



# Binks Model 95SL SPRAY GUN

**95 SLV Gun Assembly (obsolete)  
VT set-ups are available as options.**

Binks' 95SL spray gun is the latest innovation in the 95 model line of spray guns. The 95SL is slim and streamlined, and weighs less than other models. These features make this product the gun of choice for smaller grips and lighter handling.

The 95SL is a high production gun with stainless steel fluid passages and can be used with most coatings. The gun body is drop-forged anodized aluminum. Fluid passages are of stainless steel. The 95SL features:

- an adjustable, floating needle valve
- a stainless steel or tungsten carbide fluid nozzle
- a self-centering air nozzle
- a brass air-valve cartridge
- light weight (about 1 lb., 4 oz.)

This Part Sheet contains an exploded drawing and a detailed parts list to enable a complete understanding of the gun's construction. A summary of gun operation, cleaning, care and maintenance, and troubleshooting common problems is also provided.

## NOTE

Please be sure to read the warning regarding air pressure and the warning regarding paints, solvents, and other coatings on page 2.



## ILLUSTRATION KEY

1. Air Nozzle Assembly
2. Gun Body
3. Side Port Control
4. Fluid Control Knob
5. Air Connection 1/4" NPS(m)

## PACKAGE CONTENTS

Please note your Binks 95SL gun package was shipped with the following contents.

DESCRIPTION	PART NO.	QTY.
95SL Spray Gun .....	-	1
Part Sheet .....	2731	1
Gun Brush .....	82-469	1
Gunner's Mate .....	54-3871	1
Cleaning Brush .....	OMX-88	1

## HOW TO SET UP and OPERATE YOUR Binks Model 95SL SPRAY GUN

Your Binks 95SL Gun is exceptionally rugged in construction and built to stand up under hard, continuous use. However, like any other precision instrument, your gun's most efficient operation depends on a knowledge of its construction, operation and maintenance. Properly handled and cared for, it will produce beautiful, uniform finishes long after other spray guns are worn out.

The 95SL Gun can be used in any of three modes:

- Siphon Feed Cup Hook-Up
- Pressure Feed Pump Hook-Up
- Pressure Feed Tank Hook-Up

The siphon mode uses a lowered air pressure in the gun to draw fluid from the cup into the gun. Instructions for assembling the gun with the siphon cup are included in this Part Sheet.

Pressure feed mode for tanks rely on systems that separately regulate fluid and air flow. Pressure feed circulating hook-ups are usually connected to large circulating systems. Such a system has separate, regulated fluid and air flows. We recommend choosing a smaller fluid nozzle if you are using either of the pressure feed systems.

On this page are brief descriptions and illustrations of the siphon feed, the pressure feed tank hook-ups, and the pressure feed pump hook-up.

### **! WARNING**

#### **CONNECTING TO AIR HOSE Regarding Air Pressure Safety**

**Shut off air pressure before connecting or disconnecting the air hose or before removing any components from the gun.**

**For air supply, use a suitable length of 5/16" diameter air hose fitted with a 1/4" NPS(f) connector at the gun end. For hose lengths over 50', use a 3/8" diameter hose.**

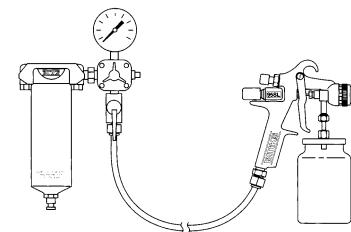
### **! WARNING**

#### **FLUID FLOW Regarding Paints, Solvents, and Other Coatings Safety**

**Do not use open containers for storage or disposal of paint, other coatings, cloth, or paper used in preparation and application. Many paints and coatings contain volatile chemicals that are a cause of pollution and are a health and fire hazard. Always wear appropriate clothing, including gloves, eye protection, and a respirator when using the gun.**

### **SIPHON FEED (CUP) HOOK-UP**

In this mode, air pressure for atomization is regulated at the extractor. The amount of fluid is adjusted by the fluid control knob (20) on the gun, viscosity of paint, and air pressure.

