



# Binks SG-2™ STEADI-GRIP ROTARY 2 QT. PRESSURE CUP Model No. 80-451<sup>▲</sup>—Rotary Agitator

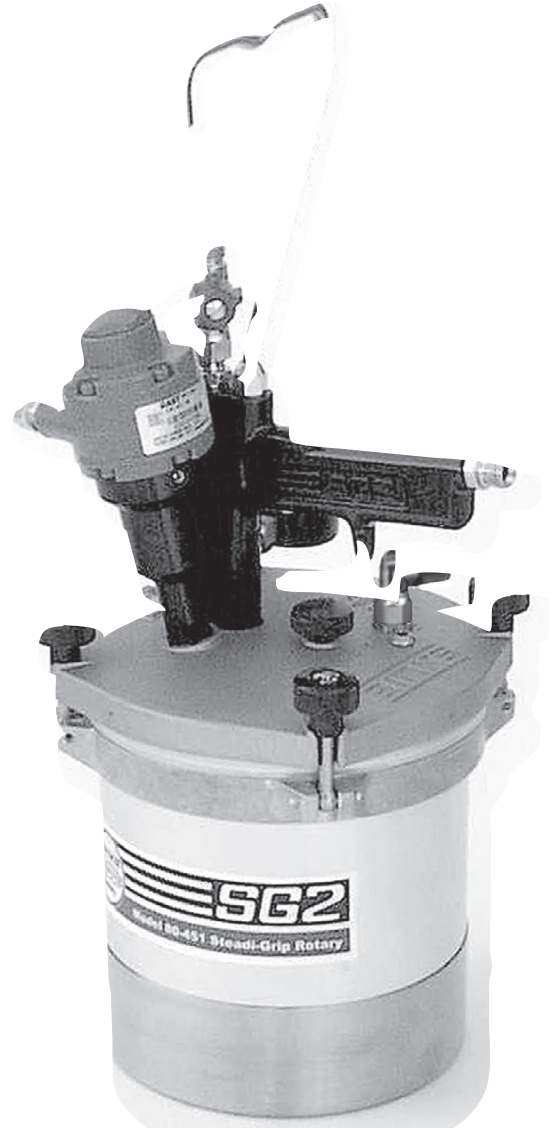
## INTRODUCTION

Binks SG-2™ Steadi-Grip 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.
- 0-40 psig fluid pressure range.
- 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		
WITH AUXILIARY HANDLE .....	16 9/16 in.	42.06 cm
WITHOUT AUXILIARY HANDLE .....	11 3/4 in.	29.85 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 @	7.5 cfm @
	40 psi	100 psi



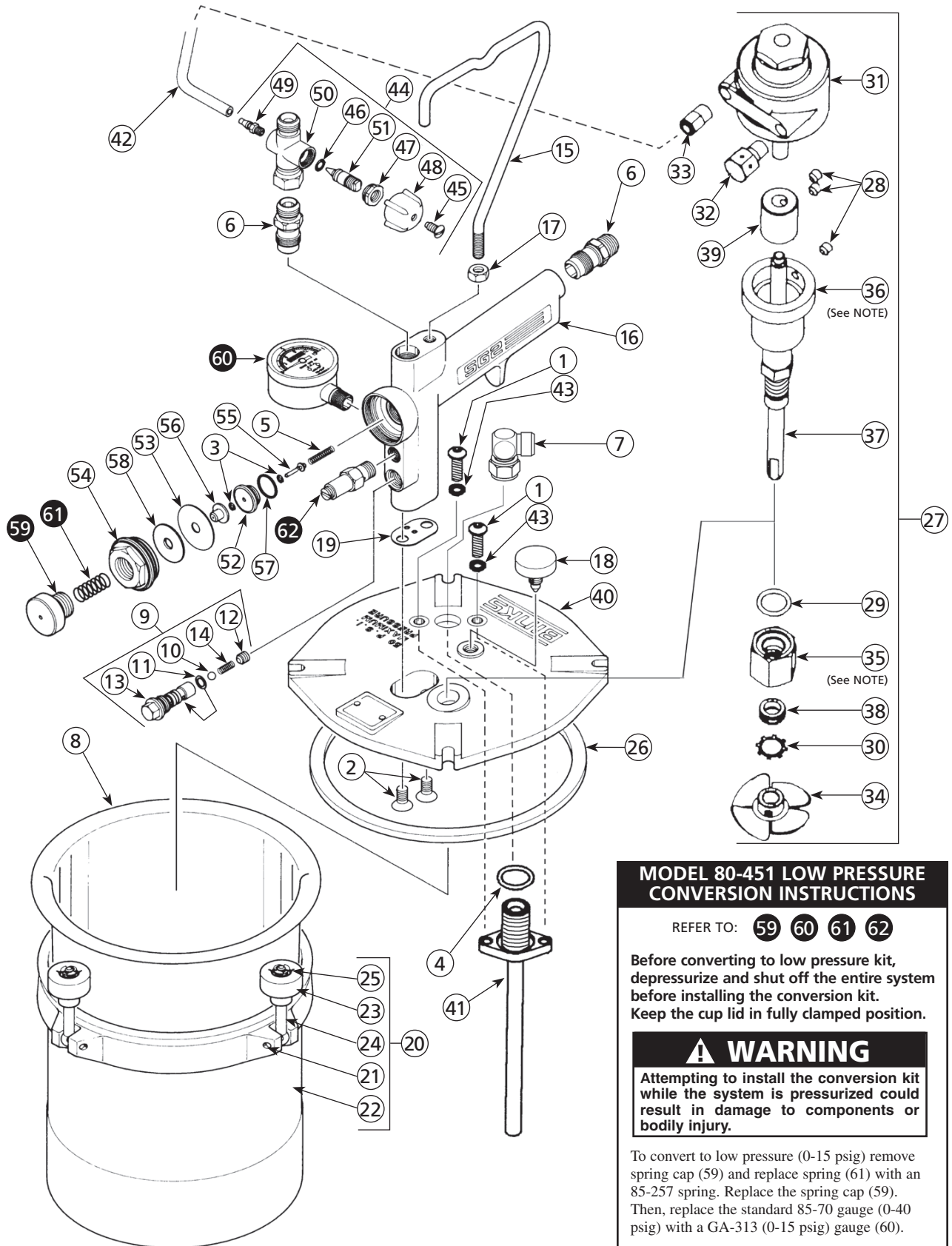
**PROP 65 WARNING**  
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

