

# SURE SHOT® SPRAYERS

## INSTRUCTIONS



Refillable, reusable. Extra versatile.  
Pressurized by free air

	TOP LOAD WITH LIGHT LIQUIDS	PRESSURIZE WITH AIR CHUCK	SPRAY ANYWHERE
<b>MODEL A</b> 32 OZ.			

### DIRECTIONS FOR OPERATING MODEL "A" SPRAYERS

- 1) **ALWAYS DEPRESSURIZE SPRAYER BEFORE REMOVING ANY PARTS.** The pressure may be let out of the sprayer one of the two following ways:
  - a) Tip the sprayer upside down and depress the trigger until no pressure is left. If some liquid is left in the sprayer when you attempt this procedure make sure you aim the nozzle at a place where a little bit of liquid can be expelled.
  - b) Remove #122 black cap from filler cap and use small probe to depress #121 valve core until all the pressure escapes. **NOTE:** Make sure the sprayer is upright and the filler cap stem is pointing away from you when depressing the valve core.
- 2) Remove the 15/16" hex filler cap once all the air has been let out of the sprayer.
- 3) Fill sprayer 2/3 full (32 ounce maximum liquid capacity) with light, clean liquid. Make sure the liquid you are putting into the sprayer is **CLEAN** and **FREE OF FOREIGN PARTICLES**. See **ACCESSORIES** on page 4 for liquid filling/measuring device.
- 5) Charge sprayer with compressed air by holding standard air chuck on valve stem of the filler cap. Hold the air chuck on the filler cap until you hear the line pressure equalize with the sprayer. Working pressure is 80-150 psi. At least 80 psi is needed to spray the full 32 oz. without a recharge of air. **THE MAXIMUM PRESSURE SHOULD NOT EXCEED 200 PSI.**
- 6) The Model "A" sprayer is now ready to use.
- 7) 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.**

**CAUTION:** Never point the nozzle of sprayer toward yourself or another person. Always point the nozzle of the sprayer away from yourself and toward your intended target before depressing the trigger.

**PLEASE NOTE:** NOZZLE IN THE OPERATING POSITION IS SET FOR REGULAR MIST. FOR PIN STREAM, REMOVE THE #303 SPIRAL WITH NEEDLE NOSE PLIERS.

THE #118 FILLER CAP NOW COMES WITH A SPECIAL CHEMICAL RESISTANT VALVE CORE AND USES A REGULAR **RIGHT HAND** THREAD.

**NOTE: ALWAYS CHECK WITH YOUR CHEMICAL SUPPLIER IF YOU ARE NOT SURE OF COMPATIBILITY. READ CAUTION LABEL ON SPRAYER BEFORE FILLING.**

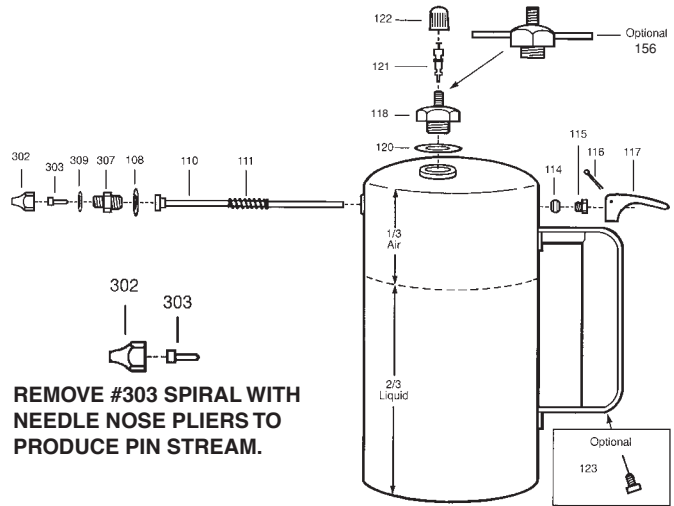
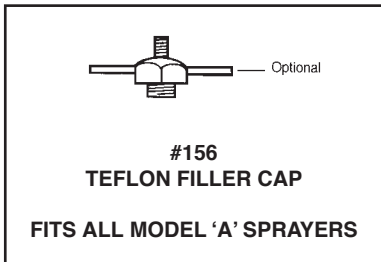
**NEVER USE ACIDS IN ANY SURE SHOT SPRAYER.**

- 4) Replace 15/16" hex filler cap and tighten.

**ALWAYS DEPRESSURIZE THE SPRAYER BEFORE REMOVING ANY PARTS**  
**SPRAYER NOT RECOMMENDED FOR USE WITH PAINTS**  
**MAXIMUM PRESSURE 200 PSI**

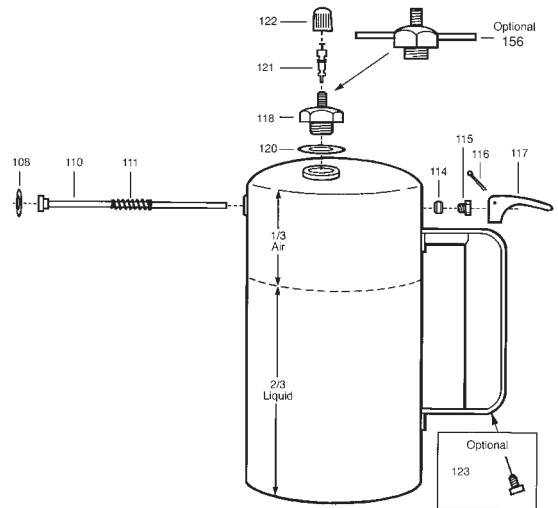
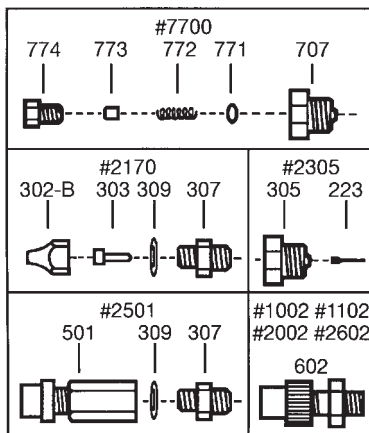
# MODEL A