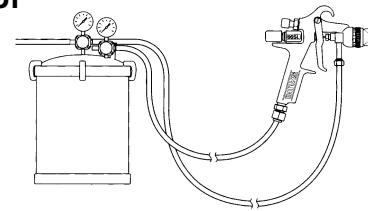


### **HOW TO SET UP YOUR GUN FOR SIPHON APPLICATIONS**

1. Insert the fluid inlet (26) into the cup's swivel nut and tighten.
2. Connect air hose from air regulator on the extractor to air connection (21) on the gun.

### **PRESSURE FEED (TANK) HOOK-UP**

For portable painting operations, use a double-regulator pressure-feed tank hook-up. In this mode, air pressure for both atomization and fluid supply is regulated by two separate air regulators on the tank.



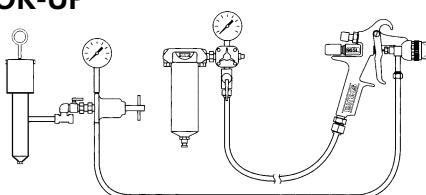
### **HOW TO SET UP YOUR GUN FOR PRESSURE FEED (TANK) HOOK-UP**

1. Connect air hose from air regulator on the tank to air connection (21) on the gun. (If tank is equipped with only one regulator, the air line must connect from the regulator to the extractor.)
2. Connect the fluid hose from fluid outlet on tank to the fluid inlet (26) on the gun.
3. Fluid delivery is controlled by various means:

- The first regulator on the tank, which regulates air into the tank (this creates the fluid pressure);
- The fluid control knob (20) on the gun, which can be used to fine tune fluid delivery;
- Other factors, which include fluid orifice size, fluid hose length, hose diameter and material viscosity.

### **PRESSURE FEED (PUMP) HOOK-UP**

Use this mode for heavy production spraying. In this mode, air pressure for atomization is regulated at the extractor. Fluid pressure is regulated at the fluid regulator.



### **HOW TO SET UP YOUR GUN FOR PRESSURE FEED (PUMP) HOOK-UP**

1. Connect air hose from air regulator to air connection (21) on the gun.
2. Connect the fluid hose from fluid regulator to the fluid inlet (26) on the gun. If the system does not require a fluid regulator, the hose connects to the pump's fluid outlet.
3. Fluid delivery is controlled by various means:

- The air regulator on the pump, which regulates air into the pump (this creates the fluid pressure);
- A fluid regulator, which may be utilized on the output of the pump;
- The fluid control knob (20) on the gun, which can be used to fine tune fluid delivery;
- Other factors, which include fluid orifice size, fluid hose length, hose diameter and material viscosity.

