Binks Model 95 SPRAY GUN

Model 95 Signature Series Spray Gun

This handheld gun is the premier spray gun in the Binks line. A combination of the three best industrial spray guns, Model 95 sets a new standard.

The Model 95 is a high production gun with stainless steel fluid passages which may be used with most coatings. This new gun replaces Models 18, 62 and BBR spray guns, incorporating the best features of all three: drop-forged anodized alumninum body, stainless steel fluid passages, adjustable floating needle valve, stainless steel or tungsten carbide fluid nozzle, plated drop-forged brass self-centering air nozzle, brass air valve cartridge, adjustable spray pattern, 3/8" NPS(m) fluid inlet, 1/4" NPS(m) air inlet. Weight 1 lb., 11 oz.

Illustration Key

1. Air Nozzle Assembly
2. Gun Body
3. Side Port Controls
4. Fluid Control Knob
5. Air Connection 1/4" NPS(m)
6. Fluid Connection 3/8" NPS(m)

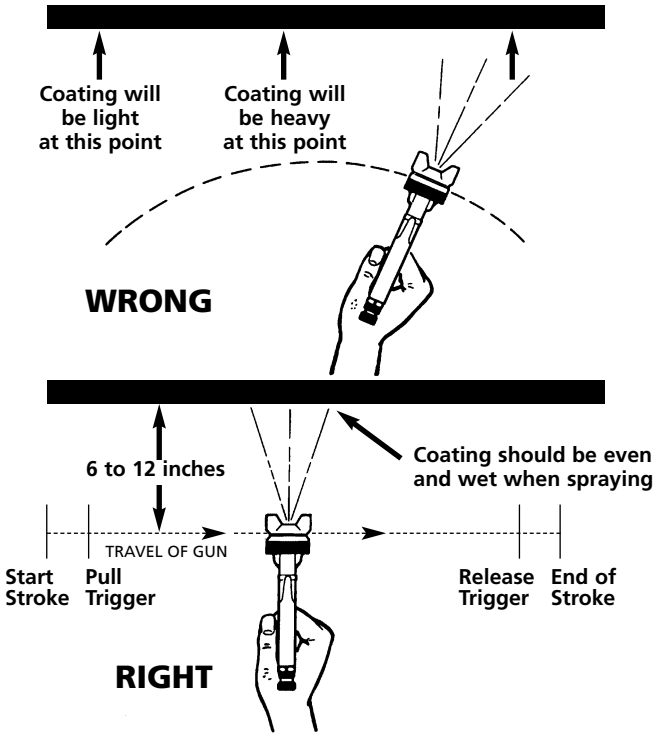
GUN HANDLING

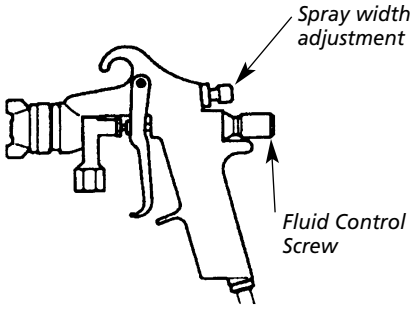
The first requirement for a good resultant finish is the proper handling of the gun. The gun should be held perpendicular to the surface being covered and moved parallel with it. The stroke should be started before the trigger is pulled and the trigger should be released before the stroke is ended. This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

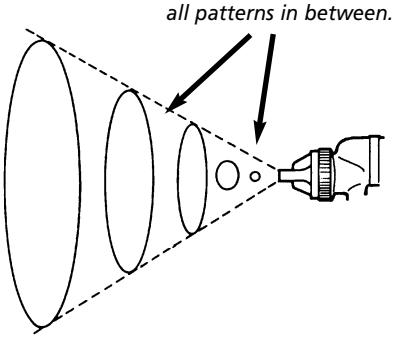
Turn clockwise for round, counterclockwise for fan.

FLUID CONTROL SCREW

Turn clockwise to decrease flow, counterclockwise to increase flow.

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.

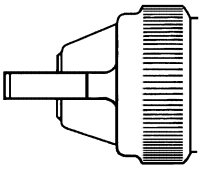
The spray pattern of the Binks gun is variable from round to flat with all patterns in between.



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.

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.



