



Binks Models 84-598 & 84-599 REMOTE FLUID PRESSURE REGULATORS

(30oz./min. & 100oz./min.)

INTRODUCTION

The Binks Models 84-598 and 84-599 Remote Fluid Pressure Regulators are designed for use with Manual or Automatic Spraying Systems utilizing an I/P (current to pressure) or E/P (voltage to pressure) Transducer and where precise fluid pressure outputs to spray gun are required. The flow rate for model 84-598 is rated at 30 oz./min. The flow rate for model 84-599 is rated at 100 oz./min.

ADVANTAGES

1. Accurate and repeatable fluid flows with maximum control sensitivity.
2. Small plastic fluid cavity for rapid cleanout and color flush cycles.
3. Positive spring-loaded shut-off (no leakage).
4. Designed to protect electronic transducer control systems (independent vented air chamber).
5. Can be used on open and closed loop fluid pressure control systems.
6. Maximum corrosion and solvent resistance.
7. Contains air gap to permit indication of air or fluid diaphragm failure.
8. Contains carbide seats and valves.

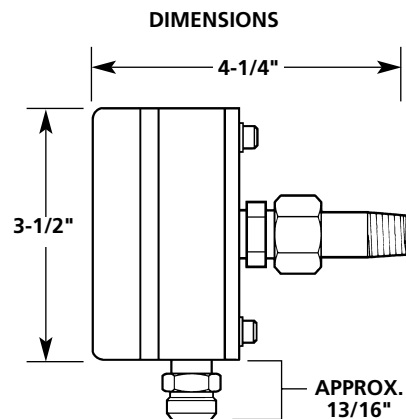
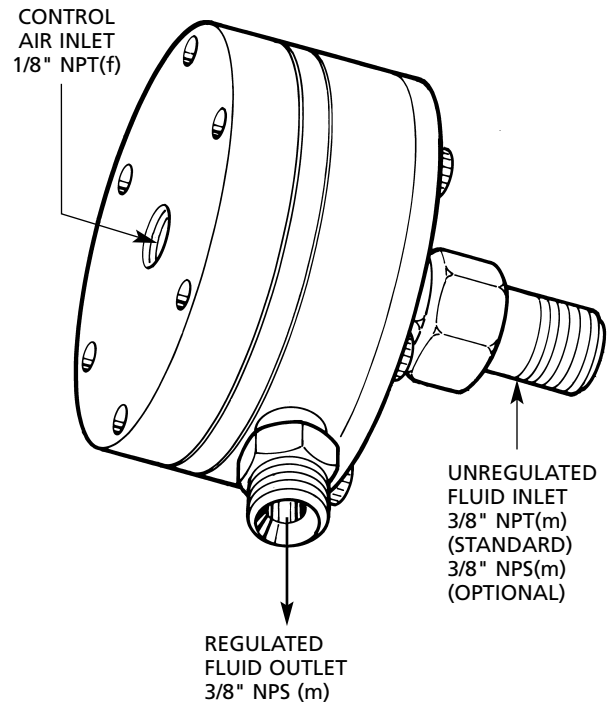
SET-UP INSTRUCTIONS

The fluid inlet is fitted into the regulator body with a 3/8" NPT(m) (standard), 3/8" NPS(m) (optional) swivel nut connection. The fluid outlet connection is 3/8" NPS(m). The control air inlet is 1/8" NPT(f).

The regulator may be mounted in either a horizontal or vertical position. As little as 4 PSI control air pressure will open this regulator depending on fluid pressure supply.

PRESSURE AND FLOW DATA

Regulation Range (Control Air)	4-100 psi	7.03 kg/cm ²
Maximum Fluid Inlet Pressure	200 psi	14.06 kg/cm ²
Control Ratio (approx.)	1:1	



APPROX. WT. 1.85 LBS.

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.



