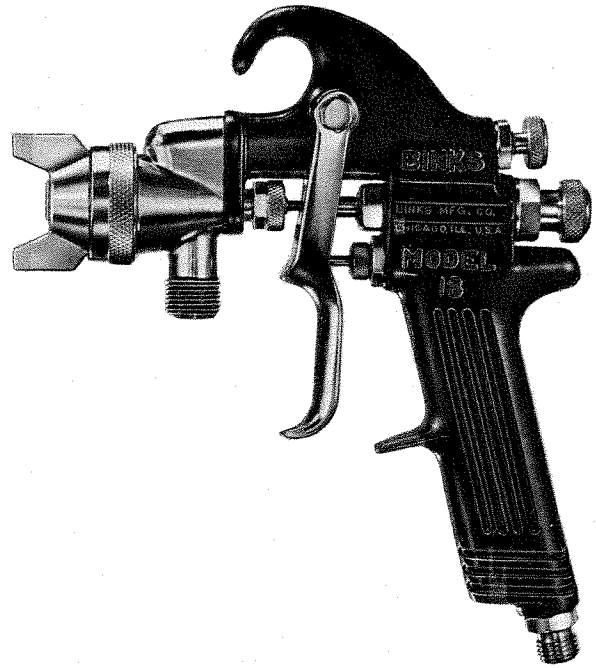
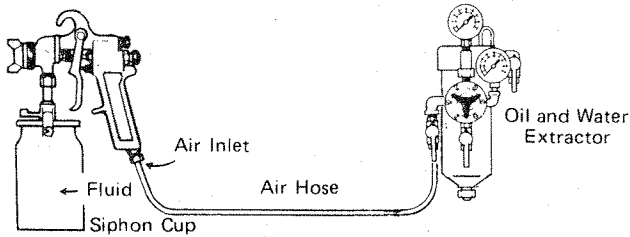


Binks MODEL 18 SPRAY GUN

Your new Binks 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.

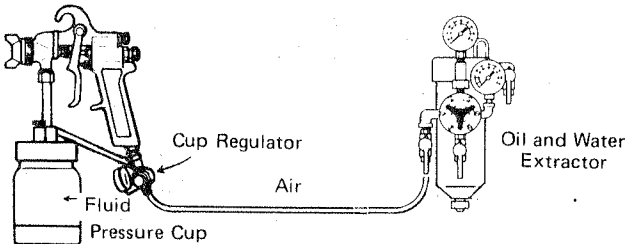


TYPES OF INSTALLATION



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.

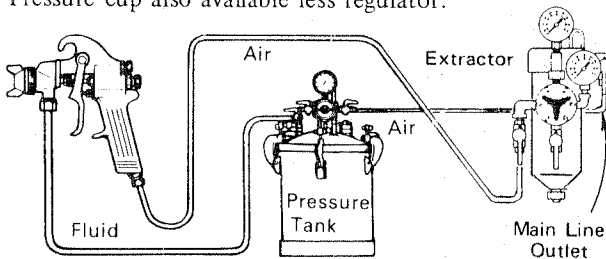


PRESSURE FEED CUP HOOKUP

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.

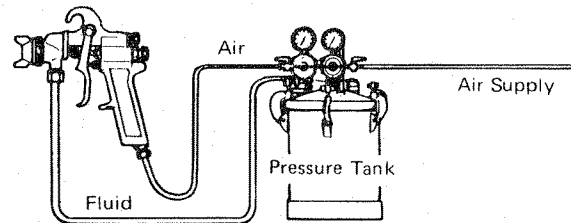
Pressure cup also available less regulator.



PRESSURE FEED TANK HOOKUP

For medium production spraying.
(Single regulator)

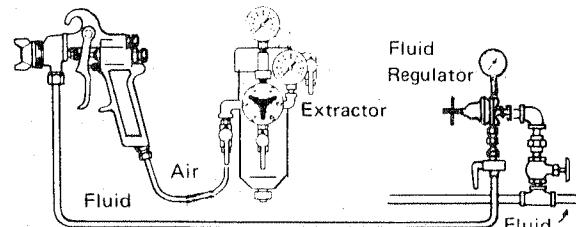
Air pressure for atomization is regulated at extractor, fluid pressure at tank regulator.



