

BINKS SV100 CONVENTIONAL SUCTION FEED SPRAY GUN

The following instructions provide the necessary information for the proper maintenance of the Binks SV100 suction feed spray gun. Please read and understand all the information in this document in order to get the maximum performance from your new SV100 suction spray gun.

The SV100 spray gun is the result of quality engineering and development activity. The result is an ergonomic product with reduced triggering effort and fine atomization. The specification table details the operating parameters of the gun. In addition, the relatively low air flow rate of the SV100 spray gun will help in containing overspray.

The SV100 spray gun should be operated under the safety directions outlined in this literature. Your safety and the safety of others depend on your thorough understanding of the material contained on the Part Sheet.

If you have any questions or do not understand the content in this literature, call your nearest service representative.

SPECIFICATIONS

Max. Air Pressure:	175 psi/12 bar
Gun Body:	Cast Aluminum
Fluid Path:	Stainless Steel
Fluid Nozzle:	Stainless Steel
Fluid Needle:	Stainless Steel
Fluid Inlet Size:	3/8" NPS(M)
Air Inlet Size;	1/4" NPS(M)
Gun Weight:	1.17 lbs. (532 g)
SV100-630K	@30 psi 8 cfm
Air Consumption:	@50 psi 11 cfm



In this part sheet, the words **WARNING**, **CAUTION** and **NOTE** are used to emphasize important safety information as follows:

WARNING

Hazards or unsafe practices which could result in severe personal injury, death or substantial property damage.

CAUTION

Hazards or unsafe practices which could result in minor personal injury, product or property damage.

NOTE

Important installation, operation or maintenance information.

WARNING

Read the following warnings before using this equipment.



READ THE MANUAL

Before operating finishing equipment, read and understand all safety, operation and maintenance information provided in the operation manual.



OPERATOR TRAINING

All personnel must be trained before operating finishing equipment.



EQUIPMENT MISUSE HAZARD

Equipment misuse can cause the equipment to rupture, malfunction, or start unexpectedly and result in serious injury.



LOCK OUT / TAG-OUT

Failure to de-energize, disconnect, lock out and tag-out all power sources before performing equipment maintenance could cause serious injury or death.



AUTOMATIC EQUIPMENT

Automatic equipment may start suddenly without warning.



PRESSURE RELIEF PROCEDURE

Always follow the pressure relief procedure in the equipment instruction manual.



KEEP EQUIPMENT GUARDS IN PLACE

Do not operate the equipment if the safety devices have been removed.



KNOW WHERE AND HOW TO SHUT OFF THE EQUIPMENT IN CASE OF AN EMERGENCY



WEAR SAFETY GLASSES

Failure to wear safety glasses with side shields could result in serious eye injury or blindness.



INSPECT THE EQUIPMENT DAILY

Inspect the equipment for worn or broken parts on a daily basis. Do not operate the equipment if you are uncertain about its condition.



NEVER MODIFY THE EQUIPMENT

Do not modify the equipment unless the manufacturer provides written approval.



NOISE HAZARD

You may be injured by loud noise. Hearing protection may be required when using this equipment.



PROJECTILE HAZARD

You may be injured by venting liquids or gases that are released under pressure, or flying debris.



PINCH POINT HAZARD

Moving parts can crush and cut. Pinch points are basically any areas where there are moving parts.



STATIC CHARGE

Fluid may develop a static charge that must be dissipated through proper grounding of the equipment, objects to be sprayed and all other electrically conductive objects in the dispensing area. Improper grounding or sparks can cause a hazardous condition and result in fire, explosion or electric shock and other serious injury.



WEAR RESPIRATOR

Toxic fumes can cause serious injury or death if inhaled. Wear a respirator as recommended by the fluid and solvent manufacturer's Safety Data Sheet.



TOXIC FLUID & FUMES

Hazardous fluid or toxic fumes can cause serious injury or death if splashed in the eyes or on the skin, inhaled, injected or swallowed. LEARN and KNOW the specific hazards of the fluids you are using.



FIRE AND EXPLOSION HAZARD

Improper equipment grounding, poor ventilation, open flame or sparks can cause a hazardous condition and result in fire or explosion and serious injury.



