

## General Maintenance

### SPRAY GUN

1. Immerse only the front end of the gun until solvent just covers the fluid connection.
2. Use a bristle brush and solvent to wash off accumulated paint.
3. Do not submerge the entire spray gun in solvent because:
  - a. the lubricant in the leather packings will dissolve and the packings will dry out.
  - b. the lubricant at wear surfaces will dissolve causing harder operation and faster wear.
  - c. residue from dirty solvent may clog the narrow air passages in the gun.
4. Wipe down the outside of the gun with solvent dampened rag.
5. Lubricate gun daily. Use a light machine oil on:
  - a. fluid needle packing.
  - b. air valve packing.
  - c. side port control packing.
  - d. trigger pivot point.Coat the fluid control spring with vaseline.
6. Caution: Never use lubricants containing silicone. This material may cause finish defects.

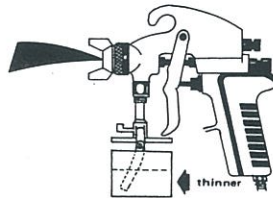
### POINTERS ON CLEANING

#### WHEN USED WITH SIPHON CUP

A compatible thinner or solvent should be siphoned through gun by inserting tube in open container of that liquid. Trigger gun repeatedly to flush passageway thoroughly and to clean tip of needle.

#### WHEN USED WITH PRESSURE TANK

Shut off air supply to tank and release pressure on tank. Open vent and loosen air nozzle. Hold a piece of cloth over the air nozzle and squeeze trigger. Air will back up through fluid nozzle, and force fluid out of hose into tank. Next, put enough thinner into tank to wash hose and gun thoroughly. Spray thinner through the gun until it is clean. Attach fluid hose to air line and blow it out thoroughly to remove all traces of materials and to dry it.



### PRECAUTIONARY NOTE

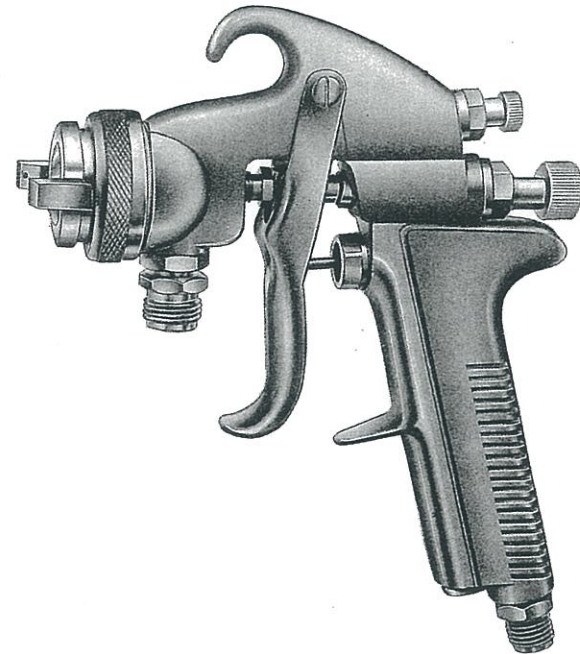
All parts on a spray gun should be screwed in hand tight at first; this will avoid the possibility of cross threading the parts. If the parts can not be turned by hand easily, make sure you have the correct parts, unscrew, realign, and try again. NEVER use undue force in mating parts.

### AIR NOZZLE, FLUID NOZZLE, NEEDLE ASSEMBLY

1. All nozzles and needles are precision made. They should be handled with care.
2. Except as described in 5., do not make any alterations in the gun. To do so could cause finishing difficulties.
3. To clean nozzles, soak them in solvent to dissolve any dried material, then blow them clean with air.
4. Do not probe any of the holes in the nozzles with metal instruments. If probing is necessary, use only a tool that is softer than brass.
5. Adjust the fluid needle valve so that when gun is triggered, air-flow occurs before fluid-flow.

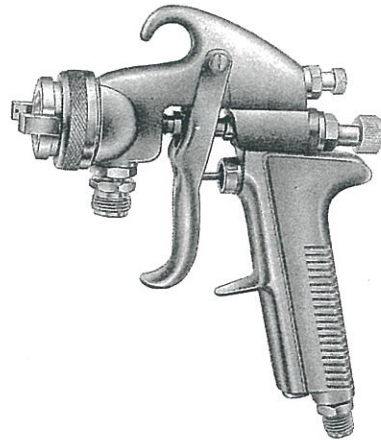
EA121 BG

# HIGH QUALITY SPRAY GUN INSTRUCTION MANUAL

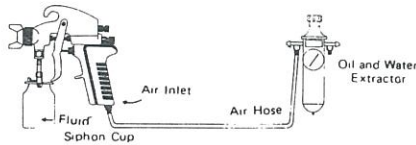


## SPRAY GUN

Your new Spray Gun is exceptionally rugged in construction, and is built to stand up under hard, continuous use. However, like any other fine precision instrument, its most efficient operation depends on a knowledge of its construction, operation, and maintenance. Properly handled and cared for, it will produce beautiful, uniform finishing results long after other spray guns have worn out.

