



# R55M/R56M Installation and Maintenance

**MASTER PNEUMATIC-DETROIT, INC.**

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JAA 09-15-05

REV MJF 03-01-13

ECN 4853

## THANK YOU!

You have just purchased a quality Regulator from Master Pneumatic.

With care in its installation and maintenance, you can expect it to have a long and economical service life. Before you go any further, please take a few minutes to look over this information, then save it for future reference and for the useful service information it contains.



## Installation & Operation Procedures

### INSTALLATION:

1. Depressurize and lockout air pressure.
2. Upstream pipes must be free of excessive dirt and liquids.
3. Filters should be installed immediately ahead of Regulators to insure a clean supply of air.
4. Install the Regulator in airline as near as possible to the device it is to serve.
5. Install the Regulator so air flows in same direction as arrow on Regulator head.
6. Regulator should be installed before any Lubricators or Valves in airline.
7. The Regulator has gauge ports on both sides of the head. It is necessary to install pressure gauge or pipe plugs into each port before operating.
8. The Regulator can be installed with Dome up, down, or any rotation.

### OPERATION:

1. When adjusting pressure setting, always reset from a pressure lower than the final desired setting. For example, lowering pressure from 100 psi to 50 psi should be done by decreasing pressure to 30 psi than increasing to 50 psi.
2. To increase pressure: Pull out on Adjusting Knob (#9), turn clockwise.  
To lower pressure: Pull out on Adjusting Knob (#9), turn counter-clockwise.
3. Push in on Adjusting Knob (#9) to lock in place.

### TO CLEAN OR REPAIR:

1. Depressurize and lockout air pressure.
2. Reduce spring load to zero by turning Adjusting Knob (#9) counter-clockwise.
3. Remove Dome (#7) by turning counter-clockwise.
4. The Piston (#3) or Diaphragm Assembly (#4) can now be removed.
5. Visually inspect Piston (#3) or Diaphragm Assembly (#4) for defects. If necessary replace.
6. Unscrew Valve Seat (A). Remove Valve Assembly (#2) including poppet, guide, o-ring and spring.
7. Visually inspect Valve Assembly (#2) for defects. If necessary replace.
8. Re-assemble, correctly locating all seals, starting with Valve Assembly (#2). Torque Valve Seat (A) to 3-5 in-lbs., do not over tighten. Insert u-cup and Piston Assembly (#3) into Head (#1) or follow instructions for Diaphragm Assembly (#4, figure 1 on page 2). Torque Dome (#7) to 90-100 in-lbs.
9. If the Regulator cannot be repaired by cleaning with soap and water, the parts should be replaced.
10. If the air supply is kept clean, the Regulator should provide long periods of uninterrupted service.

## Replacement Parts and Mounting Accessories

PART NUMBER	DESCRIPTION
A33-533	Valve Assembly Kit (Poppet Valve, Valve Spring, Valve Guide & O-ring)
A33-544	Piston Assembly Kit (Piston and U-cup)
A10R-56	Diaphragm Assembly Kit (Diaphragm, Support, Retainer and Spacer)
A33-75	Adjusting Screw Assembly Kit (Spring Rest and Adjusting Screw)
A33-82	Panel Mount Nut & Bracket
10R-26	Panel Mount Nut



