

Backpack Owner's Manual



***If you have any problems with, or have any questions about your sprayer,
DO NOT RETURN TO STORE CALL OUR TOLL FREE CUSTOMER SERVICE
TEAM (Monday - Friday, 8:00 AM - 5:00 PM EST) 1-800-311-9903***



CAUTION: Read and follow all instructions

WARNING

The sprayer is operated with liquid under pressure. Failure to observe caution and to follow instructions for operating and cleaning can cause tank, hose and other parts to be weakened and rupture under pressure. This can result in serious injury from high pressure discharge of liquids or forcible ejection of parts. Do not use flammable materials in this sprayer. Material could ignite or explode, causing serious injury. For safe use of this product, you must read and follow all instructions before use. **Test sprayer with water before using any chemicals.**

SAFETY PRECAUTIONS

- Read owner's manual completely before operating this sprayer.
- Always use goggles, gloves, and protective clothing when using sprayer.
- Read and follow all instructions and cautions on label of products used in this sprayer.
- Never use flammable liquids, caustics, acids, or hot water in this tank.
- Do not leave sprayer in the sun when not in use.
- Spray when air is calm to prevent drift of chemicals.
- Do not use sprayer near open flame or anything that could cause ignition of the spray.
- Always inspect hose and all hose connections before each use. A damaged hose, or loose hose connection can result in unintended exposure to the pressurized chemical, resulting in serious injury or property damage.
- Do not lift or carry sprayer by the hose, shutoff valve, or wand extension. Carry by the handle only.
- Do not pressurize with any mechanical device such as an air compressor, since this can create a dangerous pressure level and bursting of parts resulting in serious injury. Only use original pump.
- Do not store chemicals in this tank.
- Clean and rinse sprayer thoroughly after each use.
- Never attempt to alter sprayer from original condition.
- Always use replacement parts from original manufacturer.
- Keep the sprayer and all chemicals out of the reach of children.

ASSEMBLY

Assemble Lumbar Support & Straps:

NOTE: Your sprayer may have a lumbar support or you may purchase one.

1. Install the lumbar support over the tabs on the tank base. See Figure 1.

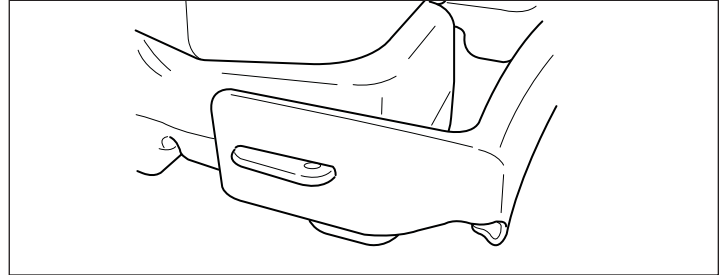


Figure 1. Install Lumbar Support

2. Use a flat blade screwdriver to spread the rings on the end of the shoulder straps. Insert the rings into the holes on the tank base tabs. Turn the ring until it is completely through the holes. Make sure the straps are not twisted. See Figure 2.

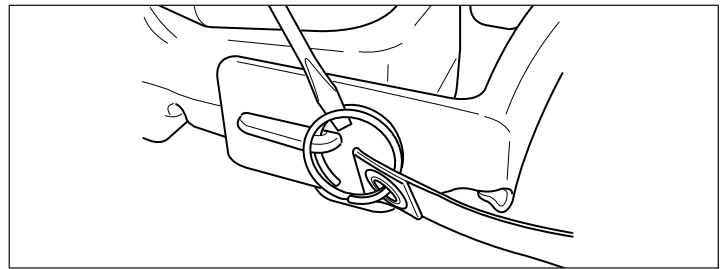


Figure 2. Install Shoulder Straps to Tank Base

3. Install the single strap of the shoulder straps through the center slot of the carry handle. Pull the strap over the bar and secure through the buckle. See Figure 3.
4. To install the waist belt (if supplied), snap the hooks onto the rings of the shoulder straps.

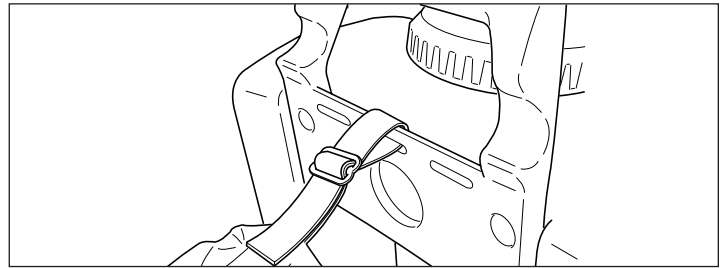


Figure 3. Install Shoulder Straps to Carry Handle

Assemble Pump Handle:

1. Determine which hand will be used to actuate the pump during normal use.
2. Install the pump handle on the pump rod. Install the bolt and tighten securely. See Figure 4.