MEDICAL ALERT

Any injury caused by high pressure liquid can be serious. If you are injured or even suspect an injury:

- Go to an emergency room immediately.
- Tell the doctor you suspect an injection injury.
- Show the doctor this medical information or the medical alert card provided with your airless spray equipment.
- Tell the doctor what kind of fluid you were spraying or dispensing.



GET IMMEDIATE MEDICAL ATTENTION

To prevent contact with the fluid, please note the following:

- Never point the gun/valve at anyone or any part of the body.
- Never put hand or fingers over the spray tip.
- Never attempt to stop or deflect fluid leaks with your hand, body, glove or rag.
- Always have the tip guard on the spray gun before spraying.
- Always ensure that the gun trigger safety operates before spraying.



PROP 65 WARNING

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

IT IS THE RESPONSIBILITY OF THE EMPLOYER TO PROVIDE THIS INFORMATION TO THE OPERATOR OF THE EQUIPMENT. FOR FURTHER SAFETY INFORMATION REGARDING THIS EQUIPMENT, SEE THE GENERAL EQUIPMENT SAFETY BOOKLET (77-5300).

Binks reserves the right to modify equipment specification without prior notice.

OPERATION AND MAINTENANCE FOR SV100 SPRAY GUN

Your new SV100 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.

SET-UP FOR SPRAYING

Connecting Gun To Air Hose

Air should be supplied by a suitable length of 5/16" diameter air hose fitted with a 1/4" NPS(f) connection at gun end. For hose lengths over 50', use 3/8" diameter hose.

SPRAY GUN CLEANING INSTRUCTIONS

In certain states it is now against the law to spray solvents containing Volatile Organic Compounds (VOC)'s into the atmosphere when cleaning a spray gun.

In order to comply with these air quality laws Binks recommends one of the following two methods to clean your spray finishing equipment:

1. Spray solvent through the gun into a closed system. An enclosed unit or spray gun cleaning station condenses solvent vapors back into liquid form which prevents escape of VOC's into the atmosphere.
2. Place spray gun in a washer type cleaner. This system must totally enclose the spray gun, cups, nozzles and other parts during washing, rinsing and draining cycles. This type of unit must be able to flush solvent through the gun without releasing any VOC vapors into the atmosphere.

Additionally, open containers for storage or disposal of solvent or solvent-containing cloth or paper used for surface preparation and clean-up may not be used. All containers shall be nonabsorbent.

Pointers On Cleaning

When used with 1 quart cup, relieve pressure in the cup. Then unscrew, empty and carefully rinse cup out with thinners. Place clean thinners in the cup and spray this through the gun until it is clean. Blow air through gun to dry it.

CAUTION

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 cannot be turned by hand easily, make sure you have the correct parts, unscrew, realign, and try again. NEVER use undue force in mating parts.

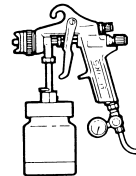
AIR PRESSURE

Atomizing pressure must be set properly to allow for the drop in air pressure between the regulator and the spray gun.

With 60 psi applied at air supply



Cross section view showing comparison of inside hose diameters (actual size). 60 lbs. regulated pressure



Only 30 PSI at gun inlet
25 feet of 1/4" I.D. hose causes a drop of 26 PSI between the air supply and the gun.
(NOT RECOMMENDED)



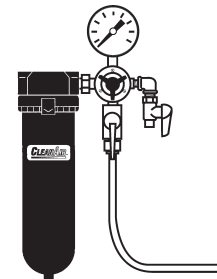
50 PSI at gun inlet
25 feet of 5/16" I.D. hose causes a drop of 12 PSI between the air supply and the gun. For this reason Binks recommends the use of 5/16" hose.
(RECOMMENDED)

Separator filter is important.