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.

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BINKS

MANUFACTURING COMPANY

9201 West Belmont Avenue, Franklin Park, Illinois 60131

Replaces
Part Sheet
1249R-14

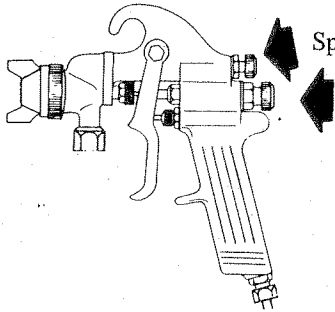
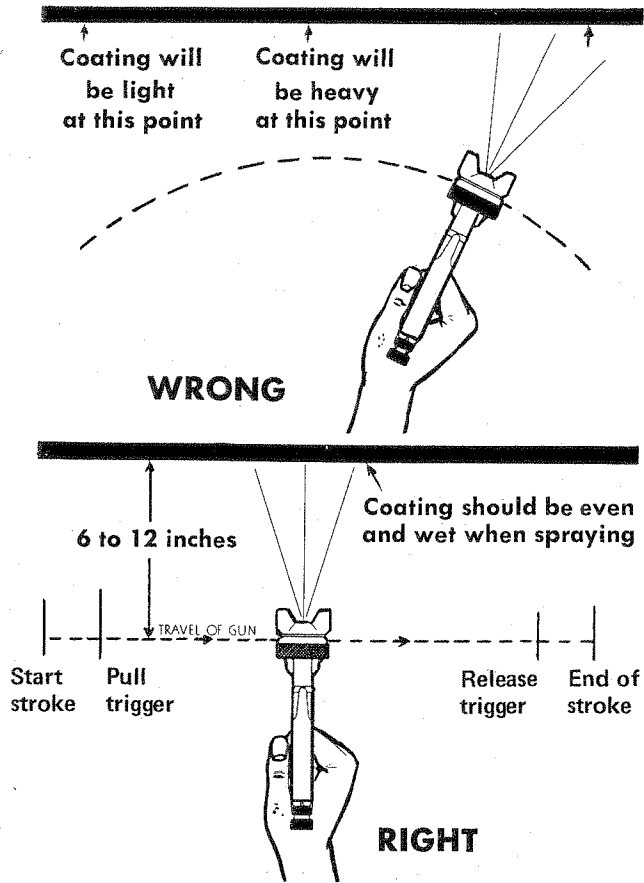
Part Sheet
1249R-15

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.

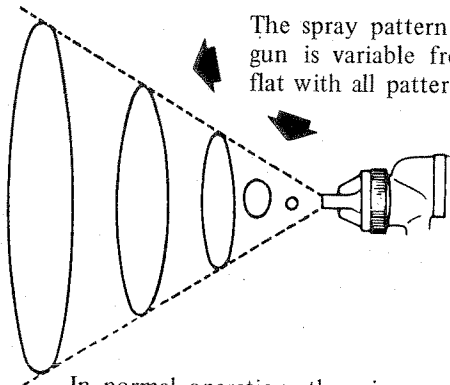
NOTE: To reduce overspray and obtain maximum efficiency; always spray with the lowest possible atomizing air pressure.



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

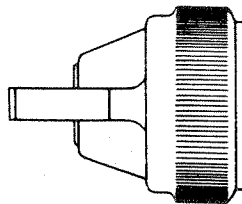
Fluid control screw. Turn to right to decrease flow, left to increase.

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.



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

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.


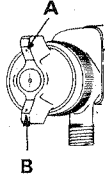

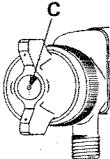

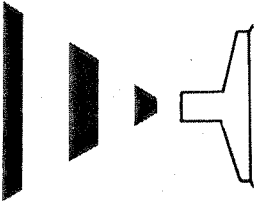
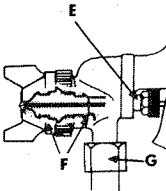
PRESSURE SPRAYING

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.