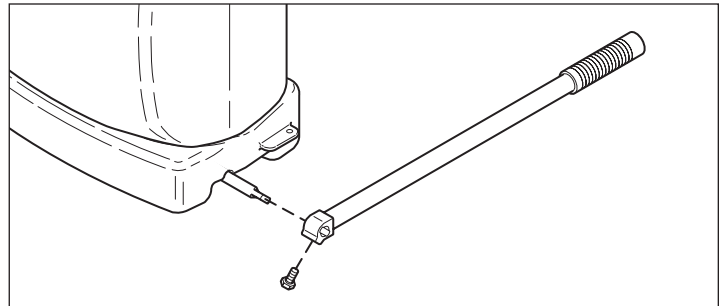


Figure 4. Install Pump Handle

**Assemble Extension to Shut-off:
(Slide-Lock Style)**

1. Install the extension onto the shut-off assembly and tighten the nut securely. See Figure 5.

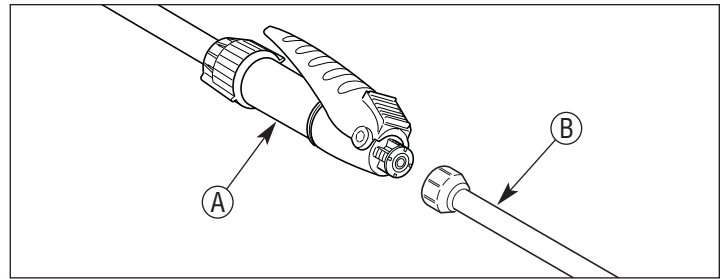


Figure 5. Install Extension

- A. Shut-off Assembly**
- B. Extension**

Install the Nozzle:

1. Select a nozzle from the chart below.
2. Install the nozzle and cap nut (used with the fan and foaming nozzles only) onto the end of the extension and tighten the nut securely. See Figure 6.

NOTE: Nozzle selection is not available on all models.

NOTES: The o-ring is pre-assembled to the metal extension. You must install the supplied o-ring on the poly extension. Make sure the o-ring is present before installing the nozzle.

When using the fan nozzle tip, align the tabs on the nozzle with the end of the extension. The tip can be installed to produce a vertical or horizontal flat fan.

When using the adjustable cone nozzle, turn the nozzle tip to adjust the spray pattern.

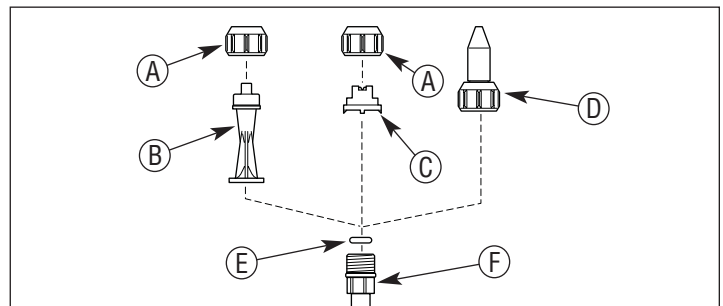


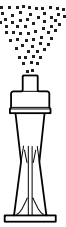


Figure 6. Install the Nozzle

- A. Cap Nut**
- B. Foaming Nozzle**
- C. Fan Nozzle**
- D. Adjustable Cone Nozzle**
- E. O-Ring (#171092 or #171092V)**
- F. Extension**

ADJUSTABLE CONE USES:	FAN NOZZLE USES:	FOAMING NOZZLE USES: (for use with Roundup® products only)
 <ul style="list-style-type: none"> • Spot spraying in or around flower beds, trees, and shrubs. • Edging along fences, driveways, and walkways. • Killing brush such as poison ivy, poison oak, kudzu and wild blackberry. • Preparing garden beds for planting of ornamentals and vegetables. 	 <ul style="list-style-type: none"> • Lawn replacement. Kill lawn and weeds before planting a new lawn. • Preparing large areas for planting or ornamental and vegetable gardens. 	 <ul style="list-style-type: none"> • Spot spraying in flower beds, walkways, driveways, and patios, around trees and shrubs. • Edging along fences, driveways and walkways. • Killing brush such as poison ivy, poison oak, kudzu and wild blackberry.

Install the 3-in-1 Nozzle (select models)

1. Hold extension near bend with long straight section angled down towards the ground as shown. See Figure 7.
2. While holding nozzle in other hand with white pointer facing up, as shown, thread on nut and tighten securely
3. Position of notch in nut will vary and is not important to the function.
4. Use pliers to tighten snug if needed

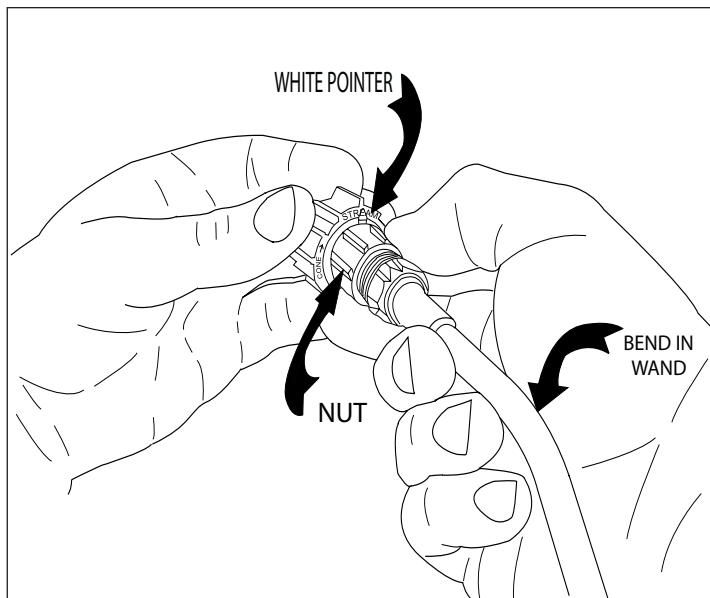
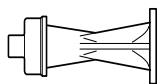


