



# PRH180M Service Parts and Maintenance

MASTER PNEUMATIC - DETROIT, INC.

6701 -18 Mile Rd. | Sterling Heights, MI 48314 | Phone: (586) 254-1000 | Fax: (586) 254-6055 | Email: mp@masterpneumatic.com

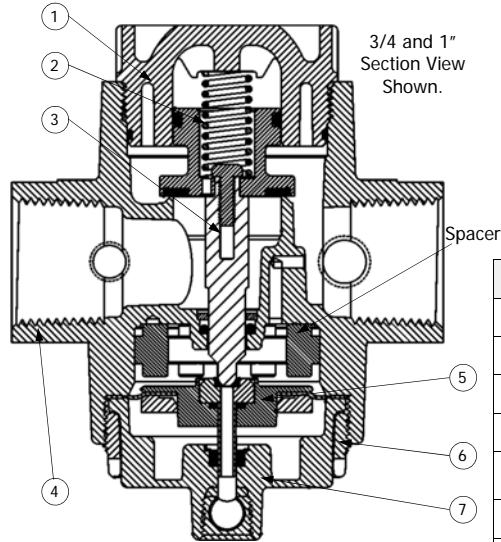
JM 12-18-01  
REV 08-17-2020  
(ECN 5246)

## Pilot Operated Regulator Replacement Parts

### THANK YOU!

You have just purchased a quality Pilot Operated Regulator from Master Pneumatic.

With care in it's 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.



### ATTENTION:

The spacer does not need to be replaced. It is only needed if one is not already installed.

KEY	DESCRIPTION	PRH180M-6	PRH180M-8	PRH180M-10	PRH180M-12
1	Cap kit	A37-199	A37-199	A37-199	A37-199
2	Spring (qty 5)	KV37-197	KV37-197	KV37-197	KV37-197
3	Valve kit	A37-321M	A37-321M	A37-321M	A37-321M
4	Head kit	A37-72M-6SR195	A37-72M-8SR195	A37-73M-10SR195	A37-73M-12SR195
5	Diaphragm kit *	KA37-110RM	KA37-110RM	KA37-110RM	KA37-110RM
6	Retaining ring	37-249	37-249	37-249	37-249
7	Dome	A37-243K	A37-243K	A37-243K	A37-243K

\* Replacement instructions for **spacer** in the diaphragm assembly kit:

- 1: Orientate spacer so stand-offs do not block hole drilled in bottom of head.
- 2: Press spacer into head.

## Installation Procedures

### INSTALLATION:

A control regulator (ordered separately) controls the outlet pressure of the pilot operated regulator. Any M/P regulator can be used as the pilot. The pilot regulator may be installed some distance from the main regulator for convenient, remote adjusting. Install the unit as near as possible to the device it is to serve. Use the size pilot operated regulator that corresponds to the maximum flow required.

Filters should be installed immediately ahead of the regulator to insure a clean supply of air. The air pressure is regulated by force created due to the pilot pressure (Supplied by the control regulator) acting against the diaphragm, which opens and closes the supply valve to maintain the set pressure with flow through the regulator. Overpressure is relieved thru the exhaust when pressure on the top of the diaphragm exceeds the pilot pressure acting on the bottom of the diaphragm.

### MAINTENANCE:

If the air supply is kept clean, the regulator should provide long periods of uninterrupted service. Erratic operation or loss of regulation is usually due to dirt or a leaking seal. If repairs are needed, lock-out the air supply and exhaust trapped air. The supply valve can be removed by unscrewing the valve cap. Clean the valve seat with soap and water to remove any dirt.

The diaphragm must be pre-loaded after assembly for proper operation. Because of this, it is not recommended that the dome be removed. If the regulator cannot be repaired by cleaning the valve, and the pilot supply regulator is functioning properly, the regulator should be returned to the factory for repair.



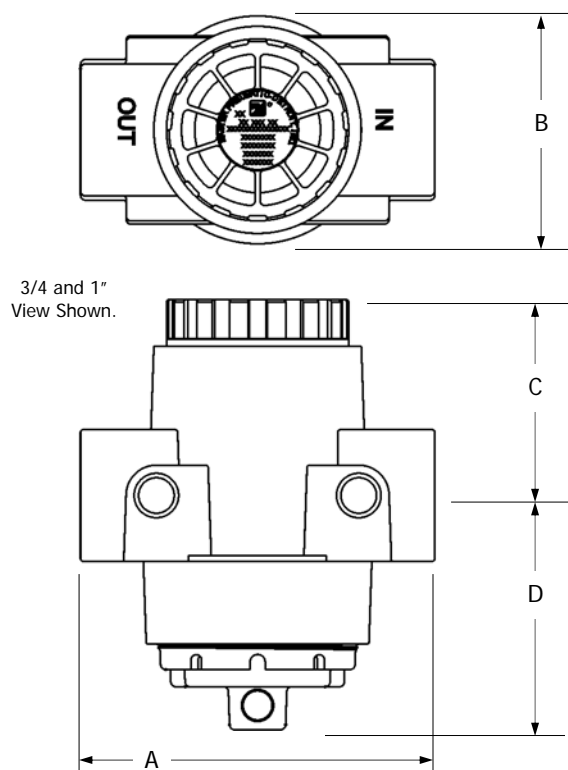
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## Dimensional Specifications



	3/4-NPTF	1-NPTF	1 1/4-NPTF	1 1/2-NPTF
KEY	PRH180M-6	PRH180M-8	PRH180M-10	PRH180M-12
A	4 3/8 (11.11 cm)	4 3/8 (11.11 cm)	4 7/8 (12.38 cm)	4 7/8 (12.38 cm)
B	2 13/16 (7.14 cm)	2 13/16 (7.14 cm)	2 13/16 (7.14 cm)	2 13/16 (7.14 cm)
C	2 27/64 (6.15 cm)	2 27/64 (6.15 cm)	2 7/64 (5.35 cm)	2 7/64 (5.35 cm)
D	4 25/32 (11.15 cm)	4 25/32 (11.15 cm)	5 3/32 (12.93 cm)	5 3/32 (12.93 cm)

## General Specifications

**MAXIMUM INLET PRESSURE:** 300 PSI (20.69 bar)

**MAXIMUM TEMPERATURE:** 175 Deg F. (79 Deg C.)

**ADJUSTING PRESSURE:** 0-200 PSI (0-13.8 bar)

### SUFFFIX OPTION

G 0-200 PSI GAUGE

W BSP BRITISH (WHITWORTH) THREADS

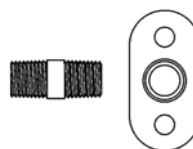
## Accessories



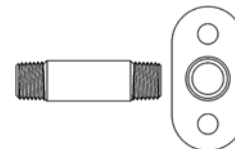
60BDD



200-BDD



KA37-68



KA37-68L

PART NUMBER	DIAL FACE	CALIBRATIONS	MOUNTING
200-BDD	2" (5.1 cm)	0-200 PSI (0-14 BAR)	1/4"-18 NPT
60BDD		0-60 PSI (0-4 BAR)	CENTER BACK
200-SDDX		0-200 PSI (0-14 BAR)	1/4"-18 NPT SIDE

KIT NUMBER	DESCRIPTION
KA37-68	Gauge port wall bracket
KA37-68L	Gauge port extended wall bracket