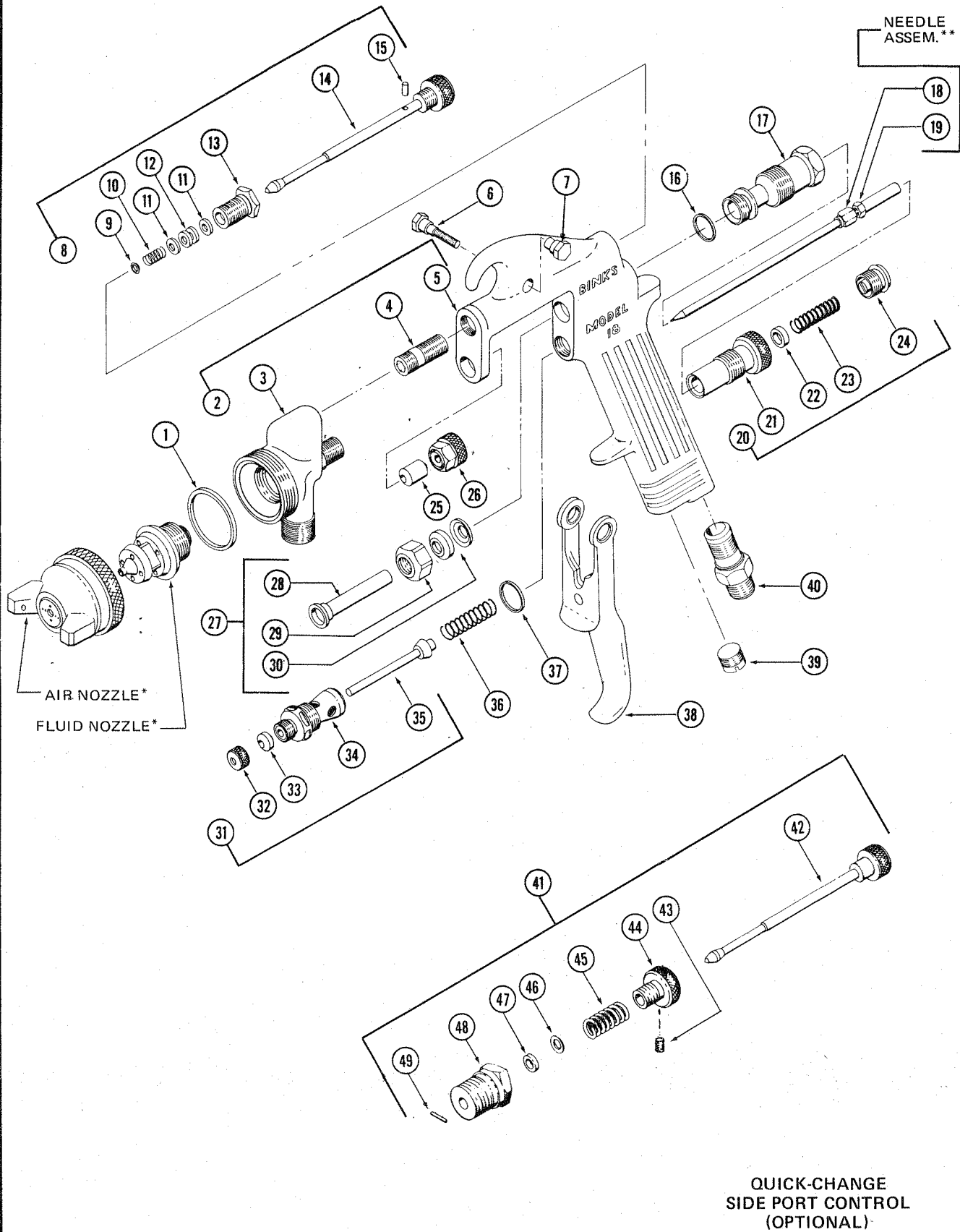
Keeping fluid control screw in open position will reduce fluid needle wear.