PRESSURE SPRAYING

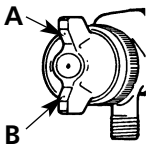
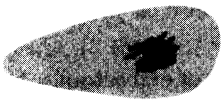
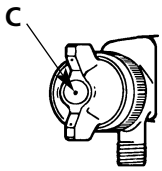
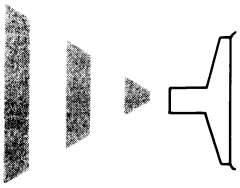
After selecting correct size fluid orifice, set fluid pressure for desired flow. Open atomization air and test spray. If spray is too fine, reduce air pressure. If spray is too coarse, raise air pressure. Adjust pattern width and repeat adjustment of spray.

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

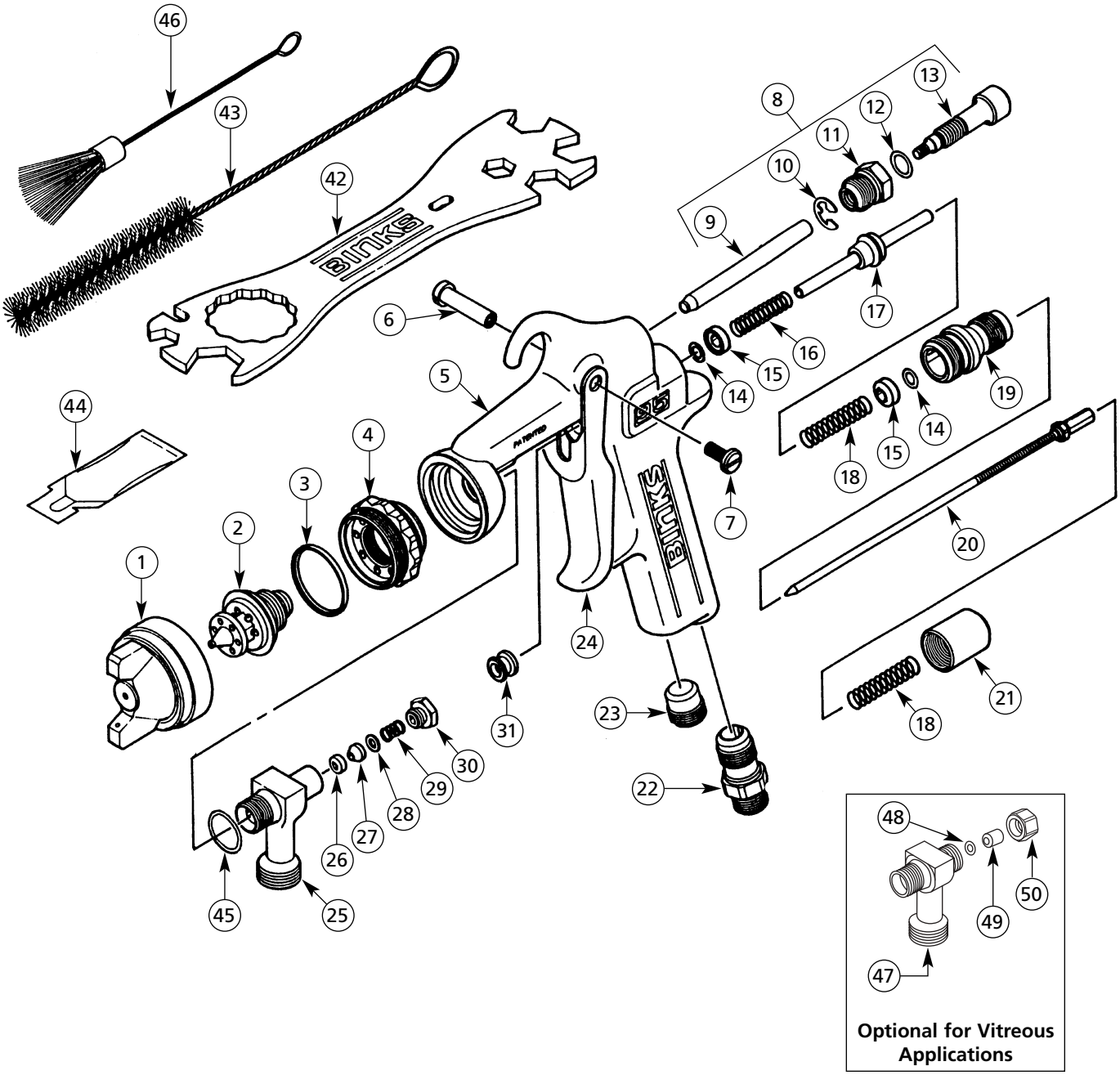
NOTE

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

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.* 	*Dissolve material in Side-Ports with thinner, then blow Gun clean. Do not poke into openings with metal instruments.*
	*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.* 	*Remove Air Nozzle and wipe off Fluid Tip using rag wet with thinner. Tighten Air Nozzle.*
	*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* ***(2)*** *Attempting to get too wide a spray pattern with thin material.*	*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.*
	***(1)*** *Dirt between Fluid Nozzle Seat and Body or loosely installed Fluid Nozzle will make Gun spit.* **(2)** *A loose or defective Swivel Nut on Siphon Cup or Material Hose can cause spitting.*	*To correct cause:* ***(1)*** *Remove Fluid Nozzle, clean back of Nozzle and Fluid Inlet Seat in Gun Body using rag wet with thinner. Then, replace Nozzle and draw up tightly against Head Insert and Fluid Inlet.* ***(2)*** *Tighten or replace Swivel Nut.*

Binks Model 95 SPRAY GUN



PARTS LIST