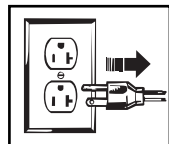
READ THE MANUAL

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



WEAR SAFETY GLASSES

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



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.



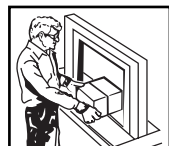
OPERATOR TRAINING

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.



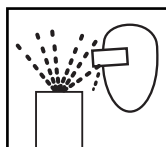
PRESSURE RELIEF PROCEDURE

Always follow the pressure relief procedure in the equipment instruction 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.



PROJECTILE HAZARD

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



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.



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.



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



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.

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

Binks MODELS 84-598 & 84-599 REMOTE FLUID PRESSURE REGULATORS

RECOMMENDED MAXIMUM FLUID FLOWS

MODEL 84-598

For low and medium viscosity abrasive materials
(14-30 sec. Zahn 2, 10-70 centipoise):
Use 84-537 seat, 84-538 valve, and
84-526 gasket for 1/4" dia. valve
(30 oz./min., 887 cc/min.).

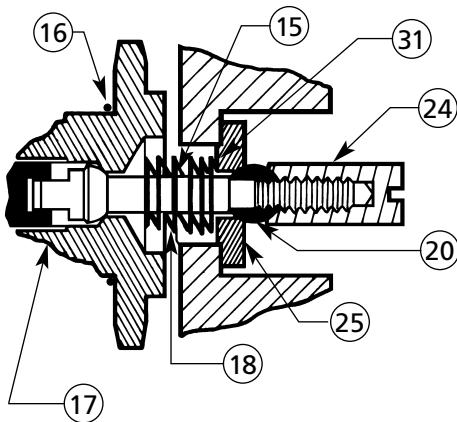
MODEL 84-599

For high viscosity abrasive materials
(Over 30 sec. Zahn 2, over 70 centipoise):
Use 84-523 seat, 84-524 valve, and
84-470 cap nut, and 84-526 gasket for
3/8" dia. valve (100 oz./min., 2957 cc/min.).

SERVICE INSTRUCTIONS

TO REPLACE THE FLUID VALVE, SEAT AND GASKET

1. Flush the system with solvent and air.
2. Shut off all fluid and air supply lines and disconnect all hoses.
3. Remove the regulator from the system by loosening the swivel nut (29).
4. At the fluid inlet, remove (counter-clockwise rotation) slotted cap nut (24) with screwdriver. The valve (20) will slide off the rod (15).
5. Unscrew (counter-clockwise rotation) hexagon inlet (27). Valve seat (25), spring (18), and gasket (31) will be removed with inlet (27).
6. Remove the valve seat (25) and gasket (31) from the body (19). Replace seat (25) and gasket (31) if worn. The valve (20) may be reversed and reused unless both sides are worn.



TO REASSEMBLE

1. Mount spring (18) onto rod (15) and insert gasket (31) and seat (25) into body (19). NOTE POSITION OF SHOULDER ON SEAT (25).
2. Place valve (20) on rod (15) and screw on and tighten cap nut (24).
3. Screw inlet (27) into body (19) and tighten. DO NOT OVER-TIGHTEN. Doing so may strip threads. The regulator requires no adjustments.

NOTE

Numbers in parenthesis () refer to item numbers shown in Parts List on page 5.

TO REPLACE DIAPHRAGMS (Air and/or Fluid)

1. Complete Steps 1 through 4 in section "To Replace Fluid Valve and Seat."
2. Remove bonnet (2A) by loosening all six socket head cap screws (23).
3. Clamp diaphragm assembly in vise, loosen nut (4) and remove diaphragms (5, 11, 13).

