

# Bandit 2 Quart

DISTRIBUTED BY: Pro Wood Finishes 14622 Southlawn Lane Rockville MD 20850 Ph: (301) 424-3033

# 51-600(A) & 51-602(A)

2 QUART PRESSURE CUP PART SHEET PRODUCT INFORMATION



51-600 SINGLE REGULATED

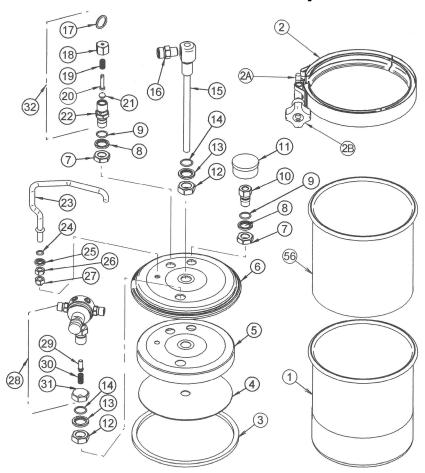
51-602 DOUBLE REGULATED

**51-600A AGITATED (1 REG)** 

**51-602A AGITATED (2 REG)** 

The Bandit 2 quart pressure cup features a stainless steel clamp band which provides 360 degree clamp pressure between the lid and canister.

## 51-600 Bandit Pressure Cup Assembly

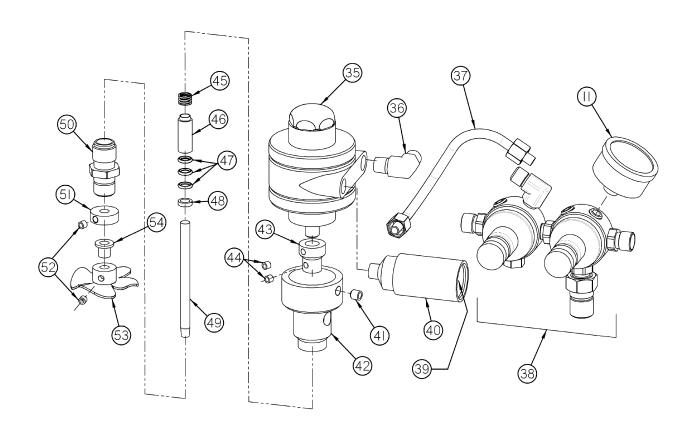


ITEM NO.	PART NO.	DESCRIPTION	ITEM NO.	PART NO.	DESCRIPTION
1	51-634	Cannister	17	51-623	Pull Ring
2	51-611	Band Clamp	18	51-638	Relief Valve Cap
2A	51-645	T-Bolt for Band	19	51-618	Relief Valve Spring
2B	51-646	Knob for Band - Cast Iron	20	51-631	Relief Valve Stem
3	51-620-5	Gasket (5 Pack)	21	98-0132	Ball
4	51-633	Splash Guard	22	51-617	Pressure Relief Body
4	51-657	Splash Guard (Agitated)	23	51-642	Handle
5	51-613	Inner Lid		51-667	Handle (Agitated)
6	51-635E	Outer Lid	24	98-8011	O-Ring
7	98-0119	9/16-18 Locknut	25	51-629	Seal Plate
8	51-632	Seal Plate	26	98-0118	5/16-18 Locknut
9	98-8015	O-Ring	27	98-0124	Acorn Nut
10	51-624	Pressure Gage Fitting	28	51-616	Regulator Assembly
11	52-53 (standard)	Pressure Gage (0 to 15 PSI)	Not Show n	52-222-Reversed	Optional 2nd Regulator**
11	52-52 (optional)	Pressure Gage (0 to 60 PSI)*	29	51-636	Check Poppet
12	98-0120	5/8-18 Locknut	30	51-619	Spring
13	51-628	Seal Plate	31	51-643	Retaining Cap
14	98-8016	O-Ring	32	51-630	Relief Valve Assembly
15	51-625	Fluid Outlet Assembly	33	51-644	Spacer (15 PSI Regulator)
16	53-555	Fluid Outlet Nipple	56	51-637-12	Plastic Liner (12 Pack)

<sup>\*</sup>To convert unit to 0-50 PSI, remove item 33 and replace pressure gage with P/N 52-52

<sup>\*\*</sup>Second regulator to convert unit to double regulated (51-222)

## 51-670 Bandit Agitator Sub-Assembly



TEM NO.	PART NO.	DESCRIPTION	ITEM NO.	PART NO.	DESCRIPTION
34	51-658	Splash Guard Retainer	48	51-654	Low er Shaft Guide
35	51-677	Air Motor	49	51-651	Agitator Shaft
36	98-0182	Elbow Fitting	50	51-653	Seal Housing
37	51-663	Hose Assembly	51	51-659	Slinger Ring
38	51-669	Dual Regulator Assembly	52	98-0179	Set Screw
40	51-271	Muffler Assembly	53	51-648	Impeller
41	98-0178	Set Screw	54	51-649	Impeller Sleeve
42	51-676	Motor Base	55	51-671	Splash Guard Spacer
43	51-678	Shaft Coupling	Not Show n	10-5	Regulator Repair Kit
44	98-0178	Set Screw	Not Show n	10-120	Air Motor Rebuild Kit
45	51-656	Seal Spring	Not Show n	10-121	Shaft Seal & Bearing Kit
46	51-655	Upper Shaft Guide	Note: Air moto	or performance is not g	uaranteed after field repair. Facto
47	98-8010	O-Ring		of air motor is recom	mended for best results.

<sup>\*</sup>To convert unit to 0-50 PSI, remove item 33 and replace pressure gage with P/N 52-52

<sup>\*\*</sup>Second regulator to convert unit to double regulated (51-222)

### WARNING! MAX WORKING PRESSURE 50 PSI

### **REMOVE THE LID**

## COMPLETELY RELIEVE PRESSURE IN CANISTER BEFORE ATTEMPTING TO REMOVE THE LID!

- 1. Loosen the clamp knob completely until it stops (by holding the clamp ends together with one hand the knob can be loosened to the stop rapidly).
- 2. Disengage the T-bolt from one end of the clamp, spread the clamp only as much as necessary to clear the lid and lower clamp down around the canister.

