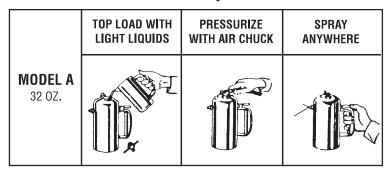
# SURE SHOT® SPRAYERS INSTRUCTIONS

Refillable, reusable. Extra versatile. Pressurized by free air



#### **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.

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

IEVER USE ACIDS IN ANY SURE SHOT SPRAYER.

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

- 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.

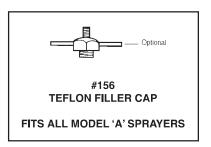
PLEASE NOTE: NOZZLE IN THE OPERATING POSITION IS SET FOR REGULAR MIST. FOR PIN STREAM, REMOVE THE #303 SPIRAL WITH NEEDLE NOSE PLIERS.

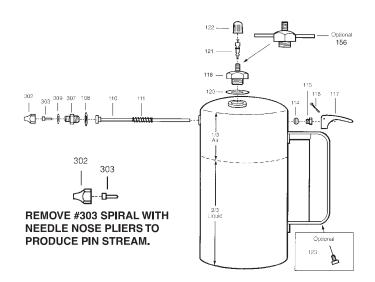
THE #118 FILLER CAP NOW COMES WITH A SPECIAL CHEMICAL RESISTANT VALVE CORE AND USES A REGULAR **RIGHT HAND** THREAD.

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

#### **MODEL A**

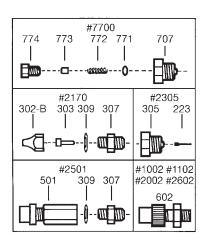
#1000 - #1100 - #2000 - #2600

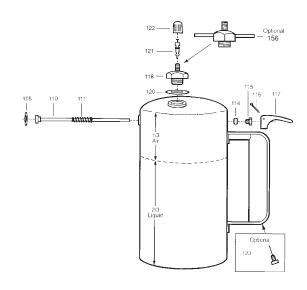




#### **MODEL A**

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

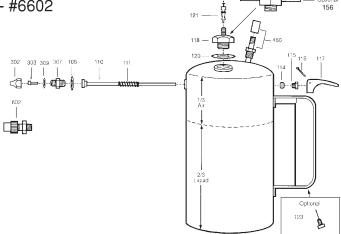




### **MODEL A**

#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.

PART #	<u>DESCRIPTION</u>	PART #	<u>DESCRIPTION</u>	
108	Inner Adaptor Washer	453	Retaining Ring	
110	Valve	456	Bulb Holder	
111	Valve Spring	460	Relief Valve - Complete	
114	Stuffing Box Packing	501	Flat Spray Nozzle	
115	Stuffing Box Nut	550	Flat Spray Nozzle with 307-C Adaptor	
116	Cotter Pin	567	Coarse Flat Spray Nozzle	
117	Valve Trigger		with 307-C Adaptor	
118	Filler Cap Assembly (incl. 120, 121FFKM, 122)	602	with Adaptor	
120	Filler Cap Gasket	707	,	
121FFKM	Perfluroelastomer Valve Core	771	Packing for 707 Nozzle	
. =	Exceptional Chemical Resistance	772	1 0	
122	Black Cap	773	Spiral for 707 Nozzle	
123	Clean Out Pick	774	Insert for 707 Nozzle	
			* The #156 filler cap assembly enables you to tighten without a wrench. Just hand tighten using the pins protruding from the 15/16" hex. Use the same valve Core (#121FFKM) as the #118. Right Hand Thread.	
*156	Filler Cap Assembly Includes 120, 121FFKM, 122 (Right Hand Thread)	protr		
223	Spray Jet Spiral (for 305)	the	*** The #307-C and #307 PT can be used in place of the #307 adaptor when the need to adapt to pipe thread fittings is necessary.	
302	Regular Spray Nozzle (incl. 303)	EXTEN		
	Remove #303 with needle nose pliers to produce pin stream.	304	Nozzle Extension Washer (for 325 & 335)	
302-B	Coarse Spray Nozzle	320	3" Extension with Sprayhead	
000.0	(incl. 303)	325	6" Nozzle Extension - Rigid Brass (for 302/302B/302C/501)	
302-C	Extra Fine Spray Nozzle (incl. 303)	330	12" Nozzle Extension - Long Flexible Teflon® Tube	
303	Spray Jet Spiral		(for 301/302/302B/302C/501)	
	(for 302, 302-B, 302-C)	331	331 12" Nozzle Extension - Long Flexible Teflon® Tube (for 305/550/567/602/707)	
305	Fine Spray Nozzle (incl. 223)			
307	Valve Seat Adaptor - Male	338	6" Nozzle Extension - Rigid Brass	
***307-C	Valve Seat Adaptor - Female 1/8" NPT	335	(for 305/550/567/602/707)  12" Nozzle Extension - Flexible Brass	
***307 PT	Valve Seat Adaptor - Male 1/8" NPT		(for 302/302B/302C/501)	
		339	12" Nozzle Extension - Flexible Brass	
309	Outer Adaptor Washer		(for 305/550/567/602/707)	
451	Piercing Pin Assembly	337	12" Plastic Pin Stream Extension	
452	Bulb Neck Washer	344	3" Long Hypodermic Tube Extension	
		345	3" Extension with Pin Stream Head	

#### **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.
- I) 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 overtighten.
- 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.
- 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.