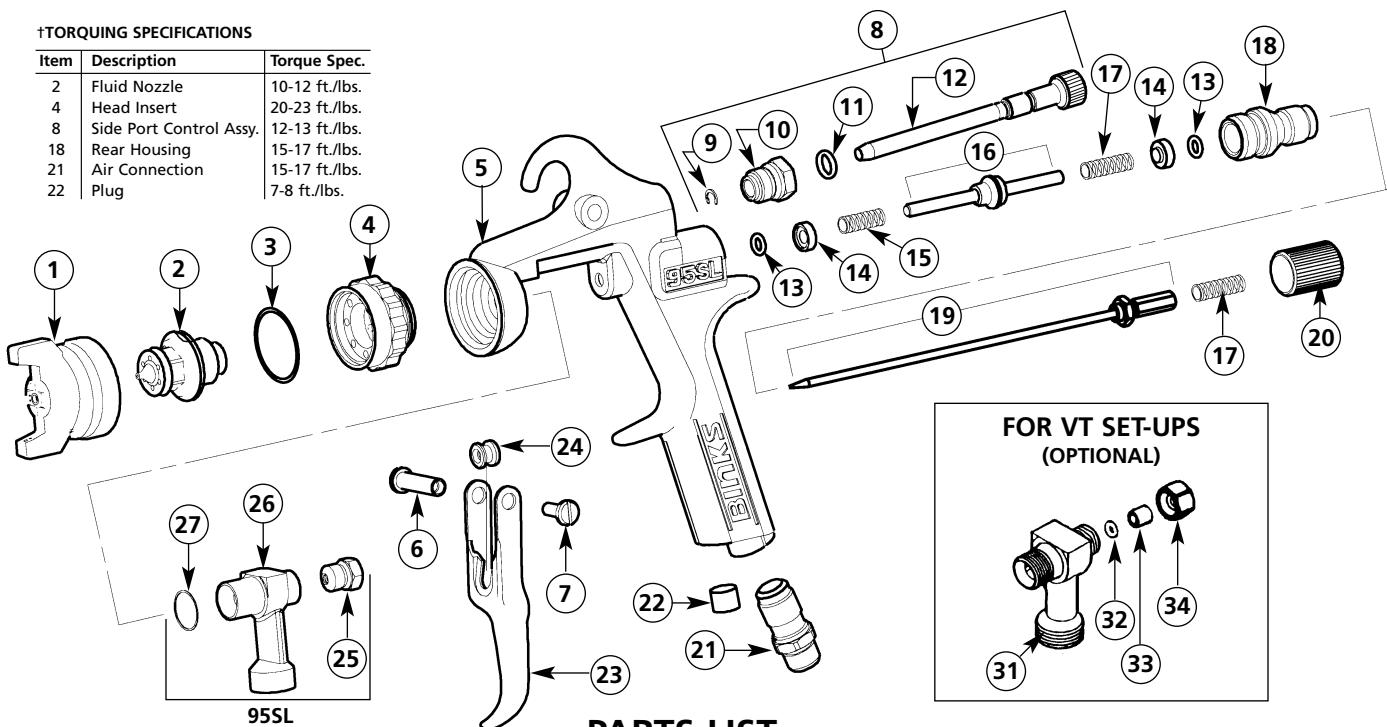
### **OIL AND WATER EXTRACTOR**

Achieving a fine spray finish without the use of a good oil and water extractor is almost impossible. A regulator/extractor serves a double purpose. It eliminates blistering and spotting by keeping air free of oil and water, and it gives precise air pressure control. Set the atomizing pressure to allow for any drop in air pressure between the regulator and the spray gun. We recommend the HFRL-508 Oil and Water Extractor/Regulator for use with the 95SL gun.

## Binks Model 95SL SPRAY GUN

<sup>†</sup>TORQUING SPECIFICATIONS

Item	Description	Torque Spec.
2	Fluid Nozzle	10-12 ft./lbs.
4	Head Insert	20-23 ft./lbs.
8	Side Port Control Assy.	12-13 ft./lbs.
18	Rear Housing	15-17 ft./lbs.
21	Air Connection	15-17 ft./lbs.
22	Plug	7-8 ft./lbs.

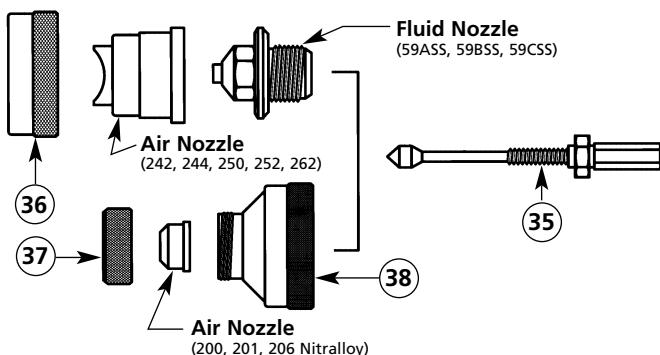


### PARTS LIST

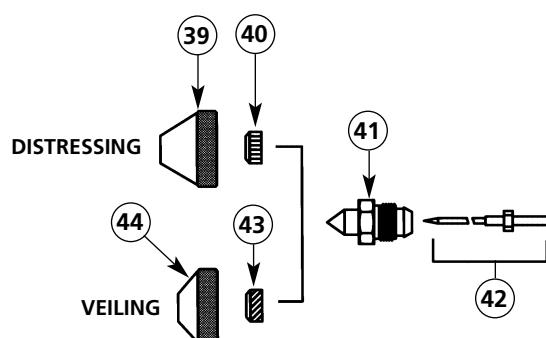
When ordering, please specify Part No.

ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.				
1	*	AIR NOZZLE ASSEMBLY .....	1	24	54-3513▲	VALVE SPINDLE CAP .....	1				
2	*†	FLUID NOZZLE (Stainless Steel).....	1	25	54-4370▲	SEAL CARTRIDGE ASSEMBLY (95SL) ..	1				
3	54-918▲	NOZZLE GASKET .....	1	26	54-4553	FLUID INLET (95SL).....	1				
4	54-4215†	HEAD INSERT .....	1	27	54-3592▲	FLUID INLET SEAL (Copper) .....	1				
5	54-4556■	GUN HANDLE ASSEMBLY	1	28	82-469	GUN BRUSH (See page 4) .....	1				
6	54-4359▲	TRIGGER STUD .....	1	ITEMS 29 - 44 ARE OPTIONAL. PLEASE ORDER SEPARATELY.							
7	82-126▲	TRIGGER SCREW .....	1	29	54-4213	WRENCH (See page 4) (Optional) .....	1				
8	54-4557†	SIDE PORT CONTROL ASSEMBLY .....	1	30	82-221	GUN BRUSH (See page 4) (Optional) ....	1				
9	54-3511▲■	RETAINING RING	1	31	54-4568	FLUID INLET (VT SET-UP) (Optional) ....	1				
10	54-4218■	FAN CONTROL HOUSING	1	32	20-2227▲	O-RING (VT SET-UP) (Optional) .....	1				
11	20-6160▲■	O-RING	1	33	54-4531▲	SPACER (VT SET-UP) (Optional) .....	1				
12	■	FAN CONTROL KNOB	1	34	54-4542	PACKING NUT (VT SET-UP) (Optional) ..	1				
13	20-4615▲	O-RING .....	2	35	859	NEEDLE ASSEMBLY (Optional) .....	1				
14	54-3515▲	SMALL HOUSING .....	2	36	54-2065	RETAINER RING (Optional) .....	1				
15	54-3520▲	YELLOW SPRING .....	1	37	54-1584	RETAINER RING (Optional) .....	1				
16	54-3512▲	AIR VALVE ASSEMBLY .....	1	38	54-1583	NOZZLE TIP BASE ASSY (Optional) .....	1				
17	54-3518▲●	BLUE SPRING .....	2	39	797	AIR NOZZLE (Optional) .....	1				
18	54-3541†	REAR HOUSING .....	1	40	790	STRAIGHT CORE (Optional) .....	1				
19	*	FLUID NEEDLE ASSEMBLY (Stainless Only) .....	1	41	794SS	FLUID NOZZLE (Optional) .....	1				
20	54-3606▲	FLUID CONTROL KNOB (Metal) .....	1	42	894	NEEDLE ASSEMBLY (Optional) .....	1				
21	54-768†	AIR CONNECTION .....	1	43	792	SPIRAL CORE (Optional) .....	1				
22	54-3986†	PLUG .....	1	44	793	AIR NOZZLE (Optional) .....	1				
23	54-4360	TRIGGER (Metal) .....	1	* See Nozzle and Needle Chart. † Refer to Torquing Specifications. ▲ Included in Spare Parts Kit 54-4559. ■ NOT available separately. ● Optional 54-4427 H.D. Spring.							

#### OPTIONAL NOZZLE SET-UPS—INTERNAL MIX HEAVY MATERIAL



#### OPTIONAL NOZZLE SET-UPS—SPECIAL EFFECTS



## HOW TO CLEAN and MAINTAIN YOUR Binks Model 95SL GUN

### CONTROLLING FAN SPRAY

Fan spray is controlled by the fan control knob (12). Turning this knob clockwise until closed produces a small, circular spray pattern. Turning this knob counter-clockwise until open widens the pattern to a fan shape.

Adjust the fan pattern to any angle by changing the position of the air nozzle assembly (1): loosen the retaining ring on the air nozzle assembly and rotate the air nozzle to the desired position, and re-tighten the retaining ring.

### CLEANING YOUR GUN

#### **NOTE**

See the **WARNING** regarding paints, solvents, and other coatings on page 2.