Figure 7. Install the 3-in-1 Nozzle

To Install the Foaming Nozzle

1. Loosen nut.
2. Snap the 3-in-1 nozzle out of the nut.
3. Install the foaming nozzle into the slot in the nut.
4. Tighten nut securely.



Using the 3-in-1 Nozzle

- The 3-in-1 Nozzle easily switches between four positions. (Cone, Straight Stream, Fan & Off)
- The nozzle can be rotated either to the right or left to select the desired pattern. (See Below)



- The white pointer will align with the spray pattern selected. See Figure 8, Off position not marked.

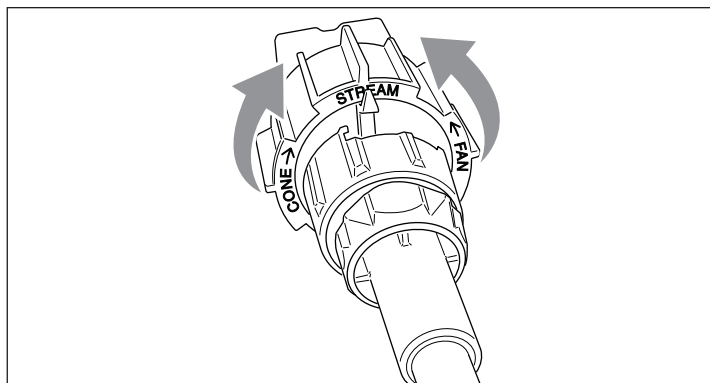


Figure 8. Using the 3-in-1 Nozzle

Assemble Shut-off and Install Extension: (Rotate-Lock Style)

1. Install the filter or poly washer (B) into the handle (A). See Figure 9.
2. Assemble the shut-off assembly (C) to the handle (A) and tighten securely.
3. Make sure the valve seat (D) is present in the end of the shut-off assembly (C).
4. Install the extension (E) onto the end of the shut-off assembly (C). Tighten the nut securely.

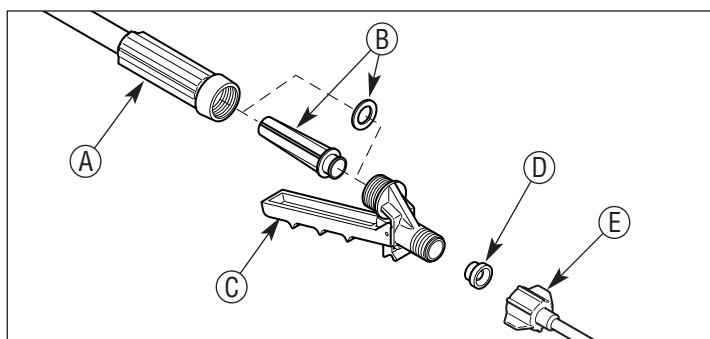


Figure 9. Assemble Shut-Off and Install Extension

Install the Nozzle:

Refer to the previous page for nozzle installation instructions.

- A. Handle
- B. Filter or Poly Washer
- C. Shut-off Assembly
- D. Valve Seat
- E. Extension

BLADDER AND CHAMBER SYSTEM

Determine High Pressure or Low Pressure

Select units have two operating pressure options, determined by chemical and type of spraying being performed.

The High Pressure chamber (A, Figure 10) is ideal for high pressure applications of insecticides, fungicides and fertilizers.

The Low Pressure bladder (B, Figure 10) is an elastic pressure chamber that is ideal for low pressure applications of herbicides. Recommended for use with *Roundup*® and *Ortho*® brand herbicide products.

Changing the Pressure Chamber

Always depressurize sprayer before changing or cleaning pressure chamber

1. Remove the tank cap and strainer.
2. Reach into the tank and turn the chamber 1/4 turn counterclockwise to unlock the chamber from the pump. See Figure 11.
3. Lift the chamber straight out of the pump.
4. Install the desired chamber onto the pump by aligning the tabs on the chamber with the slots on the pump.
5. Turn the chamber 1/4 turn clockwise to lock the chamber in place.
6. Reinstall the strainer and tank cap.