### INSTALLING LID AND CLAMP

- 1. Place lid assembly on cannister; it is self centering with the canister.
- 2. With the T-bolt disengaged, spread the clamp and place into position from above the lid.
- 3. Engage the T-bolt into the end of the clamp and tighten the knob. (By drawing the clamp ends together with one hand, the knob can be advanced rapidly before final tightening).





BINKS.

## **BINKS "TROPHY" SERIES**

PRESSURE AND SIPHON FEED HVLP, LVMP & CONVENTIONAL

## **MANUAL SPRAY GUNS**

(2465-XXXX-XXXX)

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Binks Trophy Series Spray Gun is the premier spray gun for use in pressure and siphon feed spray applications and sets a new standard in durability, ergonomics, and atomization. The lightweight ergonomic design offers unsurpassed comfort and control. The latest advanced atomization technology has been incorporated for achieving consistent, fine finishes when spraying a wide range of industrial coating applications.

Binks Trophy Series Spray Guns can be used with pumps, pressure pots, pressure cups, or siphon cups.

Binks Trophy Series Spray Guns are offered in three different atomization technologies: HVLP, LVMP and Conventional.

The Trophy HVLP Series of Spray Guns can be used to operate at high transfer efficiencies in compliance with "California South Coast Air Quality Management District" regulations as a High Volume, Low Pressure spray gun.



### **SPECIFICATIONS**

Maximum Air Pressure	140 psi / 9.6 bar (P-1)	
Maximum Fluid Pressure	140 psi / 9.6 bar (P-2) (with standard spring)	
Maximum Fluid Pressure	300 psi / 20.6 bar (P-2) (with optional spring)	
Gun Body	Anodized Aluminum	
Fluid Path	Stainless Steel	
Fluid Inlet Size	3/8" NPS / BSP(m)	
Air Inlet Size	1/4" NPS / BSP(m)	
Gun Weight	14 oz. / 410 grams	
Wetted Parts	Stainless Steel & PTFE	

### IMPORTANT! DO NOT DESTROY

It is the customer's responsibility to have all operators and service personnel read and understand this manual.

Contact your local Binks representative for additional copies of this manual.

READ ALL INSTRUCTIONS BEFORE OPERATING THIS BINKS PRODUCT.

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

### **A** WARNING

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

### **A** CAUTION

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

### NOTE

Important installation, operation or maintenance information.

### **A 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.



#### WEAR SAFETY GLASSES

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



### DE-ENERGIZE, DEPRESSURIZE, DISCONNECT AND LOCK OUT ALL POWER SOURCES DURING MAINTENANCE

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



#### 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.



### KEEP EQUIPMENT GUARDS IN PLACE

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



#### 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.



### 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.



#### 



#### PRESSURE RELIEF PROCEDURE

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



#### **NOISE HAZARD**

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



#### 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.



#### FIRE AND EXPLOSION HAZARD

Never use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in equipment with aluminum wetted parts. Such use could result in a serious chemical reaction, with the possibility of explosion. Consult your fluid suppliers to ensure that the fluids being used are compatible with aluminum parts.



#### 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 BINKS AND DEVILBISS EQUIPMENT, SEE THE GENERAL EQUIPMENT SAFETY BOOKLET (77-5300).

### **EC Declaration of Conformity**

Manuf. By: Finishing Brands

195 Internationale Blvd. Glendale Heights, IL 60139

Type/Series: Handheld Spray Guns Model: Binks "Trophy" Series

The equipment to which this document relates is in conformance with the following standards or other normative references:

**BS EN ISO 12100:2010** and **BS EN 1953:1998 + A1:2009** and thereby conform to the protection requirements of Council Directive 2006/42/EC relating to Machinery Safety Directive, and;

BS EN 13463-1:2009, Council Directive 94/9/EC relating to Equipment and Protective Systems for use in Potentially Explosive Atmospheres, protection level II 2 G X.

Approved By: Marvin Burns Date: August 1, 2013

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



### TYPES OF INSTALLATION

Air pressure for atomization is regulated at the extractor. The flow of the fluid is adjusted by the fluid valve control knob on gun, viscosity of paint and air pressure.

## PRESSURE CUP HOOKUP (Figure 1)

For fine finishing with limited spraying. Air pressure for atomization is regulated at extractor; fluid pressure at cup regulator. Pressure cup is also available less regulator.

## PRESSURE TANK WITH 2 REGULATORS (Figure 2)

The pressure to the tank is regulated by the first regulator. The pressure for atomization is regulated by the second regulator.

## PRESSURE CIRCULATING HOOKUP (Figure 3)

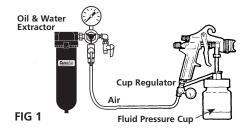
For heavy production spraying. Air pressure atomization regulated at extractor. Fluid pressure regulated at fluid regulator.

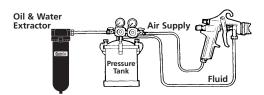
## SIPHON FEED HOOKUP (Figure 4)

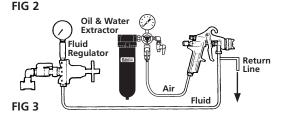
Air pressure for atomization is regulated at extractor. The amount of fluid is adjusted by fluid control screw on gun, viscosity of paint, and air pressure.

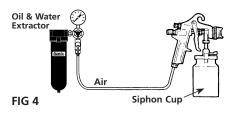
## FLUID PUMP HOOKUP (Figure 5)

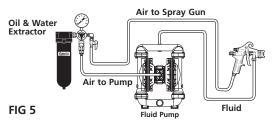
For medium production spraying (single regulator). Air pressure for atomization is regulated at extractor, fluid pressure at pump regulator.











### **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



### RECOMMENDED

48 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.



### NOT RECOMMENDED

Only 34 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.

# An oil and water extractor is important.

Achieving a fine spray finish without the use of a good oil and water extractor is virtually impossible.

