INSTRUCTIONAL MANUAL
CAT. #64186-10, -12, -20, -22
#64190-10, -12, -20, -22

Sure Shot® Pressure Sprayers –
ATOMIZER MODEL B
Introduction

Model B sprayers are available in 16 and 8 oz. Capacities. Anything that the aerosol can do, ATOMIZER can do safer. Refillable and Rechargeable. Eliminates aerosol disposal problems. All Model B sprayers come standard with Viton® seals, these seals are compatible with most products.

- Aluminum and Electroless Nickel Plated
- Working pressure: 80-145 psi
- Measurements are the same as aerosol cans (~2¾" dia)
- Liquid spray lighter than #10 Motor Oil
- Electroless Nickel Plating gives aluminum a superior chemical resistance

Operating Procedure

1. **ALWAYS DEPRESSURIZE SPRAYER BEFORE REMOVING ANY PARTS.** The pressure may be let out of the sprayer one of the two following ways:
   1.1 Tip the sprayer upside down and depress nozzle until no pressure is left. If liquid is left in the sprayer when attempting this procedure, be sure to aim the nozzle at a place where the liquid can be expelled.
   1.2 Remove B13 black cap from filler assembly and use small probe to depress the valve core until all the pressure escapes. **NOTE:** Make sure the sprayer is upright and the filler assembly is pointed away from you when depressing the valve core.

2. Once all the air has been let out of the sprayer, remove the complete top assembly from the canister by grasping the body in one hand and the canister in the other and unscrewing counterclockwise completely.

3. Fill canister 2/3 full with light, clean liquid. Make sure the liquid you are putting into the sprayer is clean and free of foreign particles.

4. Place complete top assembly on the canister and hand tighten firmly.

5. Choose the nozzle you wish to use from the poly bag in the carton. Once you have chosen the nozzle, assemble it to the stem of the B15/B16 valve on top of your sprayer. **NOTE:** Nozzle must be firmly pushed into place.

6. Pressurize sprayer with compressed air:
   6.1 Hold a standard air chuck onto the filler assembly stem and depress the valve core.
   6.2 Hold the air chuck in place until you hear the line pressure equalize with the pressure in the sprayer.
   6.3 Hold the sprayer upright while pressurizing. Working pressure is 80 - 145 psi. (At least 80 psi is necessary to spray the full 7, 8 or 16 ounces without repressurizing.)

   **MAXIMUM PRESSURE SHOULD NOT EXCEED 200 PSI.**

7. The Model “B” sprayer is now ready to use.

8. **For best results,** the liquid to be sprayed should be lighter then a No. 10 motor oil. (If liquid is too heavy a pin stream will result). Dilute with a suitable diluent until desired spray is obtained.
Repair Procedure

**CAUTION** Follow the exact order given below to remove and reassemble all the parts on the Model “B” Sprayer.

1. **ALWAYS DEPRESSURIZE SPRAYER BEFORE REMOVING ANY PARTS.** The pressure may be let out of the sprayer one of the two following ways:
   1.1 Tip the sprayer upside down and depress nozzle until no pressure is left. If liquid is left in the sprayer when attempting this procedure, be sure to aim the nozzle at a place where the liquid can be expelled.
   1.2 Remove B13 black cap from filler assembly and use small probe to depress the valve core until all the pressure escapes. **NOTE:** Make sure the sprayer is upright and the filler assembly is pointed away from you when depressing the valve core.

2. Once all the air has been let out of the sprayer, remove the complete top assembly from the canister by grasping the body in one hand and the canister in the other and unscrewing counterclockwise completely.

3. Unscrew the valve head from the body.

4. Remove the valve and B14 O-ring from the body.

5. Remove the 7/16” hex air filler (B11) assembly from the side of the body. **NOTE:** The B11W teflon washer will be left in the recessed threaded area on the body where the air filler assembly was just removed. The B11W must be removed and replaced.

6. Remove the O-ring from the body.

7. The Model “B” sprayer is completely unassembled.

8. To reassemble, start by reassembling the O-ring to the body.

9. Take a new B11W Teflon® washer and insert into the recessed threaded area on the side of the body.

10. Take the 7/16” hex air filler (B11) assembly and screw on by hand. Tighten with wrench. **NOTE:** Be careful to only tighten until snug. DO NOT OVERTIGHTEN.