#### HOW TO CLEAN YOUR GUN WITHOUT PRESSURE

1. Shut off air supply.
2. Trigger the gun to relieve pressure.
3. Remove siphon cup, empty it, and rinse it out with solvent.
4. Turn the gun upside down and pour solvent into the fluid inlet (26).
5. Trigger the gun to allow solvent to flow through it.

#### **! WARNING**

**Do not use air pressure to clean your gun. The solvent will vaporize, possibly causing personal injury. Many paints and coatings contain volatile chemicals that are a cause of pollution and are a health and fire hazard. Always wear appropriate clothing, including gloves, eye protection, and a respirator when using the gun.**

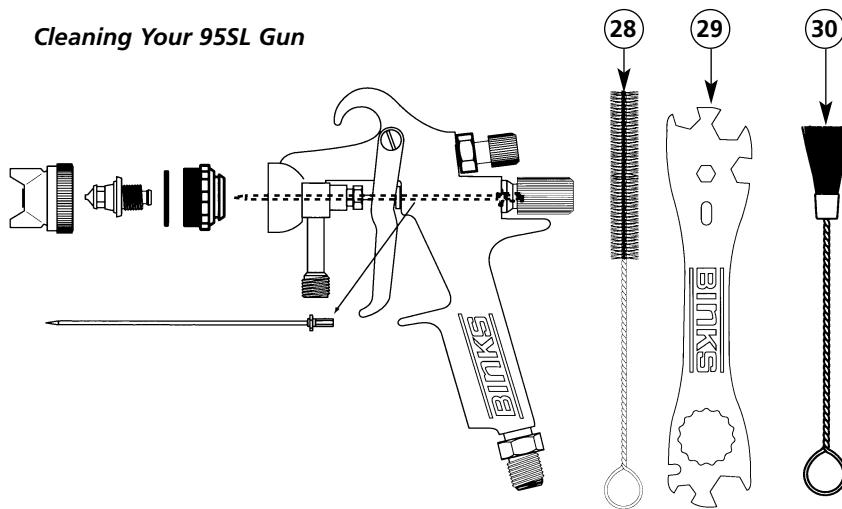
6. Clean inside the fluid inlet and the fluid nozzle (2) using the gun brush (28).

#### **! CAUTION**

**Never use anything metal to clean the air nozzle assembly (1) or fluid nozzle (2). These parts are precisely machined, and any damage to them will cause faulty spray patterns.**

7. Clean the outside of the gun.
8. Repeat any step above until the gun is clean.
9. Blow air through the gun until it is dry.
- 9a. **OPTION:** Disconnect the gun from the air hose and remove the air

#### *Cleaning Your 95SL Gun*



nozzle assembly (1) and fluid nozzle (2) if they need separate cleaning. Remove the fluid needle assembly (19) and wipe clean.

#### HOW TO CLEAN YOUR GUN UNDER PRESSURE

It has been customary in the industry to clean paint guns by spraying solvent through them under air pressure. This cleaning method is less effective than the steps previously described.

#### **! WARNING**

**Spraying solvent under pressure atomizes it and may release Volatile Organic Compounds (VOCs) into the air, an action that is now prohibited in many areas.**

In addition, you may violate local air quality regulations.

If you wish to clean the gun using this method, we recommend one of the following alternatives:

1. Spray solvent through the gun into a closed system. An enclosed unit or spray gun cleaning station condenses and captures solvent vapors, preventing the escape of VOCs.
  2. Place the spray gun in a washer type cleaner. The washer must totally enclose the gun, nozzles and other parts during washing, rinsing and draining cycles. The washer must be able to flush solvent through the gun without releasing VOCs.
- #### MAINTAINING YOUR GUN
- All part names and item numbers in parentheses refer to the exploded drawing and Parts List on page 3.
3. Lubricate your gun daily with Binks Gunners Mate (54-3871).
  4. Lubricate all moving parts, including the trigger pivot point and the air valve assembly (16).
  5. Remove the fluid control knob (20), blue spring (17), and fluid needle assembly (19).
  6. Unscrew the rear housing (18) using a 5/16" hex wrench. Inside the rear housing are a small housing (14) and an o-ring (13).
  7. Remove the second blue spring (17).
  8. Remove the air valve assembly with the yellow spring (15), small housing, and o-ring attached to it.
  9. Lubricate new o-rings with Gunners Mate if necessary.
  10. Reassemble components.
  11. Place the air valve assembly, along with the yellow spring, small housing, and o-ring into the gun body. Make sure the o-ring faces toward the front of the gun.
  12. Place the blue spring on the back side of the air valve assembly.
  13. Place the small housing and the o-ring in the rear housing so that when assembled, the o-ring faces the back of the gun.
  14. While the o-ring is positioned properly, screw the rear housing into the gun body and tighten. Torque the rear housing to 15-17 ft./lbs.
  15. Replace the fluid needle assembly, blue spring, and fluid control knob.

