

# Air Controls

309923 rev.E

**Important Safety Instructions**

Read all warnings and instructions in this manual.  
Save these instructions.

**Air Control Assemblies**

Provide clean, dry, regulated compressed air

Part No.	Description	Includes		Maximum Regulated Air Pressure
		Regulator*	Filter*	
234398	2 regulated outlets and 1 filtered main line outlet	234392	similar to 234396, page 6	160 psi (1.1 MPa, 11 bar)
234399	2 regulated outlets and 2 filtered main line outlets with gauge and air cock	234392		
234400	2 air regulators, each has 2 regulated outlets and 1 filtered main line outlet with gauge and air cock	234392		
234411	2 regulated outlets and 1 filtered main line outlet	234392	234410	

\* Regulator maximum CFM is 50. See table below for maximum filter CFM.  
See Air Regulator manual 309924 for additional information on air regulator.

**Air Filters**

With 5 micron filtration

Part No.	Description	Inlet	Outlets	Maximum CFM	Maximum Air Inlet Pressure
234396	Air Filter, bare	1/2" npt(f)	3/8" npt(f)	120 CFM	175 psi (1.2 MPa, 12 bar)
234410	Air Filter, bare	1/2" npt(f)	3/8" npt(f) 1/4" npt(f) plugged	75 CFM	
234412	Air Filter, quick coupler	1/4" npt(f)	1/4" npt(f) 1/4" npt(f) plugged	75 CFM	

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# Installation

## CAUTION

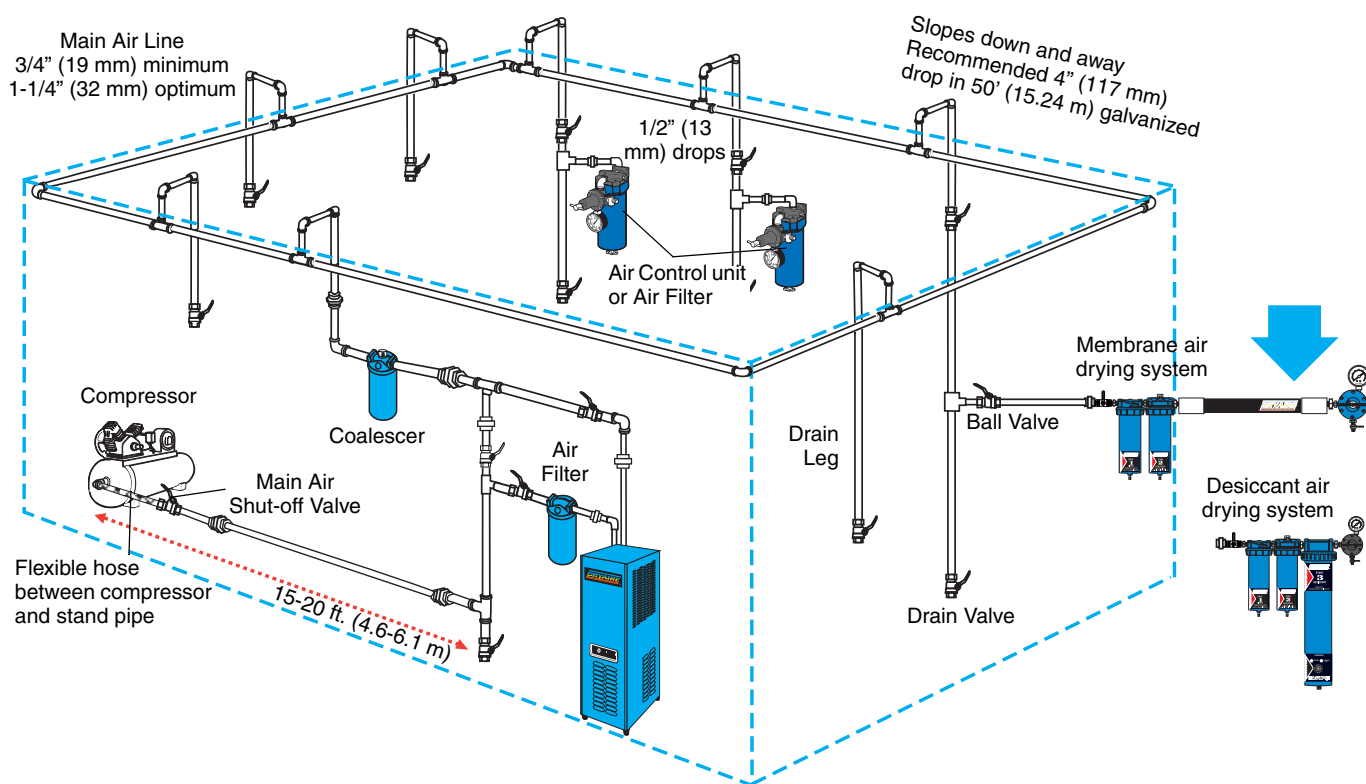
Do not hang the air control unit directly off a pump air motor inlet, which could be damaged by the weight of the unit and operating stress.