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

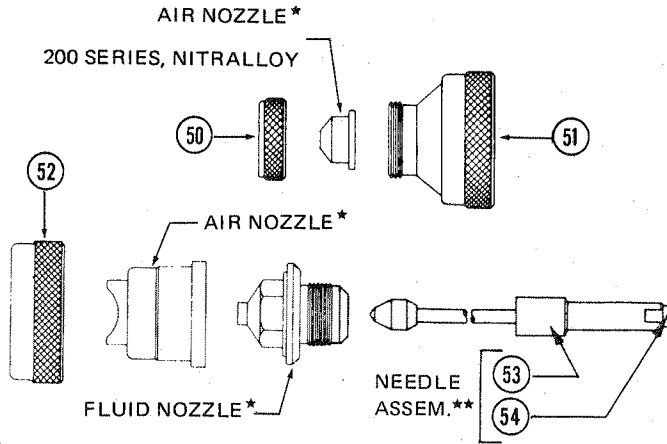
FAULTY PATTERNS and how to correct them

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 style="text-align: center;">SPITTING</p>	<p>(1) Dried out packing around material needle valve permits air to get into fluid passage-way. 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.</p> <p>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>

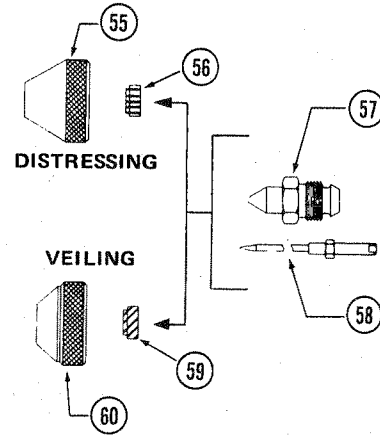
BINKS MODEL 18 SPRAY GUN



**INTERNAL MIX HEAVY MATERIAL NOZZLES
(OPTIONAL)**



**SPECIAL EFFECTS NOZZLES
(OPTIONAL)**



PARTS LIST

(When ordering, please specify PART NO.)

ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
	*	AIR NOZZLE	1	31	54-1341	AIR VALVE ASSEMBLY	1
	*	FLUID NOZZLE	1	32	54-1340	AIR VALVE PACKING NUT	1
	**	NEEDLE ASSEMBLY	1	33♦♦	54-747	AIR VALVE PACKING	1
1♦♦	54-918	GASKET	1	34	54-751	AIR VALVE BODY	1
2	54-1067	GUN BODY ASSEMBLY	1	35●	54-744	AIR VALVE STEM	1
3	54-1068	GUN HEAD	1	36●	54-750	AIR VALVE SPRING	1
4	54-710	SCREW	1	37♦♦	54-749	AIR VALVE GASKET	1
5	54-1404	BODY ASSEMBLY	1	38	54-753	TRIGGER	1
6●	54-759	TRIGGER SCREW	1	39	54-714	PLUG (included in item 5)	1
7●	54-760	TRIGGER STUD	1	40	54-768	AIR CONNECTION	1
8	54-1064	SIDE PORT CONTROL ASSEM	1	41 *	54-1795	QUICK-CHANGE SIDE PORT CONTROL	1
9	54-1015	SIDE PORT CONTROL WASHER	1	42	54-1793	STEM	1
10●	54-304	SIDE PORT CONTROL SPRING	1	43	20-3593	SCREW	1
11	54-1016	PACKING WASHER	2	44	54-1790	SCREW	1
12♦♦	54-738	SIDE PORT CONTROL PACKING	2	45	54-1804	SPRING	1
13	54-1063	SIDE PORT CONTROL BODY	1	46	55-634	RING	1
14	54-1062	SIDE PORT CONTROL SCREW	1	47	55-541	PACKING	1
15●	54-1014	SIDE PORT CONTROL PIN	1	48	54-1794	BODY	1
16♦♦	54-723	FLUID CONTROL GASKET	1	49	84-95	PIN	1
17	54-1065	FLUID CONTROL HOUSING	1	50	54-1584	RETAINER RING	1
18	54-1070	LOCKNUT	1	51	54-1583	NOZZLE TIP BASE ASSEMBLY	1
19	54-1069	LOCKNUT	1	52	54-2065	RING	1
20	54-1077	FLUID CONTROL ASSEMBLY	1	53	54-882	LOCKNUT	1
21	54-1075	FLUID CONTROL	1	54	54-883	LOCKNUT	1
22	54-727	FLUID CONTROL RING	1	55	797	AIR NOZZLE	1
23●	54-728	FLUID CONTROL SPRING	1	56	790	STRAIGHT CORE	1
24	54-1076	FLUID CONTROL SCREW	1	57	794	FLUID NOZZLE	1
25♦♦	54-764	FLUID PACKING	1	58	792	NEEDLE ASSEMBLY	1
26	54-765	NEEDLE PACKING NUT	1	59	792	SPIRAL CORE	1
27	54-1378	SLEEVE ASSEMBLY	1	60	793	AIR NOZZLE	1
28	54-1059	SLEEVE	1		5-461	WRENCH (not shown)	1
29	54-721	WIPER CUP RETAINER	1		82-221	FLAT BRUSH (not shown)	1
30♦♦	54-722	WIPER CUP	2				