## TO REPLACE THE SEAL CARTRIDGE ASSEMBLY (25)

1. Remove the fluid control knob (20) and blue spring (17).
2. Pull out the fluid needle assembly (19).
3. Unscrew the seal cartridge assembly while squeezing the trigger.
4. Replace with new seal cartridge assembly.
5. Reassemble the fluid needle assembly, blue spring, and fluid control knob.

## HOW TO REPLACE THE O-RING (11) IN THE SIDE PORT CONTROL ASSEMBLY (8)

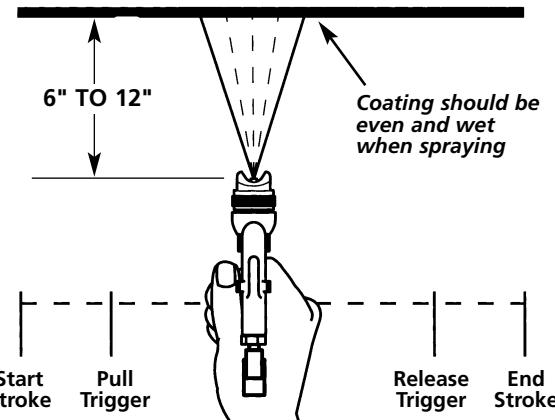
1. Remove the side port control assembly.
2. Pry off the retaining ring (9).
3. Unscrew the fan control housing (10).
4. Remove and replace the o-ring.
5. Reassemble.

## HOW TO ADJUST THE FLUID NEEDLE (19)

The effective length of the fluid needle can be adjusted using the needle locknut and needle cap, which are part of fluid needle assembly (19).

1. Remove the fluid control knob (20) and the blue spring (17).
2. Pull the fluid needle assembly (19) out approximately 1-1/4".
3. Use the wrench (28) to loosen the needle cap.
4. Screw the needle locknut out for more trigger movement, in for less trigger movement.
5. Adjust the fluid needle so the trigger moves the air valve assembly (16) 1/16" to 3/32" before the fluid needle assembly moves.
6. Tighten the needle cap with the wrench.

### CORRECT SPRAY TECHNIQUE



### PRESSURE SPRAYING

After selecting correct fluid nozzle, set the fluid pressure for the desired flow.

1. Open the atomization air and test the spray. If the spray is too fine, reduce the air pressure. If the spray is too coarse, increase the air pressure.
2. Adjust the pattern width using the fan control knob (12) and readjust the spray.

### NOTE

**Keeping the fluid control knob (20) in the open position reduces fluid needle wear.**

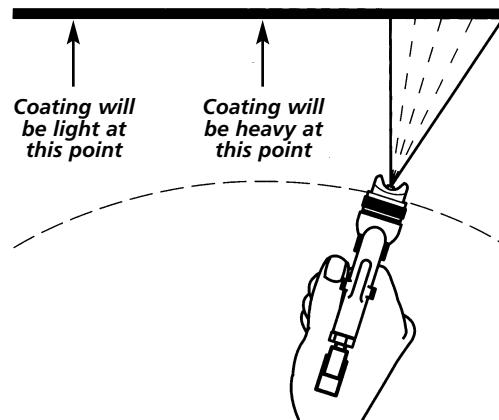
**To reduce overspray and obtain maximum efficiency, always spray with the lowest possible atomization air pressure.**

