

# **OPERATING INSTRUCTIONS**

## SMITH PERFORMANCE SPRAYERS INDUSTRIAL CONCRETE SPRAYER S103E



#### **A**SAFETY PRECAUTIONS

- Read owner's manual completely before operating this sprayer.
- Always use goggles, gloves, and protective clothing when using sprayer. Refer to the appropriate
- technical bulletin for the chemical being sprayed for additional protective clothing required.
- Read and follow all instructions and cautions on label, material safety data sheets and technical bulletins of products used in this sprayer.
- Never use flammable liquids, chlorine, bleach, caustics, acids, hot water, or other corrosive solutions or heat, pressure or gas producing chemicals in the tank for the S103E Sprayer.
- 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, shut-off valve, or extension. Carry by pump handle only, making sure handle is properly locked in place before lifting.
- 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.
- Always release pressure when sprayer is not in use and before removing pump from tank.
- Do not stand with face or body over top of tank when pumping or loosening pump, to prevent pump or solution from striking you, resulting in serious injury.
- 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.

#### **WARNING**

#### ALWAYS CLEAN THE SPRAYER AND SHUT-OFF THOROUGHLY AFTER EACH USE OR WHEN CHANGING APPLICATIONS AS DESCRIBED IN THE *CLEANING* SECTION. FAILURE TO COMPLETELY CLEAN MAY CAUSE CROSS-CONTAMINATION.

#### **A**CAUTION

Always empty, clean and dry tank, pump system, shut-off, 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.

#### A 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 and/or possible death. For safe use of this product, you must read and follow all instructions before use.

#### TEST SPRAYER WITH WATER BEFORE USING ANY CHEMICALS.

Do not return sprayer to store, if you experience problems or have questions contact our toll free Customer Service Center, M-F 8A.M. - 5P.M., EST, at 1-800-311-9903, or e-mail: Info@TheFGI.com, or access online at: www.TheFountainheadGroup.com.

## Assemble Hose To Tank 1. Wrap teflon tape around tank fitting threads 2X in

- clockwise direction, if needed.
- 2. Align hose and screw on to tank. (See Figure A).
- 3. Tighten with a 5/8" wrench. (See Figure B).



Figure B

#### Assemble Hose, Extension, Shut-Off & Nozzle

- 1. Attach hose to shut-off and tighten securely using a 9/16" wrench. Do not overtighten. Use a 3/4" wrench to hold the shut-off handle while tightening the hose. (See Figure C)
- 2. Install the extension onto the shut-off assembly and tighten the nut securely using a 13/16" wrench. (See Figure C)
- 3. Install selected nozzle into the extension nut and tighten nut securely using a 13/16" wrench. (See Figure C)

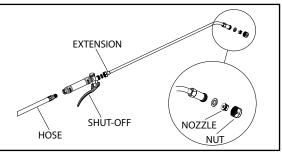
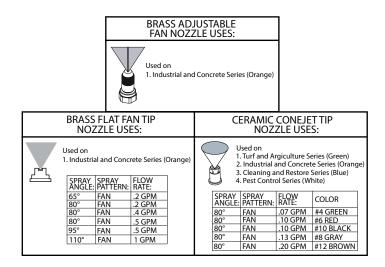


Figure C



## **OPERATING INSTRUCTIONS**

#### Filling

IMPORTANT: Always make sure the pressure is released from the tank before filling or servicing.

1. Pull up on the knob of the pressure release valve until all the pressure is released from the tank. (See Figure D.)



Figure D

## Pump Unlocking And Pressurizing



Pump Clamp Tab

TO UNLOCK PUMP: Turn handle counterclockwise until 4-prong clamp is loose, then rotate clamp counterclockwise aligning the tabs with the slots in the neck of the tank and remove the pump.



TO LOCK PUMP: Align clamp tabs with the slots in the neck of the tank and lower the pump assembly, rotate the 4-tab clamp clockwise to the stop position and rotate the handle clockwise to tighten, seal and lock the tank cover.

.