#1000 - #1100 - #2000 - #2600



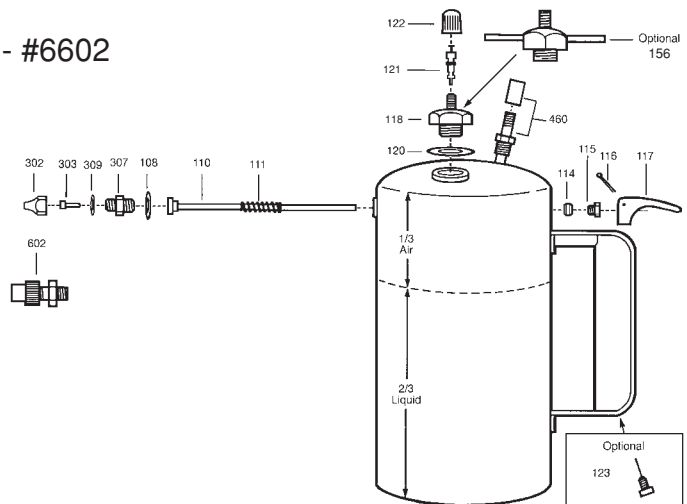
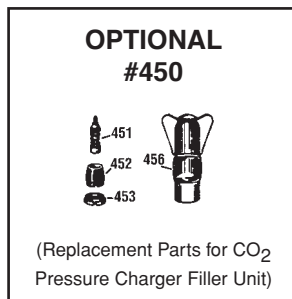
# MODEL A

#1002 - #1102 - #2002 - #2170  
#2305 - #2501 - #2602 - #7700



# MODEL A

#6100 - #6102 - #6200 - #6202 - #6600 - #6602



**THIS UNIT IS EQUIPPED WITH A PRESSURE RELIEF VALVE #460. THE RELIEF VALVE HAS BEEN PRESET AT THE FACTORY TO 150 PSI - 180 PSI AND WILL NEED NO ADJUSTMENT. DO NOT REMOVE CAP.**



## **REPAIR PROCEDURES**

The following is the correct order and way to remove and replace all the parts on your Model "A" Sprayer.

- a) **ALWAYS DEPRESSURIZE SPRAYER BEFORE REMOVING ANY PARTS.** (See page 1, #1)
- b) Remove 15/16" hex filler cap. (See page 1, #2)
- c) Take a pliers and remove the #116 cotter pin from the #117 trigger.
- d) Remove the #117 trigger.
- e) Remove 1/2" hex nozzle from the #307 adaptor, or if your sprayer has no adaptor, remove 9/16" hex nozzle from the front of the sprayer.
- f) If your sprayer has a #307 adaptor, remove the 9/16" hex #307 adaptor from the front of the sprayer.
- g) Remove the 3/8" hex #115 stuffing box nut.
- h) Remove the #110 valve. Note that the #111 spring is assembled to the #110 valve.
- i) You will destroy the #114 by removing it. Be careful not to damage the inside threads when removing the #114. #114 stuffing box packing may be removed by taking a small thin straight edge screwdriver and working the #114 stuffing box packing loose.
- j) All the removable parts are now off of your Model "A" Sprayer.
- k) To reassemble start by taking a #114 and placing it into the position you just removed it from. Take #115 and just hand start thread.
- l) Take #111 valve spring and assemble it to #110 valve, place whole assembly into sprayer.
- m) Take a #108 washer and assemble to adaptor. Take assembly and push face of #110 back into sprayer until you can hand start thread. Tighten 9/16" hex adaptor until washer is seated.
- n) Snug 3/8" hex #115 stuffing box nut. Do not over-tighten.
- o) Replace #117 trigger. Line up holes in trigger with hole in back of #110 valve. Insert #116 cotter pin, bend with pliers.
- p) Press down on #117 trigger and apply a drop or two of lubricant to the valve stem of the #110 at the rear of the #115 stuffing box nut. Tilt the sprayer so that the lubricant runs into and around the #115.

- q) Take 1/2" hex nozzle and #309 washer and assemble to 9/16" hex adaptor. Tighten.
- r) Replace 15/16" hex filler cap. Tighten.
- s) Pressurize sprayer. (see page 1, #5).
- t) Check for leaks.

Partial and Complete Repair Kits can be ordered for all Model "A" sprayers. The following is the list of Kit Numbers and there corresponding Model Numbers.

## **REPAIR KITS**

K5	Partial Repair Kit - contains 108, 110, 114, 116, 120, 121, 302, 309 for Models 1000-1100-2000-2600-6100-6200-6600
K10	Complete Repair Kit - contains 108, 110, 111, 114, 115, 116, 117, 118, 302, 307, 309 for Models 1000-1100-2000-2600-6100-6200-6600
K300	Nozzle Assortment Kit - contains 302-B, 302-C, 305, 501, 602
K5-602	Partial Repair Kit for 1002-2002-2602-6102-6202-6602
K10-602	Complete Repair Kit for 1002-2002-2602-6102-6202-6602
K5-302B	Partial Repair Kit for 2170
K10-302B	Complete Repair Kit for 2170
K5-305	Partial Repair Kit for 2305
K10-305	Complete Repair Kit for 2305
K5-501	Partial Repair Kit for 2501
K10-501	Complete Repair Kit for 2501
K5-707	Partial Repair Kit for 7700
K10-707	Complete Repair Kit for 7700

## **ACCESSORIES**

450	CO2 Pressure Charger Filler Unit
455	CO2 Pressure Chargers



P07362 Filling/Measuring Device 32 ounce capacity - Heavy Duty Polyethylene Container with brass mesh screening



# TROUBLE SHOOTING

## CLEANING THE #110 VALVE

- 1) **ALWAYS DEPRESSURIZE SPRAYER BEFORE REMOVING ANY PARTS.** (See page 1, #1)
- 2) Remove filler cap assembly.
- 3) Remove nozzle and adaptor and clean.
- 4) The face of the #110 valve is now visible. The face should be clean and clear of all particles. You should see a circular depression caused by the back of the adaptor. This depression should be clean and clear of all debris also.
- 5) Replace adaptor and washer. Tighten.
- 6) Depress #117 trigger several times to reset seal between face of #110 valve and the back of adaptor.
- 7) Replace cleaned nozzle and washer. Tighten.
- 8) Replace filler cap assembly. Tighten.
- 9) Pressurize sprayer. (See page 1, #5)
- 10) If leak persists, replace #110 valve.

