

# Binks AIRLESS 1M SPRAY GUN

(For Professional Use Only) Model 44-6000

# **OPERATION AND MAINTENANCE INSTRUCTIONS**

### **OPERATING INSTRUCTIONS:**

The following steps and recommendations should be followed to get the best results from your spray gun:

- 1. Connect high pressure airless fluid hose to the gun fluid inlet and tighten securely.
- 2. With nozzle tip removed, start pump slowly and direct spray gun into material container and pull trigger until fluid flows steadily from gun.
- 3. Release trigger. Install nozzle tip per safety procedure.

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UNDER NO circumstances should the spray gun be carelessly handled nor its spray (even when nozzle is removed) directed at close proximity to any part of the human body. If you spray yourself or anyone else at close range, the stream of material can puncture the skin and cause great harm (possible amputation).

4. Increase pressure of pump and test spray pattern for proper atomization.

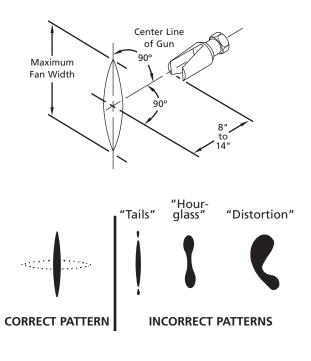
# NOTE

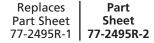
Excessive fluid pressure will distort the spray pattern. A simple rule to remember is "When the pattern is right, the pressure is right".

- 5. Spray gun distance from work surface should be at a point where maximum fan pattern is evident. This distance is normally 8 to 14 inches.
- 6. "Hour-glass" and "tails" on spray patterns normally indicate too low a fluid pressure for the nozzle tip orifice size, or the material is too viscous or thick.
- 7. Distorted spray patterns may be the result of excess fluid pressure, plugging of tip, or a worn tip.
- 8. Airless spray guns are either ON or OFF. You cannot "feather" with airless guns as you can with air atomized equipment.
- Successive strokes may not require over-lapping as much as with air atomized spray because of the heavier pattern edges produced by airless spraying.
- 10. Spray strokes with airless spray guns will be faster because of the higher fluid output.



Your new Binks Airless 1M spray gun has been thoroughly tested before leaving the factory. No adjustment is required prior to spray operations other than installing the nozzle tip.







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.

# **A**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 MANUAL

WEAR SAFETY GLASSES

serious eye injury or blindness.

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



#### MEDICAL ALERT

Any injury caused by high pressure liquid can be serious. If you are injured or even suspect an injury: a) Go to an emergency room immediately.

- b) Tell the doctor you suspect an injection injury.
- c) Show the doctor this medical information or the medical alert card provided with your airless spray equipment.
- d) Tell the doctor what kind of fluid you were spraying or dispensing. e) Refer to the Material Safety Data Sheet for specific
- information.



#### DE-ENERGIZE, DEPRESSURIZE, DISCONNECT AND LOCK OUT ALL POWER SOURCES DURING MAINTENANCE Failure to De-energize, disconnect and lock out all power

Failure to wear safety glasses with side shields could result in

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.



#### HIGH PRESSURE CONSIDERATION

High pressure can cause serious injury. Relieve all pressure before servicing. Spray from the spray gun, hose leaks, or ruptured components can inject fluid into your body and cause extremely serious injury.



#### GET IMMEDIATE MEDICAL ATTENTION

To prevent contact with the fluid, please note the following: a) Never point the gun/valve at anyone or any part of the body. b) Never put hand or fingers over the spray tip.

- c) Never attempt to stop or deflect fluid leaks with your hand, body, glove or rag. d) Always have the tip guard on the spray gun before spraying.
- e) Always ensure that the gun trigger safety operates before
- spraying. f) Always lock the gun trigger safety when you stop spraying.



#### PRESSURE RELIEF PROCEDURE

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



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#### WEAR RESPIRATOR

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TOXIC FLUID & FUMES

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

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 or the fluids you are using.