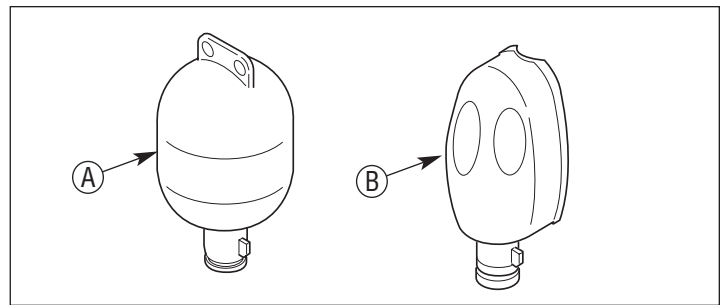


Figure 10. Pressure Chamber Options
A. High Pressure Chamber (White)
B. Low Pressure Bladder (Yellow)

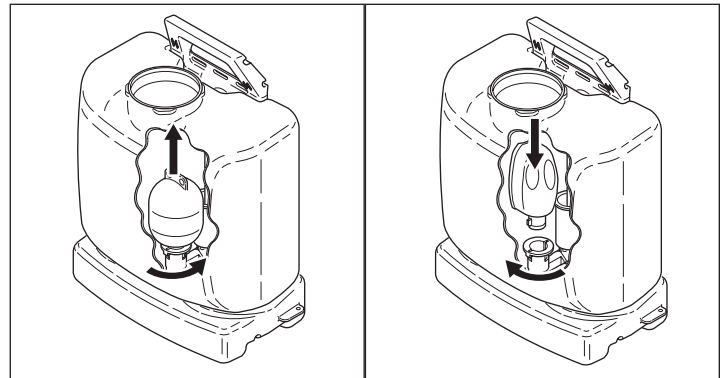


Figure 11. Changing the Pressure Chamber

OPERATING INSTRUCTIONS

Always conduct a test using clean water before mixing chemicals.

Filling

1. Remove the cap from the tank. Turn the cap 1/4 turn counterclockwise. See Figure 12.
2. Make sure the strainer is in place in the neck of the tank.
3. Fill the tank with water and chemical to the desired level. (Always refer to chemical manufacturer for proper mixture).
4. Reinstall the cap. Turn the cap 1/4 turn clockwise to secure to the tank.

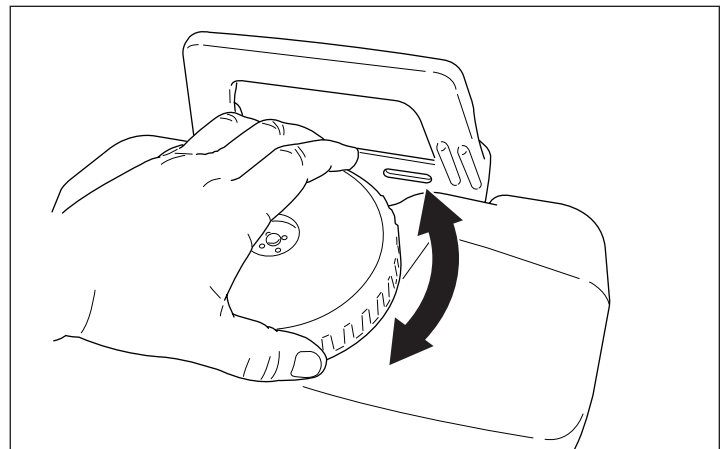


Figure 12. Remove & Reinstall Tank Cap

Pressurizing

NOTE: Before pressurizing the unit, make sure the shut-off lever is not depressed and the lock is not engaged.

When using the Low Pressure Bladder

Operate the pump handle up and down 1 - 3 times in a smooth motion. To maintain pressure, operate the pump handle every 8 seconds or as needed. See Figure 13

When using the High Pressure Chamber

Operate the pump handle up and down in a smooth motion until pumping becomes difficult. To maintain pressure, operate the pump handle every 8 seconds or as needed.

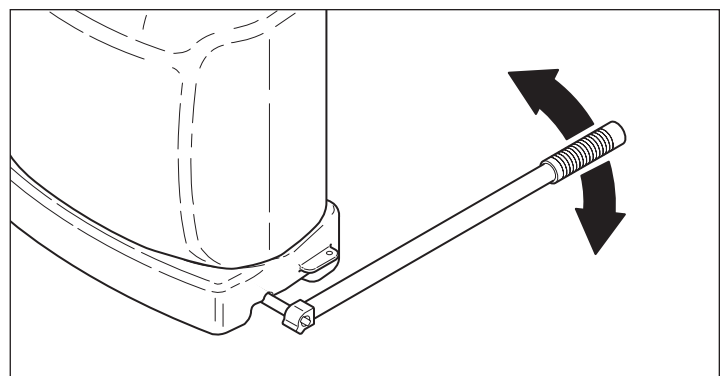


Figure 13. Operate the Pump Handle

Spraying

1. Direct the nozzle away from you. Squeeze the shut-off handle to begin spraying.
2. Release the shut-off handle to stop spraying.
3. For continuous spraying, squeeze the shut-off handle and either slide or rotate the lock (A) towards you. To unlock, slide or rotate the lock towards the nozzle. See Figure 14.

