

If you have any questions about your sprayer, please do not return it to the store!! Call the Consumer Hotline at 1-800-253-4642 year -yound Monday through Friday 8:00 a.m. to 7:00 p.m. ; March 1 - August 31 on Saturday and Sunday 10:00 a.m. to 4:00 p.m., Eastern Time



Owners' Manual
Lawn & Garden Polymer Sprayers
Models 1401M, 1402M, 1403M and 1002M

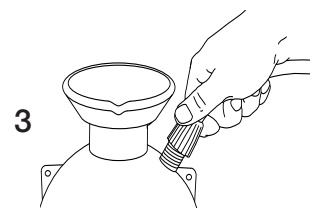
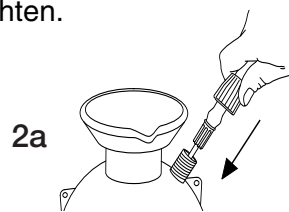
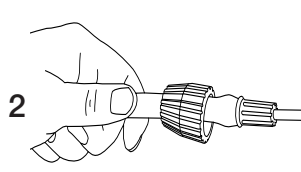
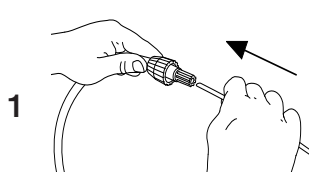
WARNING!!! THIS PRODUCT IS DESIGNED TO SPRAY CHEMICALS THAT MAY BE HARMFUL AND COULD CAUSE SERIOUS PERSONAL INJURY IF INHALED OR BROUGHT INTO CONTACT WITH THE USER. FAILURE TO READ AND FOLLOW OWNERS' MANUAL INSTRUCTIONS BEFORE USE AND/OR MISUSE OF THIS PRODUCT COULD RESULT IN EXPLOSIVE FAILURE WITH MAJOR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

- **ALWAYS** water test sprayer before each use.
- **ALWAYS** wear long sleeve shirts, long pants, goggles, gloves and durable shoes.
- **ALWAYS READ AND FOLLOW** label instructions for the chemicals to be applied.
- **AFTER USE** release pressure and clean the sprayer.
- **ALWAYS RELEASE** pressure in sprayer before servicing.
- **DO NOT** alter the sprayer or any components.
- **DO NOT** spray flammable, caustic (i.e. acids, chlorines and bleach), corrosive, heated or self-heating solutions with this sprayer.
- **DO NOT** store liquids in the sprayer.
- **NEVER** fill tank above the "MAX FILL LINE" on the tank.

ASSEMBLY INSTRUCTIONS

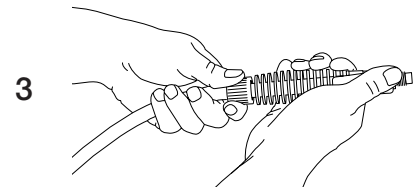
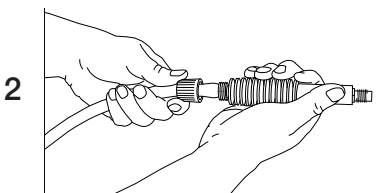
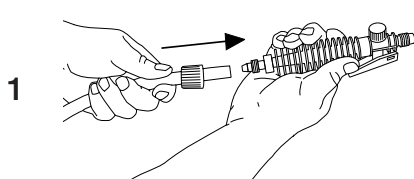
A. HOSE TO TANK ASSEMBLY

1. Insert the pink siphon tube approximately ½" into the pink hose insert otherwise sprayer will spray only air.
2. Lubricate the black o-ring on the pink hose insert and then push (2a) into the threaded tank nipple until fully seated.
3. Screw hose nut onto threaded tank nipple. Firmly hand tighten.



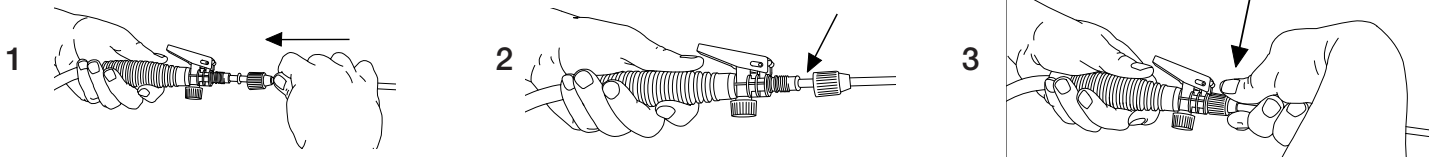
B. FLOW CONTROL TO HOSE

1. Remove the flow control hose nut from the flow control and slide over the hose.
2. Push the hose over the pointed end of the flow control until it touches the threads.
3. Screw the flow control hose nut onto the flow control. Firmly hand tighten.



C. WAND TO FLOW CONTROL

1. Push the wand into the flow control until it stops.
2. Slide the o-ring down until it touches the flow control.
3. Screw the wand nut onto the flow control. Firmly hand tighten.



