

# BINKS® SG-2 PLUS™ ROTARY 2 QT. PRESSURE CUP MODEL NO. 80-651 – ROTARY AGITATOR

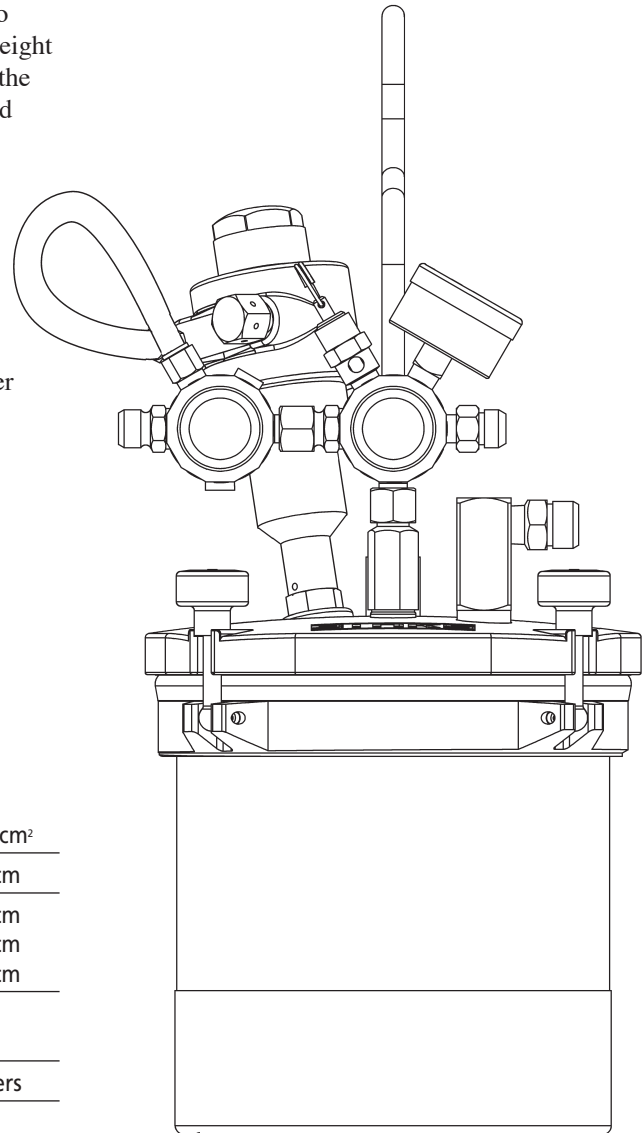
**INTRODUCTION**

Binks SG-2™ Plus Rotary 2 Qt. Pressure Cup is ideal for component spraying and industrial applications where small batch production spraying is required. The 2 qt. capacity is sufficient to complete large spray jobs without refilling the cup. Its lightweight and rugged construction is excellent for portability, allowing the operator to make fluid and air control adjustments quickly and efficiently at the spray station.

The internal construction is designed for waterborne and solvent base materials.

Other features include:

- Stainless steel pick-up tube, fluid fittings and removable plastic liner makes it corrosion resistant.
- “Wide-mouth” opening allows easy cleaning, plastic liner removal and quick color change.
- Positive grip carrying handle for operator comfort.
- Wide stainless steel base for stability and corrosion resistance.
- 0-50 psig fluid pressure range.
- Optional 0-10 psi pressure kit.
- Silverstone® coated on interior and exterior of lid.
- Rotary agitator for metallics and paints requiring continuous agitation.
- Mixed flow impeller for superior agitation with minimal vortex.