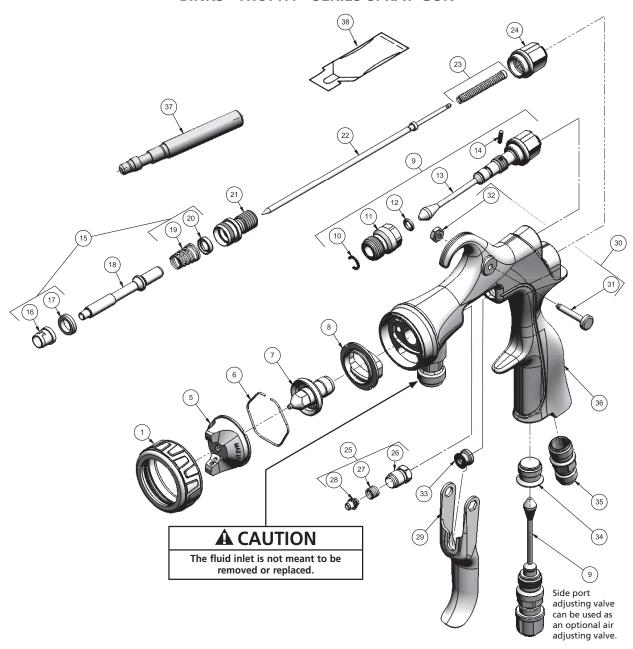
A regulator/extractor serves a double purpose. It eliminates blistering and spotting by keeping air free of oil and

water, and it gives precise air pressure control at the gun.

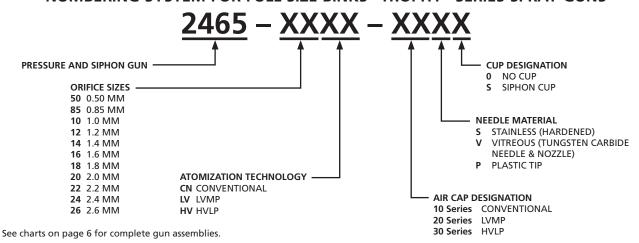
Use DeVilbiss oil and water extractors and regulators. See your local distributor for models.



### **BINKS "TROPHY" SERIES SPRAY GUN**



### NUMBERING SYSTEM FOR FULL SIZE BINKS "TROPHY" SERIES SPRAY GUNS



### CHART 1: BINKS "TROPHY" SERIES SPRAY GUN PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION		QTY.
1	54-6120		AIR CAP RETAINING RING ASSEMBLY	
5	SEE CHARTS ON PAGE 7		AIR CAP	1
6	JGA-156-K10		SPRING-CLIP (KIT OF 10)	1
7	SEE CHARTS BELOW		FLUID NOZZLE	1
8	54-6102-K3		BAFFLE/SEPARATOR (KIT OF 3)	1
9	54-6122		SIDE PORT VALVE ASSEMBLY	1
10		+ Δ	RETAINING CLIP	1
11		+	BODY BUSHING	1
12		+ Δ	O-RING	1
13		+	SIDE PORT STEM	1
14		+ Δ	PIN	
15	54-6131-K	۵	AIR VALVE SERVICE KIT	
16		•	FRONT SEAL – AIR VALVE	1
17		•	FRONT AIR VALVE SEAL	1
18	54-6109	۵	AIR VALVE SPINDLE	1
19		•	AIR VALVE SPRING	
20		•	REAR SEAL – AIR VALVE	1
21	SN-66		HOUSING	1
	47-6825		NEEDLE – STAINLESS STEEL (STD.) MARKING: I	1
	SEE CHART #2		NEEDLE – FEATHERING	1
22	47-6830		NEEDLE – TUNGSTEN CARBIDE MARKING: II	
	47-6826		NEEDLE – PLASTIC TIP MARKING: III	1
			SPRING/PAD ASSEMBLY	1
23	54-6133-K3		SPRING/PAD ASSEMBLY (STANDARD) (KIT OF 3)	1
	54-6134-K		SPRING/PAD ASSEMBLY KIT – HEAVY DUTY (OPTIONAL)	1

ITEM NO.	PART NUMBER		DESCRIPTION	
24	54-6111		KNOB – NEEDLE ADJUSTING	1
25	54-6130-K		NEEDLE PACKING KIT (STANDARD)	1
25	54-6129-K		NEEDLE PACKING KIT (VITREOUS)	1
26		*	NUT – PACKING	1
27		*	SPRING FOR PACKING	1
28			NEEDLE PACKING (STANDARD)	1
			NEEDLE PACKING (VITREOUS KIT OF 3)	1
29	54-4360		TRIGGER	1
30	54-6132-K		TRIGGER SCREW NUT KIT	1
31		0	TRIGGER SCREW	1
32		0	TRIGGER NUT	1
33	54-3513		SPINDLE CAP	1
34	SN-11		PLUG	1
35	54-6112		FITTING – AIR INLET	1
36			GUN BODY WITH FLUID INLET	1
37			TOOL – SEAL INSERTION	1
38			GUNNER'S MATE (3 CC BAG)	1

### FOR SIPHON GUNS ORDER CUP PART NUMBER 81-800

PARTS INCLUDED IN 54-6122
PARTS INCLUDED IN 54-6129-K
PARTS INCLUDED IN 54-6130-K
ALSO AVAILABLE IN KIT OF 3 SN-2-K3
PARTS INCLUDED IN 54-6131-K

C	PARTS INCLUDED IN 54-6132-K
Δ	GTI-428-K5 SIDE PORT REPAIR KIT
*	ALSO AVAILABLE IN KIT OF 3 54-6119-K3
	PARTS INCLUDED IN 54-6135
	`

## CHART 2: STAINLESS STEEL FEATHERING NEEDLES AND NOZZLES – OPTIONAL

FEATHERIN NEEDLE PART NO	. N	IARKIN	IG ON EDLE		NOZZLE P/N CE SIZE)
47-6833		- 1	Ш	45-11050-12	1.2MM (.047")
47-6834		Ш	Ш	45-11050-14	1.4MM (.055")
47-6835		Ш	IIII	45-11050-18	1.8MM (.071")