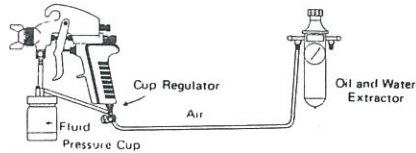


### TYPES OF INSTALLATION



#### SIPHON FEED CUP HOOKUP

Air pressure for atomization is regulated at extractor. Amount of fluid is adjusted by fluid control screw on gun, viscosity of paint, and air pressure.

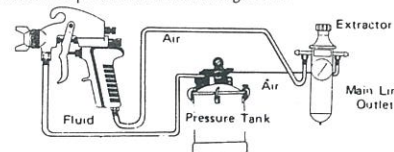


#### PRESSURE FEED CUP HOOKUP

For fine finishing with limited spraying.

Air pressure for atomization is regulated at extractor; fluid pressure at cup regulator. For heavy fluids and internal mix nozzle spraying, fluid adjusted by control screw on gun.

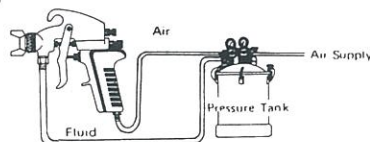
Pressure cup also available less regulator.



#### PRESSURE FEED TANK HOOKUP

For medium production spraying. (Single regulator)

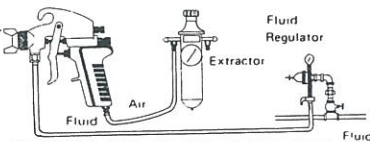
Air pressure for atomization is regulated at extractor, fluid pressure at tank regulator.



#### PRESSURE FEED TANK HOOKUP

For portable painting operations. (Double regulator)

Air pressure for atomization and fluid supply is regulated by two individual air regulators on tank.



#### PRESSURE FEED CIRCULATING HOOKUP

For heavy production spraying.

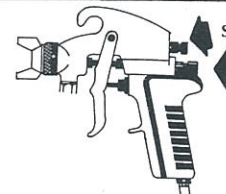
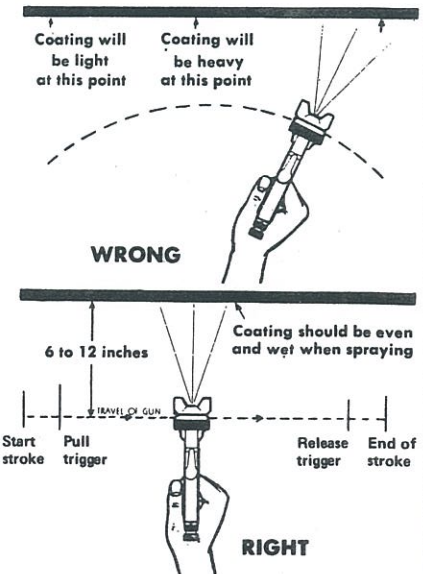
Air pressure atomization regulated at extractor. Fluid pressure regulated at fluid regulator.

### GUN HANDLING

The first requirement for a good resultant finish is the proper handling of the gun. The gun should be held perpendicular to the surface being covered, and moved parallel with it. The stroke should be started before the trigger is pulled and the trigger should be released before the stroke is ended. This gives accurate control of the gun and material.

The distance between gun and surface should be 6 to 12 inches depending on material and atomizing pressure. The material deposited should always be even and wet. Lap each stroke over the preceeding stroke to obtain a uniform finish.

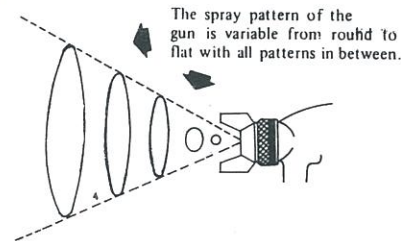
NOTE: To reduce overspray and obtain maximum efficiency, always spray with the lowest possible atomizing air pressure.



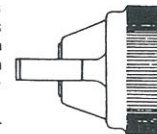
Spray width adjustment. Turn right for round, left for fan.

Fluid control screw. Turn to right to decrease flow, left to increase.