(When ordering, please specify Part No.)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	*	AIR CAP ASSEMBLY	1
2	*	FLUID NOZZLE (Stainless Only)	1
3	54-918●■	SEALING RING	1
4	54-4215	HEAD INSERT	1
5	54-4205	95 SERIES GUN HANDLE	1
6	54-3580	TRIGGER STUD	1
7	54-3581	TRIGGER SCREW	1
8	54-4216	SLIDE PORT CONTROL ASSEMBLY	1
9	54-4219	CONTROL STEM	–
10	54-3511■	RETAINING RING	–
11	54-4218	CONTROL BODY	–
12	20-6160■♦	O-RING	–
13	54-4217	CONTROL SCREW	–
14	20-4615■♦	O-RING	2
15	54-3515	HOUSING	2
16	54-3520■♦	SPRING (Yellow)	1
17	54-3512■♦	SPINDLE ASSEMBLY	1
18	54-3518■♦	SPRING (Blue – 6 lbs., 8 oz.)	2
19	54-3541	HOUSING	1
20	*	NEEDLE ASSEMBLY (Stainless Only)	1
21	54-3606	MATERIAL VALVE CONTROL KNOB	1
22	54-768	AIR CONNECTION	1
23	54-3504	PLUG	1
24	54-3578	TRIGGER	1
25	54-4210	FLUID INLET	1
26	54-4264●■	GLAND ADAPTER	–
27	54-4265●■	NEEDLE SEAL	–
28	54-4266●■	SEAL BACKUP	–
29	54-4267●■	SPRING	–
30	54-4263●■	PACKING NUT	–
31	54-3513	VALVE SPINDLE CAP	1
43	82-469	GUN BRUSH	1
44	54-3871	GUNNERS MATE (3cc)	1
45	54-3592●■	COPPER GASKET	1

32 THRU 41 — OPTIONAL NOZZLE SET-UPS (See chart below)

OPTIONAL ACCESSORIES (Please order separately)

42	54-4213	WRENCH (Optional)	1
46	82-221	GUN BRUSH (Optional)	1
—	6-428	GUNNERS MATE (2oz)	1

OPTIONAL SPRINGS (Please order separately)

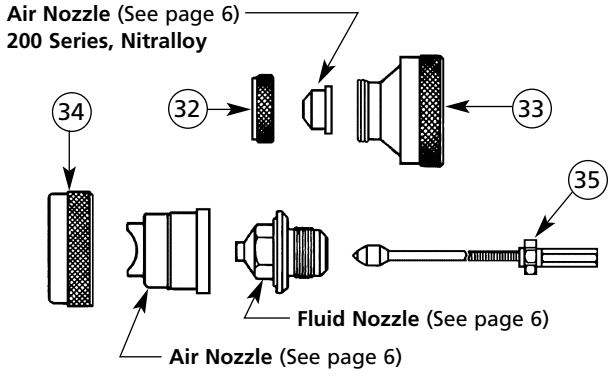
18	54-3559	HEAVY DUTY SPRING (Stainless Steel – 8 lbs., 14 oz.)	1
18	54-4427	HEAVY DUTY SPRING (29 lbs.)	1

* See Air Cap, Fluid Nozzle, and Needle Selection Chart page 5.
■ Part of Repair Kit 54-3577 (Fluid Inlet and Air Valve Kit). Available only as a part of its assembly.
● Part of Repair Kit 54-4225 (Fluid Inlet Packing Kit).
♦ Part of Repair Kit 54-4226 (Air Valve Spindle Kit).