TO REASSEMBLE

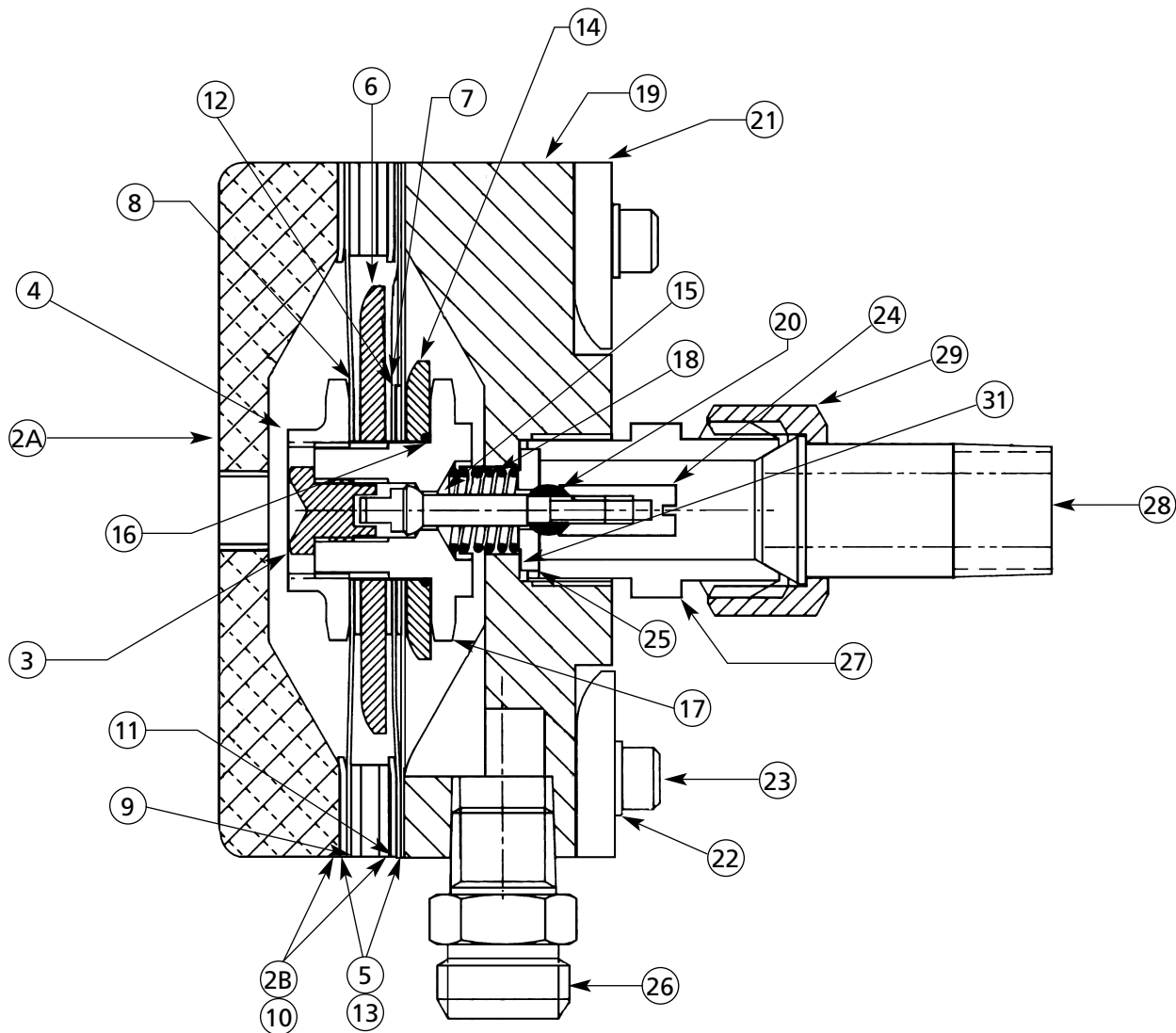
Reverse the above procedure.

NOTE

Make sure that the fastener holes on items 5, 11, and 13 are aligned before tightening item 4.