#### ELECTRIC SHOCK / GROUNDING Improper grounding or sparks can cause a hazardous condition and result in fire, explosion or electric shock and other serious



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



#### FIRE AND EXPLOSION HAZARD

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



#### 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.

#### PROP 65 WARNING



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

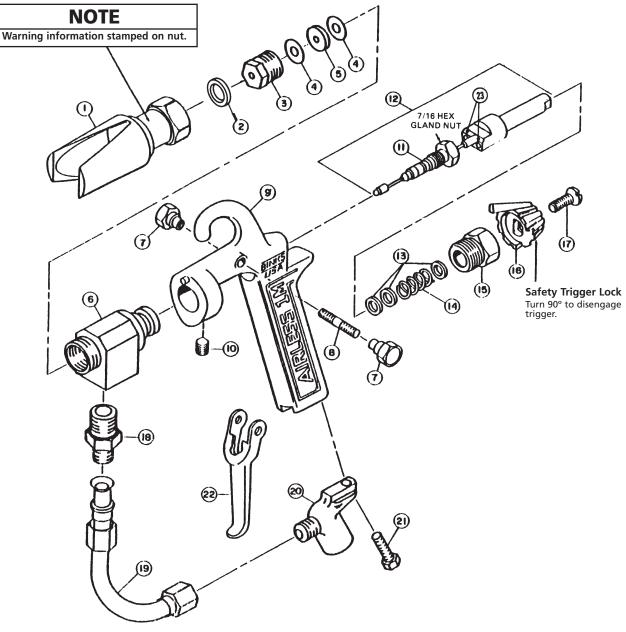


IT IS THE RESPONSIBILITY OF THE EMPLOYER TO PROVIDE THIS INFORMATION TO THE OPERATOR OF THE EQUIPMENT.

FOR FURTHER SAFETY INFORMATION REGARDING BINKS AND DEVILBISS EQUIPMENT, SEE THE **GENERAL EQUIPMENT SAFETY BOOKLET (77-5300).** 



### Binks MODEL 44-6000 AIRLESS 1M SPRAY GUN



#### When ordering, please specify Part No.

ITEM	PART			ITEM	PART		
NO.	NO.	DESCRIPTION	QTY	NO.	NO.	DESCRIPTION	QTY
1	54-3085	NOZZLE GUARD ASSEMBLY, 3/4-20	) 1	16	54-3467	SAFETY KNOB	. 1
2	54-2229	NYLON GASKET, 9/32 x 5/8 x 1/8 Th	1	17	20-4965	SCREW, 10-32 x 5/8	. 1
3	44-2603	SEAT RETAINER, 9/16 Hex	1	18	44-2668	CONNECTOR, 3/8 NPT(m) x 9/16-18	
4	44-2601•	SEAT GASKET	2			(37° JIC)	. 1
5	44-2602•	T.C. SEAT (Reversible)	1	19	44-6138	TUBE ASSEMBLY, 3/8 O.D.	. 1
6	44-6100	FLUID HEAD, s.s. 3/4-20		20	54-3161	FLUID INLET, 3/8 NPT(f)	. 1
		Nozzle connection, 3/8 NPT (f) inlet	1	21	20-702-1	BOLT, 1/4-20 x 7/8	. 1
7	54-3460	TRIGGER NUT, 5/16 Hex	2	22	54-3484	TRIGGER, (4 Finger) Std.	. 1
8	54-3461	TRIGGER STUD, 6-32 x 7/8	1		54-3458	TRIGGER, (2 Finger) Optional	. REF
9	44-6160	PISTOL GRIP ASSEMBLY	1			(Please order separately)	-
10	20-5865	SET SCREW, 1/4-20 x 3/8, 1/8" Hex socket	1	23	20-591/•▲	BALL, 1/8" dia. (Replaceable)	. 2
11	54-2949∙▲	SPLIT TEFLON PACKING, (Replaceable)	1	• Also i	included in 44-6	Repair Kit. Please order separately.	
12	54-3488•	CARTRIDGE ASSEMBLY, T.C. Ball	1			turned 180° to attach gun to an overhead	d hose.
13	54-3465•	WASHER	3	3/8 NI	PT (f) fluid inlet		
14	54-2961	SPRING	1	🔺 Part o	of item 12.		
15	54-3466	GUIDE, 5/8" Hex	1				3

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## Binks MODEL 44-6000 AIRLESS 1M SPRAY GUN MAINTENANCE INSTRUCTIONS Read and understand all warnings on page 2 before operating this equipment.

# **A**CAUTION

- 1. Use care when handling nozzle tips to avoid dropping.
- Tips are made of tungsten carbide and are brittle. 2. Never use metal probes to clean nozzle tips.
- 3. Excessive fluid pressure will cause undue wear.