★ When ordering, please specify number stamped on nozzle. See Nozzle Selection Chart, page 6.
 ★★ When ordering, please specify gun model and number stamped on needle stem.
 ● Parts included in Repair Kit 6-189.
 ♦♦ Also available in Packing Kit 6-214. Please order separately.
 * Optional accessory. Includes items 42 through 49. Please order separately.

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	
			30 PSI	50 PSI	70 PSI			
VERY THIN 14-16 SECS—NO. 2 ZAHN	63 x 63P	PE	4.5	7.5	10.0	5.0"	63	
	63A x 63P	PE	5.1	8.7	12.2	11.0"	63A	
	63B x 63PB	PE	9.0	14.3	20.0	14.0"	63A	
WASH PRIMERS DYES STAINS SOLVENTS WATER INKS	66 x 66SD	SE	7.9	12.1		10.5"	65	
	66 x 66SK	SE	11.0	15.2	19.5	13.0"	65	
	63A x 220	PI	2.2	3.0	5.0	RD.	63A	
	63B x 200	PI	3.1	5.2	6.4	12.0"	63A	
	63C x 204	PI	3.9	5.5	7.4	9.0"	63A	
THIN 16-20 SECS—NO. 2 ZAHN	63A x 63P	PE	5.1	8.7	12.2	11.0"	63A	
	63B x 63PJ	PE	9.5	14.2	19.0	15.0"	63A	
	63B x 63PE	PE	9.5	15.0	20.0	13.0"	63A	
	66 x 66SA	SE	4.4	7.1		10.0"	65	
	66 x 66SG	SE	6.8	10.5		8.0"	65	
	66 x 66SH	SE	7.8	12.0		12.0"	65	
	66 x 66SK	SE	11.0	15.2	19.5	13.0"	65	
	63A x 220	PI	2.2	3.0	5.0	RD.	63A	
	63B x 200	PI	3.1	5.2	6.4	12.0"	63A	
	63C x 204	PI	3.9	5.5	7.4	9.0"	63A	
	MEDIUM 19-30 SECS—NO. 2 ZAHN	63B x 63PB	PE	9.0	14.3	20.0	14.0"	63A
		63C x 63PE	PE	9.5	15.0	20.0	13.0"	63A
SYN. ENAMELS VARNISHES SHELLACS FILLERS PRIMERS EPOXIES URETHANES LUBRICANTS WAX EMULSIONS	63C x 63PR	PE	9.5	15.5	19.5	18.0"	63A	
	65 x 63PK	PE	11.0	16.5	22.0	15.0"	65	
	66 x 66SF	SE	8.0	12.0		11.0"	65	
	66 x 66SH	SE	7.8	12.0		12.0"	65	
	66 x 66SD	SE	7.9	12.1		11.0"	65	
	66 x 66SK	SE	11.0	15.2	19.5	13.0"	65	
	63C x 200	PI	3.1	5.2	6.4	12.0"	63A	
	66 x 204	PI	3.9	5.5	7.4	9.0"	65	
	HEAVY (CREAM-LIKE) OVER 28 SECS—NO. 4 FORD	66 x 204	PI	3.9	5.5	7.4	9.0"	65
		67 x 206	PI	6.0	9.5	13.0	15.0"	67
		68 x 201	PI	4.6	6.8	9.1	11.0"	68
66 x 63PB		PE	9.0	14.3	20.0	14.0"	65	
67 x 67PB		PE	9.5	14.9	19.5	12.0"	67	
68 x 68PB		PE	9.5	14.1	19.1	12.0"	68	
VERY HEAVY		68 x 206	PI	6.2	9.8	13.2	15.0"	68
		68 x 68PB	PE	9.5	14.1	19.1	12.0"	68
UNAGGREGATED BLOCK FILLERS TEXTURED COATINGS FIRE RETARDANTS ROAD MARKING PAINT BITUMASTICS	59A x 241	PI	4.1	6.0	8.2	12"	59	
	59A x 242	PI	4.1	6.0	8.2	6"	59	
	59A x 243	PI	6.4	10.0	13.4	RD.	59	
	59A x 244	PI	7.8	11.5	15.2	12"	59	
	59A x 245	PI	7.8	11.5	15.2	6"	59	
	59B x 250	PI	7.3	11.0	14.7	RD.	59	
	59B x 251	PI	7.8	11.5	15.2	12"	59	
	59B x 252	PI	7.8	11.5	15.2	6"	59	
	59C x 260	PI	7.8	11.5	15.2	RD.	59	
	59C x 261	PI	8.0	12.0	15.9	12"	59	
	59C x 262	PI	10.0	11.0	20.0	7"	59	
	ADHESIVES WATERBASE WHITE VINYL GLUE SOLVENT BASE NEOPRENES (CONTACT CEMENTS)	63CSS x 63PB	PE	9.0	14.3	20.0	14.0"	63A
		66SS x 63PR	PE	9.5	15.5	19.5	15.0"	65
67SS x 67PB		PE	9.5	14.1	19.1	12.0"	67	
63 x 66SD		PE	7.9	12.1	16.2	4.0"	63	
63A x 66SD		PE	7.9	12.1	16.2	7.0"	63A	
63B x 66PJ		PE	9.5	14.2	19.0	10.0"	63A	