## ▲ 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.

▲ Available from Binks distributors only.

**Binks MODEL 80-451 PRESSURE CUP WITH ROTARY AGITATOR**



**NOTE**  
Items 35 and 36 have left hand threads.

**MODEL 80-451 LOW PRESSURE CONVERSION INSTRUCTIONS**

REFER TO: **59 60 61 62**

Before converting to low pressure kit, depressurize and shut off the entire system before installing the conversion kit. Keep the cup lid in fully clamped position.

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

To convert to low pressure (0-15 psig) remove spring cap (59) and replace spring (61) with an 85-257 spring. Replace the spring cap (59). Then, replace the standard 85-70 gauge (0-40 psig) with a GA-313 (0-15 psig) gauge (60).

Pressurize the cup slowly with air by turning spring cap (59) clockwise. With the spring cap screwed all the way in, adjust the pop valve by turning the pop valve adjustment screw (62) until the pop valve releases air at 15 psi gauge pressure. All items to convert to low pressure are provided.

**Binks MODEL 80-451 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	20-6085	BUTTON HEAD SCREW .....	2	36	80-455	SHAFT HOUSING .....	1
2	20-6582	SCREW.....	2	37	80-457	SHAFT.....	1
3	20-6683*	O-RING.....	2	38	80-458●	ROTARY SEAL.....	1
4	20-6755*	O-RING .....	1	39	80-459	SHAFT COUPLING.....	1
5	54-1637*	SPRING .....	1	40	80-460	CANISTER AGITATOR LID.....	1
6	54-768	AIR CONNECTION.....	2	41	80-461	FLUID TUBE ASSEMBLY.....	1
7	73-24	90 DEG SWIVEL ELBOW.....	1	42	81-304	TUBE.....	1
8	80-355	DISPOSABLE CAN LINER.....	1	43	82-730*	GASKET.....	2
9	80-360*	CHECK VALVE ASM.....	1	44	82-740	AIR CONTROL VALVE ASM.....	1
10	20-2183	BALL.....	1	45	20-2606-1▲	SCREW.....	1
11	20-3619	O-RING.....	1	46	20-3236▲	O-RING.....	1
12	20-6161	SCREW.....	1	47	73-44▲	NUT (METER VALVE).....	1
13	80-361	CHECK VALVE BODY.....	1	48	73-46▲	CAP.....	1
14	80-362	CHECK VALVE SPRING.....	1	49	81-307▲	CONNECTOR.....	1
15	80-364	AUXILIARY HANDLE.....	1	50	82-745▲	VALVE BODY ASSEMBLY.....	1
16	80-365	STEADI-GRIP HANDLE.....	1	51	82-747▲	VALVE STEM.....	1
17	80-367	AUX HANDLE NUT.....	1	52	85-181	REGULATOR SEAT.....	1
18	80-372	VENT KNOB.....	1	53	85-183*	DIAPHRAGM.....	1
19	80-373*	HANDLE GASKET.....	1	54	85-184	REGULATOR CAP.....	1
20	80-375	2 QT CANISTER ASM.....	1	55	85-259	VALVE.....	1
21	20-4870+○	SPIROL PIN.....	4	56	85-262	RETAINING RING.....	1
22	80-376+	2 QT CANISTER SUB-ASM.....	1	57	85-266*	SEAL.....	1
23	80-380+○	CANISTER KNOB.....	4	58	85-267	WASHER.....	1
24	80-381+○	CANISTER KNOB SWIVEL.....	4	59	85-46	SPRING CAP (REGULATOR).....	1
25	80-382+○	RETAINING RING.....	4	60	85-70	GAUGE, 60 LBS (STANDARD).....	1
26	80-392*	LID GASKET.....	2	60a	GA-313	PRESSURE GAUGE, 15 LBS.....	1
27	80-452	SG2 ROTARY AGITATOR ASY....	1			(OPTIONAL) (NOT SHOWN)	
28	20-2141	SCREW SET, ALLEN HEAD.....	3	61	85-80*	SPRING, 40# (STANDARD).....	1
29	20-6754●	O-RING.....	1	61a	85-257	SPRING, 15# (OPTIONAL) (NOT SHOWN)	1
30	20-6756●	RETAINING RING.....	1	1			
31	37-478	AIR MOTOR.....	1	62	85-84*	POP VALVE.....	1
32	41-646	MUFFLER.....	1	63	85-130-5	REPLACEMENT LENS (FOR 85-70) ..	1
33	54-4945	TUBE CONNECTOR.....	1			(NOT SHOWN)	
34	80-453	IMPELLER.....	1				
35	80-454	SEAL RETAINER NUT.....	1				