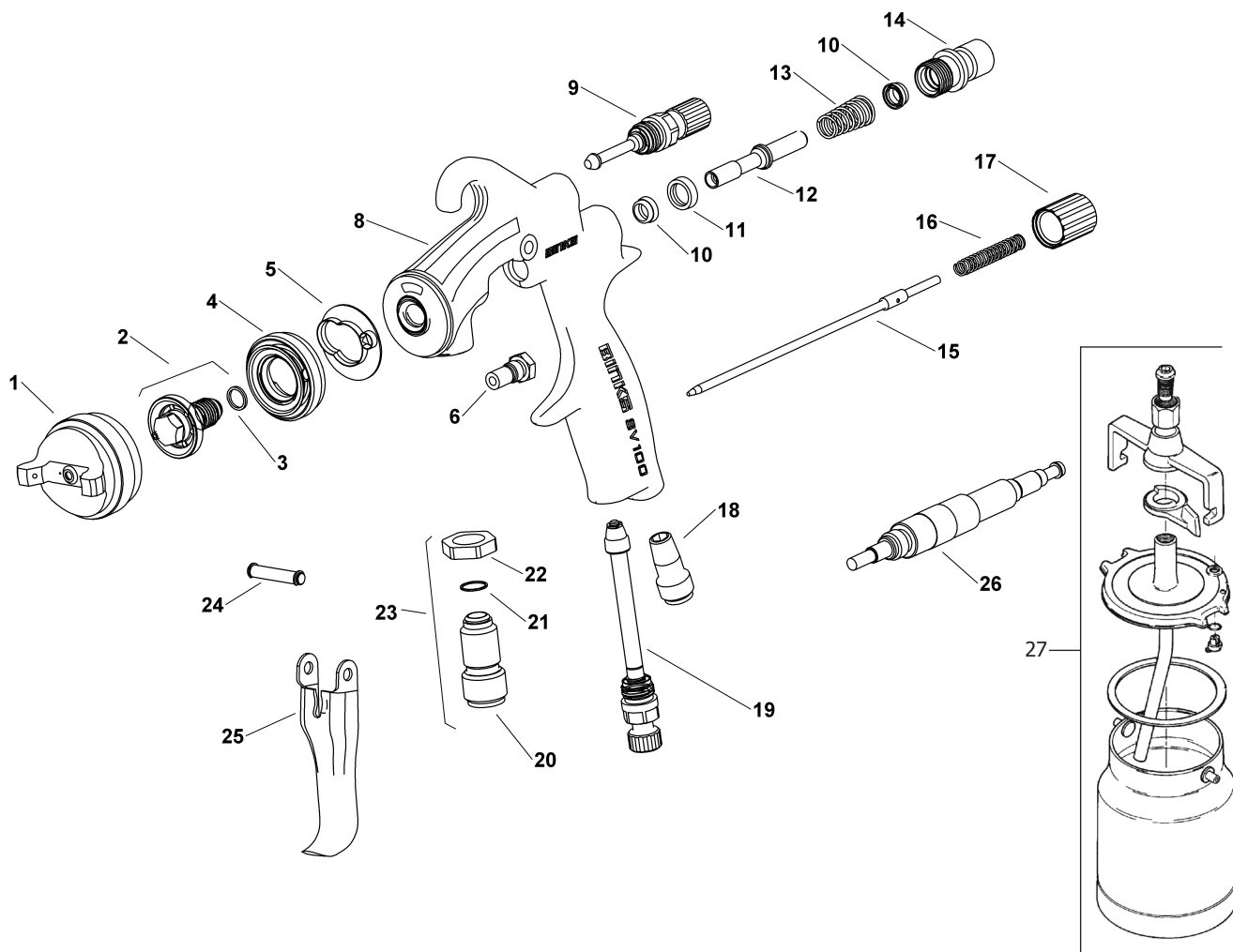
Achieving a fine spray finish without the use of a good separator filter is virtually impossible.

A Binks regulator / separator filter serves a double purpose. It eliminates blistering and spotting by keeping air free of oil and water, and it gives precise air pressure control at the gun.

Binks recommends using Model HFRL-508 Separator Filter / Regulator. See your local distributor for other models.



BINKS SV100 CONVENTIONAL SUCTION FEED SPRAY GUN



PARTS LIST

(When ordering, please specify Part No.)

ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	SV100-630K	AIR CAP	1	19	SGK-457	AIR ADJUSTING VALVE ASSEMBLY	1
2★	—	FLUID TIP 1.8 mm w/GASKET.....	1	20	—	FLUID NIPPLE.....	1
3■	—	GASKET.....	1	21	—	WASHER.....	1
4●	—	BAFFLE.....	1	22	—	NUT	1
5■▼	—	GASKET	1	23	—	FLUID NIPPLE ASSEMBLY	1
6★■▼	—	PACKING w/NUT	1	24	—	TRIGGER PIN ASSEMBLY	1
8	—	GUN BODY	1	25	—	TRIGGER.....	1
9●	—	SPRAY PATTERN VALVE	1	26■	—	ASSEMBLY TOOL.....	1
10■	—	U-CUP SEAL.....	2	27	81-800	1 QT. SIPHON CUP (ALUMINUM).....	1
11■	—	AIR VALVE SEAT	1				
12	—	AIR VALVE STEM.....	1				
13■	—	AIR VALVE SPRING	1				
14	—	AIR VALVE BUSHING.....	1				
15★	—	FLUID NEEDLE 1.8 mm.....	1				
16★	—	FLUID NEEDLE SPRING	1				
17	—	FLUID ADJUSTMENT KNOB.....	1				
18	—	NIPPLE.....	1				

- ★ K-5054 Suction Gun Fluid Tip and Needle Replacement Kit
- K-5057 Soft Parts Kit
- ▼ SGK-537-K Packing and Baffle Gasket (5 ea.)
- SGK-454-K Spray Pattern Valve and Baffle

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SPRAY TECHNIQUE

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 fluid.

The distance between gun and surface should be 8 to 10 inches depending on fluid and atomizing pressure. The fluid deposited should always be even and wet. Lap each stroke over the preceding stroke to obtain a uniform finish. Use 50% overlap.

NOTE

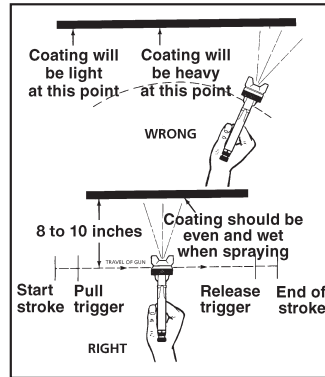
To reduce overspray and obtain maximum efficiency always spray with the lowest possible atomizing air pressure.

GENERAL SPRAY INSTRUCTIONS

To reduce overspray and obtain maximum efficiency, always spray with the lowest possible fluid/air pressure that produces an acceptable spray pattern.

Excessive atomizing air pressures can increase overspray, reduce transfer efficiency, and with some materials, result in poor finish quality from dry spray.

OPERATING THE SV100 SPRAY GUN



For best results, use 3 to 6 psi fluid pressure. Higher than 6 psi fluid pressure may be required for heavy-bodied materials. Low fluid pressures will produce a narrower than normal spray pattern. Generally use 30-35 psi air at gun inlet. Unusually heavy, difficult to atomize fluids may require up to 50 psi air at gun inlet.

CONTROLLING THE FAN SPRAY

The fan spray is controlled by means of the spray pattern valve. Turning this control clockwise until it is closed will give a round spray; turning it counterclockwise will widen the spray into a fan shape. The fan spray can be turned anywhere through 360° by positioning the air nozzle relative to the gun. To accomplish this, loosen retaining ring, position nozzle, then tighten retaining ring.

AIR NOZZLE, FLUID NOZZLE, FLUID NEEDLE

1. All nozzles and needles are precision made. They should be handled with care.
2. 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.

TROUBLESHOOTING

Faulty Spray

A faulty spray pattern is often caused by improper cleaning resulting in dried materials around the fluid nozzle tip or in the air nozzle. Soak these parts in thinners to soften the dried material and remove with a brush or cloth.

CAUTION

Never use metal instruments to clean the air or fluid nozzles. These parts are carefully machined and any damage to them will cause faulty spray.

If either the air nozzle or fluid nozzle are damaged, these parts must be replaced before perfect spray can be obtained.

Intermittent Spray

If the spray flutters, it is caused by one of the following faults:

1. Insufficient fluids available. Check supply and replenish if necessary.
2. Fluid tip not tightened sufficiently.
3. Packing loose or worn.

NOTES

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WARRANTY POLICY

Binks products are covered by Finishing Brands one year materials and workmanship limited warranty. The use of any parts or accessories, from a source other than Finishing Brands, will void all warranties. For specific warranty information please contact the closest Finishing Brands location listed below.

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Binks is part of Finishing Brands, a global leader in innovative spray finishing technologies. For technical assistance or to locate an authorized distributor, contact one of our international sales and customer support locations below.

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