## TO CLEAN NOZZLE TIP

- 1. Turn safety knob (16) 90° to disengage trigger (22).
- 2. Shut off power supply to pump and release pressure from gun. Remove gun from hose.
- 3. Remove tip guard assembly (1) and gasket (2).
- 4. Reassemble in reverse order.

## NOTE

Use of diffuser/filter assembly will eliminate most tip clogging problems.

## **TO REPLACE CARTRIDGE ASSEMBLY (12)**

- 1. Shut off power supply to pump and release pressure from gun. Remove gun from hose.
- 2. Remove screw (17), safety knob (16) and guide (15).
- 3. Unscrew gland nut.
- 4. Pull cartridge assembly (12) out from back of gun.
- 5. Make sure inside of gun is clean.
- Reinsert cartridge assembly (12) (of step 4) into position through back of gun body assembly. Tighten gland nut.
- 7. Reassemble items 13 through 17.

## **TO REPLACE PACKING (11)**

- 1. Remove cartridge assembly following steps 1-4 under "To Replace Cartridge Assembly."
- 2. Locate slot in packing gland (11), pry apart and push off.
- 3. Replace with new packing gland, and reassemble.

## TO ADJUST PACKING GLAND (11)

- 1. Shut off power supply to pump and release pressure from gun. Remove gun from hose.
- 2. Use a 7/16" open-end wrench to turn gland nut clockwise to eliminate any leakage at gland.
- 3. If sluggish trigger operation is noted, turn gland nut counterclockwise in 1/16 turn increments until drag is eliminated.
- 4. If leakage cannot be stopped without excessive drag on trigger, replace packing.

## TO REPLACE SEAT (5)

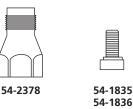
- 1. Shut off air or power supply to pump and release pressure from gun. Remove gun from hose.
- 2. Remove tip guard assembly (1) and gasket (2).
- 3. Remove nut diffuser and attached parts (3, 4, 5). Seat should drop out.
- 4. Reassemble in reverse order.

## DIFFUSER ASSEMBLY ACCESSORY

Reduces fluid velocity to minimize tip wear and make tip removal safer. Also to aid fluid filtration.

Order 54-2229 nylon gasket with set-up, described below.

54-2378 nut for use with 54-1835 (.005) or 54-1836 (.009) edge type filter.



## FLAT TIP ASSEMBLIES FOR AIRLESS GUNS

PART NUMBER	STAMPED NUMBER	ORIFICE (INCHES)	FAN WIDTH (12" FROM SURFACE)	PART NUMBER	STAMPED NUMBER	ORIFICE (INCHES)	FAN WIDTH (12" FROM SURFACE)	PART NUMBER	STAMPED NUMBER	ORIFICE (INCHES)	FAN WIDTH (12" FROM SURFACE)
9-1170	9-1170	.011	8-10	9-2140	9-2140	.021	10-12	9-3620	9-3620	.036	6-8
9-1180	9-1180	.011	10-12	9-2180	9-2180	.021	16-18	9-3640	9-3640	.036	12-14
9-1350	9-1350	.013	8-10	9-2190	9-2190	.021	18-20	9-3660	9-3660	.036	16-18
9-1360	9-1360	.013	10-12	9-2340	9-2340	.023	10-12	9-3680	9-3680	.036	18-20
9-1380	9-1380	.013	12-14	9-2640	9-2640	.026	12-14	9-4340	9-4340	.043	12-14
9-1550	9-1550	.015	8-10	9-3120	9-3120	.031	6-8	9-4380	9-4380	.043	18-20
9-1560	9-1560	.015	10-12	9-3140	9-3140	.031	12-14	9-5230	9-5230	.052	8-10
9-1590	9-1590	.015	14-16	9-3180	9-3180	.031	18-20	9-5240	9-5240	.052	12-14
9-1840	9-1840	.018	10-12					9-6230	9-6230	.062	8-10
9-1860	9-1860	.018	12-14								
9-1890	9-1890	.018	16-18								



Binks AIRLESS 1M SPRAY GUN: TWIST-TIP REVERSIBLE NOZZLE CLEANER

# Binks TWIST-TIP REVERSIBLE NOZZLE CLEANER

#### GENERAL

The Twist-Tip Nozzle Cleaner allows purging of a clogged nozzle orifice without disassembly from the spray gun. The tungsten carbide nozzle is permanently assembled into the rotatable cylinder tip insert and handle assembly. No alignment or adjustments are required.