TO PRESSURIZE: Push down on the handle to depress coil spring and turn handle 1/4 turn counterclockwise to unlock handle. Pressurize the sprayer by pumping the handle in a smooth up and down motion. Push down on the handle to depress coil spring and turn handle 1/4 turn clockwise, then allow handle to raise into lock position.

#### **Steps To Cleaning Your Sprayer**

#### \*\*\* To prevent clogging issues, after each use clean your sprayer.\*\*\*

1. Release pressure in your sprayer via pressure relief valve. Do not undo handle without releasing pressure. 2. Empty remaining chemical back into original filling container.

- 3. Fill sprayer with water, place pump back into tank, and tighten.
- 4. Aggressively shake the water in the tank to try and get residue off of the inside walls of the sprayer. Repeat step if necessary, each time refilling with fresh water.
- 5. Pressurize the sprayer and spray water for 30-45 seconds into a disposable reservoir, then release pressure and remove the pump from the tank.
- 6. Tip and empty tank, then set tank upright. Hold wand and shut-off above the tank and depress the shut-off. The liquid will drain into the tank, empty again.
- 7. Repeat the steps above as necessary.
- 8. Allow tank to air dry by leaving the pump outside of tank over night. The next day, replace the pump to keep debris out of the tank.

#### **Sprayer Storage**

- 1. Sprayer tank should be hung upside down, with the pump removed.
- 2. Do not store or leave any solution in the tank after use.
- 3. Store in a warm, dry location out of direct sunlight.
- 4. Keep the sprayer and all chemicals out of reach of children.

## MAINTENANCE

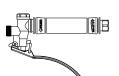
#### Pump Lubrication

Pump should be periodically oiled by applying 10 to 12 drops of light oil down the pump rod through the opening in the pump cap as shown.



#### Shut-Off

- 1. Direct nozzle away from you and squeeze shut-off lever to begin spraying.
- 2. This model does have a locking trigger.





#### MAINTENANCE CONTINUED

## MAINTENANCE CONTINUED

#### Pump Disassembly & Reassembly NOTE: Remove pump from tank prior to disassembly.

1. Inspect tank cover o-ring. If worn or damaged, remove and replace. (See Figure E)

2. To remove tank cover from pump barrel, while firmly gripping tank cover, grasp pump barrel and unscrew by turning counterclockwise as shown. (See Figure F) A strap wrench may be required to loosen barrel.







**Figure G** 

Figure E







Figure H

**Figure J** 

**Figure K** 

- 3. Inspect barrel o-ring. If worn or damaged, remove and replace. Lubricate o-ring with petroleum jelly. (See Figure G)
- 4. Inspect piston o-ring. If worn or damaged, remove and replace. Lubricate o-ring with petroleum jelly. (See Figure H)
- 5. Inspect check valve in bottom of barrel. If worn or damaged, remove and replace by pressing into hole in bottom of barrel. (See Figure J)
- 6. Insert the pump handle/piston assembly into the barrel. While firmly gripping the tank cover, thread the pump barrel into the cover and tighten by turning clockwise. (See Figure K) A strap wrench may be required to tighten barrel.

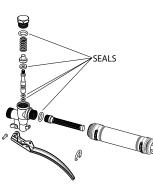
## Nozzle Maintenance

- 1. If nozzle clogs, remove and disassemble the nozzle assembly.
- 2. Clean the openings of any obstructions and reassemble.
- 3. The brass nozzles should be cleaned with toothbrush and detergent. Don't use metal brush or sharp objects on the nozzle. For tough clogs soak brass nozzle in xylene and clean with a brush.

#### Shut-Off Maintenance (Repair Kit)

Always depressurize sprayer before maintenance by activating shut-off and spraying contents out.

- 1. Unscrew the handle from the shut-off assembly.
- 2. Unscrew valve cap and remove valve stem components and seals as shown. Clean components with cool clean water.
- 3. Clean any debris from inside the handle and shut-off body. Check for any wear of o-rings or seals and replace as necessary.
- 4. Reassemble the components as shown and tighten the handle and valve cap securely.