### SPRAY TECHNIQUE

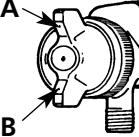
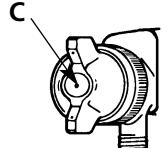
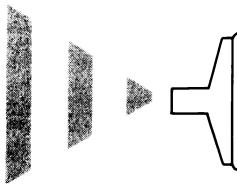
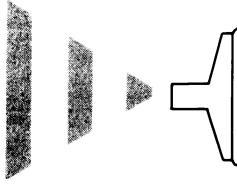
To get a good finish, you must handle the gun properly. Hold the gun perpendicular to the surface you are painting. Each paint stroke should be made parallel to the plane of the surface being painted. Start the stroke before you trigger the gun and release the trigger before you end the stroke. This will give you accurate control of both gun and material and prevent excessive build-up of material at the stroke ends.

The distance between the gun and surface should be 6"-12" depending on the material and the atomizing pressure. The material deposited should always be even and wet. Lap each stroke about half of the preceding stroke to obtain a uniform finish.

### INCORRECT SPRAY TECHNIQUE



## FAULTY PATTERNS AND HOW TO CORRECT THEM

PATTERN	CAUSE	CORRECTION
	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>Dissolve material in side ports with thinner, then blow gun clean.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <b>CAUTION</b>          Never use anything metal to clean the air nozzle or fluid nozzle. These parts are precisely machined, and any damage to them will cause faulty spray patterns.       </div>
	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 a loose air nozzle assembly.	 <p>Remove air nozzle assembly (1) and wipe off fluid nozzle tip (2) using rag wet with thinner. Tighten air nozzle assembly.</p>
	A split spray or a spray 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 (2) Attempting to get too wide a spray pattern with thin material.	<p>Reducing air pressure will correct Cause (1). To correct Cause (2), open fluid control knob (20) to full position by turning counterclockwise. At the same time, turn fan control knob (12) clockwise. This will reduce width of spray, but will correct split spray pattern.</p>
	Intermittent spray is caused by: (1) Air leaking into the fluid passages due to either of the following reasons: • The seal cartridge assembly (25) may be loose. • The fluid nozzle (2) may be loose. (2) Insufficient fluid supply. (3) Clogged fluid passage due to dirty fluid.	<p>(1) Check these locations and tighten if necessary.            (2) Fill the fluid supply            (3) Clean fluid passages with solvent and strain fluid.</p>
	Spitting is caused by anything that restricts the movement of the fluid needle assembly (19). The probable causes include: (1) The fluid needle is bent. (2) Dried material has built up on the needle or in the fluid nozzle (2). (1) Lumps or impurities in the fluid. (4) A loose or defective swivel nut on the siphon cup or material hose can cause spitting.	<p>(1) You may be able to straighten the needle.            (2) Clean with thinner as above.            (3) Strain all material before use. Consider an Oil and Water Extractor/Regulator (HFR-508) to keep fluid free of impurities in the air supply.            (2) For fluid pressure setups, tighten or replace swivel nut.</p>

Regulator pressures are based on 25' of 5/16" hose in good condition and without quick disconnects or other restrictive fittings. Gun inlet pressures are measured at the gun air inlet with the gun triggered.

These recommendations are for typical or average fluids, and are intended to serve as a starting point. Adjust as necessary for your specific application.

