

# BINKS® MODELS 84-421 & 84-521 BACK PRESSURE VALVES

	Medium Pressure Model 84-521	High Pressure Model 84-421
Pressure Range (PSI)	100-900	300-2000
Working Press. (Max.) (PSI)	2000	3000
Flow Coefficient (C <sub>v</sub> )	.026	.013

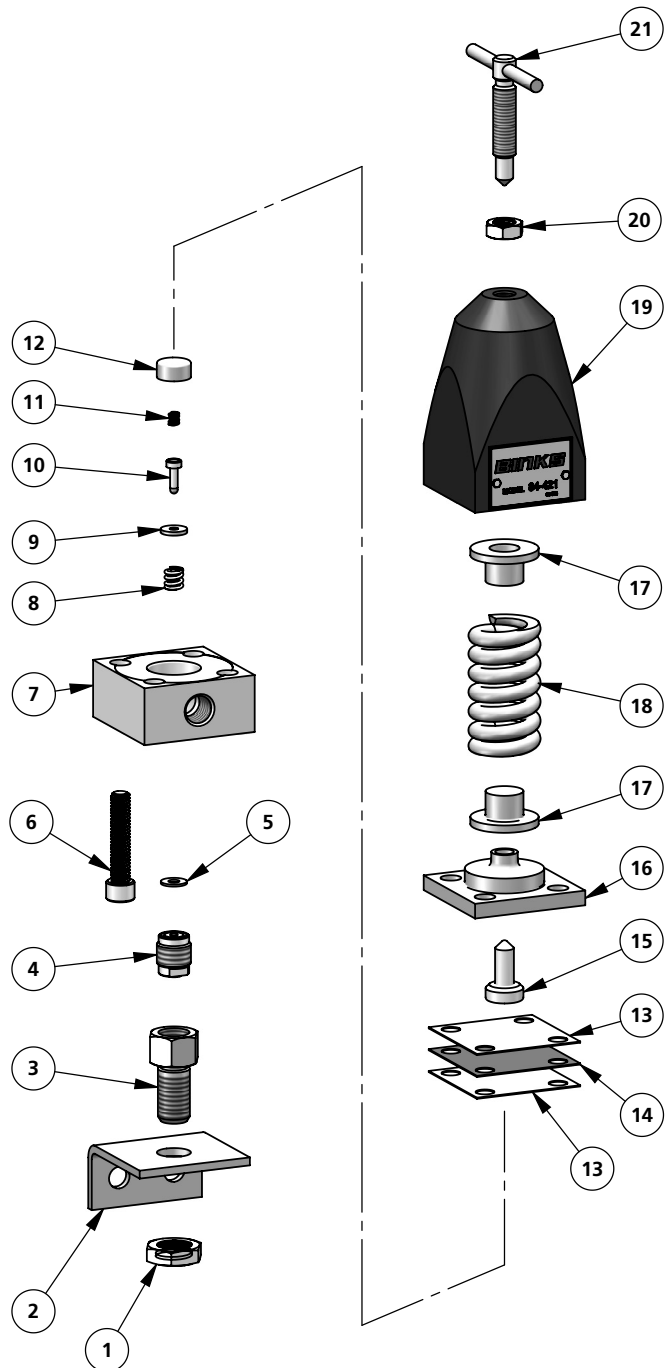
$$\text{Flow Rate (GPM)} = \frac{\text{Flow Coeff. (C}_v\text{)} \sqrt{\text{Inlet Press. (PSI)} - \text{Outlet Press. (PSI)}}}{\text{Specific Gravity}}$$

## PARTS LIST

When ordering, please specify Part No.

ITEM NO.	PART NO.	DESCRIPTION	84-421 QTY.	84-521 QTY.
1	20-4457	LOCKNUT	1	1
2	84-466	BRACKET	1	1
3	84-448	OUTLET	1	1
4	84-475	SEAT ASSEMBLY	1	1
5	84-436 ▲	GASKET	1	1
6	20-1974	ALLEN HD CAP SCREW	4	4
7	84-461	BODY	1	1
8	84-447 ▲	SPRING	1	1
9	84-462	WASHER	1	1
10	84-446	VALVE ASSEMBLY	1	1
11	84-431 ▲	SPRING	1	1
12	84-444	DISC	1	1
13	84-429 ▲	DIAPHRAGM	2	2
14	84-430 ▲	DIAPHRAGM	1	1
15	84-428	PISTON	1	1
16	84-427	FLANGE	1	1
17	84-424	BUTTON	2	2
18	84-425 ▲	SPRING (HIGH PRESSURE)	1	-
	84-503 ▲	SPRING (MEDIUM PRESSURE)	-	1
19	84-426	BONNET	1	1
20	20-619-1	JAM NUT	1	1
21	84-423	HANDLE	1	1
22	20-2161	PIPE PLUG, SS (NOT SHOWN)	1	1
23	72-790	DM NIPPLE, SS (NOT SHOWN)	1	1
24	101-9120	SWIVEL ADAPTER, SS (NOT SHOWN)	1	1

▲ Indicates parts included in 6-1306 Repair Kit.



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.



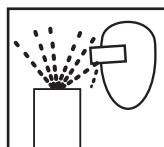
**READ THE MANUAL**  
 Before operating finishing equipment, read and understand all safety, operation and maintenance information provided in the operation manual.



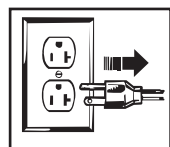
**ELECTRIC SHOCK/GROUNDING**  
 Improper grounding or sparks can cause a hazardous condition and result in fire, explosion or electric shock and other serious injury.