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SERVICE INSTRUCTIONS



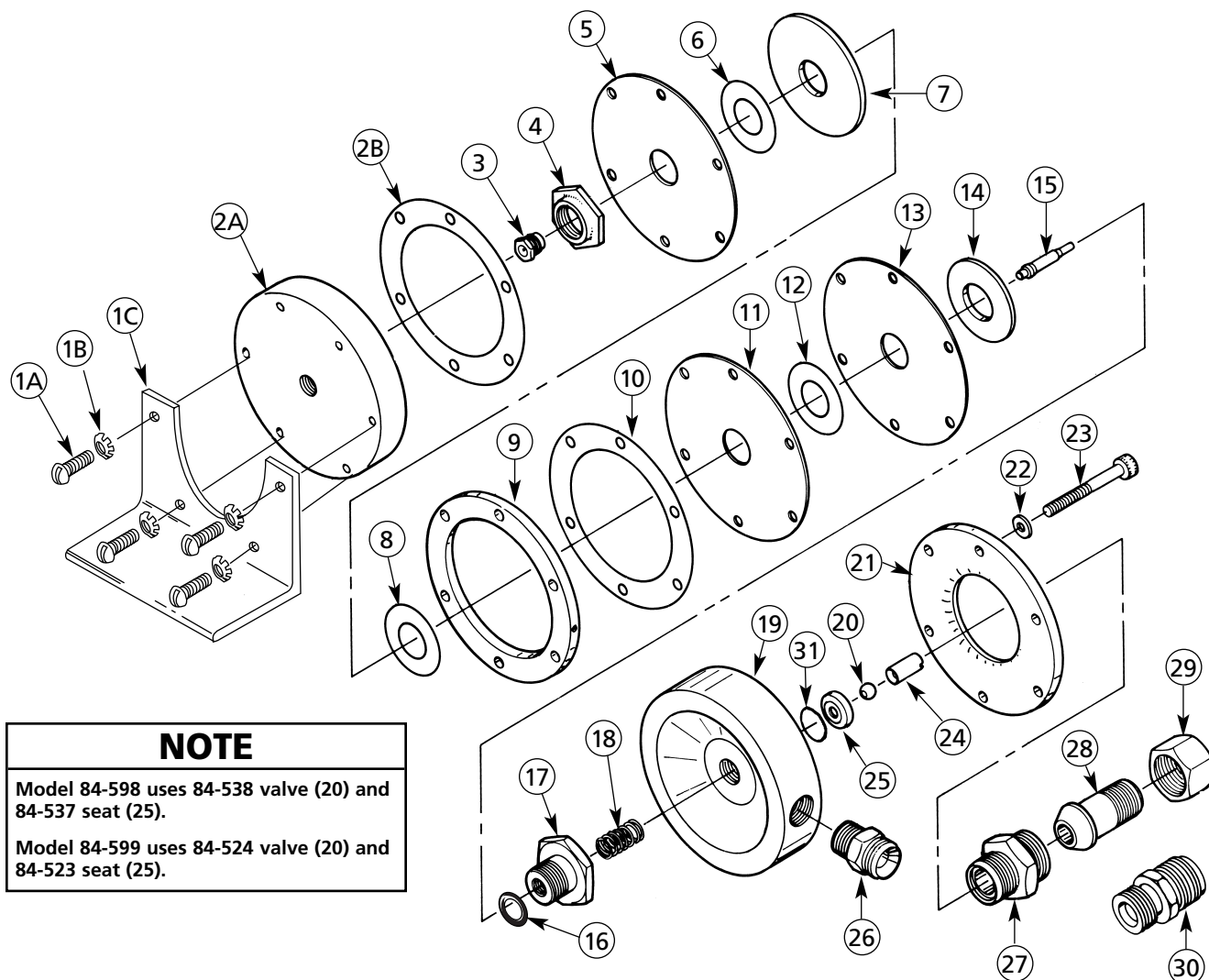
NOTE

Use Teflon tape on threads of items 3 and 17.