**TO ENSURE CORRECT ASSEMBLY, TEST SPRAYER WITH
WATER BEFORE USING.**

OPERATING INSTRUCTIONS

A. FILLING THE SPRAYER

1. Remove the pump assembly from the tank by turning counter-clockwise.
2. Prepare the spray solution following the instructions listed on the chemical manufacturers' label. Mix only the amount of solution to be sprayed.
3. **DO NOT** spray flammable, caustic (i.e. acids, chlorines and bleach), corrosive, heated or self-heating solutions with this sprayer.
4. Screw the pump assembly back into the tank by turning clockwise. Firmly hand tighten.
5. **NEVER** fill tank above the "MAX FILL LINE" on the tank.

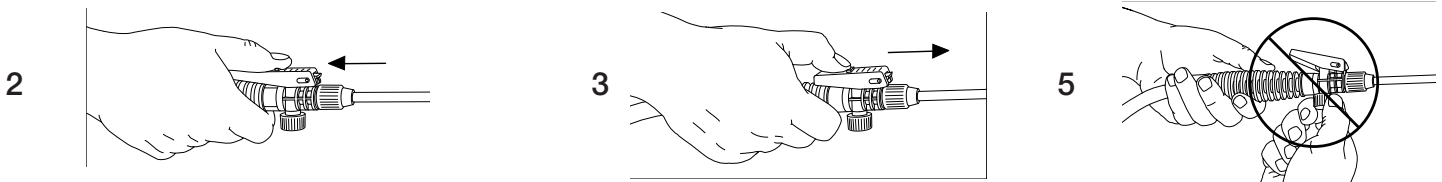
B. PRESSURIZING THE SPRAYER

1. To operate the pump, unlock the pump handle by turning counter-clockwise. Be careful not to loosen the pump from the tank.
2. To create pressure, stroke up and down.
3. Lock the pump handle back into the pump assembly by turning clockwise.

WARNING!!! To prevent ejected pump assembly and/or solution from striking and injuring you, never stand with your face or body directly over the top of the tanks when pumping or loosening the pump.

C. SPRAYING

1. To start spraying, squeeze the flow control lever.
2. To stop spraying, release the flow control lever while pulling back on the lever.
3. To spray continuously, squeeze the flow control lever and slide forward to lock on.
4. If your sprayer has an adjustable cone nozzle, screw it clockwise for a fine mist and counter-clockwise for a coarse stream. Flat fan nozzles are not adjustable.
5. **DO NOT** remove flow control cap while spraying.
6. **ALWAYS** wear long sleeve shirts, long pants, goggles, gloves and durable shoes.



D. RELEASING PRESSURE

1. To release pressure from the tank, turn the tank upside down, and then squeeze the flow control lever until all the air pressure is gone. If your sprayer has a pressure relief valve, turn yellow knob clockwise until all air pressure is gone.
2. If your sprayer is clogged and the pressure will not release using the flow control, do the following:
 - a. Place a rag over the top of the sprayer and pump.
 - b. While firmly pushing down on the pump handle, slowly turn counter-clockwise.
3. **ALWAYS RELEASE** pressure in sprayer before servicing.
4. **NEVER** leave pressurized sprayer unattended.

E. CLEANING

1. Do not store chemicals in the tank. If the chemical is stored in the tank, it can clog the system as it dries and destroy the seals and other components.
2. To prolong its life, clean the sprayer after each use. After using water-based products, rinse thoroughly with soapy water then clean water, being sure to flush out the hose and flow control. After spraying solvent or oil-based products, follow the chemical manufacturers' recommended cleaning procedure, following up with a thorough rinsing and flushing of the sprayer, hose and flow control with soapy water then clean water.

F. STORAGE AFTER CLEANING

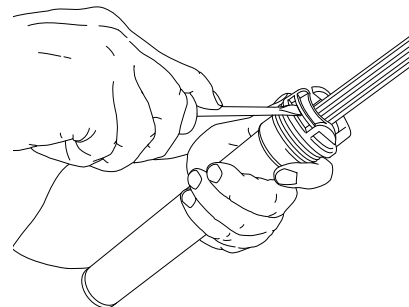
1. To store the sprayer, remove the complete hose assembly (hose w/siphon tube, wand, flow control) from the tank.
2. For proper drainage and drying, lock flow control lever on.
3. Loosen pump assembly, but leave in the tank.
4. Store all components in a clean, dry area.

PUMP MAINTENANCE & DISASSEMBLY

To keep the pump working smoothly and efficiently, the plunger o-ring needs to be lubricated often by applying grease or petroleum jelly around the outside of the plunger o-ring.