## CHART 3: TUNGSTEN CARBIDE NOZZLES AND NEEDLES

NOZZLE SIZE	TC NOZZLE P.N.	TC NEEDLE P.N.
1.4 MM (.055")	45-11080-14	47-6830
1.8 MM (.071")	45-11080-18	47-6830
2.2 MM (.086")	45-11080-22	47-6830
2.6 MM (.102")	45-11080-26	47-6830

## CHART 4: STAINLESS STEEL (HARDENED) FLUID NOZZLES – STD.

	STAINLESS FLUID NOZZLE ORIFICE SIZE			
.020"	.50 mm	45-11050-50		
.035"	.85 mm	45-11050-85		
.039"	1.0 mm	45-11050-10		
.047"	1.2 mm	45-11050-12		
.055"	1.4 mm	45-11050-14		
.063"	1.6 mm	45-11050-16		
.071"	1.8 mm	45-11050-18		
.079"	2.0 mm	45-11060-20		
.087"	2.2 mm	45-11060-22		
.102"	2.6 mm	45-11060-26		

### CHART 5: TEST AIR CAP KITS – OPTIONAL

CONVENTIO	ONAL			
54-6140-K	11-C KIT			
54-6141-K	12-C KIT			
54-6142-K	14-C KIT			
LVMP				
54-6146-K	22-L KIT			
54-6147-K	23-L KIT			
54-6149-K	25-L KIT			
HVLP				
54-6151-K	31-H KIT – HVLP			
54-6152-K	32-H KIT – HVLP			
54-6153-K	33-H KIT – HVLP			
54-6154-K	39-H KIT – HVLP			

## BINKS "TROPHY" SERIES SPRAY GUN PRESSURE FEED SPRAY GUN NEEDLE AND NOZZLE SELECTION GUIDE

### **CHART 6: CONVENTIONAL GUN SET-UPS**

TYPE OF FLUID TO BE SPRAYED	COMPLETE GUN ASSEMBLY PART NUMBER	FLUID NOZZLE AND AIR CAP
THIN	2465-10CN-11S0	1.0 mm (.039") X 11C
5-25 CENTIPOISE	2465-12CN-11S0	1.2 mm (.047") X 11C
15-19 sec. Zahn 2 cup	2465-14CN-11S0	1.4 mm (.055") X 11C
wash primers, dyes, stains, solvents,	2465-16CN-11S0	1.6 mm (.063") X 11C
water, inks, sealers,	2465-16CN-12S0	1.6 mm (.063") X 12C
laquers, lubricants, zinc chromates,	2465-16CN-12SS	1.6 mm (.063") X 12C ▲
acrylics	2465-18CN-12SS	1.8 mm (.070") X 12C ▲
	2465-12CN-11S0	1.2 mm (.047") X 11C
MEDIUM	2465-14CN-11S0	1.4 mm (.055") X 11C
25-70 CENTIPOISE 20-30 sec. Zahn 2 cup	2465-16CN-11S0	1.6 mm (.063") X 11C
synthetic enamels,	2465-16CN-12S0	1.6 mm (.063") X 12C
varnishes, shellacs,	2465-18CN-11S0	1.8 mm (.070") X 11C
fillers, primers, epoxies, urethanes,	2465-16CN-12SS	1.6 mm (.063") X 12C ▲
lubricants,	2465-18CN-12SS	1.8 mm (.070") X 12C ▲
wax emulsions, enamels	2465-20CN-14S0	2.0 mm (.079") X 14C
Chameis	2465-22CN-14S0	2.2 mm (.087") X 14C
	2465-16CN-11S0	1.6 mm (.063") X 11C
HEAVY	2465-16CN-12S0	1.6 mm (.063") X 12C
70-160 CENTIPOISE	2465-18CN-11S0	1.8 mm (.070") X 11C
31-66 sec. Zahn 2 cup	2465-20CN-14S0	2.0 mm (.079") X 14C
	2465-22CN-14S0	2.2 mm (.087") X 14C
ADHESIVES	2465-18CN-12SS	1.8 mm (.070") X 12C ▲
water based vinyl glues, solvent based neoprenes,	2465-20CN-14S0	2.0 mm (.079") X 14C
contact cements	2465-22CN-14S0	2.2 mm (.087") X 14C
MOLD RELEASE	2465-12CN-11S0	1.2 mm (.047") X 11C
CERAMICS	2465-14CN-14V0	1.4 mm (.055") X 14C ■
abrasive materials,	2465-18CN-14V0	1.8 mm (.070") X 14C ■
glazes, engobes, porcelain enamel	2465-22CN-14V0	2.2 mm (.087") X 14C ■
porceiain enamei	2465-26CN-14V0	2.6 mm (.102") X 14C ■
NON STICK	2465-10CN-11S0	1.0 mm (.039") X 11C
NON-STICK COATINGS	2465-12CN-11S0	1.2 mm (.047") X 11C
Cortilitos	2465-18CN-12SS	1.8 mm (.070") X 12C ▲
	2465-14CN-11S0	1.4 mm (.055") X 11C
HAMMERS	2465-16CN-11S0	1.6 mm (.063") X 11C
	2465-16CN-12S0	1.6 mm (.063") X 12C
WRINKLE	2465-14CN-11S0	1.4 mm (.055") X 11C
ENAMELS	2465-16CN-11S0	1.6 mm (.063") X 11C
ZINC RICH COATINGS	2465-22CN-14V0	2.2 mm (.087") X 14C ■