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



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



**DE-ENERGIZE, 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.



**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.



**OPERATOR TRAINING**  
 All personnel must be trained before operating finishing equipment.



**NEVER MODIFY THE EQUIPMENT**  
 Do not modify the equipment unless the manufacturer provides written approval.



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



**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.



**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**



**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.



**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.

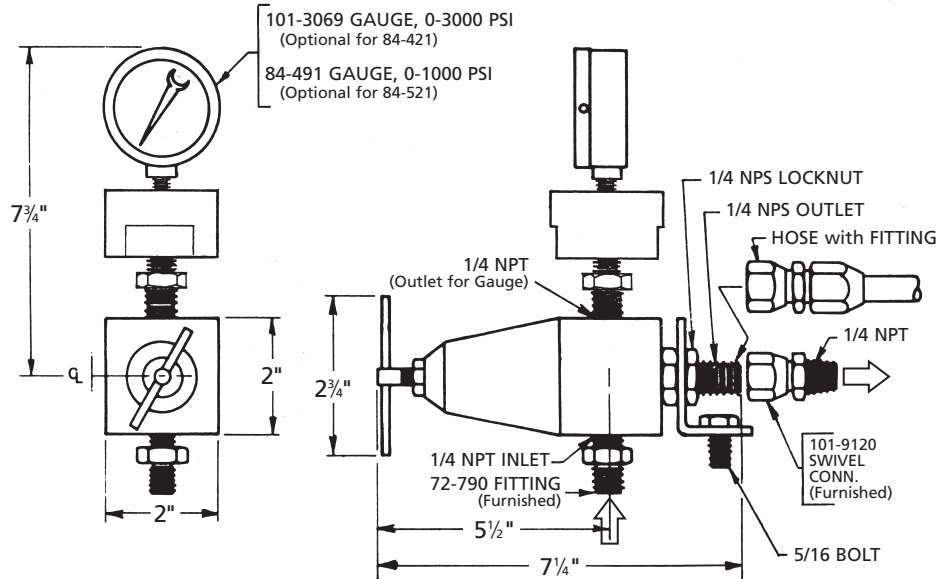


**PRESSURE RELIEF PROCEDURE**  
 Always follow the pressure relief procedure in the equipment instruction manual.

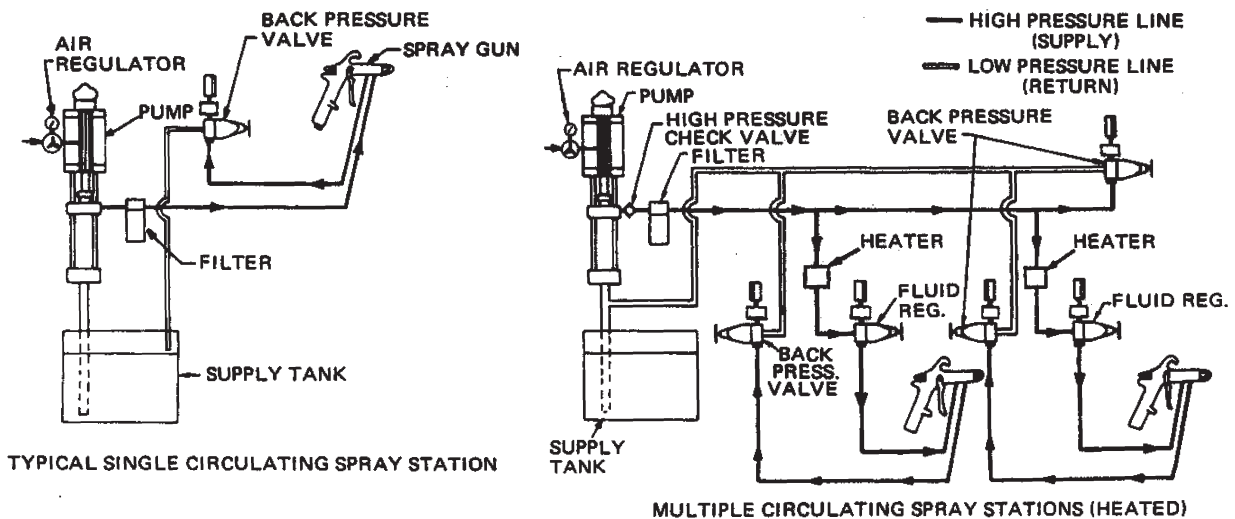
**IT IS THE RESPONSIBILITY OF THE EMPLOYER TO PROVIDE THIS INFORMATION TO THE OPERATOR OF THE EQUIPMENT.**

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

## TYPICAL INSTALLATION



## SYSTEM INTEGRATION



### TYPICAL INSTALLATIONS

1. Back pressure valve can be mounted in any position.
2. Valve is bracket-mounted, and hose- or pipe-connected.
3. Use 1/4 NPT high pressure fittings on inlet, and 1/4 NPT low pressure fittings on outlet.
4. If using pressure gauge, install in port marked "gauge."

### OPERATION

1. Back pressure valve controls pressure at inlet port.
2. To increase pressure, turn knob clockwise.
3. To decrease pressure, turn knob counter-clockwise.

## TROUBLESHOOTING

### PROBLEM

1. Valve will not respond to adjustments.
2. Leakage at adjustment knob.

### REMEDY

1. Clean valve and seat, or replace.
2. Replace diaphragm.

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## WARRANTY POLICY

This product is covered by Carlisle Fluid Technologies' materials and workmanship limited warranty. The use of any parts or accessories, from a source other than Carlisle Fluid Technologies, will void all warranties. Failure to reasonably follow any maintenance guidance provided may invalidate any warranty.

For specific warranty information please contact Carlisle Fluid Technologies.

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