\* Part of 80-464 Pressure Cup Repair Kit.  
 + Part of Item No. 20 2Qt. Canister Assy.  
 ○ Part of 80-390 Knob Replacement Kit.  
 ● Part of 80-463 Agitator Repair Kit.  
 ▲ Part of Item No. 44 Air Control Valve Assy.

**ACCESSORIES**

(Not furnished, please order separately.)

PART NO.	DESCRIPTION	QTY.
80-356	CANISTER LINER QTY. PACK OF 80-355 .....	12/pk.
73-125	AIR CONTROLLER (for atomizing air) .....	1
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.....	4
37-525	BEARING.....	2
37-526	SHAFT SEAL.....	1
37-528	END PLATE GASKET.....	2
37-530	END CAP GASKET.....	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

**80-464 PRESSURE CUP REPAIR KIT**

PART NO.	DESCRIPTION	QTY.
20-6683	O-RING.....	2
20-6755	O-RING (FLUID TUBE).....	1
54-1637	SPRING.....	1
80-360	CHECK VALVE ASSEMBLY.....	1
80-373	HANDLE GASKET.....	1
80-392	LID GASKET.....	1
82-730	GASKET.....	2
85-183	DIAPHRAGM.....	1
85-266	SEAL.....	1
85-80	SPRING, (40# SPRING).....	1
85-84	POP VALVE.....	1

## SETUP AND OPERATION

Refer to "TYPICAL INSTALLATION" drawing below

Set up the SG2™ Steadi-Grip 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.

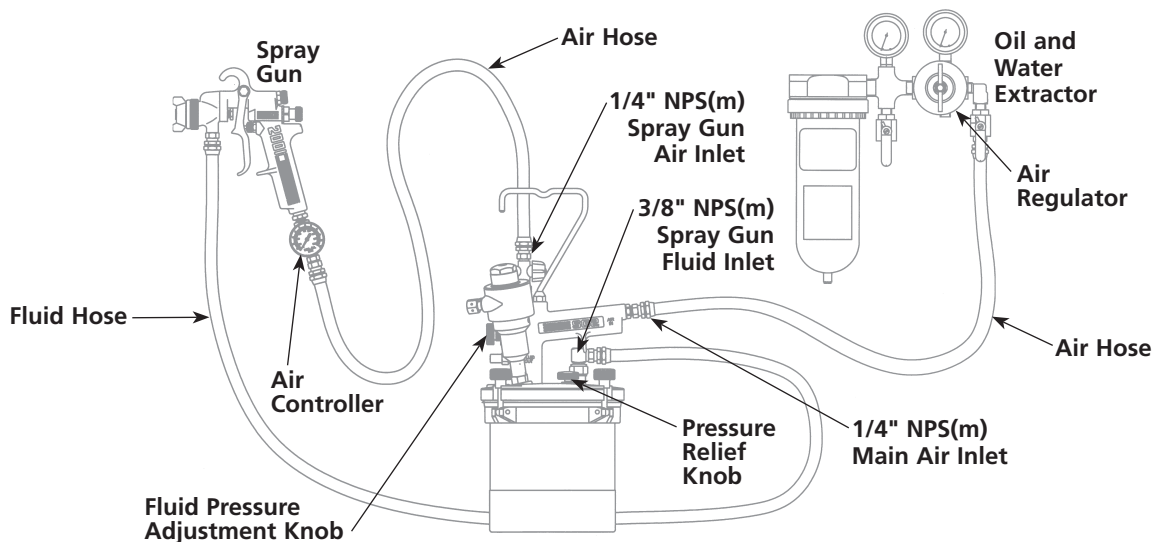
### WARNING

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.

## TYPICAL INSTALLATION



## MAINTAINING YOUR 80-451 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 35 and 36 have left hand threads.

## WARRANTY

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

**Binks Sales and Service: [www.binks.com](http://www.binks.com)**

**BINKS**

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77-2796R Revisions: Trademark updates; (P1) Added Prop 65 warning; (P4) Updated contact information.