Use pipe compound or tape sparingly and only on male threads. Locate the regulator as close as possible to the equipment it serves.

Install a main air shutoff valve upstream from the air controls to isolate them for service.

Before installing air line components, blow out the pipe line to remove debris. Be sure air to the regulator is clean. Erratic operation or loss of regulation is usually caused by dirt in the regulator.

## Shop Air Piping Layout




- Main Air Line stand pipe should not be smaller than compressor outlet size.
- A minimum of 25 ft. (7.62 m) from compressor to first filter outlet is required to cool air [50 ft. (15.24 m) optimum]

Minimum Pipe Size Recommendations			
Compressor		Main Air Line	
HP	CFM	Length ft (m)	Size in. (mm)
1-1/2 - 2	6 - 9	any	3/4 (19)
3 - 5	12 - 20	Up to 200 (61)	3/4 (19)
		Over 200 (61)	1 (25.4)
5 - 10	20 - 40	Up to 100 (30.5)	3/4 (19)
		Over 100-200(30.5-61)	1 (25.4)
		Over 200 (61)	1-1/4 (31.8)
10 - 15	40 - 60	Up to 100 (30.5)	3/4 (19)
		Over 100-200(30.5-61)	1-1/4 (31.8)
		Over 200 (61)	1-1/2 (38.1)

Air Pressure Drop Through Hose, by hose length and ID psi (Kpa, bar)				
Hose ID (in.)	Inlet P	Hose Length (ft)	Pressure Drop	SCFM (ft <sup>3</sup> /min)
1/4	40	4	6	14
		10	8	10
		15	9.5	9
		20	11	8
		25	12.75	8
		50	24	8



# Operation

## Pressure Adjustment

						
Do not exceed the Maximum Incoming Air Pressure of the equipment. Over pressurizing can cause component rupture and serious injury.						

Turn clockwise to increase air pressure. Turn counterclockwise to decrease air pressure.

## Pressure Relief Procedure

						
To avoid injury, relieve air and fluid pressure before checking, cleaning, or repairing the equipment.						

The following is a basic pressure relief procedure. Be sure to follow the specific pressure relief procedure in your spray gun and/or fluid supply equipment manuals.

- 1. Close the main air shutoff valve.
- 2. Trigger the gun or dispense valve and open any drain valves to relieve pressure.

# Maintenance and Repair

## Air Filter


Follow the **Pressure Relief Procedure** before performing any of the following procedures.

Wash the filter element and bowl with household soap and water or denatured alcohol. Use compressed air to blow dirt and contaminants out of the filter body. Blow out the filter element from the inside.

Clean the air filter regularly to maximize filtering efficiency and to avoid excessive pressure drop. Fully relieve pressure before removing the bowl.

## Auto Drain

When the filter bowl is pressurized, the piston travels down against the spring and closes the drain opening. When the bowl is depressurized (i.e., overnight when system is shut down), the spring lifts the piston from the seal, allowing the bowl to drain.

 You can push the piston stem on the bottom of the bowl to manually drain it.