TORQUE SPECIFICATIONS

Item	Torque
3	100-110" lbs.
4	110-120" lbs.
22	35-45" lbs.

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NOTE

Model 84-598 uses 84-538 valve (20) and 84-537 seat (25).

Model 84-599 uses 84-524 valve (20) and 84-523 seat (25).

PARTS LIST

When ordering, please specify Part No.

ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1A	20-227■	RD. HD. MACHINE SCREW (10-24 x 1/2" Long)	4	20	84-524†	VALVE (Tungsten Carbide)	1
1B	20-2530■	LOCK WASHER	4	20	84-538*	VALVE (Tungsten Carbide)	1
1C	95-19407■	MOUNTING BRACKET	1	21	84-493	FLANGE	1
2A	84-534	BONNET	1	22	20-1375	LOCKWASHER (#10)	6
2B	84-463*†	GASKET	1	23	20-3336	SOC. HD. CAP SCREW (10-24 x 1-3/4" Long)	6
3	84-333	SOCKET	1	24	84-336	CAP NUT (Model 84-598).....	1
4	84-331	NUT	1	24	84-470	CAP NUT (Model 84-599).....	1
5	84-399*†	DIAPHRAGM	1	25	84-523†	SEAT (Tungsten Carbide)	1
6	84-388*†	GASKET	1	25	84-537*	SEAT (Tungsten Carbide)	1
7	84-398	DISK	1	26	83-2484	D.M. NIPPLE (Stainless Steel) (1/4" NPT x 3/8" NPS)	1
8		(SAME AS ITEM 6)	1	27	84-337	INLET	1
9	84-532	SPACER.....	1	28	84-318	TAILPIECE	1
10		(SAME AS ITEM 2B)	1	29	72-337	SWIVEL NUT	1
11	84-329*†	DIAPHRAGM	1	30	84-529■▲	INLET (3/8" NPS)	1
12		(SAME AS ITEM 6)	1	31	84-526*†	GASKET	1
13		(SAME AS ITEM 5)	1				
14	84-328*†	DISC	1				
15	84-395	ROD	1				
16	20-5921*†	O-RING (To Prevent Leakage).....	1				
17	84-467	RETAINER	1				
18	84-535*†	SPRING	1				
19	84-533	BODY (Alum.)	1				

■ Optional. Please order separately.

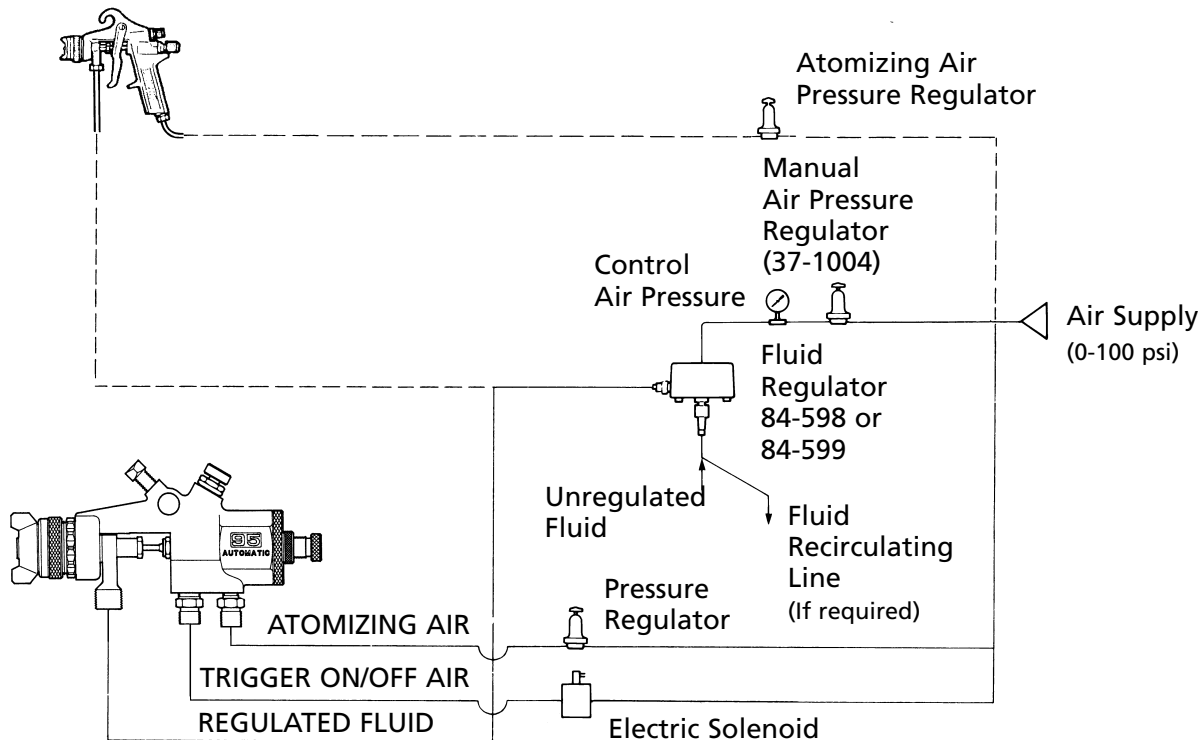
* Also available in Repair Kit 6-525 (Model 84-598). Kit not furnished, please order separately.