Cleaning

1. Fill the tank with cool, clean tap water. Replace the cap and tighten securely. (Note: Never use hot water for cleaning.)
2. Agitate the tank to rinse the chemical from the tank walls.
3. Remove the cap and empty the contents into gravel or bare soil.
4. Refill the tank with clean tap water. Replace the cap and tighten securely.
5. Pressurize the tank as described in the Pressurizing section.
6. Direct the nozzle away from you and squeeze the shut-off handle for at least 30 seconds to clean the pressure chamber or bladder, hose and shut-off.
7. Remove the cap and empty the contents into gravel or bare soil.
8. Repeat steps 4 - 7 until thoroughly cleaned. Remove nozzle when flushing pump system. Clean nozzle before replacing.

MAINTENANCE

Tank Maintenance

1. After each use, rinse the tank with clean water.
2. Check the cap vent check valve and cap gasket. Make sure they do not show signs of wear and are operating properly. Replace them as required.
3. Clean any dirt or debris from the strainer basket.
4. Periodically check the straps for fraying. Replace them as required.

Shut-Off Maintenance (Slide-Lock Style)

1. Unscrew the handle section from the lever section of the shut-off. See Figure 15.
2. Remove the spring, valve body, and filter (optional) from the handle.

Note: The poppet seal is assembled on the valve body.

3. Clean any debris from inside the handle, on the valve body, poppet seal face or the filter.
4. Reassemble the components as shown and tighten the shut-off sections securely.

Shut-Off Maintenance (Rotate-Lock Style)

1. Unscrew the handle from the shut-off assembly. See Figure 16.
2. Unscrew the extension from the shut-off assembly.
3. Remove the filter or poly washer and valve seat from the shut-off assembly.
4. Clean any debris from inside the handle and shut-off assembly, or on the valve seat or filter.
5. Reassemble the components as shown and tighten all connections securely.

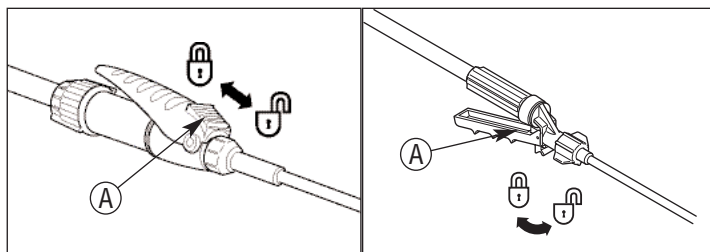


Figure 14. Apply and Release Shut-Off Lock

Sprayer Storage

1. Never store sprayer with pressure in reservoir or liquid in any part of sprayer.
2. Sprayer tank should be hung upside down, with the cap removed, to dry completely.
3. Do not store or leave any solution in the tank after use.
4. Store in a warm, dry location out of direct sunlight.
5. **Keep the sprayer and all chemicals out of the reach of children.**
6. Remove pump handle, rotate 1/4 turn, and reinstall to store handle in upright position.

CAUTION:

Always empty, clean and dry tank, pump system, shutoff, hose and extension after each use. FAILURE TO DO SO MAY WEAKEN SPRAYER COMPONENTS CAUSING COMPONENTS TO RUPTURE WHEN PRESSURIZED. Additionally: FAILURE TO CLEAN AND PROPERLY MAINTAIN YOUR SPRAYER WILL VOID MANUFACTURER'S WARRANTY.

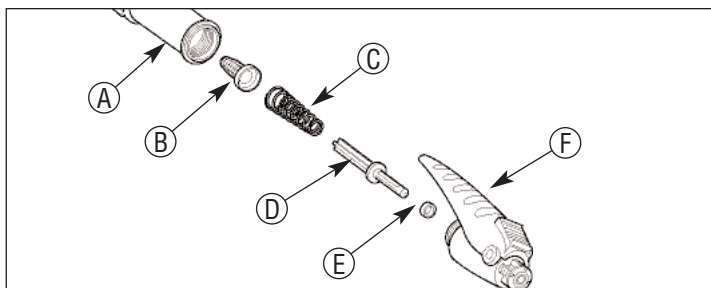


Figure 15. Shut-Off Maintenance (Slide-Lock Style)

- A. Handle Section
- B. Filter
- C. Spring
- D. Valve Body
- E. Poppet Seal
- F. Lever Section

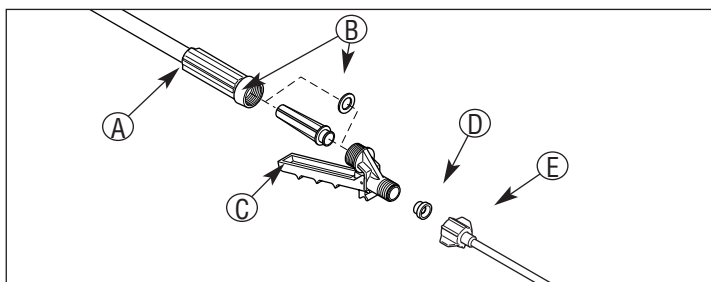


Figure 16. Shut-Off Maintenance (Rotate-Lock Style)

- A. Handle
- B. Filter or Poly Washer
- C. Shut-off Assembly
- D. Valve Seat
- E. Extension

Bladder Replacement

1. Remove old bladder from the yellow chamber.
2. Start installing the new bladder into the yellow chamber.
3. Use the smooth end of the extension to push the bladder into the chamber. Make sure the bladder is fully seated. See Figure 17.