ORIFICE SIZE REFERENCE CHART

NOZZLE NO.	59A	59B	59C	63	63A	63B	63C	65	66	67	68
ORIFICE SIZE	.171"	.218"	.281"	.028"	.040"	.046"	.052"	.059"	.070"	.086"	.110"

- ◆ Be certain your air supply is sufficient to operate nozzles selected.
- * PE, Pressure feed, external
- SE, Siphon feed, external
- PI, Pressure feed, internal

Fluid Nozzles available in either carbon steel or stainless steel

For stainless steel add SS to nozzle number, i.e. 63SS.
(264D & 794 are stainless steel)

(59C not available in stainless steel)

All needles are hardened stainless steel.

For additional nozzle information, see Bulletin A46-4.

Binks MODEL 18 SPRAY GUN 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.

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.

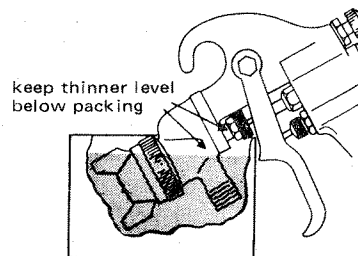
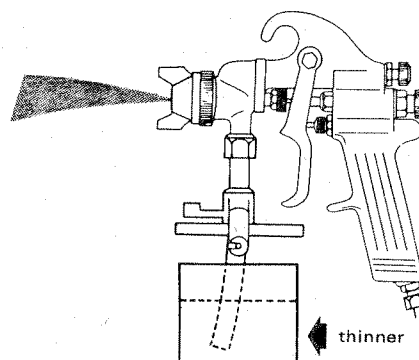
POINTERS ON CLEANING

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.