### ASSEMBLY

Assembly to spray gun is simple. Please refer to the detailed assembly instructions on page 7. The exploded view at right is for part ordering reference.

#### FEATURES OF THE TWIST-TIP ATTACHMENT

- Fits most popular airless spray guns
- Low friction turning
- Equals or exceeds life of other reversible spray tips
- Hand-tightened seal system
- Assembly suitable for solvent and water-based
- Maximum working pressure: 7,500 PSI
- Rapid changing of the tip and base by hand without tools

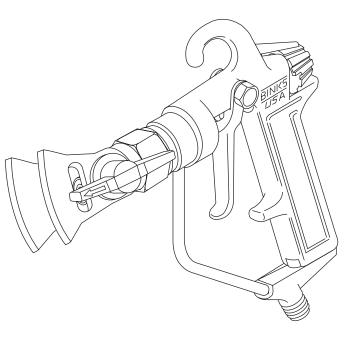
#### IMPORTANT OPERATING INSTRUCTIONS

- 1. The spray gun must be shut off while rotating the Twist-Tip attachment handle.
- 2. If leakage occurs, unit must be disassembled, cleaned and parts checked for any damage. Replace damaged parts with genuine Binks parts.

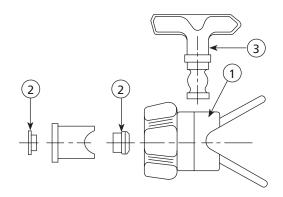
# WARNING

Do not operate unit with leakage from the spray gun, Twist-Tip attachment or hose or severe injury may result.

3. With proper care, the Twist-Tip attachment will give long, reliable service. To maintain this performance, it should be flushed with solvent or proper cleaning fluid following each spray period.



#### SEE PAGE 7 FOR DETAILED ASSEMBLY INSTRUCTIONS



## PARTS LIST

When ordering, please specify Part No.

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	454-3	SAFETY GUARD ASM	1
1	454-5	SAFETY GUARD (G Thread) ASM	1
2	454-1	(Part of Safety Guard)	1
3	454-Tip Size	SPRAY TIP	. 1



## Binks AIRLESS 1M SPRAY GUN: TWIST-TIP REVERSIBLE NOZZLE CLEANER

# A WARNING

NEVER hold gun trigger when replacing tip. Always remove fingers from trigger and HOLD BY GUN HANDLE ONLY. NEVER attempt to rotate/remove/change tip when device is pressurized and or when gun trigger is depressed. ALWAYS engage trigger safety whenever removing cylinder tip assembly.

#### MAINTENANCE/CLEANING

- 1. Cleanliness is important to assure trouble-free operation. Excessive purging can indicate a need for paint filtering and/or service of existing filter.
- 2. Flush unit after each use, and before any expected downtime. Adjust unit fluid pressure to lowest possible setting.
- 3. To store unit: Clean, disassemble and store dry.

#### **AIRLESS TIP SELECTION**

**Proper Selection:** Determined by fluid flow desired and the spray pattern fan width required for the specific job. Selected size should supply the desired amount of fluid and pattern width with proper atomization and yet not exceed the capacity of the fluid supply.

**Viscosity:** Viscosity can be used as a guide and generally smaller orifice tips are desired for "light" viscosity fluids. For heavy viscosities larger orifice tips are preferred. The chart below indicates orifice sizes with appropriate fluids.

Orifice Size	Material
.011 to .013	Lacquers and Stains
.015 to .019	Oil and Latex
.021 to .051	Heavy-Bodied Latex and Block Filler

#### **FAN WIDTH**

Fan width is dictated by the job at hand, and personal selection. However, an 8" to 12" pattern is preferred by most painters and offers more spray control while less likely to plug. A 14" to 16" pattern may find favor with a more experienced painter and offer greater production rates.