## CLEANING THE NOZZLE

- 1) **ALWAYS DEPRESSURIZE SPRAYER BEFORE REMOVING ANY PARTS.** (See page 1, #1)
- 2) Remove nozzle from operating position leaving adaptor in place.
- 3) Using a needle nose pliers, remove spiral from nozzle.
- 4) Rinse both nozzle and spiral with cleaner.
- 5) Make sure the nozzle orifice hole and the spiral grooves are clean and clear of all dirt before putting back together.
- 6) Put spiral back into nozzle and reassemble including washer. Tighten.
- 7) If nozzle still does not spray correctly it may need to be replaced.

## **PROBLEM: SPRAYER WILL NOT SPRAY AT ALL**

Reason/Solution

- A) Sprayer is completely full of liquid. Only fill sprayer 2/3 full (32 ounces).
- B) No air pressure. Pressurize.
- C) Nozzle completely clogged. Clean or replace nozzle. (See Cleaning the Nozzle above)

## **PROBLEM: PIN STREAM ONLY**

Reason/Solution

- A) Liquid too thick. Thin until sprayable. Consult your liquid supplier for correct thinning procedures.
- B) Too little air pressure. Must have a minimum of 80 psi.
- C) Pin stream nozzle is in the operating position. Replace with spray nozzle.
- D) The spiral is missing from spray nozzle. Replace the spiral.

## **PROBLEM: LEAKS FROM #115 STUFFING BOX NUT**

Reason/Solution

- A) #115 stuffing box nut loose. Tighten #115 1/16th of a turn and apply a drop or two of lubricant to the #110 valve stem at the rear of the #115. Tilt the sprayer so that the lubricant runs into and around the #115. Depress trigger to work in oil.
- (B) Worn 114. Replace.

## **PROBLEM: STUCK OR DRAGGING TRIGGER ACTION**

Reason/Solution

- A) #115 stuffing box nut is too tight. Loosen #115 nut 1/16th of a turn and apply a drop or two of lubricant to the #110 valve stem at the rear of the #115. Tilt the sprayer so that the lubricant runs into and around the #115. Depress trigger to work in oil. Retighten for proper action.

## **PROBLEM: FILLER CAP WON'T ACCEPT AIR**

Reason/Solution

- A) Dirty or damaged filler cap. Replace.

## **PROBLEM: LEAKS FROM TOP OF FILLER CAP**

Reason/Solution

- A) Filler cap has been damaged. Replace.
- B) #121 is loose. Tighten.
- C) #121 is worn. Replace.

## **PROBLEM: LEAKS FROM BOTTOM OF FILLER CAP**

Reason/Solution

- A) #120 gasket is missing or dirty. Replace.

## **PROBLEM: LEAKS FROM NOZZLE**

Reason/Solution

- A) Dirty or worn face on #110 valve. (See Cleaning the #110 valve at left)
- (B) #115 stuffing box nut is too tight. See stuck or dragging trigger action above.

**WARNING \* WARNING \* WARNING**

Sprayer Units returned to the factory containing **ANY LIQUIDS** will be returned to sender at their expense.

**WARRANTY**

SURE SHOT® SPRAYERS, Parts and Accessories are guaranteed against defective materials and workmanship under normal conditions of use and service for a period of ninety days from date of sale to the consumer or nine months from date of shipment from the factory, whichever transpires first. The obligation of the Company (Milwaukee Sprayer Mfg. Co., Inc.) shall be limited to repairing or replacing any sprayer, part or accessory which is found by the Company to be defective, provided that a written claim covering such defect is submitted within the warranty period. The Company shall in no event be liable for consequential damages arising out of a defect or failure in any sprayer, part or accessory, or for any loss arising from the use or resale of any such materials, the Company's liability being limited to repair or replacement of defective components as aforesaid. This warranty shall not apply to defects resulting from accident, alterations, abuse or misuse, including the use of solutions containing ammonia in any Sure Shot® Sprayer. Although it shall be the policy of the Company to be liberal in making adjustments, the settlement of claims regarding product defects will be governed by the provisions of this warranty. No other warranty, expressed or implied, is made by Milwaukee Sprayer Mfg. Co., Inc. with respect to any sales or products referred to herein.

Suspect defective sprayers should be returned to the factory for examination. All sprayers returned to the factory for examination and/or repair must be sent to the address shown below with transportation charges prepaid. If the defects are covered by the above warranty, the least expensive inbound and outbound transportation charges in connection with repairing or replacing such defects will be borne by the factory. All returned repairable sprayers not covered by the warranty will be reconditioned in accordance with the following schedule of reconditioning charges.

**FACTORY RECONDITIONING AVAILABLE FOR "SURE SHOT" MODEL "A" SPRAYERS. CALL FOR CURRENT PRICING.**

**PLEASE NOTE: WE WILL NOT ACCEPT ANY SPRAYERS CONTAINING LIQUID. SPRAYERS SENT IN FOR FACTORY RECONDITIONING MUST BE NOTED ON PAPERWORK.**

***sure  
shot***®

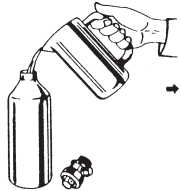

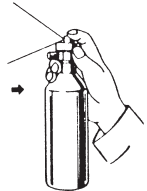
**MILWAUKEE SPRAYER MFG. CO., INC.**

N90 W14337 COMMERCE DRIVE MENOMONEE FALLS, WISCONSIN 53051  
(262) 437-0330 • TOLL FREE: 800-558-7035 (including Canada) • FAX: (262) 437-0100  
EMAIL: sureshot@sureshotsprayer.com • WEBSITE: www.sureshotsprayer.com

# SURE SHOT ATOMIZER SPRAYERS

## INSTRUCTIONS

**Refillable, Reusable. Extra Versatile.  
Pressurized by Free Air.**

	TOP LOAD WITH LIGHT LIQUIDS	PRESSURIZE WITH AIR CHUCK	SPRAY ANYWHERE
MODEL B 16 oz. 8 oz. 7 oz.			