**SPECIFICATIONS**

MAX. WORKING PRESSURE .....	50 psig	3.5 kg/cm <sup>2</sup>
OVERALL HEIGHT .....	15 11/16 in.	39.88 cm
BASE DIAMETER .....	6 in.	15.24 cm
DIA. ACROSS CLOSED CLAMPS.....	8 1/16 in.	20.47 cm
DIA. ACROSS OPEN CLAMPS .....	8 1/16 in.	20.47 cm
AIR INLET & OUTLET CONNECTION SIZE ...	1/4 NPS (m)	--
FLUID OUTLET CONNECTION SIZE.....	3/8 NPS (m)	--
FLUID CAPACITY .....	2 Qts. (U.S.)	1.9 Liters
WEIGHT .....	7lb.5oz.	3.3 kg.
AGITATOR AIR CONSUMPTION .....	2.5 cfm @ 40 psi	7.5 cfm @ 100 psi

**⚠ WARNING**

All air and fluid pressure in the system must be relieved before servicing the cup and before cup is filled or cleaned. Attempting to service the cup while pressurized could result in damage to components or personal injury.

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

## **WARNING**

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

## **CAUTION**

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

## **NOTE**

Important installation, operation or maintenance information.

## **WARNING**

### Read the following warnings before using this equipment.



#### **READ THE MANUAL**

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



#### **OPERATOR TRAINING**

All personnel must be trained before operating finishing equipment.



#### **EQUIPMENT MISUSE HAZARD**

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



#### **LOCK OUT / TAG-OUT**

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



#### **AUTOMATIC EQUIPMENT**

Automatic equipment may start suddenly without warning.



#### **PRESSURE RELIEF PROCEDURE**

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



#### **KEEP EQUIPMENT GUARDS IN PLACE**

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



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



#### **WEAR SAFETY GLASSES**

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



#### **INSPECT THE EQUIPMENT DAILY**

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



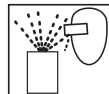
#### **NEVER MODIFY THE EQUIPMENT**

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



#### **NOISE HAZARD**

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



#### **PROJECTILE HAZARD**

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



#### **PINCH POINT HAZARD**

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



#### **STATIC CHARGE**

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



#### **WEAR RESPIRATOR**

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



#### **TOXIC FLUID & FUMES**

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



#### **FIRE AND EXPLOSION HAZARD**

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



#### **MEDICAL ALERT**

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

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



#### **GET IMMEDIATE MEDICAL ATTENTION**

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

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



#### **PROP 65 WARNING**

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

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

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

## SETUP AND OPERATION

Refer to "TYPICAL INSTALLATION" drawing below

Set up the SG-2 Plus™ Rotary with the CONVENTIONAL or HVLP gun along with at least 5 ft. of air and fluid hose.

Attach air hose from extractor to air inlet on handle of steady-grip assembly. Pour paint into canister with liner. Re-attach lid to canister and firmly tighten four knobs over canister lid. Set air pressure from air regulator mounted on extractor and fluid pressure by adjusting fluid pressure adjustment knob on cup handle. Open air valve on top of handle to start agitator.

### CAUTION

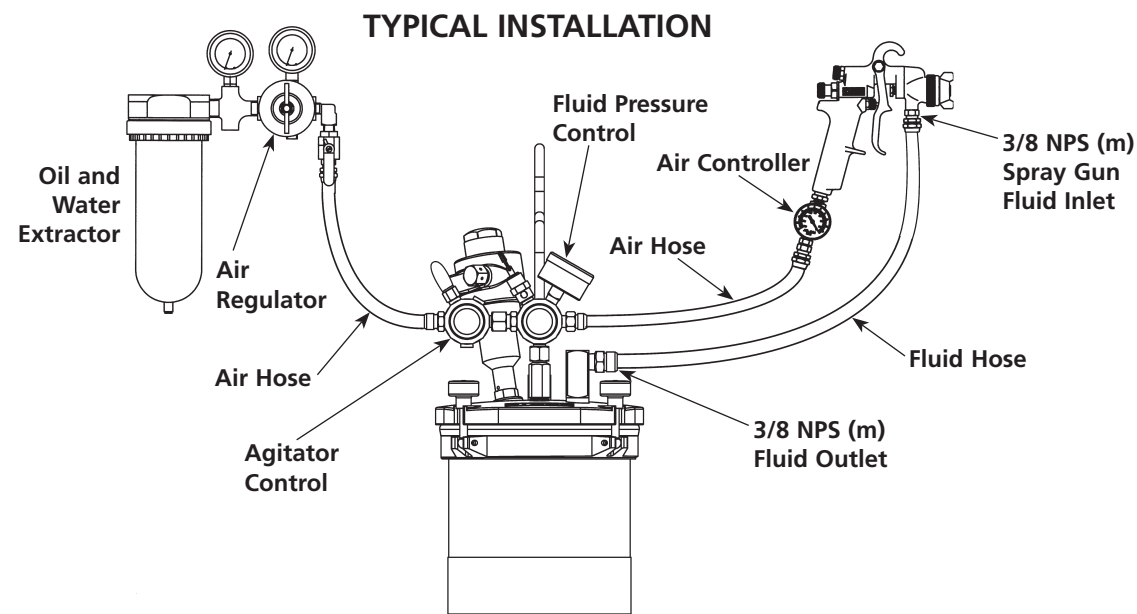
Do not exceed 100 PSIG input air pressure into the cup. Excessive pressure could damage components.