As width of spray is increased, more material must be allowed to pass through the gun to obtain the same coverage on the increased area.



In normal operation, the wings on the nozzle are horizontal as illustrated here. This provides a vertical fan shaped pattern which gives maximum coverage as the gun is moved back and forth parallel to the surface being finished.



### SIPHON SPRAYING

Set atomization pressure at approximately 50 psi for lacquer and 60 psi for enamel. Test spray. If the spray is too fine, reduce the air pressure or open fluid control screw. If the spray is too coarse, close the fluid control screw. Adjust the pattern width and repeat adjustment of spray if necessary.






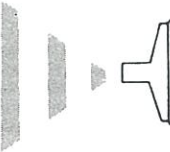

### PRESSURE SPRAYING

After selecting correct size fluid orifice, set fluid pressure for desired flow. Open atomization air and test spray. If spray is too fine reduce air pressure. If spray is too coarse, raise air pressure. Adjust pattern width and repeat adjustment of spray.

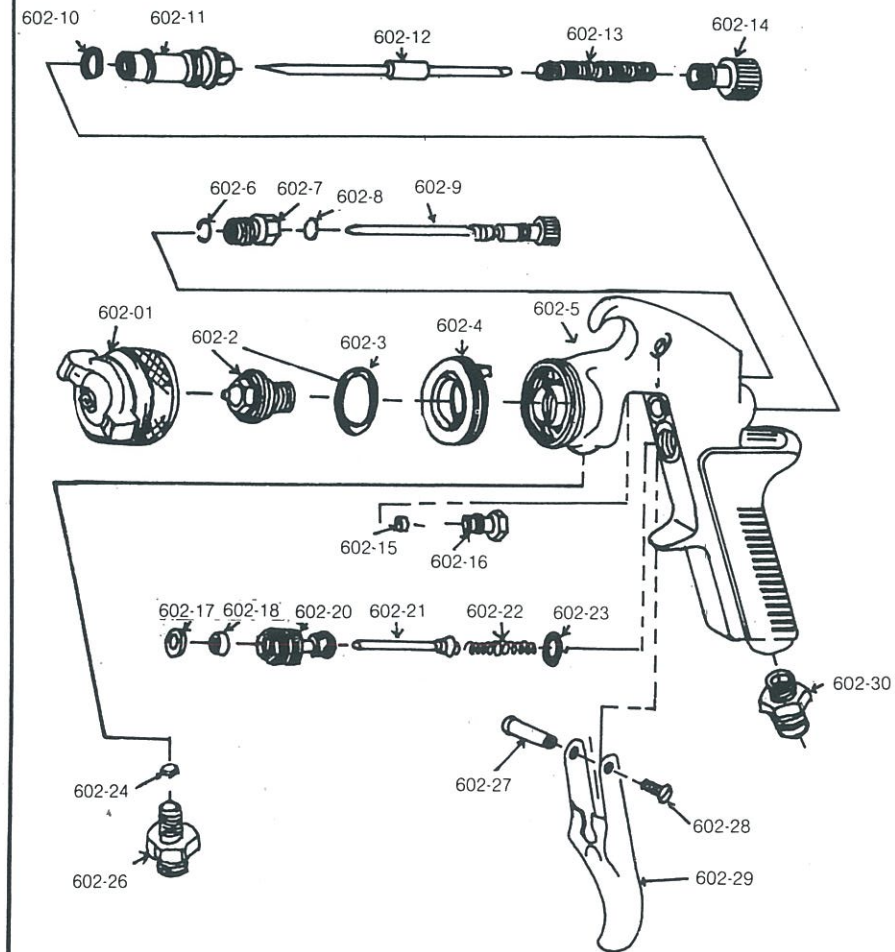
Keeping fluid control screw in open position will reduce fluid needle wear.

NOTE: To reduce overspray and obtain maximum efficiency, always spray with the lowest possible atomization air pressure.