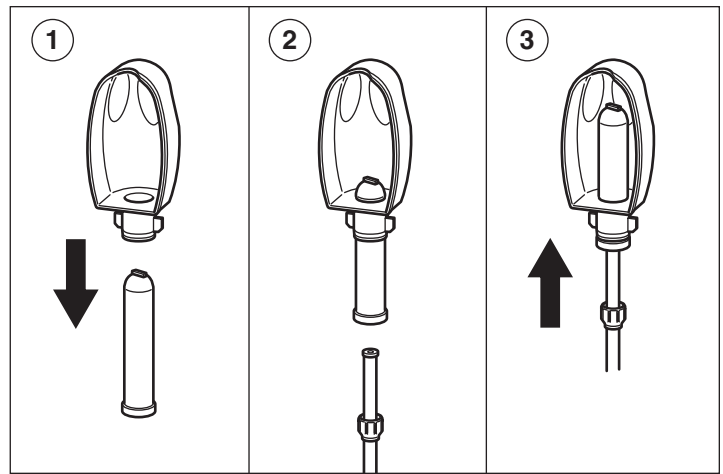


Figure 17. Bladder Replacement

Nozzle Maintenance

1. If nozzle clogs, remove and disassemble the nozzle assembly.
2. Clean the openings of any obstructions and reassemble.

3-in-1 Nozzle Maintenance

1. If nozzle clogs, ensure the pointer is aligned with the spray pattern that is clogged.
2. Loosen the nut and snap the 3-in-1 nozzle out of the nut.
3. Flush out the clogged nozzle under a steady flow of water from a faucet or garden hose. See Figure 18.
4. Reassemble the nozzle to the wand as described on page 4 and tighten the nut securely. Test spray pattern and repeat cleaning steps until all debris is removed from the nozzle.

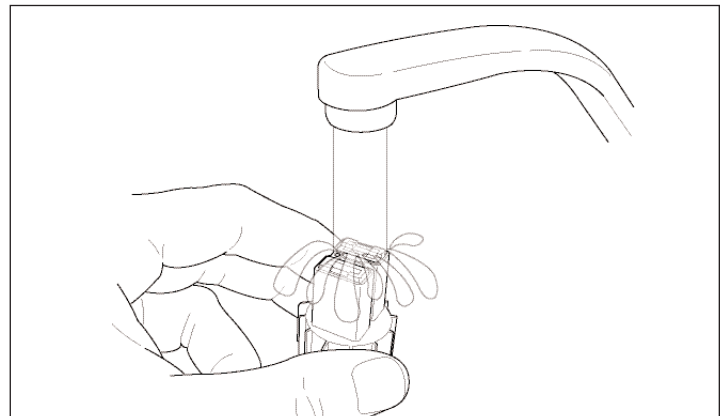


Figure 18. Cleaning the 3-in-1 Nozzle

PARTS & ACCESSORIES

Key #	Part #	Description	Key #	Part #	Description	Key #	Part #	Description
1	180344	Nozzle Assembly, Brass	28	171510	4-Gallon Tank	51	171453B	Rod & Bracket Assembly
2	180340	Nozzle Cap, Brass	28	180123	5-Gallon Tank	52	171479	Reservoir Assy (includes Key #53)
3	171092	O-Ring	29	171475	Hook Bolt	53	171488V	O-Ring
4	180266	Foaming Nozzle	30	171444B	Base, Black	54	1714432	Reservoir/Bladder Assembly (includes Key #55)
5	181205	3-in-1 Nozzle	31	171489	Washer, #8 SAE	55	180120	Bladder w/ Pressure Relief Valve
6	180007	Fan Tip Set	32	171476	Nut, #10-24 Hex Nylon Lock	56	171496	Shoulder Straps, Deluxe Padded
7	178070	Fan Tip Set	33	171780	Handle, Black	57	171497	Waist Belt
8	178067	Cap Nut	34	171490	Screw, 1/4-20 x 5/8, Self Tapping	58	171552	Handle Assembly
9	180097	High Volume Fan Tip (Red)	35	171775	Grommet	59	171553	Bolt, 3/8-16 x 3/4
10	180168	Low Volume Fan Tip (Yellow)	36	171445	Lumbar Support	60	174086C	Service Kit
11	178080	Extension, Poly, 18"	37	171454	Agitator	61*	176455	Adapter
12	181108	Shut-off Assy, w/ Filter & Hose, 50"	38	171474	Hitch Pin	62	171093	Three Nozzle Boom
13	181230	Shut-off Assy, w/ Filter	39	171455	Pivot	63	171071	Twin Nozzle Boom
14	1785068	Poppet Seal	40	171512	Connecting Rod, 4-Gallon	64	171084	5 Foot Lance
15	180808	Filter	40	171513	Connecting Rod, 5-Gallon	65	171427	Pressure Regulator
16	180883	Hose Nut	41	180103	Piston Assembly, 4-Gallon (includes Key #42)	66	171085	Weed Shield
17	181082	Hose, 50"	41	180115	Piston Assembly, 5-Gallon (includes Key #42)			
18	181164	Extension, Brass, 24"	42	171487V	O-Ring			
19	176141	Handle and Hose Assembly w/Grip	43	171747	Pump Assembly (includes Key #44)			
20	171048	Filter (optional)	44	171740	Gasket			
21	171035P	Poly Washer	45	171495	Pump Nut			
22	171700	Shut-Off Assy, (includes Key #23)	46	180360	O-Ring			
23	171050	Valve Seat	47	171743	Fitting Assembly (includes Key #46)			
24	180262	Cap Assembly, Black (includes Key #25 & 26)	48	176009	Hose Clamp			
25	171015	Check Valve	49	171468	Retainer Bracket			
26	171726	Gasket	50	171493	Screw, #10 x 1, Self Tapping			
27	181115	Strainer Basket						