### **CHART 7: LVMP GUN SET-UPS**

TYPE OF FLUID TO BE SPRAYED	COMPLETE GUN ASSEMBLY PART NUMBER	FLUID NOZZLE AND AIR CAP
	2465-85LV-22S0	0.85 mm (.034") X 22L
	2465-10LV-22S0	1.0 mm (.039") X 22L
	2465-12LV-23S0	1.2 mm (.047") X 23L
THIN	2465-14LV-23S0	1.4 mm (.055") X 23L
5-25 CENTIPOISE	2465-16LV-23S0	1.6 mm (.063") X 23L
15-19 sec. Zahn 2 cup	2465-18LV-23SS	1.8 mm (.070") X 23L ▲
	2465-85LV-25S0	0.85 mm (.034") X 25L
	2465-10LV-25S0	1.0 mm (.039") X 25L
	2465-12LV-25S0	1.2 mm (.047") X 25L
	2465-12LV-23S0	1.2 mm (.047") X 23L
	2465-14LV-23S0	1.4 mm (.055") X 23L
MEDIUM	2465-16LV-23S0	1.6 mm (.063") X 23L
25-70 CENTIPOISE	2465-14LV-24S0	1.4 mm (.055") X 23L
	2465-18LV-23SS	1.8 mm (.070") X 23L ▲
20-30 sec. Zahn 2 cup	2465-12LV-25S0	1.2 mm (.047") X 25L
	2465-14LV-25S0	1.4 mm (.055") X 25L
	2465-18LV-25S0	1.8 mm (.070") X 25L

### **CHART 8: HVLP GUN SET-UPS**

TYPE OF FLUID TO BE SPRAYED	COMPLETE GUN ASSEMBLY PART NUMBER	FLUID NOZZLE AND AIR CAP
	2465-85HV-32S0	0.85 mm (.034") X 32H
	2465-85HV-33S0	0.85 mm (.034") X 33H
THIN	2465-85HV-31P0	0.85 mm (.034") X 31H ●
5-25 CENTIPOISE 15-19 sec. Zahn 2 cup	2465-10HV-32S0	1.0 mm (.039") X 32H
1	2465-10HV-33S0	1.0 mm (.039") X 33H
wash primers,	2465-10HV-31P0	1.0 mm (.039") X 31H ●
dyes, stains, solvents, water,	2465-12HV-32S0	1.2 mm (.047") X 32H
inks, sealers,	2465-12HV-31P0	1.2 mm (.047") X 31H ●
laquers, lubricants,	2465-18HV-32SS	1.8 mm (.070") X 32H ▲
zinc chromates, acrylics	2465-85HV-39S0	0.85 mm (.034") X 39H
acrylics	2465-10HV-39S0	1.0 mm (.039") X 39H
	2465-12HV-39S0	1.2 mm (.047") X 39H
	2465-12HV-32S0	1.2 mm (.047") X 32H
MEDIUM	2465-12HV-31P0	1.2 mm (.047") X 31H
25-70 CENTIPOISE	2465-14HV-32S0	1.4 mm (.055") X 32H
20-30 sec. Zahn 2 cup	2465-14HV-32SS	1.4 mm (.055") X 32H
synthetic enamels, varnishes, shellacs,	2465-14HV-31P0	1.4 mm (.055") X 31H ●
fillers, primers,	2465-16HV-32S0	1.6 mm (.063") X 32H
epoxies, urethanes,	2465-18HV-32S0	1.8 mm (.070") X 32H
lubricants, wax emulsions,	2465-18HV-32SS	1.8 mm (.070") X 32H ▲
enamels	2465-12HV-39S0	1.2 mm (.047") X 39H
	2465-14HV-39S0	1.4 mm (.055") X 39H
LIE AV/V	2465-14HV-32S0	1.4 mm (.055") X 32H
HEAVY 70-160 CENTIPOISE	2465-14HV-31P0	1.4 mm (.055") X 31H ●
31-66 sec. Zahn 2 cup	2465-16HV-32S0	1.6 mm (.063") X 32H
5 1-00 Sec. Zann Z cup	2465-18HV-32S0	1.8 mm (.070") X 32H

### **CHART 9: ROUND SPRAY GUN SET-UPS**

CIDAN SINCOND SINVI GON SET OF							
TYPE OF FLUID TO BE SPRAYED	COMPLETE GUN ASSEMBLY PART NUMBER	FLUID NOZZLE AND AIR CAP					
THIN 5-25 CENTIPOISE 15-19 sec. Zahn 2 cup	2465-12CN-16S0	1.2 mm (.047") X 16					
MEDIUM 25-70 CENTIPOISE 20-30 sec. Zahn 2 cup	2465-12CN-16S0	1.2 mm (.047") X 16					

<sup>•</sup> Plastic needle tip set-ups



<sup>▲</sup> Siphon set-up: includes Binks cup 81-800

<sup>■</sup> Tungsten carbide needle and nozzle set-ups

### BINKS "TROPHY" SERIES SPRAY GUN AIR CAP AND FLUID NOZZLE SELECTION CHARTS

	CHART 10: CONVENTIONAL AIR CAP AND FLUID NOZZLE SELECTION CHART								
Air Cap	Air Cap Part No.	Spray Pattern Range	CFM @ 30 PSI	CFM @ 50 PSI	CFM @ 70 PSI	Fluid Nozzle	Siphon or Pressure	Typical Coatings	
11-C	46-6500	8 – 12"	9.8	14.2	18.7	45-11050 series, 1.0 mm – 1.8 mm	Р	Stains, Primers, Lacquers, Enamels, Acrylics, Reduced Latex, Mold Release	
12-C	46-6501	4 – 12"	8.3	12.1	14.2	45-11050 series, 1.0 mm – 1.8 mm	P, S	Lacquers, Enamels, Top Coats, Low Viscosity Adhesives	
14-C	46-6503	8 – 14"	17.0	24.4	31.2	45-11060 series, 2.0 mm – 2.6 mm or 45-11080 Tungsten Carbide Series (VT), 1.4 mm – 2.6 mm	Р	Zinc Rich, Adhesives, Glazes, Engobies, Ceramics, Porcelain Enamels	

	CHART 11: LVMP – LOW VOLUME MEDIUM PRESSURE AIR CAP AND FLUID NOZZLE SELECTION CHART									
Air Cap	Air Cap Part No.	Spray Pattern Range	CFM @30 PSI Gun Inlet (Dynamic)	Fluid Nozzle	Siphon or Pressure	Typical Coatings				
22-L	46-6510	4 – 12"	11.2	45-11050 series, .5 mm – 1.6 mm	P, S	Stains, Primers, Lacquers, Enamels, Acrylics, Reduced Latex				
23-L	46-6511	4 – 12"	10.6	45-11050 series, 1.0 mm – 1.8 mm	P, S	Lacquers, Enamels, Top Coats, Low Viscosity Adhesives				
24-L	46-6512	2 – 6"	14.3	45-11050 series, .5 mm – 1.8 mm	P, S	Small Pattern Applications of Stains, Lacquers, Enamels, Acrylics				
25-L	46-6513	4 – 15"	14.7	45-11050 series, .85 mm – 1.8 mm	Р	Dyes, Stains, Toners, Enamels, Lacquers, Primers, Urethanes, Solvent Coatings, Waterborne Coatings				