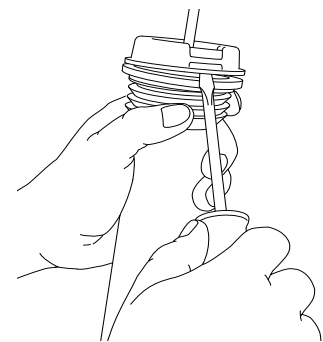
To lubricate the plunger o-ring on model numbers 1401M, 1402M and 1403M do the following:

- Remove pump assembly from the tank.
- Unlock the pump handle and pull it out as far as it will go.
- With a flat blade screwdriver, push down on the tabs on each side of the pump. Pull up and the handle and the plunger assembly should come out of the pump cylinder.
- To reassemble, insert the plunger assembly into the cylinder and snap the cap back into place.



To lubricate the plunger o-ring on model numbers 1002Mo the following:

- Remove pump assembly from the tank.
- Unlock the pump handle and pull it out as far as it will go.
- Lay a flat blade screwdriver in the slot below ↓PRY↓. Bring the screwdriver handle down towards the bottom of the pump. This will pry the cap out and over the tab. Repeat this procedure on the other side of the pump cap.
- To reassemble, insert the plunger assembly into the cylinder and push the tabs back into place.



TROUBLESHOOTING

Always depressurize the sprayer, remove all chemical solution and clean the sprayer before making repairs. Replacement parts may be purchased at the store where the sprayer was purchased or they can be ordered from our **Customer Service Hotline at 1-800-253-4642**.

PROBLEM: Pump works hard or does not pressurize the tank.

CAUSE: Plunger o-ring either not lubricated or damaged.

SOLUTION: Apply petroleum jelly or grease around outside of plunger o-ring. Check for cracks or other damage and replace if necessary.

PROBLEM: Spray solution or air leaks into pump cylinder.

CAUSE: Check valve on bottom of cylinder is prevented from sealing by dirt, residue or damage.

SOLUTION: Remove the pump assembly and examine the check valve. Clean if dirty; replace if necessary.

PROBLEM: Hose leaks air at tank connection.

CAUSE: (1) Tank nut is loose or (2) hose insert o-ring is damaged.

SOLUTION: (1) Tighten hose tank nut or (2) replace hose insert o-ring.

PROBLEM: Flow control leaks.

CAUSE: Improper assembly.

SOLUTION: Refer to “Flow Control to Hose” and “Wand to Flow Control” assembly instructions.

PROBLEM: Bad spray pattern or low spray volume.

CAUSE: (1) Nozzle is clogged or (2) low pressure in sprayer.

SOLUTION: (1) Remove nozzle and clean; remove wand and clean. If wand cannot be unclogged, replace it or (2) repressurize the tank.

PROBLEM: Nozzle leaks when flow control is closed.

CAUSE: Flow control remaining open (lever is locked on).

SOLUTION: Completely disassemble flow control. Inspect all components, clean and lubricate all seals or replace flow control.

PROBLEM: Leak at tank opening.

CAUSE: (1) Pump assembly not sealed tightly into tank or (2) damaged pump cylinder gasket or o-ring.

SOLUTION: (1) Thoroughly clean pump cylinder gasket or o-ring and surrounding area and apply grease or petroleum jelly to pump gasket or o-ring or (2) Replace gasket or o-ring.

PROBLEM: Fluid leaks from pressure relief valve.

CAUSE: Tank is over filled.

SOLUTION: Release pressure by following “Releasing Pressure” instructions. *DO NOT USE* the pressure relief valve for releasing pressure. Remove excess fluid.

LIMITED WARRANTY

Root-Lowell Manufacturing Co. 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 the time period as specified for model numbers listed below: If the product fails to function as intended—DO NOT RETURN IT TO THE STORE—call **our CONSUMER SERVICE HOTLINE AT 1-800-253-4642 (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.) Root-Lowell Manufacturing Co. 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 of o-rings or seals.

<u>Model Number</u>	<u>Warranty Period</u>
1401M, 1402M, 1403M	3 Year Limited
1002M	5 Year Limited

ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR CONSUMER USE, ARE LIMITED TO THE DURATION SPECIFIED ABOVE. ROOT-LOWELL MANUFACTURING CO.’S LIABILITY IS LIMITED SOLELY TO THE REPAIR OR REPLACEMENT OF THE NON-FUNCTIONING PRODUCT OR PART. ROOT-LOWELL MANUFACTURING CO. 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 SERVICE HOTLINE AT 1-800-253-4642** (Mon. through Fri., 8:00 a.m. to 7:00 p.m. EST) or **WRITE:** ROOT-LOWELL MANUFACTURING CO. · ATTN: CONSUMER SERVICE · 1000 FOREMAN ROAD · P. O. BOX 289 · LOWELL, MICHIGAN 49331-0289.

HELP PROTECT THE ENVIRONMENT. PLEASE USE CHEMICALS CAREFULLY, ACCORDING TO CHEMICAL MANUFACTURER’S GUIDELINES, AND ALWAYS DISPOSE OF THEM PROPERLY.