 3-1/8 Inch)

5. Bowl Diameter: 45mm (1.772 Inch)

6. Net Weight: 4.3kg (9.5 Lb)

IMPORTANT POINTS

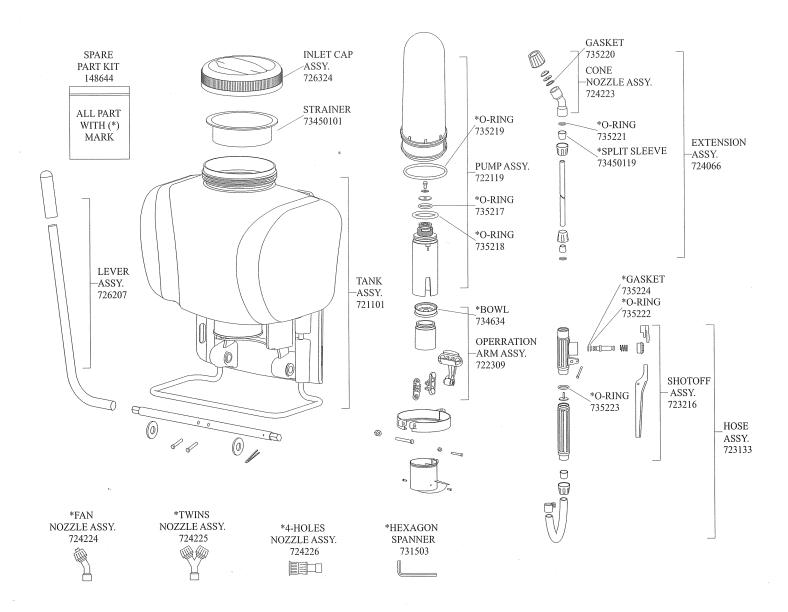
Nozzle Type	Pressure	Flow Rate	Nozzle Type	Pressure	Flow Rate
Cone Nozzle	0.3~0.4 MPA 43.5~58 psi	0.7~0.85 L/min 0.18~0.23 GPM	Twins Nozzle	0.2~0.3 MPA 29~58 psi	1.3~1.6 L/min 0.34~0.42 GPM
Fan Nozzle	0.2~0.3 MPA 29~43.5 psi	0.5~0.6 L/min 0.13~0.16 GPM			
4-Holes Nozzle	0.2~0.4 MPA 29~58 psi	0.6~1.0 L/min 0.16~0.26 GPM			

- 1. Before turning on the switch, do not swing the operation arm continuously for a long time- this will avoid damage of the sprayer.
- 2. While spraying pesticides, the user must wear mask and gloves, to avoid the pesticide directly touching the skin and damaging the body. Don't spray pesticide towards the wind. Do not spray pesticides near people, animals and foodstuff. Don't operate under high temperature for a long time.
- 3. While handling the pesticide, please comply with the safety directives seriously.
- 4. Do not use with strong acid and alkali liquids. Do not use highly-toxic or highly-residual pesticides on vegetables, melons, gourds, fruits and medicinal herbs. After applying pesticides, according to the manufacturer's directions, do not eat vegetables for several days.
- 5. After spraying, clean the sprayer, to prevent liquids from corroding the sprayer or blocking up the spray head. Avoid residual pesticide mixed with the next pesticide used. This may cause a chemical reaction and influence the effect of the pesticide.
- 6. For extended periods of non-usage or continuous usage for several days, add Vaseline to the seals, o-ring and moving parts to reduce wear of parts.

TROUBLE SHOOTING

PROBLEM	CAUSE	SOLUTION
Leakage or spraying poorly	Sealing plate is damaged or loose.	Replace sealing plate or tighten.
Pump handle is hard to move.	Spray nozzle or filter blocked.	Rinse filter and nozzle with water. Add Vaseline to moving parts.
Low pressure.	Bowl or sealing ball worn.	Replace bowl or sealing ball.
Pump handle moves too easily-no pressure.	Seal is missing.	Properly position new seal.

STRUCTURE SKETCH



PACKING LIST

No.	Name	Unit	Quantity
1	Sprayer	Complete Set	1
2	Instructions Manual	Сору	1
3	O-Ring & Gasket	Set	1
4	Bowl	Piece	1
5	Cone Nozzle Assy.Set	Piece	1
6	Fan Nozzle Assy. Set	Piece	1
7	Twins Nozzle Assy.	Set	1
8	4-Holes Nozzle Assy.	Set	1
9	Split Sleeve	Piece	2
10	Hexagon Spanner	Piece	1



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13194 COMMERCIAL BAK PAK PARTS

146736 – Hose Assembly

726137 – Maintenance Kit (includes nozzles)

141271 - Extension Rod

149474 – Shut Off Assembly

141654 - Elbow Nozzle (cone) that comes attached to ext. rod

141655 – Nozzle (fan)(#54)

141656 – Dual nozzle Assy (#56)

141657 – 4-hose Adjustable nozzle (#55)

156240 - Nut

722309 - Operating Arm PARTS

142859 – Operating Arm Lever