### WARNING

Chlorinated solvents and aluminum are incompatible and will cause an adverse chemical reaction, possibly resulting in bodily injury. With the SG2 pressure cup, use chlorinated solvents only when using plastic liner (80-355).

### CAUTION

Before refilling canister with paint, shut off air supply to the cup and release pressure from canister by rotating pressure relief knob counterclockwise.



## MAINTAINING YOUR 80-651 ROTARY PRESSURE CUP

**DAILY:** Add a couple drops of air motor oil to air motor inlet to ensure smooth operation. **DO NOT ADD OIL TO MAIN AIR INLET ON HANDLE.**

**AS NEEDED:** Clean and lubricate regulator, check valve and pop valve.

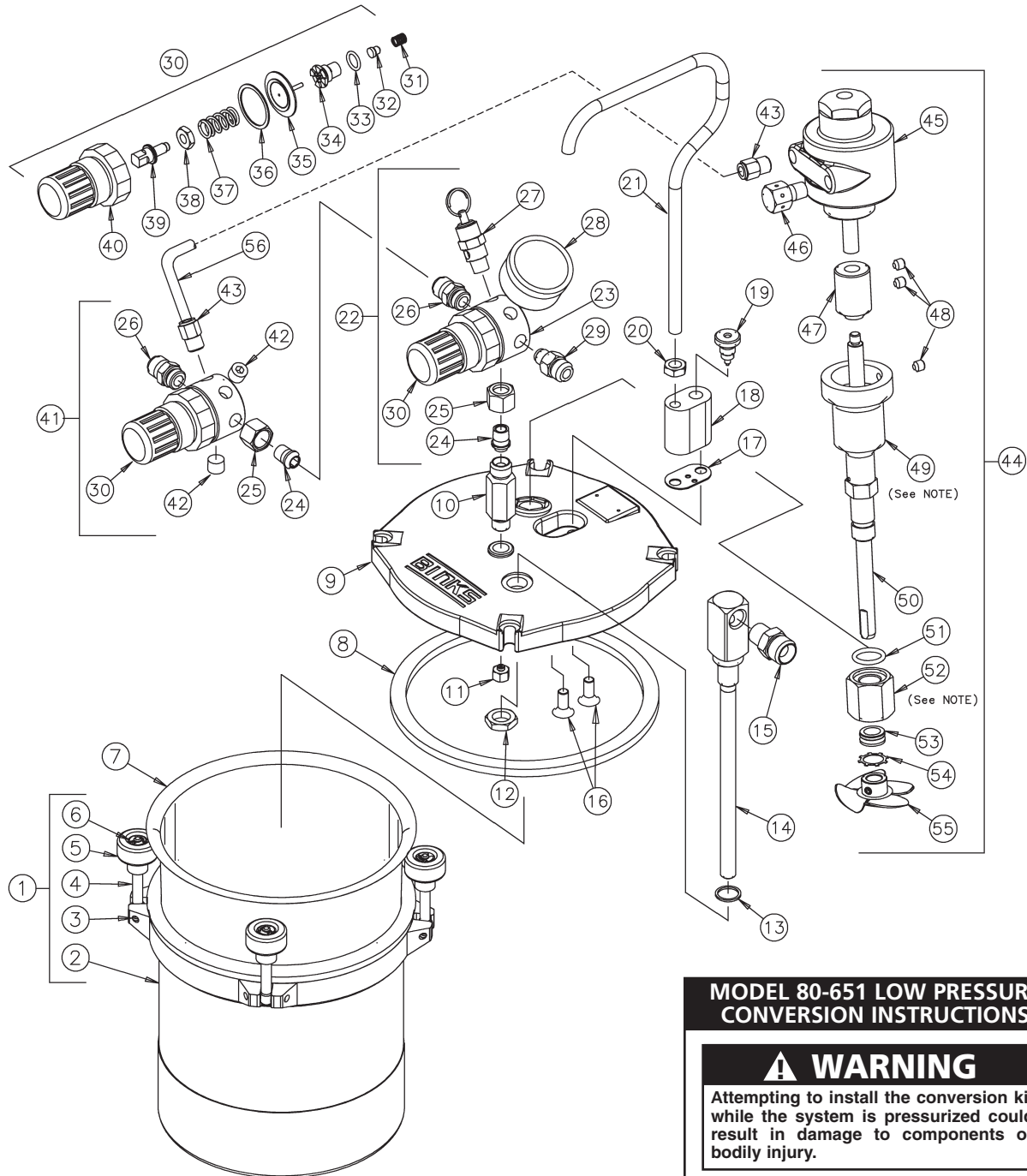
### WARNING

Disconnect air source from cup and bleed off all pressure before servicing the cup or its components. Failure to do so could result in injury.

### NOTE

Items 49 and 52 have left hand threads.

**Binks MODEL 80-651 SG-2 PLUS™ PRESSURE CUP WITH ROTARY AGITATOR**



**NOTE**  
Items 49 and 52 have left hand threads.

**MODEL 80-651 LOW PRESSURE  
CONVERSION INSTRUCTIONS**

**⚠ WARNING**  
Attempting to install the conversion kit while the system is pressurized could result in damage to components or bodily injury.

**INSTRUCTIONS**

1. Depressurize and shut off the entire system before installing the conversion kit.
2. Remove regulator from cup.
3. Replace gauge (28) with gauge provided in the conversion kit.
4. Replace the regulating spring (37).
5. Inspect all other internal components of the regulator and replace with the new items from the conversion kit as needed and reassemble the regulator.
6. Reassemble the regulator to the cup.

## Binks MODEL 80-651 SG-2 PLUS™ PRESSURE CUP WITH ROTARY AGITATOR

### PARTS LIST

(When ordering, please specify Part No.)

ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	80-375	2 QT CANISTER ASM .....	1	30	85-438* ◇	REGULATOR KIT, 60 PSI.....	2
2	80-376+	2 QT CANISTER SUB-ASM .....	1	31	----- ▲	VALVE SPRING .....	1
3	20-4870+○	SPIROL PIN .....	4	32	----- ▲	VALVE, TEF.....	1
4	80-381+○	CANISTER KNOB SWIVEL .....	4	33	----- ▲	O-RING .....	1
5	80-380+○	CANISTER KNOB .....	4	34	----- ▲	VALVE SEAT .....	1
6	80-382+○	RETAINING RING .....	4	35	----- ▲	DIAPHRAGM.....	1
7	80-355	DISPOSABLE LINER .....	1	36	----- ▲	VALVE SPRING .....	1
8	80-392*	LID GASKET .....	1	37	----- ▲	REGULATING SPRING .....	1
9	80-602	COVER MACHINING .....	1	38	----- ▲	NUT .....	1
10	80-606	CHECK VALVE ASM .....	1	39	----- ▲	STEM .....	1
11	80-610	DIFFUSER.....	1	40	----- ▲	BONNET .....	1
12	80-389	FLUID TUBE NUT .....	1	41	85-448	REGULATOR ASM, Agitator control	1
13	80-388*	FLUID TUBE SEAL .....	1	42	20-2287-1	PLUG, 1/8 NPT.....	2
14	80-613	FLUID TUBE ASM.....	1	43	54-4945	PUSH-LOK CONNECTION .....	2
15	83-2484	DM NIPPLE, 1/4 NPT X 3/8 NPS.....	1	44	80-452	ROTARY AGITATOR ASM .....	1
16	20-6582	SCREW.....	2	45	37-478	AIR MOTOR .....	1
17	80-373*	HANDLE GASKET.....	1	46	41-646	MUFFLER.....	1
18	80-604	MANIFOLD.....	1	47	80-459	SHAFT COUPLING.....	1
19	80-12	RELIEF VALVE.....	1	48	20-2141	SET SCREW, HEX HEAD .....	3
20	20-353-1	JAM NUT, 5/16-18 .....	1	49	80-455	SHAFT HOUSING .....	1
21	80-605	HANDLE .....	1	50	80-457	SHAFT.....	1
22	85-450	REGULATOR ASM (60# gauge) .....	1	51	20-6754	O-RING.....	1
23	85-436	REGULATOR BODY.....	2	52	80-454	SEAL RETAINER NUT .....	1
24	72-104	TAIL PIECE.....	2	53	80-458	ROTARY SEAL .....	1
25	72-93	SWIVEL NUT, 1/4 NPS .....	2	54	20-6756	RETAINING RING .....	1
26	54-308	AIR CONNECTION.....	2	55	80-453	IMPELLER .....	1
27	85-243	SAFETY VALVE* .....	1	56	54-3929-5	TUBE 6" (Quantity Pack) .....	1
28	59-369	GAUGE, 60 PSI .....	1				
29	71-28	DM NIPPLE, 1/8 NPT X 1/4 NPS .....	1				

\* Part of 80-618 Pressure Cup Repair Kit.

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○ Part of 80-390 Knob Replacement Kit. (1 ea. knob, pin, spring, and retaining ring.)

◇ Used in 85-448 and 85-450 Regulator Assemblies.

▲ Part of 85-438 Regulator Kit.

### ACCESSORIES

(Not furnished, please order separately.)

PART NO.	DESCRIPTION	QTY.
80-356	CANISTER LINER QTY. PACK OF 80-355 .....	12/pk.
HAV-500	AIR ADJUSTING VALVE.....	1
HAV-501	AIR ADJUSTING VALVE W/GAUGE .....	1

#### 6-196 AIR MOTOR REPAIR KIT

PART NO.	DESCRIPTION	QTY.
37-703	VANE .....	1
37-525	BEARING .....	1
37-526	SHAFT SEAL .....	1
37-528	END PLATE GASKET.....	1
37-530	END CAP GASKET.....	1

#### 80-465 AGITATOR SHAFT KIT

PART NO.	DESCRIPTION	QTY.
80-458	ROTARY SEAL .....	1
80-457	AGITATOR SHAFT .....	1
20-6756	RETAINING RING.....	1

#### 80-463 AGITATOR REPAIR KIT

PART NO.	DESCRIPTION	QTY.
80-458	ROTARY SEAL .....	1
20-6756	RETAINING RING.....	1
20-6754	O-RING .....	1

#### 80-618 PRESSURE CUP REPAIR KIT

(HIGH PRESSURE – 50# SPRING)

PART NO.	DESCRIPTION	QTY.
85-438	REGULATOR KIT, (50# SPRING).....	1
80-373	HANDLE GASKET.....	1
80-388	FLUID TUBE SEAL.....	2
80-392	LID GASKET .....	1
85-243	SAFETY VALVE .....	1

#### 85-441 DUAL REGULATION CONVERSION KIT

PART NO.	DESCRIPTION	QTY.
HAR-503-2	REGULATOR .....	1
85-439*	SPRING, 50 PSI, GREEN .....	1
57-13-1	DM NIPPLE .....	1
85-70	GAUGE, 60 PSI .....	1
SSP-8217-ZN	SWIVEL FITTING 1/4(M) NPT X1/4 NPS(F)....	1

\*Available in kit 85-438

**NOTES**

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**NOTES**

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## WARRANTY POLICY

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

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