▲ Item 30, when used, replaces the three Items 27, 28, 29.

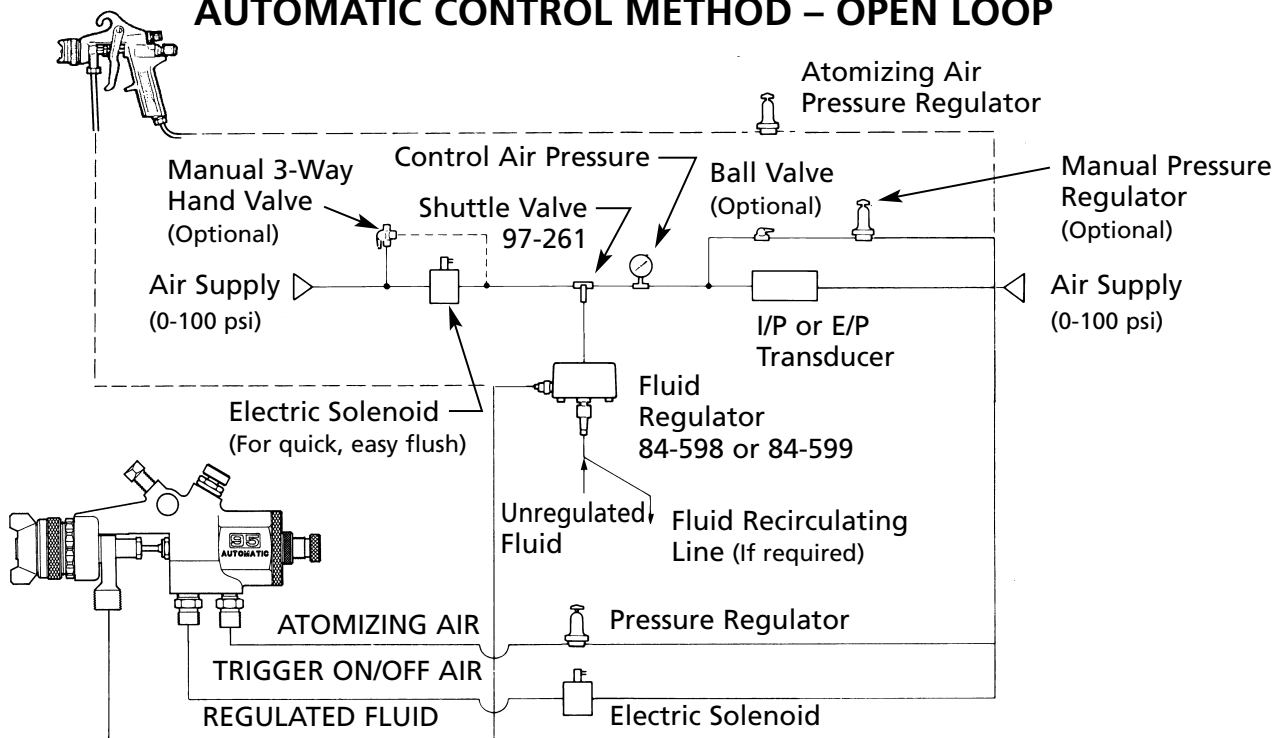
† Also available in Repair Kit 6-526 (Model 84-599). Kit not furnished, please order separately.