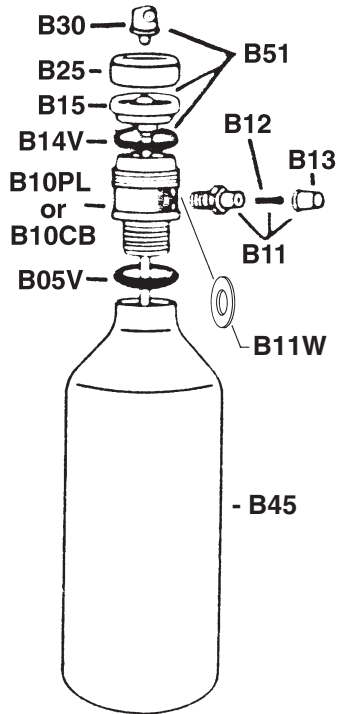
### DIRECTIONS FOR OPERATING MODEL "B" SPRAYERS

- 1) **ALWAYS DEPRESSURIZE SPRAYER BEFORE REMOVING ANY PARTS.** The pressure may be let out of the sprayer one of the two following ways:
    - a) Tip the sprayer upside down and depress nozzle until no pressure is left. If some liquid is left in the sprayer when attempting this procedure make sure you aim the nozzle at a place where a little bit of liquid can be expelled.
    - b) 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) Remove the complete top assembly from the canister once all the air has been let out of the sprayer. Do this by grasping the body in one hand and the canister in the other and unscrewing counterclockwise completely.
  - 3) Fill canister 2/3 full ( 7,8 or 16 ounce maximum capacity) with light, clean liquid. Make sure the liquid you are putting into the sprayer is CLEAN and FREE OF FOREIGN PARTICLES. See ACCESSORIES on page 3 for the liquid filling/measuring device.
  - 4) Place complete top assembly on the canister and firmly hand tighten.
  - 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 by holding a standard air chuck onto the filler assembly stem and depress the valve core. Hold the air chuck in place until you hear the line pressure equalize with the pressure in the sprayer. 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. **THE 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.
- 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.
- NOTE: ALWAYS CHECK WITH THE CHEMICAL SUPPLIER FOR CHEMICAL COMPATIBILITY WITH O'RINGS, VALVES AND CANISTERS.**

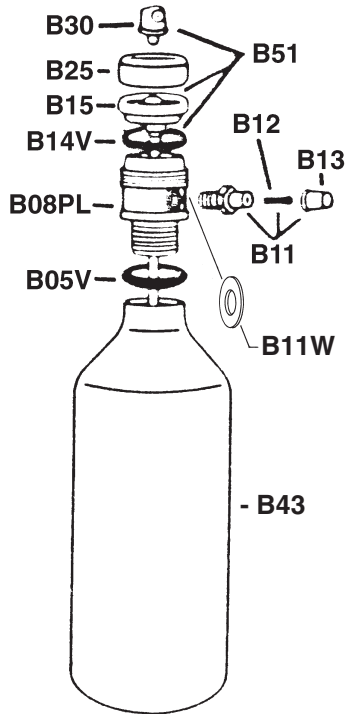
**SPRAYER NOT RECOMMENDED FOR USE WITH PAINTS**