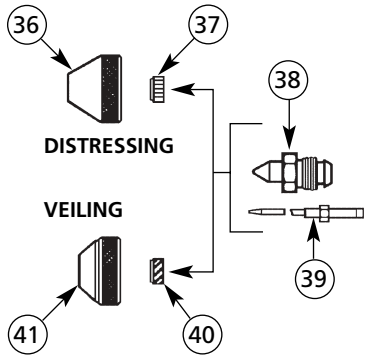
OPTIONAL NOZZLE SET-UPS

ITEM NO.	PART NO.	DESCRIPTION	QTY.
32	54-1584	RETAINER RING	1
33	54-1583	NOZZLE TIP BASE ASSEMBLY	1
34	54-2065	RING	1
35	659	NEEDLE ASSEMBLY	1
36	797	AIR NOZZLE	1
37	790	STRAIGHT CORE	1
38	794SS	FLUID NOZZLE	1
39	694	NEEDLE ASSEMBLY	1
40	792	SPIRAL CORE	1
41	793	AIR NOZZLE	1

INTERNAL MIX HEAVY MATERIAL NOZZLES (OPTIONAL)



SPECIAL EFFECTS NOZZLES (OPTIONAL)



FOR VITREOUS APPLICATIONS – PLEASE ORDER SEPARATELY

ITEM NO.	PART NO.	DESCRIPTION	QTY.
47	54-4568	FLUID INLET	1
48	20-2227●■	O-RING	1
49	54-4531●■	PACKING SPACER	1
50	54-4542	NUT ASSEMBLY	1

● Part of Repair Kit 54-4225 (Fluid Inlet Packing Kit). ■ Part of Repair Kit 54-3577 (Fluid Inlet and Air Valve Kit). Available only as a part of its assembly.

NOZZLE and NEEDLE SELECTION CHARTS

TYPE OF FLUID TO BE SPRAYED	FLUID X AIR NOZZLES	NOZZLE TYPE	CFM AT 30 PSI	CFM AT 50 PSI	CFM AT 70 PSI	MAX PATTERN AT 8"	FLUID NEEDLE NOS. FOR SPRAY GUN MODEL 95
VERY THIN	63ss x 63P	PE	4.5	7.5	10.0	5	663
14-16 secs. Zahn 2 Cup	63Bss x 63PB	PE	9.0	14.3	20.0	14	663A
Wash primers, dyes,	66ss x 66SD	SE	7.9	12.1	—	10.5	665
stains, solvents,	66ss x 66SK	SE	11.0	15.2	19.5	13	665
water, inks	63Bss x 200	PI	3.1	5.2	6.4	12	663A
THIN	63Ass x 63P	PE	5.1	8.37	12.2	11	663A
16-20 secs. Zahn 2 Cup	63Bss x 63PE	PE	9.5	15.0	20.0	13	663A
Sealer, lacquers, primers,	66ss x 66SK	SE	11.0	15.2	19.5	13	665
inks, lubricants,	63Bss x 200	PI	3.1	5.2	6.4	12	663A
zinc chromates, acrylics							
MEDIUM	63Bss x 63PB	PE	9.0	14.3	20.0	14	663A
19-30 secs. Zahn 2 Cup	63Css x 63PE	PE	9.5	15.0	20.0	13	663A
Synthetic enamels, varnishes,	66ss x 66SD	SE	7.9	12.1	—	11	665
shellacs, fillers, primers,	66ss x 66SK	SE	11.0	15.2	19.5	13	665
epoxies, urethanes, lubricants,	63Css x 200	PI	3.1	5.2	6.4	12	663A
wax emulsions, enamels							
HEAVY	67ss x 67PB	PE	9.5	14.9	19.5	12	667
(Cream-like)	68ss x 68PB	PE	9.5	14.1	19.1	12	668
Over 28 secs. No. 4 Ford Cup	67ss x 206	PI	6.0	9.5	13.0	15	667
VERY HEAVY	68ss x 68PB	PE	9.5	14.1	19.1	12	668
Texture coatings,	68ss x 206	PI	6.2	9.8	13.2	15	668
Road marking paint	59Ass x 244	PI	7.8	11.5	15.2	12	659
	59Ass x 245	PI	7.8	11.5	15.2	6	659
	59Bss x 251	PI	7.8	11.5	15.2	12	659
	59Bss x 252	PI	7.8	11.5	15.2	6	659
	59Css x 262	PI	7.3	11.0	14.7	6	659
	68ss x 206	PI	6.2	9.8	13.2	15	668
ADHESIVES	63Bss x 66SD-3	PE	7.9	12.1	16.2	4	663
Waterbase white vinyl glues	67ss x 67PB	PE	9.5	14.1	19.1	12	667
Solvent base, neoprenes	66ss x 66SD-3	PE	7.9	12.1	16.2	10	--
(contact cement)							
CERAMICS	67VT x 67PD	PE	10.0	15.0	20.0	15	667VT
Similar abrasive materials,	68VT x 68PB	PE	9.5	14.1	19.1	12	668VT
glazes, engobes,							
porcelain enamel							
BUFFING COMPOUNDS	64VT x 64PA	PE	12.1	15.0	21.0	13	664VT
	67VT x 67PD	PE	10.0	15.0	20.0	15	667VT
CONCRETE CURING COMPOUNDS	66ss x 200	PI	3.1	5.2	6.4	15	665
	67ss x 206	PI	6.0	9.5	13.0	18	667
	68ss x 206	PI	6.2	9.8	13.2	20	668
MULTICOLOR PAINTS	66ss x 200	PI	3.1	5.2	—	12	665
	67ss x 206	PI	6.0	9.5	—	15	667
TEFLONS	63Ass x 63PB	PE	9.0	14.3	20.1	10	663A
	66ss x 66SD	PE	7.9	12.1	—	7	665
HAMMERS	63ss X 63PB	PE	9.0	14.3	—	14	663A
	66ss X 63PB	PE	9.0	14.3	—	14	665
	66ss X 66SD	PE	7.9	12.1	—	7	665
WRINKLE ENAMELS	63Css x 63PB	PE	9.0	14.3	20.0	10	663A
	66ss x 63PB	PE	9.0	14.3	20.0	10	665
ZINC RICH COATINGS	66ss x 67PD	PE	12.0	18.0	24.0	15	665N
	67VT x 67PB	PE	9.5	14.1	19.1	12	667VT