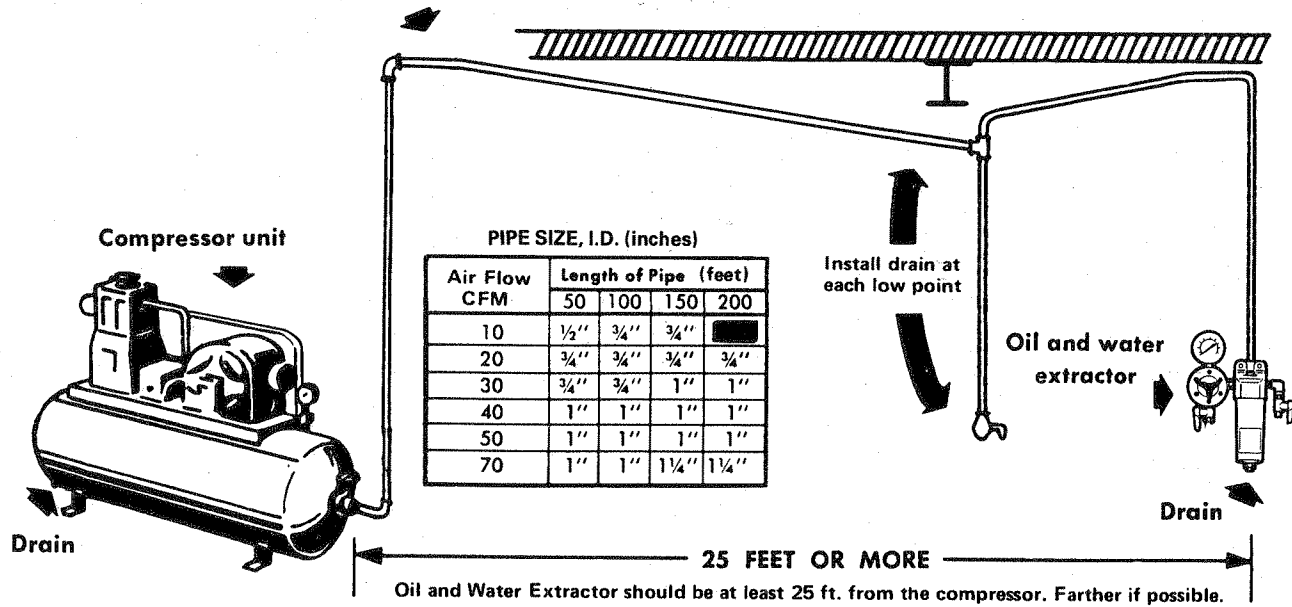
WHEN USED WITH PRESSURE TANK

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.



AIR SUPPLY

Pitch pipe away from air receiver



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

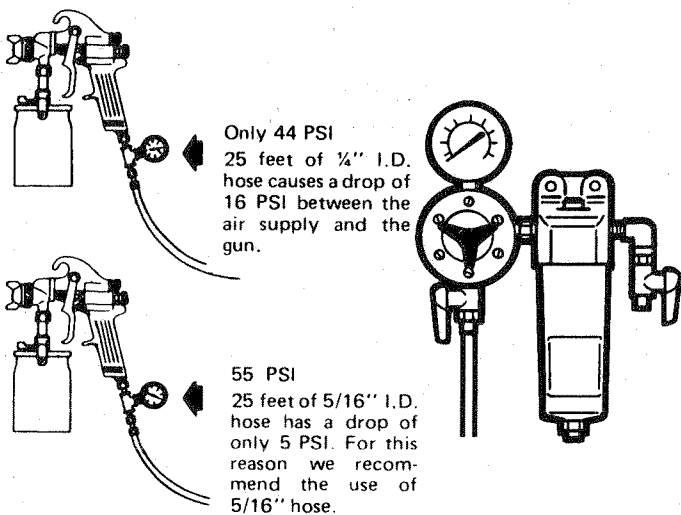
The temperature of air is greatly increased during compression. As the air cools down to room temperature, in the air line, on its way to the spray gun, the moisture contained in it condenses. Thus, for maximum effectiveness, the oil and water extractor should be mounted at some point in the air supply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

AIR PRESSURE

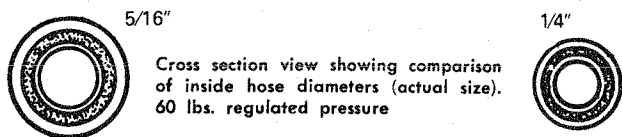


Binks oil and water extractor is important

A Binks Extractor serves a double purpose. It eliminates blistering and spotting by keeping air free from oil and water . . . and its precision air regulator makes possible perfect air pressure control at the gun.

The best spray gun in the world will not operate efficiently without a good compressor and a good oil and water extractor. If you are attempting to get a fine finish without the use of an oil and water extractor you will not succeed.

See below for instructions regarding installation of extractors.



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