	CHART 12: HVLP - HIGH VOLUME LOW PRESSURE AIR CAP AND FLUID NOZZLE SELECTION CHART								
Air Cap	Air Cap Part No.	Spray Pattern Range	SCFM @ 10 PSI Cap Pressure (Dynamic)	Gun Inlet PSI @ 10 PSI at Air Cap (Dynamic)	Fluid Nozzle	Siphon or Pressure	Typical Coatings		
31-H	46-6517	8 – 12"	10.5	17	45-11050 series, .85 mm – 1.8 mm	P, S	Stains, Low Viscous Enamels		
32-H	46-6518	8 – 18"	15.5	24	45-11050 series, .85 mm – 1.8 mm	P, S	Lacquers, Enamels, Multi-Colors, Multi-Spec, Nonstick Coatings, Cut-Latex		
33-H	46-6519	8 – 12"	11.0	16	45-11050 series, .85 mm – 1.6 mm	Р	Stains, Lacquers, Enamel, Multi-Color, Multi-Spec, Nonstick Coatings		
39-H	46-6525	4 – 12"	10.0	14	45-11050 series, .85 mm – 1.6 mm	Р	Dyes, Stains, Toners, Enamels, Lacquers, Primers, Urethanes, Solvent Coatings, Waterborne Coatings		

	CHART 13: ROUND SPRAY AIR CAP AND FLUID NOZZLE SELECTION CHART							
Air Cap	Air Cap Part No.	Spray Pattern Range	CFM @ 30 PSI	CFM @ 50 PSI	CFM @ 70 PSI	Fluid Nozzle	Siphon or Pressure	Typical Coatings
16	46-6505	2 – 4"	5.6	7.8	10.5	45-11050 series, 1.0 mm – 1.8 mm	P, S	Lacquers, Enamels

### **INSTALLATION INSTRUCTIONS**

For maximum transfer efficiency, do not use more pressure than is necessary to atomize the material being applied.

### NOTE

When using HVLP do not exceed inlet pressures listed on page 7.

1. Connect the gun to a clean, moisture and oil free air supply using a conductive hose of at least 5/16 in I.D.

### **NOTE**

Depending on hose length, larger I.D. hose may be required. Install an air gauge at the gun handle. See page 7 for operating pressures. Do not use more pressure than is necessary to atomize the material being applied. Excess pressure will create additional overspray and reduce transfer efficiency.

### NOTE

If quick connect couplings are required, use only high flow quick connects approved for HVLP use. Other types will not flow enough air for correct gun operation.

### NOTE

If an air adjusting valve is used at the gun inlet, use HAV-501 adjusting valve.

- 2. **SIPHON MODELS ONLY.** Attach the cup lid assembly to the fluid inlet connector. Position cup yoke at right angles to the gun.
- 3. **PRESSURE FEED MODELS.** Connect the fluid supply hose to fluid inlet connector.

### NOTE

Before using the spray gun, flush it with solvent to ensure that the fluid passages are clean.

### **OPERATION**

### **SIPHON MODELS**

- Mix coating material to manufacturer's instructions and strain material.
- 2. Fill the cup to no more than 3/4 inch from the top of the cup. DO NOT OVERFILL.
- 3. Attach to cup lid.

### **ALL MODELS**

- Turn fluid adjusting knob (24) clockwise to prevent fluid needle movement.
- 5. Turn sideport control (9) counter clockwise to fully open.
- 6. Adjust inlet air pressure if required.

- Turn fluid adjusting knob counter clockwise until first thread shows.
- 8. Test spray. If the finish is too dry, reduce airflow by reducing air inlet pressure.
- 9. If finish is too wet, reduce fluid flow by turning fluid adjusting knob (24) clockwise. If atomization is too coarse, increase inlet air pressure. If too fine, reduce inlet pressure.
- 10. The pattern size can be reduced by turning sideport control (9) clockwise.
- 11. Hold gun perpendicular to surface being sprayed. Arcing or tilting may result in uneven coating.
- 12. The recommended spray distance is 8 inches.
- 13. Spray edges first. Overlap each stroke a minimum of 75%. Move gun at a constant speed.
- 14. Always turn off air supply and relieve pressure when gun is not in use.

## PREVENTIVE MAINTENANCE AND CLEANING

To clean air cap and fluid nozzle, brush exterior with a stiff bristle brush. If necessary to clean cap holes, use a broom straw or toothpick if possible. If a wire or hard instrument is used, extreme care must be used to prevent scratching or burring of the holes which will cause a distorted spray pattern.

To clean fluid passages, remove excess material from gun, then flush with gun wash solution. Wipe the gun exterior with a dampened cloth. Never completely immerse in any solvent or cleaning solutions as this is detrimental to the lubricants and life of the spray gun.

### **NOTE**

When replacing the fluid nozzle (7) or fluid needle (22), replace both at the same time. Using worn parts can cause fluid leakage. See page 4. Also, replace the needle packing at this time. Torque the fluid nozzle to 230–240 inch-lbs. Do not over tighten.

### **A** CAUTION

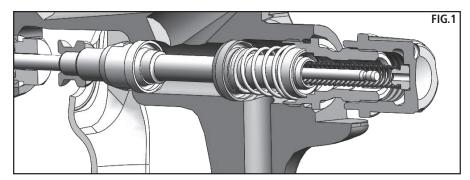
To prevent damage to fluid nozzle (7) or fluid needle (22), be sure to either 1) pull the trigger and hold while tightening or loosening the fluid nozzle, or 2) remove fluid adjusting knob (24) to relieve spring pressure against needle collar.