11. Assemble B14 O-ring to valve and reposition on top of body.

12. Take B25 valve head and secure valve and O-ring in place. Firmly hand tighten only.

13. Take the completed top assembly and screw it clockwise into top of the canister. Firmly hand tighten only.

14. Pressurize and check for leaks. If leaks are found retighten the loose part or parts until leaks stop. Depressurize and follow steps #1 - #7 on page 1.
## Trouble Shooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Reason</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leaks from around B25 Valve Head</td>
<td>B25 valve too loose.</td>
<td>Firmly tighten by hand only.</td>
</tr>
<tr>
<td></td>
<td>B14 O-ring is crimped or has some loose particles on it</td>
<td>Depressurize sprayer and remove B25 valve head. Remove valve and check O-ring. Clean away any loose particles and wet O-ring. Reassemble and repressurize.</td>
</tr>
<tr>
<td>Pin Stream only</td>
<td>Liquid is too thick</td>
<td>Thin with proper diluent until sprayable. Consult your chemical supplier for correct thinning procedures.</td>
</tr>
<tr>
<td></td>
<td>Too little air pressure</td>
<td>You must have at least 80 psi to spray full contents of sprayer.</td>
</tr>
<tr>
<td></td>
<td>Pin stream nozzle in operating position</td>
<td>Remove. Replace with a spray nozzle (regular, fine, medium &amp; coarse).</td>
</tr>
<tr>
<td>Air filler assembly won't accept air or leaks</td>
<td>Air filler assembly has been damaged</td>
<td>Replace</td>
</tr>
<tr>
<td></td>
<td>Valve core is swollen</td>
<td>Replace</td>
</tr>
<tr>
<td></td>
<td>Chemical is attacking valve core</td>
<td>Replace B11 with an alternative valve core.</td>
</tr>
<tr>
<td>Will not spray at all</td>
<td>Nozzle is completely clogged</td>
<td>Replace</td>
</tr>
<tr>
<td></td>
<td>Valve is completely clogged</td>
<td>Replace</td>
</tr>
<tr>
<td></td>
<td>No air pressure</td>
<td>Pressurize with at least 80 psi</td>
</tr>
<tr>
<td>Leaks from between body and canister</td>
<td>O-ring is dirty</td>
<td>Clean and wet</td>
</tr>
<tr>
<td></td>
<td>O-ring is swollen</td>
<td>Replace. Standard O-ring is Viton®. Neoprene, ethylene propylene, and buna, are available for chemicals that are not compatible with Viton®.</td>
</tr>
<tr>
<td>Leaks from valve stem/nozzle</td>
<td>Valve worn or swollen</td>
<td>Standard valve has a Viton® seal. Valves also available in neoprene and buna for chemicals not compatible with Viton®.</td>
</tr>
</tbody>
</table>
### Top Assembly

![Diagram of Top Assembly]

- **B30** - Spray Nozzle
- **B25** - Aluminum Valve Head
- **B15** - Viton® Valve
- **B14V** - Viton® O-ring
- **B10 PL** - Plastic Body or **B10 CB** - Chrome Brass Body
- **B05V** - Viton® O-ring
- **B11W** - Teflon® Washer
- **Air Filler Base**
- **B12** - Valve Core
- **B-13** Black Cap

**Valve Kit Cat. # 64187**

(See chart below for details)

### Atomizer Repair Kits for Model B

<table>
<thead>
<tr>
<th>Cat#</th>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>64187</td>
<td>B51</td>
<td>6-Complete Valve Assemblies. Contains: 6 of each B15, B14 &amp; B30</td>
</tr>
<tr>
<td>64189</td>
<td>BK50</td>
<td>Complete Repair Kit (For Aluminum Sprayers Only). Contains: B05, B11, B12, B13, B25, 6 each of B15, B30, and B14</td>
</tr>
</tbody>
</table>
For any questions or for ordering information, please contact Customer Service at 1-800-523-5874

Thank you for choosing Electron Microscopy Sciences!

www.emsdiasum.com
sgkcck@aol.com

Tel: 215-412-8400 • Fax: 215-412-8450

Electron Microscopy Sciences
P.O. Box 550
1560 Industry Road, Hatfield, PA 19440