## TROUBLESHOOTING

| TROUBLE  | LOOK FOR  | REMEDY  |
|--|---|---|
| Sprayer leaks at pump or<br>sprayer does not build<br>pressure.  | <ol> <li>Dirt or debris on tank cover<br/>o-ring. (#3H).</li> <li>Chipped, torn, swollen, or<br/>defective tank cover o-ring (3H).</li> <li>Check valve (#3S) at bottom of<br/>pump assembly.</li> <li>Worn or damaged o-ring (#3L)<br/>on piston.</li> </ol> | <ol> <li>Clean dirt or debris from o-ring (#3H) or<br/>closure.</li> <li>Remove old o-ring (#3H) and replace with<br/>new as described in <i>Pump Disassembly &amp;<br/>Reassembly</i> section.</li> <li>Replace if missing or damaged as described<br/>in <i>Pump Disassembly &amp; Reassembly</i> section.</li> <li>Replace if worn or damaged as described in<br/><i>Pump Disassembly &amp; Reassembly</i> section.</li> </ol> |
| Sprayer material<br>overflows through pump<br>barrel or pump handle<br>rises when handle is<br>unlocked. | <ol> <li>Dirt or debris under check<br/>valve (#35) on pump.</li> <li>Chipped, torn, or swollen<br/>pump check valve (#35).</li> </ol>  | <ol> <li>Clean check valve (#3S) and valve sealing<br/>surface on pump.</li> <li>Replace check valve (#3S) as described<br/>in <i>Pump Disassembly &amp; Reassembly</i> section.</li> </ol>   |
| Hose leaks at tank or shut-off.  | 1. Loose hose at tank.<br>2. Cracked, swollen, or faulty hose.<br>3. Loose hose at shut-off.  | 1. Tighten hose nut at tank.<br>2. Replace hose.<br>3. Tighten hose at shut-off.  |
| Sprayer is difficult to pump.  | 1. Damaged piston o-ring (#3L)<br>2. Piston o-ring (#3L) is dry.  | <ol> <li>Replace piston o-ring as described in<br/><i>Pump Disassembly &amp; Reassembly</i> section.</li> <li>Lubricate piston o-ring as described<br/>in <i>Pump Disassembly &amp; Reassembly</i> section.</li> </ol>  |
| Sprayer tank leaks.  | Evidence of spray material escaping from the tank.  | Replace entire sprayer.   |
| Nozzle drips when shut-off lever is released.  | <ol> <li>Dirt or debris in shut-off valve.</li> <li>Damaged o-rings or seals in<br/>shut-off (Kit #10).</li> </ol>  | <ol> <li>Clean shut-off as described in Shut-off<br/>Maintenance section.</li> <li>Service shut-off seals as described in<br/>Maintenance service (Kit #10).</li> </ol>   |
| Nozzle tip leaks, poor<br>spray pattern, partial<br>spray or complete<br>stoppage.                       | <ol> <li>Spray extension or nozzle<br/>clogged.</li> <li>Dirty or clogged nozzle tip.</li> </ol>  | <ol> <li>Remove nozzle and clean as described in<br/><i>Nozzle Maintenance</i> section.</li> <li>Clean the nozzle tip with a soft brush.</li> </ol>   |



## Parchem Construction Supplies Pty Ltd

1956 Dandenong Road, Clayton VIC 3168, Australia Phone: 1300 353 986 flextool.com.au ABN 80 069 961 968

#### DISCLAIMER:

Any advice, recommendation, information, assistance or service provided by us in this manual is given in good faith and is believed by us to be appropriate and reliable. However, any advice, recommendation, information, assistance or service provided by us is provided without liability or responsibility PROVIDED THAT the foregoing shall not exclude, limit, restrict or modify the right entitlements and remedies conferred upon any person or the liabilities imposed upon us by any condition or warranty implied by Commonwealth, State or Territory Act or ordinance void or prohibiting such exclusion limitation or modification. The product can be expected to perform as indicated in this manual so long as operation and operational procedures of the individual products are followed as recommended in this manual.

Design and technical specifications may be subject to changes.



This Technical Data Sheet (TDS) summarises our best knowledge of the product, based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

© This publication is copyright. All rights are reserved. Flextool is a registered trade mark of Parchem Construction Supplies Pty Ltd. Smith Performance Sprayers is a trade mark.