Note: PE - Pressure External SP - Siphon External PI - Pressure Internal

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

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. Containers shall be nonabsorbent.

AIR AND FLUID NOZZLE CLEANING

A faulty spray pattern is often caused by improper cleaning resulting in dried materials around the material 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 material 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.

CLEANING GUN 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.

CLEANING GUN USED WITH PRESSURE CONTAINER

⚠ WARNING

Injection of material from the gun into the skin may result in serious personal injury. Shut off the air supply to the container and release the pressure on the container before attempting to clean the gun.

Hold a piece of cloth wadded in the hand over the gun nozzle and pull the trigger. The air will back up through the material nozzle and force the material out of the hose into the container. Empty container. Put enough thinners into the container to wash the hose and gun thoroughly and spray this through the gun until it is clean. Then blow out the material hose to dry it and remove all traces of material by attaching it to the air line.

CLEANING GUN USED WITH PAINT CIRCULATING SYSTEM

Shut off material supply and remove material hose from gun. Clean gun as used with siphon cup or pressure container or connect quick release on paint line solvent line. To ensure clean air to spray gun, use Binks oil and water extractor. See your Binks distributor for the correct model.

MAINTENANCE

TO REPLACE AIR VALVE AND SPINDLE ASSEMBLY

Remove material valve control knob (21), spring (18), and needle assembly (20). Unscrew housing (19), and remove spindle assembly (17) with springs (16 & 18), housings (15), and o-rings (14). Lubricate new o-rings with Gunners Mate.

Assemble components using material needle. Place this assembly along with housing (19) into gun body and screw into position. Remove material needle (20) and tighten housing (19).

TO REPLACE NEEDLE SEAL AND GLAND ADAPTER IN FLUID INLET

Remove material valve control knob (21) and spring (18) and pull out needle assembly (20). Unscrew packing nut (30) and remove spring (29) and seal backup (28). Using a no. 10 x 1-1/4" coarse-thread wood screw (Binks Part No. 20-6536) or small sheet metal screw, remove the needle seal (27) and gland adapter (26). Replace gland adapter (26) and needle seal (27). Re-insert seal backup (28) spring (29) and screw on packing nut (30) a couple of turns so it fits loosely by hand. Reassemble needle assembly (20), spring (18) and material valve control knob (21). Finally, tighten packing nut (30) until it bottoms out on fluid inlet (25).