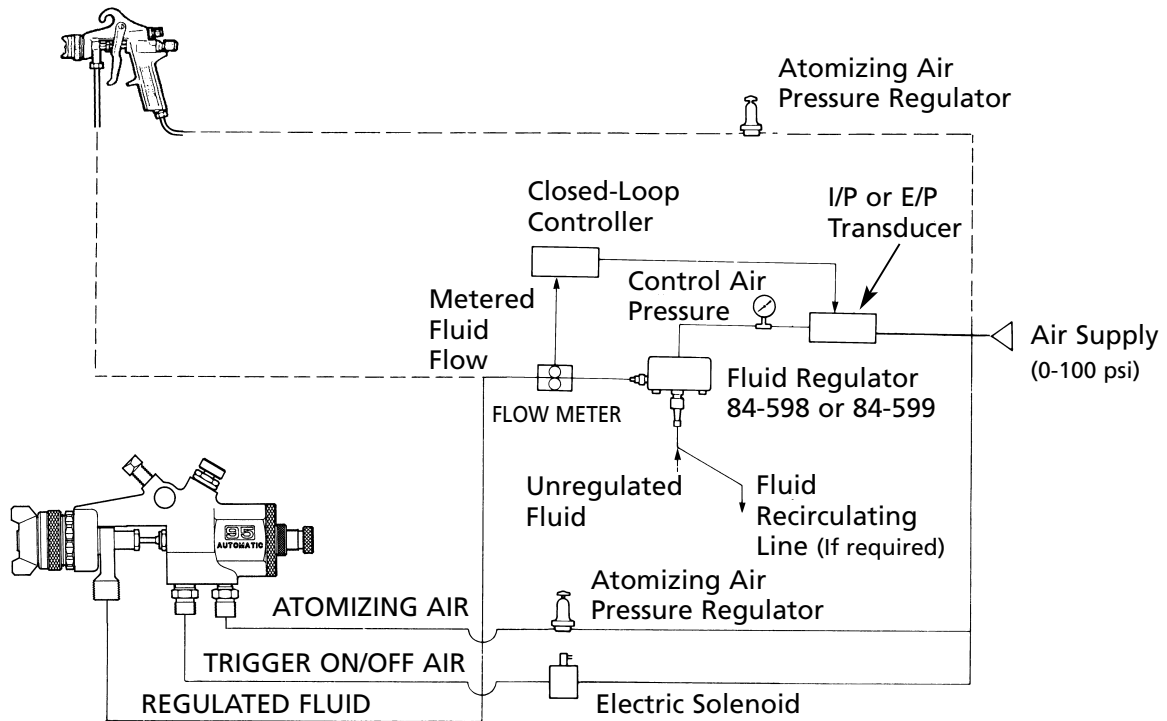
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MANUAL CONTROL METHOD – OPEN LOOP



AUTOMATIC CONTROL METHOD – OPEN LOOP



Binks MODELS 84-598 & 84-599 REMOTE FLUID PRESSURE REGULATORS**AUTOMATIC CONTROL METHOD – CLOSED LOOP**

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



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