**DO NOT PRESSURIZE SPRAYER WITHOUT B25 VALVE HEAD IN PLACE AND FIRMLY HAND TIGHTENED**

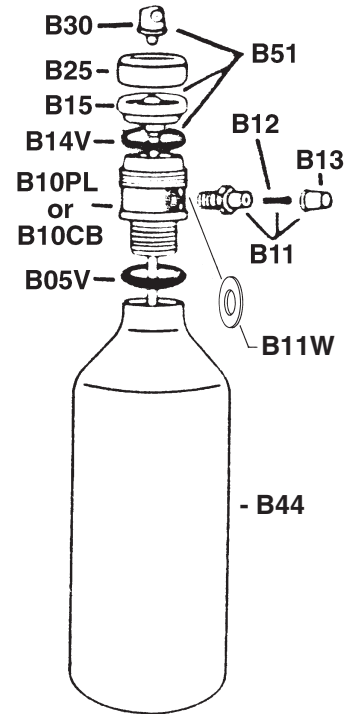
**B8000PL / B8000CB  
ALUMINUM**



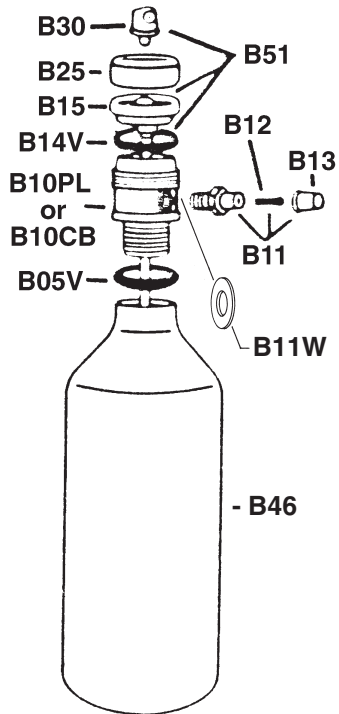
**B8200PL  
ALUMINUM**



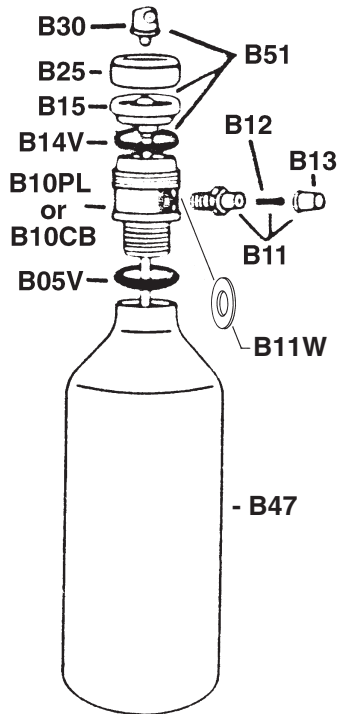
**B8300PL / B8300CB  
ALUMINUM**



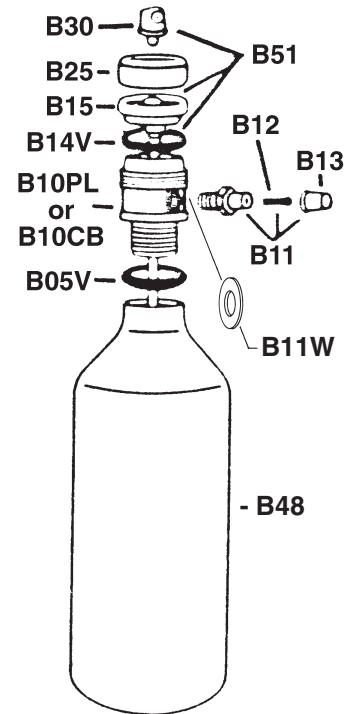
**B8100PL / B8100CB  
PLATED ALUMINUM**



**B8400PL/B8400CB  
PLATED, BRUSHED  
ALUMINUM**



**B8700PL / B8700CB  
PLATED, BRUSHED  
ALUMINUM**



**PL — DESIGNATES PLASTIC BODY**

**CB — DESIGNATES CHROME BRASS BODY**

<b><u>PART#</u></b>	<b><u>DESCRIPTION</u></b>
B05BUNA	Buna O'Ring
B05N	Neoprene O'Ring
B05EP	Ethylene Propylene O'Ring
B05V	Viton® O'Ring
B08PL	Plastic Body (8200 only)
B10CB	Chrome Brass Body
B10PL	Plastic Body
B11	Air Filler Assembly (includes B11W, B12 & B13)
B11W	Teflon® Washer
B12	Valve Core - Viton®
B13	Black Cap
B14BUNA	Buna O'Ring
B14N	Neoprene O'Ring
B14EP	Ethylene Propylene O'Ring
B14V	Viton® O'Ring
B15	Viton® Valve
B15N	Neoprene Valve
B16	Buna Valve
B17	Butyl Rubber Valve
B25	Aluminum Valve Head
B30-001	Pin Stream Nozzle
B30-035	Medium Spray Nozzle
B30-040	Fine Spray Nozzle

<b><u>PART#</u></b>	<b><u>DESCRIPTION</u></b>
B30-043	Regular Spray Nozzle
B30-080	Coarse Spray Nozzle
B32	Plastic Adjustable Nozzle for all Model "B"s
B43	7 ounce Aluminum Canister (8200)
B44	8 ounce Aluminum Canister (8300)
B45	16 ounce Aluminum Canister (8000)
B46	16 ounce Plated Aluminum Canister (8100)
B47	16 ounce Plated, Brushed Aluminum Canister (8400)
B48	8 ounce Plated, Brushed Aluminum Canister (8700)

### **REPAIR KITS**

B51	6 Complete Valve Assemblies - contains 6 each - B14V & B15 and 3 each - B30-001 w/6" tube & B30-043
BK50	Complete Repair Kit contains B05V, B11, B12, B13, B25, 6 each - B14V & B15 and 3 each - B30-001 w/6" tube & B30-043

## ACCESSORIES



### **P07362**

Filling/Measuring Device 32 ounce capacity - Heavy Duty Polyethylene container with brass mesh screen and easy fill spout.

## REPAIR PROCEDURES

The following is the correct order and way to remove and reassemble all the parts on the Model "B" Sprayer.

- a) **ALWAYS DEPRESSURIZE SPRAYER BEFORE REMOVING ANY PARTS.** See page 1. #1.
- b) Remove the complete top assembly from the canister once all the air has been let out of the sprayer. Do this by grasping the body in one hand and the canister in the other and unscrewing counterclockwise completely.
- c) Unscrew the valve head from the body.
- d) Remove the valve and B14 o'ring from the body.
- e) 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.

- f) Remove the o'ring from the body.
- g) The Model "B" sprayer is completely unassembled.
- h) To reassemble, start by reassembling the o'ring to the body.
- i) Take a new B11W Teflon® washer and insert into the recessed threaded area on the side of the body.
- j) 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.
- k) Assemble B14 o'ring to valve and reposition on top of body.
- l) Take B25 valve head and secure valve and o'ring in place. Firmly hand tighten only.
- m) Take the completed top assembly and screw it clockwise into top of the canister. Firmly hand tighten only.
- n) 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.

**DO NOT PRESSURIZE SPRAYER WITHOUT  
B25 VALVE HEAD IN PLACE AND TIGHTENED**

**MAXIMUM PRESSURE — 200 PSI**



## **TROUBLE SHOOTING**

Normal maintenance includes replacing the B15/B16 valve

THE B15/B16 VALVE WILL NEED TO BE PERIODICALLY REPLACED. THE LONGEVITY OF EACH VALVE DEPENDS ON THE PRODUCT BEING SPRAYED AND THE AMOUNT OF SEDIMENT OR DIRT THAT GETS INSIDE THE SPRAYER WHILE FILLING.

Four fillings is the average before the valve needs to be replaced. But it is not uncommon to get more than four fillings out of each valve.

**THE STANDARD MODEL B UNITS COME WITH VITON® O'RINGS, A B15 VITON® VALVE, AND B12 VITON® VALVE CORE. NOT ALL PRODUCTS ARE COMPATIBLE WITH VITON®.**

There are a variety of o'rings available (Viton®, Neoprene, Buna & Ethylene Propylene). There are three different valves (B15 Viton®, B15N Neoprene & B16-Buna). There are two different valve cores (B12 - Viton® & B12N - nitrile).

If the standard Viton® o'rings and seals are not compatible with the product being sprayed please check with the chemical supplier for compatibility with the other o'rings and seals that are available.

Viton® o'rings and seals are standard on Model "B" sprayers because they are compatible with the widest range of sprayable products.

**Problem: Leaks from around B25 valve head.**

*Reason/Solution*

- 1) B25 valve too loose. Firmly tighten by hand only.
- 2) 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.

## **TROUBLE SHOOTING**

**Problem: Pin Stream only.**

*Reason/Solution*

- 1) Liquid is too thick. Thin with proper diluent until sprayable. Consult your chemical supplier for correct thinning procedures.
- 2) Too little air pressure. You must have at least 80 psi to spray full contents of sprayer.
- 3) Pin Stream nozzle in operating position. Remove. Replace with a spray nozzle. (regular, fine, medium & coarse)

**Problem: Air filler assembly won't accept air or leaks**

*Reason/Solution*

- 1) Air filler assembly has been damaged. Replace.
- 2) Valve core is swollen. Replace.
- 3) Chemical is attacking valve core. Replace B11 with an alternative valve core.

**Problem: Will not spray at all.**

*Reason/Solution*

- 1) Nozzle is completely clogged. Replace
- 2) Valve is completely clogged. Replace.
- 3) No Air pressure. Pressurize with at least 80 psi
- 4) Sprayer is full to top with liquid not allowing room for compressed air.