ADJUSTMENT OF MATERIAL NEEDLE

The needle assembly is adjustable for length by means of the needle, needle cap and needle lock nut. These should be adjusted so that when the trigger tssembly is in contact with the spindle assembly (17), a movement of the spindle assembly of 1/16" thru 3/32" is required before the material needle moves.

Under no circumstances should the material valve open before the air valve.

LUBRICATION

Lubricate daily, all moving parts including trigger pivot point and air valve spindle and with Binks Gunners Mate (44).

TYPE OF INSTALLATION

SIPHON FEED CUP HOOKUP

Air pressure for atomization is regulated at extractor. The amount of fluid is adjusted by fluid control screw on gun, viscosity of paint, and air pressure (see Fig. 1).

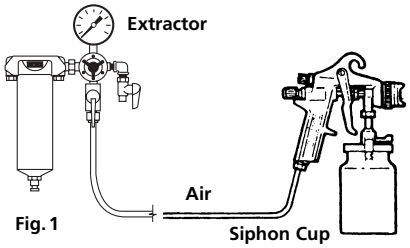


Fig. 1

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 fluid and internal mix nozzle spraying, fluid adjusted by control screw on gun.

Pressure cup also available less regulator (see Fig. 2, above right).

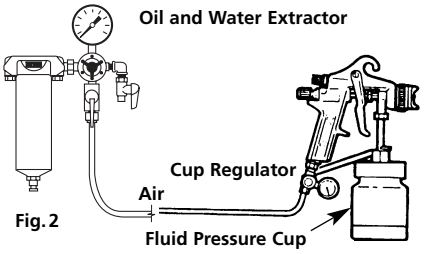


Fig. 2

PRESSURE FEED TANK HOOKUP

For medium production spraying (single regulator).

Air pressure for atomization is regulated at extractor, fluid pressure at tank regulator (see Fig. 3).

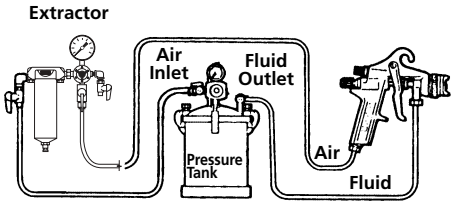


Fig. 3

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 (see Fig. 4).

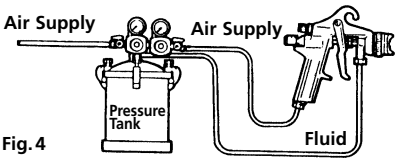


Fig. 4

PRESSURE FEED CIRCULATING HOOKUP

For heavy production spraying.

Air pressure atomization regulated at extractor. Fluid pressure regulated at fluid regulator (see Fig. 5).

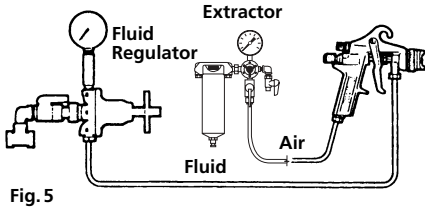
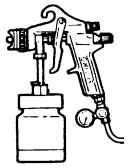
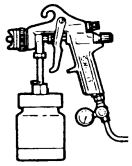


Fig. 5

AIR PRESSURE



Only 44 PSI
25 feet of 1/4" I.D. Hose causes a drop of 16 PSI between the air supply and the gun.

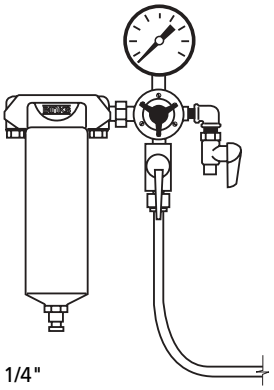


55 PSI
25 feet of 5/16" I.D. hose has a drop of only 5 PSI. For this reason we recommend the use of 5/16" hose.

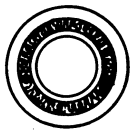
Atomizing pressure must be set to allow for the drop in air pressure between the regulator and the spray gun.

BINKS OIL AND WATER EXTRACTOR IS IMPORTANT.

Achieving a fine spray finish without the use of a good oil and water extractor is virutally impossible. A Binks 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 at the gun. See above regarding installation of extractors.



5/16"



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

1/4"

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2625R-3 Revisions: (P1) Text changes, including changing air nozzle reference from bronze to brass; (P4) Added bracket to show correct included parts in Part No. 8 assembly; (P5) Added Part No. 22, removed footnote on Part Nos. 42 and 46; (P8) Removed logos from all extractors.

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