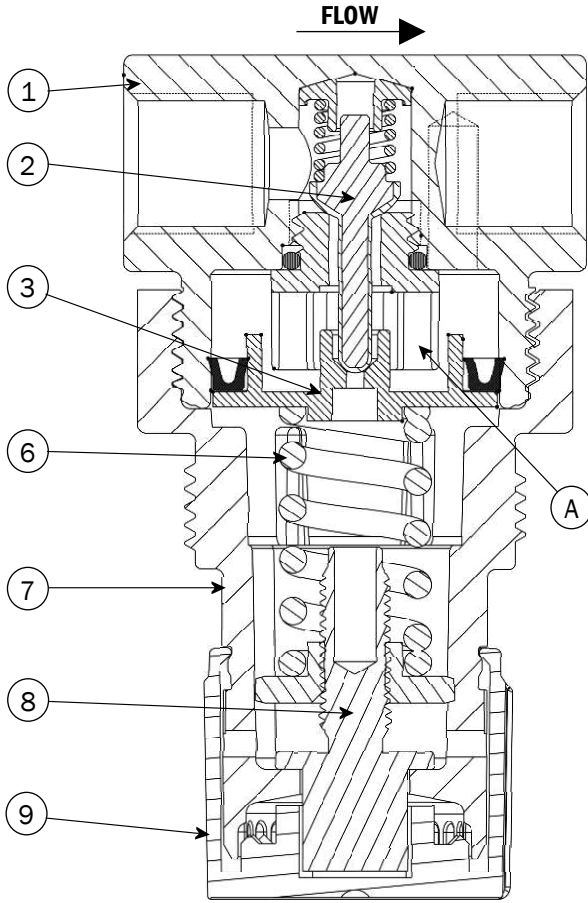
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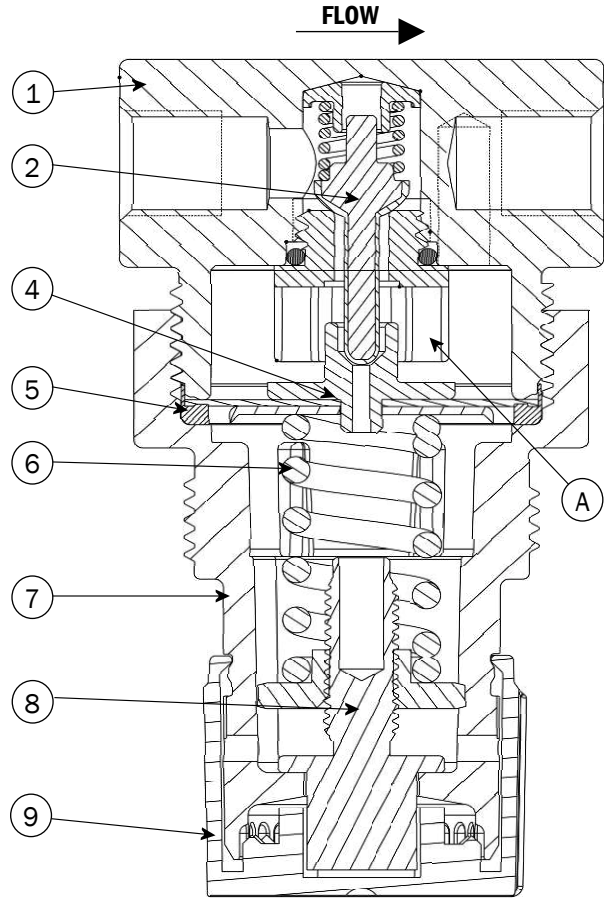
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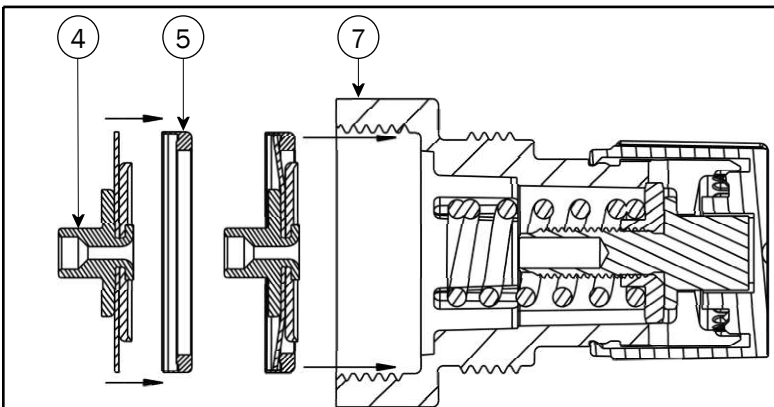
## Section View



**R55M SECTION VIEW**  
(Piston Regulator)



**R56M SECTION VIEW**  
(Diaphragm Regulator)



**Figure 1**

Insert Diaphragm Assembly (#4) into Spacer (#5) then insert into Dome (#7) as shown above.

KEY	DESCRIPTION
1	Head
2	Valve Assembly
3	Piston Assembly
4	Diaphragm Assembly
5	Spacer
6	Main Spring
7	Dome
8	Adjusting Screw Assembly
9	Adjusting Knob
A	Valve Seat