

**INSTRUCTIONAL MANUAL CAT.  
#64186-10, -20, -22**

**Sure Shot® Pressure Sprayers  
ATOMIZER MODEL B**



**Electron Microscopy Sciences**

P.O. Box 550 ♦ 1560 Industry Road ♦ Hatfield PA 19440

*Toll Free: 1-800-523-5874*

[www.emsdiasum.com](http://www.emsdiasum.com)

[sgkcck@aol.com](mailto:sgkcck@aol.com)

*Tel: 215-412-8400 ♦ Fax: 215-412-8450*

## Introduction



1. Fill with light liquids
2. Pressurize with air chuck
3. Spray!

Model B sprayers are available in 16 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

### NOTICE

- Always check with the chemical supplier for chemical compatibility with O-rings, valves and canisters.
- Do not pressurize sprayer without b25 valve head in place and tightened.
- Maximum pressure – 200 psi.

### CAUTION

- NEVER point the nozzle of sprayer towards yourself or any other person.
- ALWAYS point the nozzle of the sprayer away from yourself and toward the intended target before depressing the nozzle.
- DO NOT use sprayer with paints.
- DO NOT pressurize sprayer without b25 valve head in place and firmly hand tightened.
- Sure Shot® Sprayers are not recommended for spraying any acids.
- Sure Shot® Sprayers will handle most chemicals, but are not designed to be used with products that are intended to etch or attack metal surfaces.

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 16 ounces without re-pressurizing.)

### CAUTION

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 than 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



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.

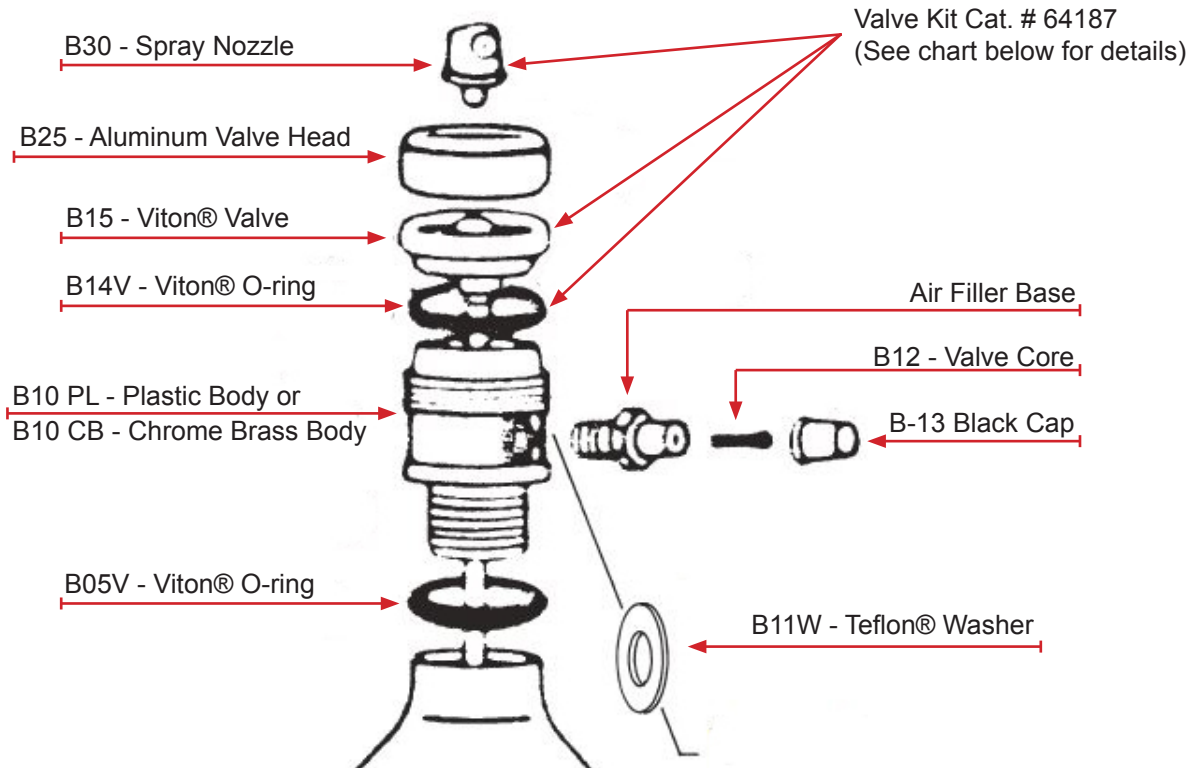
**NOTE:** The B11W teflon washer will be left in the recessed threaded area on the body where the air filler assembly was just removed. The B11W must be removed and replaced.

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

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

## Top Assembly



## Atomizer Repair Kits for Model B

Atomizer Repair Kits for Model B		
Cat#	Model	Description
64187	B51	6-Complete Valve Assemblies. Contains: 6 of each B15, B14 & B30
64189	BK50	Complete Repair Kit (For Aluminum Sprayers Only). Contains: B05, B11, B12, B13, B25, 6 each of B15, B30, and B14

**Electron  
Microscopy  
Sciences**

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](http://www.emsdiasum.com)  
[sgkcck@aol.com](mailto:sgkcck@aol.com)

*Tel:* 215-412-8400 ♦ *Fax:* 215-412-8450

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