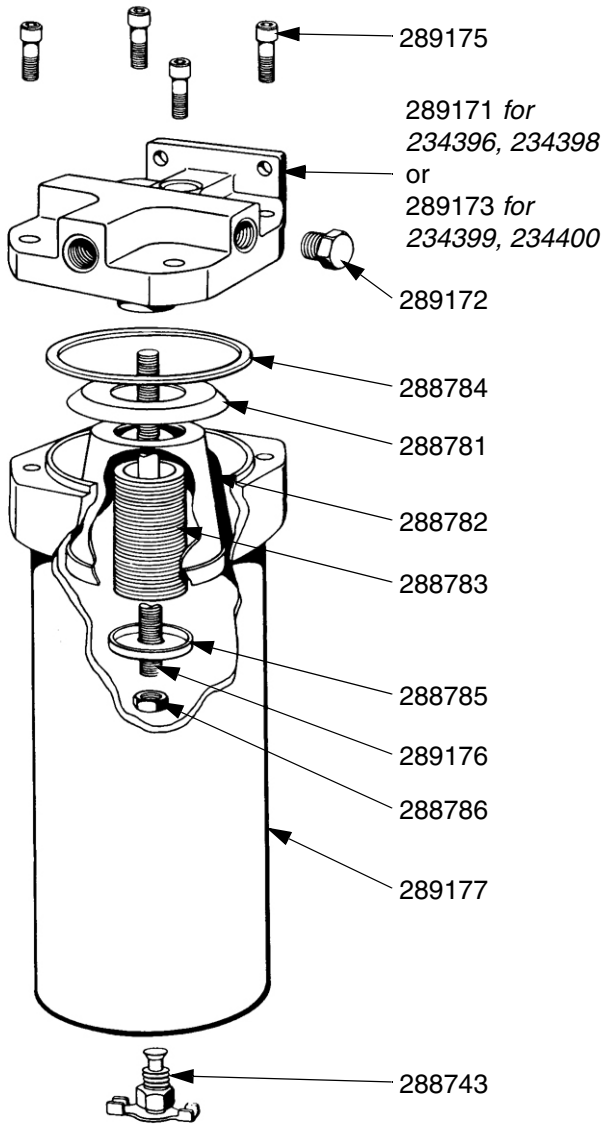
## Air Regulator

See Air Regulator Manual 309924 for maintenance and repair procedures.

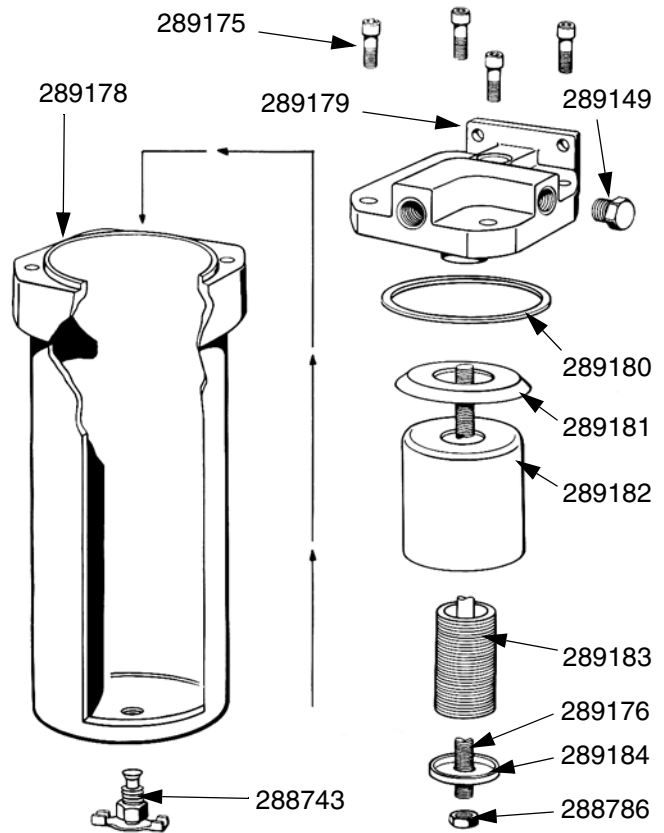


## Air Filters

Parts for Bare Filter 234396 and for  
Filter supplied with Air Controls 234398,  
234399, and 234400



Part No. 234410 and 234412





Handwriting practice lines consisting of multiple horizontal lines. Each line set includes a solid top line, a dashed middle line, and a solid bottom line, providing a guide for letter height and placement.

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# Graco Information

**TO PLACE AN ORDER,** contact your Graco distributor or call to identify the nearest distributor.

**Phone:** 612-623-6921 **or Toll Free:** 1-800-328-0211 **Fax:** 612-378-3505

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This manual contains English. MM 309923

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