**Problem: Leaks from valve stem/nozzle.**

*Reason/Solution*

- 1) Valve worn or swollen. Replace. Standard valve has a Viton® seal. Valves also available in neoprene and buna for chemicals not compatible with Viton®.

**Problem: Leaks from between body and canister.**

*Reason/Solution*

- 1) O'ring is dirty. Clean and wet.
- 2) 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®.

**WARNING \* WARNING \* WARNING**

Sprayer Units returned to the factory containing **ANY LIQUIDS** will be returned to sender at their expense.

**WARRANTY**

SURE SHOT SPRAYERS, Parts and Accessories are guaranteed against defective materials and workmanship under normal conditions of use and service for a period of ninety days from date of sale to the consumer or nine months from date of shipment from the factory, whichever transpires first. The obligation of the Company (Milwaukee Sprayer Mfg. Co., Inc.) shall be limited to repairing or replacing any sprayer, part or accessory which is found by the Company to be defective, provided that a written claim covering such defect is submitted within the warranty period. The Company shall in no event be liable for consequential damages arising out of a defect or failure in any sprayer, part or accessory, or for any loss arising from the use or resale of any such materials, the Company's liability being limited to repair or replacement of defective components as aforesaid. This warranty shall not apply to defects resulting from accident, alterations, abuse or misuse, including solutions not recommended for use with the materials used in the manufacturing of this unit. Although it shall be the policy of the Company to be liberal in making adjustments, the settlement of claims regarding product defects will be governed by the provisions of this warranty. No other warranty, expressed or implied, is made by Milwaukee Sprayer Mfg. Co., Inc. with respect to any sales or products referred to herein.

Suspect defective sprayers should be returned to the factory for examination. All sprayers returned to the factory for examination must be sent to Milwaukee Sprayer Mfg. Co., Inc. with transportation charges prepaid. If the defects are covered by the above warranty, the least expensive return transportation charges in connection with repairing or replacing such defects, will be borne by the factory.

***sure  
shot***<sup>®</sup>

**MILWAUKEE SPRAYER MFG. CO., INC.**

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# SURE SHOT® SPRAYERS

## INSTRUCTIONS

Refillable, reusable. Extra versatile.  
Pressurized by free air



### DIRECTIONS FOR OPERATING MODEL “M” SPRAYERS

- 1) ALWAYS DEPRESSURIZE SPRAYER BEFORE REMOVING ANY PARTS.** The pressure may be let out of the sprayer one of the two following ways:
  - a) Tip the sprayer upside down and depress the trigger until no pressure is left. If some liquid is left in the sprayer when you attempt this procedure make sure you aim the nozzle at a place where a little bit of liquid can be expelled.
  - b) Remove #122 black cap from air filler and use small probe to depress #121 valve core until all the pressure escapes. **NOTE:** Make sure the sprayer is upright and the air filler stem is pointing away from you when depressing the valve core.
  - c) Remove the complete top assembly from the canister once all the air has been let out. Do this by grasping the body in one hand and the canister in the other while unscrewing counterclockwise completely.
- 2) Fill sprayer 2/3 full (24 ounce maximum liquid capacity) with light, clean liquid.** Make sure the liquid you are putting into the sprayer is **CLEAN** and **FREE OF FOREIGN PARTICLES**. See **ACCESSORIES** on page 3 for liquid filling/measuring device.

**NOTE: ALWAYS CHECK WITH YOUR CHEMICAL SUPPLIER IF YOU ARE NOT SURE OF COMPATIBILITY. READ CAUTION LABEL ON SPRAYER BEFORE FILLING. NEVER USE ACIDS IN ANY SURE SHOT SPRAYER.**

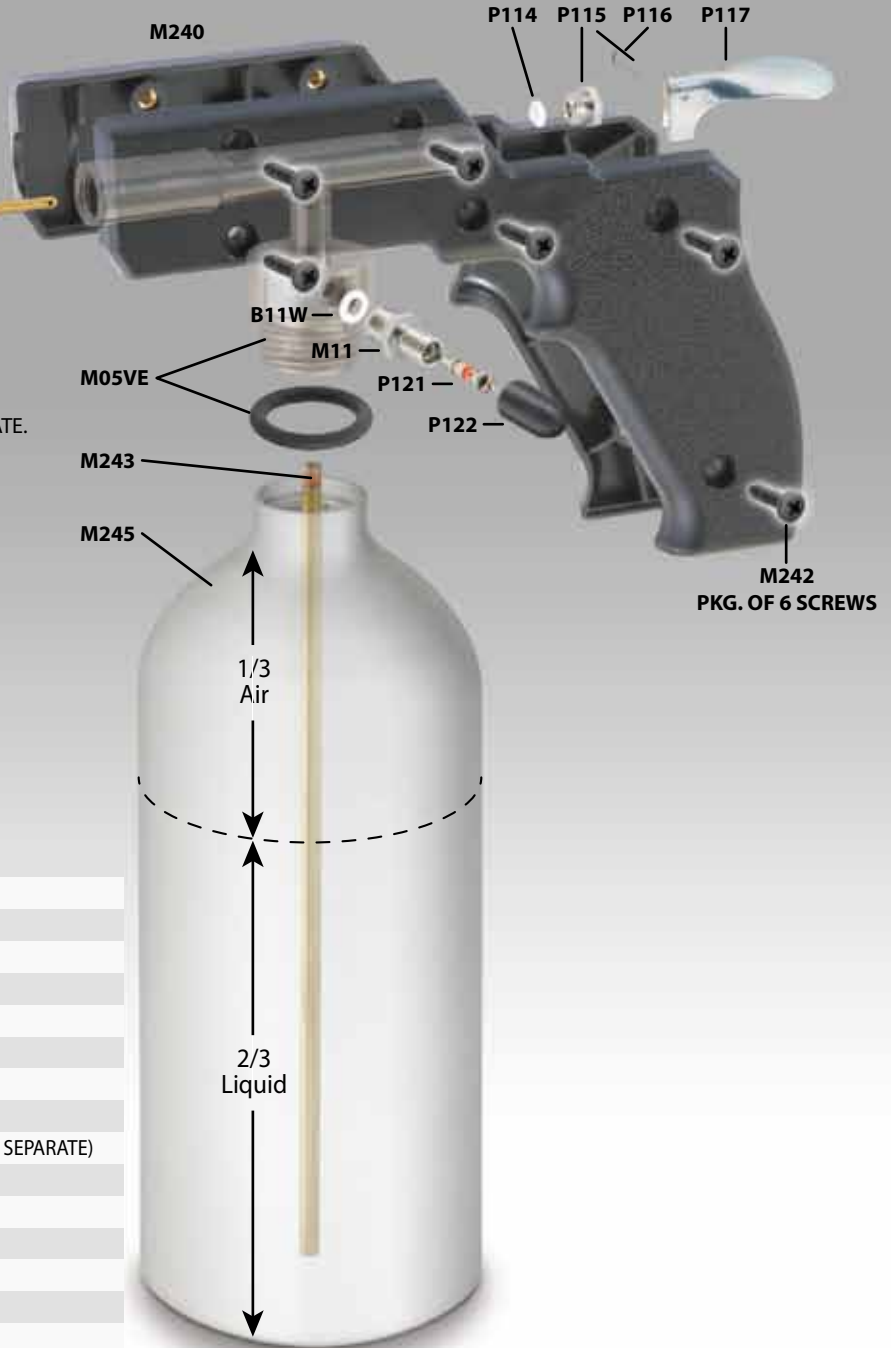
- 3) Take the complete top assembly and screw it clockwise into top of the canister.** Firmly hand tighten only.
- 4) Charge sprayer with compressed air by holding standard air chuck on valve stem of the air filler.** Hold the air chuck on the air filler until you hear the line pressure equalize with the sprayer. Working pressure is 80-150 psi. At least 80 psi is needed to spray the full 24 oz. without a recharge of air. **THE MAXIMUM PRESSURE SHOULD NOT EXCEED 200 PSI.**
- 5) The Model “M” sprayer is now ready to use.**
- 6) 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.**