**FAULTY PATTERNS and how to correct them**

PATTERN	CAUSE	CORRECTION
	<p>Dried material in side-port "A" restricts passage of air. Greater flow of air from cleaner side-port "B" forces fan pattern in direction of clogged side.</p> 	<p>Dissolve material in side-ports with thinner, then blow gun clean. Do not poke into openings with metal instruments.</p>
	<p>Dried material around the outside of the fluid nozzle tip at position "C" restricts the passage of atomizing air at one point through the center opening of air nozzle and results in pattern shown. This pattern can also be caused by loose air nozzle.</p> 	<p>Remove air nozzle and wipe off fluid tip, using rag wet with thinner. Tighten air nozzle.</p>
	<p>A split spray or one that is heavy on each end of a fan pattern and weak in the middle is usually caused by (1) too high an atomization air pressure, or (2) by attempting to get too wide a spray with thin material.</p>	<p>Reducing air pressure will correct cause (1). To correct cause (2), open material control to full position by turning to left. At the same time, turn spray width adjustment to right. This will reduce width of spray but will correct split spray pattern.</p>
 <p>SPITTING</p>	<p>(1) Dried out packing around material needle valve permits air to get into fluid passageway. This results in spitting.                  (2) Dirt between fluid nozzle seat and body or loosely installed fluid nozzle will make gun spit.                  (3) A loose or defective swivel nut on siphon cup or material hose can cause spitting.</p>	<p>To correct cause (1) back up knurled nut (E), place two drops of machine oil on packing, replace nut and tighten with fingers only. In aggravated cases, replace packing.                  To correct cause (2), remove fluid nozzle (F), clean back of nozzle and nozzle seat in gun body using rag wet with thinner, replace nozzle and draw up tightly against body.                  To correct cause (3), tighten or replace swivel nut.</p> 

**SPRAY GUN MAINTENANCE INSTRUCTION**

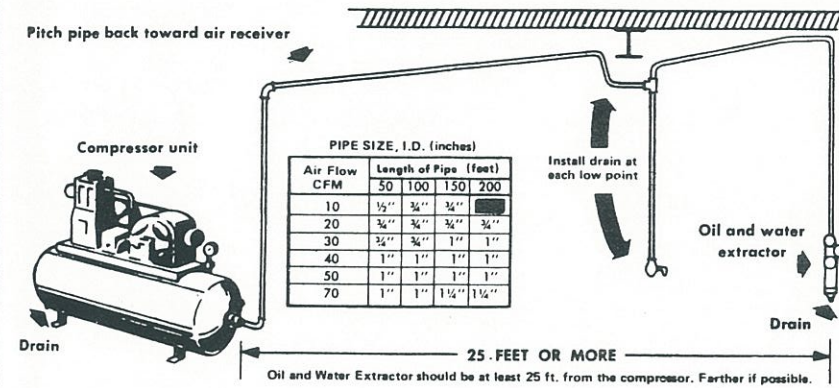


PART NO.	DESCRIPTION	QTY.	PART NO.	DESCRIPTION	Qty.
602-01	AIR CAP/RETAINING RING .....	1	602-16	PACKING SCREW .....	1
602-02	FLUID NOZZLE .....	1	602-17	SNAP RING .....	1
602-03	GASKIT .....	1	602-18	PACKING .....	1
602-04	BAFFLE .....	1	602-20	AIR VALVE BODY .....	1
602-05	GUN BODY .....	1	602-21	AIR VALVE .....	1
602-06	RETAINING RING .....	1	602-22	SPRING .....	1
602-07	FAN ADJUSTMENT VALVE BODY .....	1	602-23	GASKET .....	1
602-08	O RING .....	1	602-24	O RING .....	1
602-09	FAN ADJUSTMENT VALVE ASSY .....	1	602-26	FLUID INLET NIPPLE .....	1
602-10	GASKET .....	2	602-27	TRIGGER STUD .....	1
602-11	FLUID ADJUSTMENT VALVE BODY ....	1	602-28	TRIGGER LOCK SCREW .....	1
602-12	FLUID NEEDLE .....	1	602-29	TRIGGER .....	1
602-13	SPRING .....	1	602-30	AIR INLET NIPPLE .....	1
602-14	FLUID ADJUSTING SCREW .....	1			
602-15	PACKING .....	2			

\*A QUANTITY OF NECESSARY PARTS IS INCLUDED IN REPAIR KIT CH602-A2 FOR COMPLETE GUN REPAIR.

### N920 SPRAY GUN PERFORMANCE

Approximate pattern. length	Air Consumption C.F.M.		Air cap and tip characteristics
	40 P.S.I.	50 P.S.I.	
9"—12" Gun 8" from work	9	11	1. fan pattern 2. excellent suction feed cap



The oil and water extractor should not be mounted on or near the air compressor.

The temperature of air is greatly increased during compression. As the air cools down to room temperature, in the air line, on its way to the spray gun, the moisture contained in it condenses. Thus, for maximum effectiveness, the oil and water extractor should be mounted at some point in the air supply system where the tempera-

ture of the compressed air in the line is likely to be lowest.

#### Air lines must be properly drained

Pitch all air lines back towards the compressor so that condensed moisture will flow back into the air receiver where it can be drained off. Each low point in an air line acts as a water trap. Such points should be fitted with an easily accessible drain. See diagram above.