**SIPHON CUP.** Empty excess material and clean the cup. Make sure the vent hole in the lid is clear.

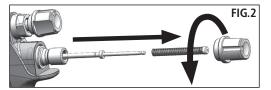
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## **REMOVAL AND INSTALLATION PROCEDURES**

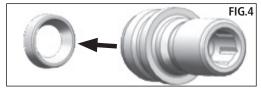
### **NEEDLE AND VALVE DISASSEMBLY AND ASSEMBLY**



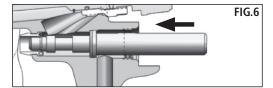
### **DISASSEMBLY**

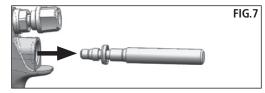


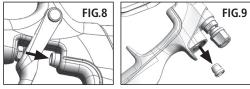




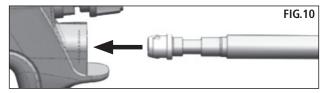


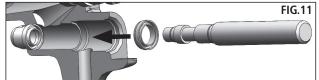


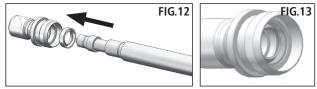


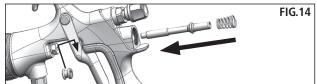


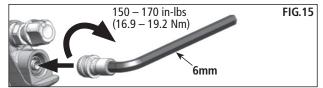
### **ASSEMBLY**







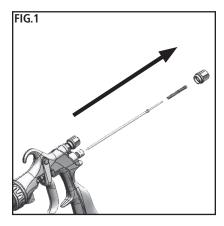


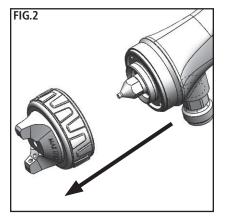


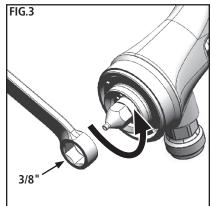


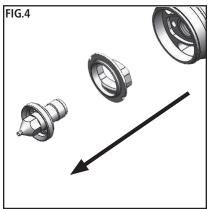


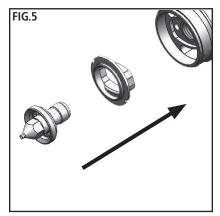
### MAINTENANCE - FLUID NOZZLE AND BAFFLE REMOVAL AND INSTALLATION

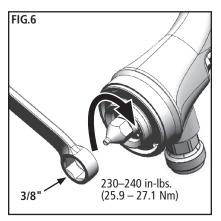


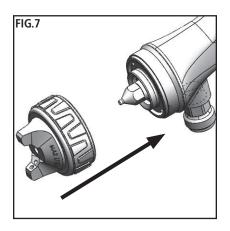


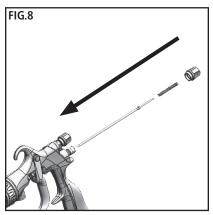




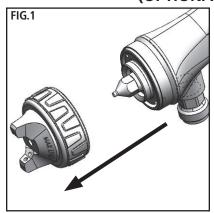




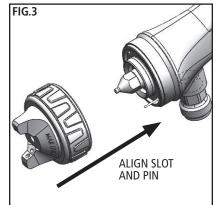




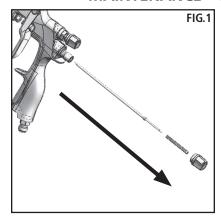
# AIR CAP INDEX PIN (54-6184) INSTALLATION (OPTIONAL – 90° INCREMENTS INDEXING FEATURE)

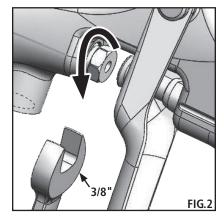


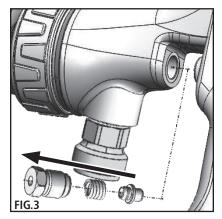


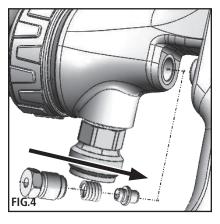


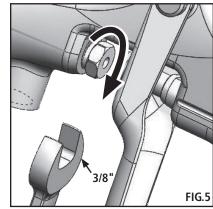
### **MAINTENANCE – NEEDLE PACKING REMOVAL AND INSTALLATION**

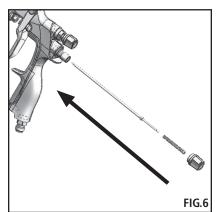




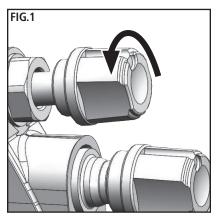


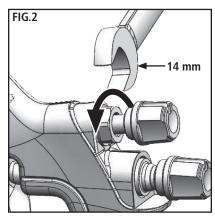


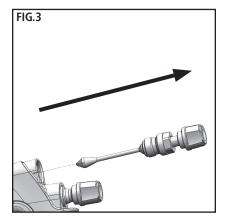


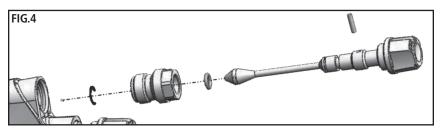


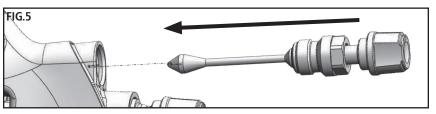
### **MAINTENANCE – SIDEPORT REMOVAL AND INSTALLATION**