* - IMPORTANT: Key #61 is required to adapt the nozzle booms, lance or weed shield to the supplied extension.

PARTS & ACCESSORIES

To order replacement parts, fill in the quantity required in the left hand column, calculate the grand total, and send this list to the address on the reverse side. ALL PRICES SHOWN IN U.S. DOLLARS.

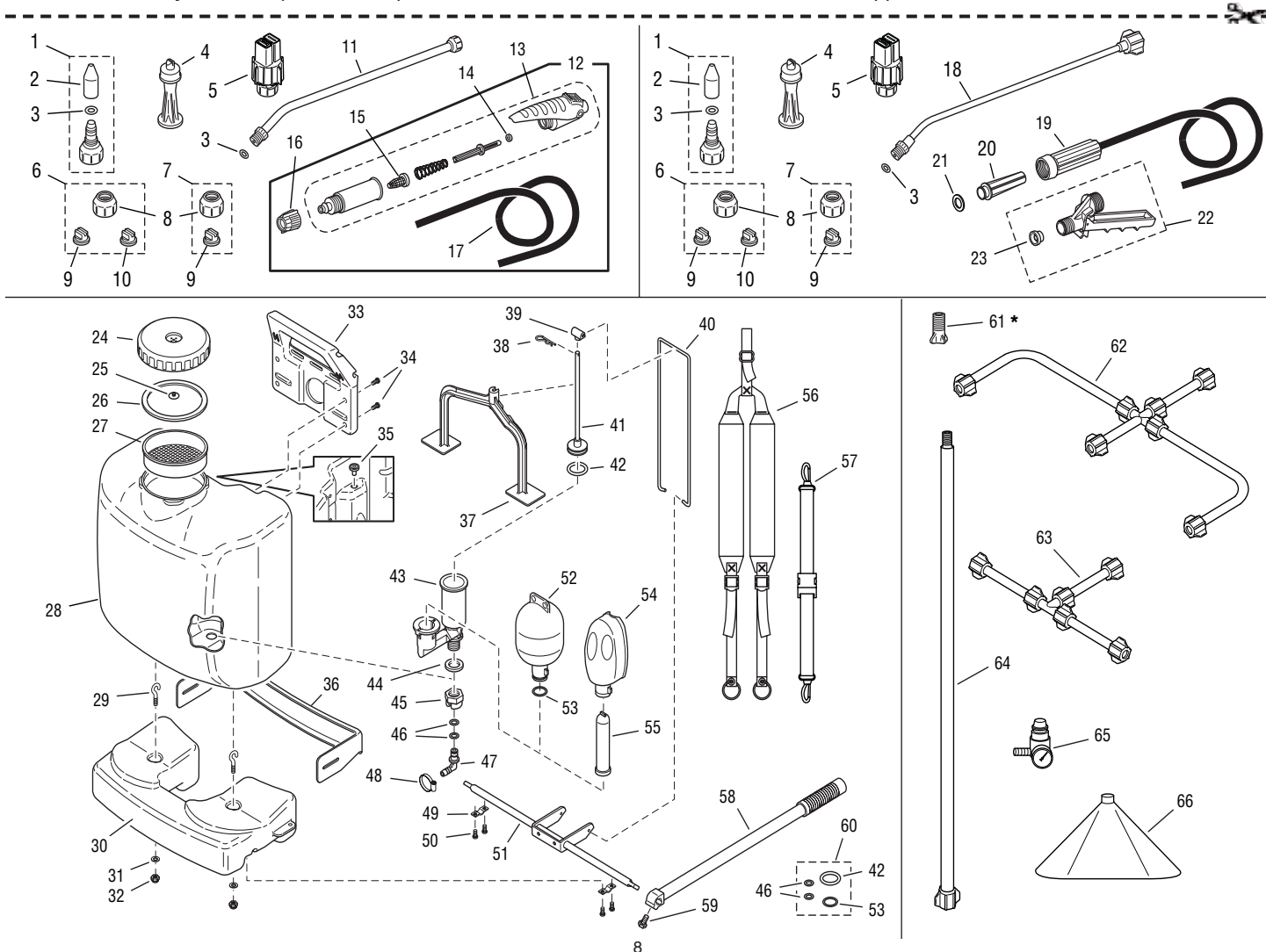
QTY.	Part #	Description	Price	Total	QTY.	Part #	Description	Price	Total
	180344	Brass Nozzle	\$1.75			180103	Piston Assembly, 4-Gallon	\$14.50	
	180266	Foaming Nozzle	\$1.25			180115	Piston Assembly, 5-Gallon	\$14.50	
	181205	3 In 1 Nozzle	\$4.80			171747	Pump Assembly	\$16.25	
	180007	Fan Tip Set	\$2.00			171740	Gasket	\$1.50	
	178070	Fan Tip Set	\$1.00			171495	Pump Nut	\$1.25	
	178080	Extension, Poly, 18"	\$2.25			171743	Fitting Assembly	\$1.50	
	181108	Shut-off Assembly w/ Filter & Hose	\$6.25			176009	Hose Clamp	\$1.50	
	181164	Extension Brass 24"	\$5.00			171468	Retaining Bracket	\$0.50	
	176141	Handle & Hose Assy, w/ Grip	\$6.75			171493	Screw, #10 x 1, Self Tapping	\$0.25	
	171700	Shut-off Assy	\$6.50			171453B	Rod & Bracket Assembly	\$14.50	
	180262	Cap Assembly, Black	\$7.50			171479	Reservoir Assembly	\$6.00	
	181115	Strainer Basket	\$1.00			171488V	O-Ring	\$1.50	
	171510	4-Gallon Tank	\$32.50			1714432	Reservoir / Bladder Assembly	\$11.00	
	180123	5-Gallon Tank	\$32.50			171496	Shoulder Strap, Deluxe Padded	\$8.00	
	171444B	Base, Black	\$10.00			171497	Waist Belt	\$4.50	
	171489	Washer, #8 SAE	\$0.25			171552	Handle Assembly	\$17.00	
	171476	Nut, #10-24 Hex Nylon Lock	\$0.25			171553	Bolt, 3/8-16 x 3/4	\$0.50	
	171780	Handle, Black	\$5.50			174086C	Service Kit	\$4.00	
	171490	Screw, 1/4-20 x 5/8, Self Tapping	\$0.50			176455	Adapter	\$3.50	
	171775	Grommet	\$0.75			171093	Three Nozzle Boom	\$38.00	
	171445	Lumbar Support	\$5.00			171071	Twin Nozzle Boom	\$23.00	
	171454	Agitator	\$5.00			171084	5 Foot Lance	\$44.00	
	171474	Hitch Pin	\$0.50			171427	Pressure Regulator	\$52.00	
	171455	Pivot	\$1.50			171085	Weed Shield	\$26.00	
	171512	Connecting Rod, 4-Gallon	\$5.00						
	171513	Connecting Rod, 5-Gallon	\$5.00						