**CAUTION:** Never point the nozzle of sprayer toward yourself or another person. Always point the nozzle of the sprayer away from yourself and toward your intended target before depressing the trigger.

**ALWAYS DEPRESSURIZE THE SPRAYER BEFORE REMOVING ANY PARTS**  
**SPRAYER NOT RECOMMENDED FOR USE WITH PAINTS**  
**MAXIMUM PRESSURE 200 PSI**



## MODEL M SPRAYER



- B11W** TEFLON® WASHER
- M05VE** O'RING
- M11** AIR FILLER ASSEMBLY (INCLUDES B11W, P121, P122)
- M240** ACETAL PLASTIC HANDLE
- M242** HANDLE SCREWS (PKG. OF 6)
- M243** BRASS SIPHON TUBE
- M245** 24 OZ. CAPACITY CANISTER (BLACK OR SILVER)
- P108** INNER ADAPTER WASHER
- P110** VALVE (INCLUDES P111)
- P111** VALVE SPRING (INCLUDED WITH P110, NOT AVAILABLE SEPARATE)
- P114** STUFFING BOX PACKING
- P115** STUFFING BOX NUT
- P116** COTTER PIN
- P117** VALVE TRIGGER
- P121** CHEMICAL RESISTANT VALVE CORE
- P122** BLACK CAP
- P602** ADJUSTABLE NOZZLE (MIST TO STREAM)

<b><u>PART #</u></b>	<b><u>DESCRIPTION</u></b>
B11W	Teflon® Washer
M05VE	O'Ring
M11	Air Filler Assembly (Incl. B11W, P121, P122)
M240	Acetal Plastic Handle
M242	Handle Screws (Pkg. of 6)
M243	Brass Siphon Tube
M245	24 oz. Capacity Anodized Canister (Black or silver)
P108	Inner Adapter Washer
P110	Valve (Includes P111)
P111	Valve Spring (Included With P110, Not Available Separately)
P114	Stuffing Box Packing
P115	Stuffing Box Nut
P116	Cotter Pin
P117	Valve Trigger
P121	Chemical Resistant Valve Core
P122	Black Cap
P307	Valve Seat Adapter - Male
P307-C	Valve Seat Adapter - Female 1/8" NPT
P307PT	Valve Seat Adapter - Male 1/8" NPT
P309	Outer Adapter Washer

<b><u>NOZZLES</u></b>	
<b><u>PART #</u></b>	<b><u>DESCRIPTION</u></b>
P223A P302	Spray Jet Spiral (For P305) Regular Spray Nozzle (Incl. P303, P309) Remove P303 With Needle Nose Pliers To Produce Pin Stream
P302-B	Coarse Spray Nozzle (Incl. P303, P309)
P302-C	Extra Fine Spray Nozzle (Incl. P303, P309)
P303	Spray Jet Spiral (Fits P302, P302-B, P302-C)
P305	Fine Spray Nozzle (Incl. P223A, P108)
P501	Flat Spray Nozzle (Incl. P307-C, P108)
P550	Flat Spray Nozzle (Incl. P307-C, P108)
P567	Coarse Flat Spray Nozzle (Incl. P307-C, P108)
P602	Adjustable Nozzle With Adapter (Incl. P108)
P707	Extra, Extra Fine Spray Nozzle (Incl. P108)

<b><u>EXTENSIONS</u></b>	
304	Nozzle Extension Washer (for 325 & 335)
320	3" Extension with Sprayhead
325	6" Nozzle Extension - Rigid Brass (for 302/302B/302C/501)
330	12" Nozzle Extension - Long Flexible Teflon® Tube (for 301/302/302B/302C/501)
331	12" Nozzle Extension - Long Flexible Teflon® Tube (for 305/550/567/602/707)
338	6" Nozzle Extension - Rigid Brass (for 305/550/567/602/707)
335	12" Nozzle Extension - Flexible Brass (for 302/302B/302C/501)
339	12" Nozzle Extension - Flexible Brass (for 305/550/567/602/707)
337	12" Plastic Pin Stream Extension
344	3" Long Hypodermic Tube Extension
345	3" Extension with Pin Stream Head

### **ACCESSORIES**

P07362



Filling/Measuring Device  
32 ounce Capacity: Graduations  
at 8, 16, 24, and 32 oz. Includes  
Brass Mesh Screening

## **REPAIR PROCEDURES**

The following is the correct order and way to remove and replace all the parts on your Model "M" Sprayer.