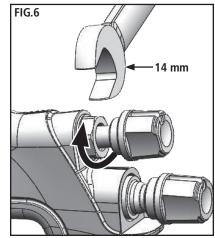












### **TROUBLESHOOTING**

CONDITION	CAUSE	CORRECTION		
Heavy top or bottom pattern	Horn holes plugged. Obstruction on top or bottom of fluid tip. Cap and/or tip seat dirty.	Clean. Ream with non-metallic point. Clean. Clean.		
Heavy right or left side pattern	Left or right side horn holes plugged. Dirt on left or right side of fluid tip.	Clean. Ream with non-metallic point. Clean.		
)(	spray pattern. Then, rotate the cap one-ha is inverted, obstruction is on the air cap. C	cap or the fluid tip. Do this by making a test alf turn and spray another pattern. If the defect clean the air cap as previously instructed. id tip. Check for a fine burr on the edge of the and paper.		
Heavy center pattern	Fluid flow too high for atomization air.	Balance air pressure and fluid flow. Increase spray pattern width with spreader adjustment valve.		
•	Material flow exceeds air cap's capacity. Spreader adjustment valve set too low. Atomizing pressure too low. Material too thick.	Thin or lower fluid flow. Adjust. Increase pressure. Thin to proper consistency.		
Split spray pattern	Atomization air pressure too high. Fluid flow too low. Spreader adjusting valve set too high.	Reduce at transformer or gun. Increase fluid flow (increases gun handling speed). Adjust.		
Jerky or fluttering spray	*Loose or damaged fluid tip/seat. Material level too low. Container tipped too far. Obstruction in fluid passage. Dry or loose fluid needle packing nut.	Tighten or replace. Refill. Hold more upright. Backflush with solvent. Lubricate or tighten.		
Unable to get round spray	Spreader adjustment screw not seating properly. Air cap retaining ring loose.	Clean or replace. Tighten.		
Will not spray	No air pressure at gun.  Fluid needle adjusting screw not open enough.  Fluid too heavy for gravity feed.	Check air supply and air lines, blow out gun air passages. Open fluid needle adjusting screw. Thin material and/or change to larger tip size.		
Paint bubbles in cup	Fluid tip not tight.	Tighten tip.		
Fluid leaking or dripping from cup lid	Cup lid loose. Dirty threads on cup or lid. Cracked cup or lid.	Tighten lid. Clean. Replace cup and lid.		

 $<sup>{\</sup>rm *Most\,common\,problem.}$ 



### **TROUBLESHOOTING**

CONDITION	CAUSE	CORRECTION		
Starved spray pattern	Inadequate material flow.	Back fluid adjusting screw out to first thread, or change to larger tip size.		
	Low atomization air pressure.	Increase air pressure and rebalance gun.		
Excessive overspray	Too much atomization air pressure. Gun too far from work surface. Improper stroking (arcing, gun motion too fast).	Reduce pressure. Adjust to proper distance. Move at moderate pace, parallel to work surface.		
Excessive fog	Too much or too fast-drying thinner. Too much atomization (air pressure.)	Remix properly. Reduce air pressure.		
Dry spray	Air pressure too high. Gun tip too far from work surface. Gun motion too fast. Gun out of adjustment.	Reduce air pressure. Adjust to proper distance. Slow down. Adjust.		
Fluid leaking from packing nut	Packing nut loose. Packing worn or dry.	Tighten, do not bind needle. Replace or lubricate.		
Fluid leaking or dripping from front of gun	Packing nut too tight. Dry packing. Fluid tip or needle worn or damaged. Foreign matter in tip. Fluid needle spring broken. Wrong size needle or tip.	Adjust. Lubricate. Replace tip and needle. Clean. Replace. Replace.		
Fluid dripping or leaking from bottom of cup	Cup loose on gun. Cup gasket worn or missing below cup. Cup threads dirty.	Tighten. Replace cup gasket. Clean.		
Runs and sags	Too much material flow. Material too thin. Gun tilted on an angle, or gun motion too slow.	Adjust gun or reduce fluid flow. Mix properly or apply light coats. Hold gun at right angle to work and adapt to proper gun technique.		
Thin, sandy coarse finish drying before it flows out	Gun too far from surface. Too much air pressure. Improper thinner being used.	Check distance. Normally approximately 8". Reduce air pressure and check spray pattern. Follow paint manufacturer's mixing instructions.		
Thick, dimpled finish "orange peel"	Gun too close to surface. Too much material coarsely atomized. Air pressure too low. Improper thinner being used. Material not properly mixed. Surface rough, oily, dirty.	Check distance. Normally approximately 8". Follow paint manufacturer's mixing instructions. Increase air pressure or reduce fluid flow. Follow paint manufacturer's mixing instructions. Follow paint manufacturer's mixing instructions. Properly clean and prepare.		

### **ACCESSORIES**





### Contains six precision tools designed to effectively clean all DeVilbiss, Binks, Finishline and other brand spray guns.



Compatible with all paint materials; contains no silicone or petroleum distillates to contaminate paint. MSDS available upon request.



HAV-500 does not have pressure gauge. Use to control air usage at gun.





NIOSH-Certified, for respiratory protection in atmospheres not immediately dangerous to life.

Small 40-141 Medium 40-128

Large 40-143

### **Quick Connects for HVLP Guns (Air)** High Flow Type



HC-4419 Stem 1/4" NPT(F) Gun End



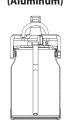
HC-4719 Coupler 1/4" NPT(M) Hose End

### 29-3100 Scrubs° **Hand Cleaner Towels**



Scrubs<sup>\*</sup> are a premoistened hand cleaner towel for painters, body men and mechanics that go where you go and no water is needed.

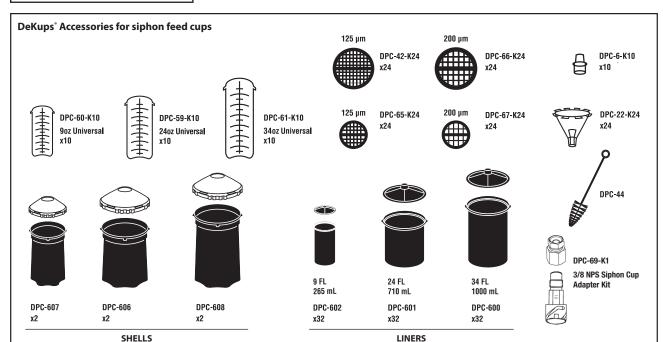
### 81-800 1 Qt. Siphon Cup (Aluminum)



3/8" nps thread for full size guns.

### 54-6197 **Needle Adjustment Stop**





### **NOTES**

### **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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