## 95SL STANDARD NOZZLE and NEEDLE SELECTION CHART

TYPE OF FLUID TO BE SPRAYED	FLUID x AIR NOZZLES	NOZZLE TYPE†	CFM AT*			MAX. PATTERN AT 8"	FLUID NEEDLE NO.
			30 PSI	50 PSI	70 PSI		
<b>VERY THIN</b>	63SS x 63P 63ASS x 63P 66BSS x 63PB 66SS x 66SD 66SS x 66SK 63BSS x 200	PE PE PE SE SE PI	4.5 5.1 9.0 7.9 11.0 3.1	7.5 8.7 14.3 12.1 15.2 5.2	10.0 12.2 20.0 19.5 5.0 7.4	5.0" 11.0" 14.0" 10.5" 13.0" 12.0"	863 863A 863A 865 865 863A
14-16 Secs – No. 2 Zahn Wash Primers, Dyes, Stains, Solvents, Water, Inks							
<b>THIN</b>	63ASS x 63P 66SS x 66SD 66SS x 66SK 63BSS x 200	PE SE SE PI	5.1 7.9 11.0 3.1	8.7 12.1 15.2 5.2	12.2 19.5 19.5 6.4	11.0" 10.5" 13.0" 12.0"	863A 865 865 863A
16-20 Secs – No. 2 Zahn Sealers, Lacquers, Primers, Inks, Zinc Chromates, Acrylics, Lubricants							
<b>MEDIUM</b>	63BSS x 63PB 63CSS x 63PR 65SS x 63PB 66SS x 66SD 66SS x 66SK 63CSS x 200	PE PE PE SE SE PI	9.0 9.5 9.0 7.9 11.0 3.1	14.3 15.5 14.3 12.1 15.2 5.2	20.0 19.5 20.0 — 19.5 6.4	14.0" 18.0" 15.0" 11.0" 13.0" 12.0"	863A 863A 865 865 865 863A
19-30 Secs – No. 2 Zahn Synthetic Enamels, Varnishes, Shellacs, Fillers, Primers, Epoxies, Urethanes, Lubricants, Wax Emulsions, Enamels							
<b>HEAVY (CREAM-LIKE)</b>	67SS x 206 68SS x 201 66SS x 63PB 67SS x 67PB 68SS x 68PB	PI PI PE PE PE	6.0 4.6 9.0 9.5 9.5	9.5 6.8 14.3 14.9 14.1	13.0 9.1 20.0 19.5 19.1	15.0" 11.0" 14.0" 12.0" 12.0"	867 868 865 867 868
Over 28 Secs – No. 4 Ford House Paint, Wall Paint (Oil, Latex), Block Sealers, Mill Whites, Vinyls, Acrylics, Epoxies							
<b>VERY HEAVY</b>	68SS x 206 68SS x 68PB 59ASS x 244 59BSS x 250 59BSS x 252 59CSS x 262	PI PE PI PI PI PI	6.2 9.5 7.8 7.3 7.8 10.0	9.8 14.1 11.5 11.0 11.5 11.0	13.2 19.1 15.2 14.7 15.2 20.0	15.0" 12.0" 12.0" RD. 6.0" 7.0"	868 868 859 859 859 859
Unaggregated Block Fillers, Textured Coatings, Fire Retardants, Road Marking Paint, Bitumastics							
<b>ADHESIVES</b>	63CSS x 63PB 66SS x 63PR 67SS x 67PB 63SS x 66SD 63ASS x 66SD	PE PE PE PE PE	9.0 9.5 9.5 7.9 7.9	14.3 15.5 14.1 12.1 12.1	20.0 19.5 19.1 16.2 16.2	14.0" 15.0" 12.0" 4.0" 7.0"	863A 865 867 863 863A
Waterbase, White Vinyl Glue, Solvent Base, Neoprenes, (Contact Cements)							
<b>CERAMICS &amp; SIMILAR ABRASIVE MATERIALS</b>	63CVTSS x 66PH 64VTSS x 64PA 67VTSS x 67PD 68VTSS x 68PB	PE PE PE PE	11.5 12.1 10.0 9.5	16.4 15.0 15.0 14.0	22.0 21.0 20.0 19.1	13.0" 13.0" 15.0" 12.0"	863VT 864VT 867VT 868VT
Glazes, Engobes, Porcelain Enamel							

Nozzle No.	59ASS	59BSS	59CSS	63SS	63ASS	63BSS	63CSS	65SS	66SS	67SS	68SS
Orifice Size	.171	.218	.281	.028	.040	.046	.052	.059	.070	.086	.110

All needles and fluid nozzles are stainless steel unless otherwise specified.

\*Be certain your air supply is sufficient to operate nozzles selected.

†PE, Pressure feed-external; SE, Siphon feed-external; PI, Pressure feed-internal

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**2731R-2 Revisions:** Removed references to 95SLV Gun; (P1) Updated Package Contents; (P2) Revised Hookup instructions and illustrations; (P3) Added footnote to Item 5, indicated that Items 29 through 34 are optional, changed Item No. 41 to Part No. 7945S, changed nozzle numbers in Optional Nozzle Set-Ups Chart; (P7) Edited Needle Selection Chart.