- a) **ALWAYS DEPRESSURIZE SPRAYER BEFORE REMOVING ANY PARTS.** (See page 1)
- b) Remove the complete top assembly from the canister once all the air has been let out of the sprayer. Do this by grasping the body in one hand and the canister in the other and unscrewing counterclockwise completely.
- c) Take a pliers and remove the P116 cotter pin from the P117 trigger and remove the trigger.
- d) Remove the P602 nozzle using a 5/8" wrench.
- e) Remove the P115 nut using a 3/8" wrench.
- f) Remove the P110 valve. Note that the P111 spring is assembled to the P110 valve.
- g) You will most likely damage the P114 when you remove it. Be careful not to damage the inside threads when removing the P114. The P114 stuffing box packing may be removed by taking a small thin flat blade screwdriver and working the P114 loose.
- h) Remove the B05VE O'Ring from the body.
- i) Remove the 7/16" hex M11 air filler assembly from the side of the body. The B11W washer must also be removed and replaced. You have now removed all the parts from the sprayer.
- j) To reassemble using your KM10 complete repair kit, start by taking a P114 and placing it into the position you just removed it from. Take the P115 and just hand start the thread.
- k) Take the P111 valve spring and assemble it to the P110 valve and place whole assembly into sprayer.
- l) Take a P108 washer and assemble to the back of the P602 nozzle. Take the assembly and push the face of the P110 back into the sprayer until you can hand start the thread. Tighten the 5/8" hex until washer is seated.

- m) Snug 3/8" hex P115 stuffing box nut. Do not over-tighten.
- n) Replace P117 trigger. Line up the holes in the trigger with hole in the back of the P110 valve. Insert P116 cotter pin and using a pliers bend over the ends.
- o) Press down on the P117 trigger and apply a drop or two of lubricant to the valve stem of the P110 at the rear of the P115 stuffing box nut. Tilt the sprayer so that the lubricant runs into and around the P115.
- p) Pressurize sprayer and check for leaks.

## **CLEANING THE P110 VALVE**

- 1) **ALWAYS DEPRESSURIZE SPRAYER BEFORE REMOVING ANY PARTS.** (See page 1)
- 2) Remove the complete top assembly from the canister once all the air has been let out of the sprayer. Do this by grasping the body in one hand and the canister in the other and unscrewing counterclockwise completely.
- 3) Remove P602 nozzle by using 5/8" wrench on the hex portion of the P602 body. Clean nozzle.
- 4) The face of the P110 valve is now visible. The face should be clean and clear of all particles. You should see a circular depression caused by the back of the nozzle. This depression should be clean and clear of all debris. You can do this with a small brush.
- 5) Return P602 nozzle and P108 washer to the opening and tighten.
- 6) Depress the P117 trigger several times to reset the seal between the face of the P110 valve and the back of the nozzle.
- 7) Take the top assembly and screw it clockwise into the top of the canister. Firmly hand tighten only.
- 8) Pressurize and check for leaks. If valve does not seal correctly, replace the P110 valve.



# TROUBLE SHOOTING

## TROUBLE SHOOTING

### SPRAYER WILL NOT SPRAY AT ALL

- A) Sprayer is completely full of liquid. Only fill sprayer 2/3 full (24 ounces).
- B) No air pressure. Pressurize.
- C) Nozzle is clogged. Clean or replace nozzle.

### PIN STREAM ONLY

- A) Liquid too thick. Thin until sprayable. Consult your liquid supplier for correct thinning procedures.
- B) Too little air pressure. Minimum of 80 psi.

### LEAKS FROM P115 STUFFING BOX NUT

- A) P115 stuffing box nut is loose. Tighten P115 1/16th of a turn and apply a drop or two of lubricant to the P110 valve stem at the rear of the P115. Tilt the sprayer so that the lubricant runs into and around the P115. Depress trigger a few times to work in the oil.

### STUCK OR DRAGGING TRIGGER ACTION

- A) P115 stuffing box nut is too tight. Loosen P115 nut 1/16th of a turn and apply a drop or two of lubricant to the P110 valve stem at the rear of the P115. Tilt the sprayer so that the lubricant runs into and around the P115. Depress trigger to work in oil. Retighten slightly for proper action.

### AIR FILLER ASSEMBLY WON'T ACCEPT AIR

- A) Air filler assembly has been damaged. Replace.

### LEAKS FROM NOZZLE

- A) Dirty or worn face on P110 valve. (See Cleaning the P110 valve on previous page)
- B) P115 stuffing box nut is too tight. (See stuck or dragging trigger action on this page)

### LEAKS BETWEEN BODY AND CANISTER

- A) O'Ring is dirty. Clean and wet.
- B) O'Ring is damaged or worn. Replace.

**WARNING \* WARNING \* WARNING**

Sprayer Units returned to the factory containing **ANY LIQUIDS** will be returned to sender at their expense.

**WARRANTY**

SURE SHOT® SPRAYERS, Parts and Accessories are guaranteed against defective materials and workmanship under normal conditions of use and service for a period of ninety days from date of sale to the consumer or nine months from date of shipment from the factory, whichever transpires first. The obligation of the Company (Milwaukee Sprayer Mfg. Co., Inc.) shall be limited to repairing or replacing any sprayer, part or accessory which is found by the Company to be defective, provided that a written claim covering such defect is submitted within the warranty period. The Company shall in no event be liable for consequential damages arising out of a defect or failure in any sprayer, part or accessory, or for any loss arising from the use or resale of any such materials, the Company's liability being limited to repair or replacement of defective components as aforesaid. This warranty shall not apply to defects resulting from accident, alterations, abuse or misuse, including the use of solutions containing ammonia in any Sure Shot® Sprayer. Although it shall be the policy of the Company to be liberal in making adjustments, the settlement of claims regarding product defects will be governed by the provisions of this warranty. No other warranty, expressed or implied, is made by Milwaukee Sprayer Mfg. Co., Inc. with respect to any sales or products referred to herein.

Suspect defective sprayers should be returned to the factory for examination. All sprayers returned to the factory for examination and/or repair must be sent to the address shown below with transportation charges prepaid. If the defects are covered by the above warranty, the least expensive inbound and outbound transportation charges in connection with repairing or replacing such defects will be borne by the factory. All returned repairable sprayers not covered by the warranty will be reconditioned in accordance with the following schedule of reconditioning charges.



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