Prices subject to change without notice.

All Parts F.O.B. Factory

*IMPORTANT: Key #61 is required to adapt the nozzle booms, lance or weed shield to the supplied extension.

Subtotal:	
8.75% Tax (NY only):	
Shipping & Handling	\$ 4.00
GRAND TOTAL:	



NAME

PHONE

ADDRESS

CITY

STATE / PROVINCE

ZIP CODE

Method of payment:
\$10 minimum on
all credit card
orders.

 VISA MASTERCARD Check

(Please do not staple check to order form)

Account No.

Expiration Date:

Send Check payable to:
The Fountainhead Group, Inc.
23 Garden Street
New York Mills, NY 13417

Phone: 1-800-311-9903 or (315) 736-0037
Fax: (315) 768-4220
E-mail: info@thefgi.com
www.thefountainheadgroup.com

TROUBLESHOOTING

TROUBLE	LOOK FOR	REMEDY
Sprayer will not build pressure.	a.) O-ring on pump piston is worn or damaged. b.) Check ball in pump is dirty or stuck. c.) Reservoir assy or bladder is damaged.	a.) Replace o-ring. b.) Flush pump with clean water to remove any debris from the check ball. c.) Replace reservoir assy or bladder.
Sprayer leaks from the bottom of tank.	a.) Pump gasket on the bottom of the pump is damaged. b.) Pump retaining nut is not tight. c.) O-rings are damaged.	a.) Replace gasket. Lubricate gasket prior to replacement. b.) Tighten pump retaining nut. Do not overtighten or pump damage will occur. c.) Lubricate or replace o-rings.
Sprayer will not spray.	Shut-off or nozzle is clogged.	Clean shut-off or nozzle as described on pages 6 and 7.
Sprayer leaks where plunger rod enters tank.	Dirty or damaged rod seal grommet.	Lubricate grommet with petroleum jelly. If seal still leaks, replace grommet.
Pump handle is difficult to operate.	a.) Swollen or damaged pump piston o-ring. b.) Dry or damaged rod seal grommet.	a.) Lubricate o-ring with petroleum jelly or replace o-ring. b.) Lubricate grommet with petroleum jelly or replace grommet.



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