SURFACE	COATING	FAN WIDTH	TH ORIFICE SIZE									
		(in inches)	.009	.011	.013	.015	.017	.019	.021	.023	.035	.051
Wood Interior	Stain, Sanding	6"	309	311	313	-	-	-	-	-	-	-
Cabinets, Paneling	Sealer, Lacquer	8"	-	-	413	-	-	-	-	-	-	-
	Varnish, Shellac, Enamels	10"	-	-	513	-	-	-	-	-	-	-
Interior Walls	Latex, Vinyl	6"	-	-	-	315	-	-	-	-	-	-
Ceilings, Drywall	Acrylic	8"	-	-	-	415	417	419	-	-	-	-
Plaster		10"	-	-	-	515	517	519	-	-	-	-
		12"	-	-	-	615	617	619	-	-	-	-
Overhang	Primers,	6"	-	-	-	315	-	-	-	-	-	-
-	Enamels	8"	-	-	-	415	417	-	-	-	-	-
		10"	-	-	-	515	517	-	-	-	-	-
		12"	-	-	-	-	-	619	-	-	-	-
Masonry Block,	Vinyl, Acrylic	8"	-	-	-	-	417	-	-	-	-	-
Stucco, Concrete	Latex, Oil Base,	10"	-	-	-	-	517	519	521	-	-	-
	Alkyds	12"	-	-	-	-	-	-	621	-	-	-
Wood Exterior	Exterior, Stains	10"	-	-	-	-	517	519	521	-	-	-
Shingle Siding, Shiplap	Latex, Vinyl, Acrylic	12"	-	-	-	-	-	-	621	-	-	-
Open Joist	MIL White	10"	-	-	-	-	-	519	521	523	535	551
Ceiling Areas	HI Build	12"	-	-	-	-	-	-	621	-	-	-

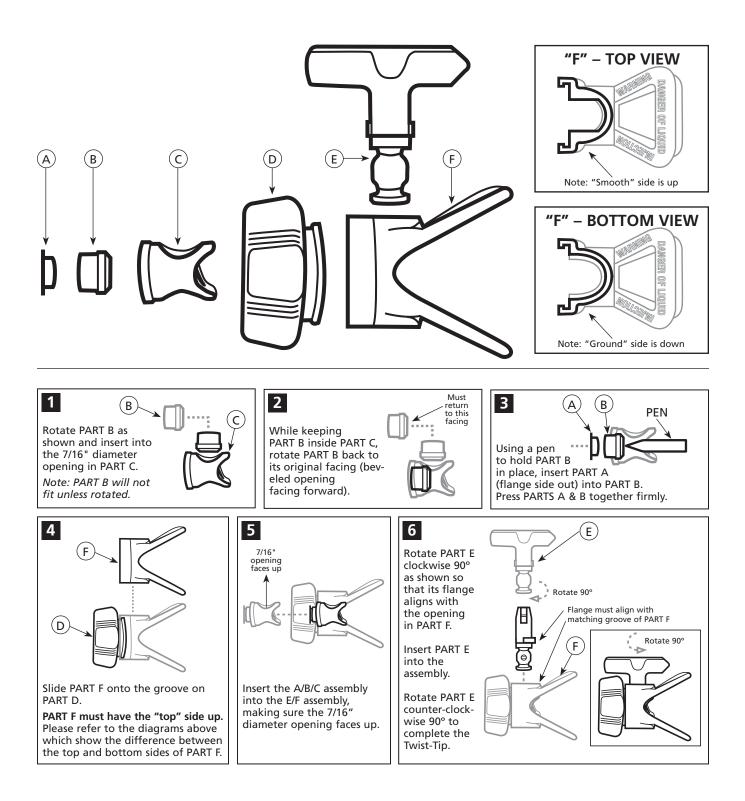
## AIRLESS TWIST TIP CHART

#### **BASE RETAINERS**

Assembly	454-3	454-5			
Number	3/4 – 20	7/8 – 14 (G)			
	Binks	Graco, Titan,			
		Wagner			

**Ordering:** For twist tips add the prefix 454- to size tip selected. For example, if you select 517, order as 454-517.

Binks AIRLESS 1M SPRAY GUN: TWIST-TIP REVERSIBLE NOZZLE CLEANER



**WARRANTY** This product is covered by Binks' 1 Year Limited Warranty.

## Binks Worldwide Sales and Service Listing: www.binks.com

#### **ITW Industrial Finishing**

Binks has authorized distributors throughout the world. For technical assistance or the distributor nearest you, see listing below.

#### U.S./Canada Technical Service Office:

195 Internationale Blvd., Glendale Heights, IL 60139 Toll-Free Telephone: 1-888-992-4657 (U.S.A. and Canada only) Toll-Free Fax: 1-888-246-5732

77-2495R-2 Revisions: (P2) Updated warnings.

