# Model 12-PV-PRD / 34-PV-PRD

Pressure Reducing Valve (1/2" & 3/4")



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### **Maintenance Instructions**

#### MAINTENANCE (1/2" PV-PRD VALVE)

The PV-PRD pressure reducing control valve may be installed in any position. The flow direction is shown below. Flow goes from the narrow side to the wide side of the cast body.



#### DISASSEMBLY

Prior to disassembly, relieve all pressure from the valve.

- 1. Secure valve body and remove main cap on bottom of valve using an adjustable wrench.
- Next remove adjustment cover (plastic cover), 3/8" adjustment bolt with nut, 8 socket head screws around the pilot bell using a 5/32 hex key, spring, and spring disc.
- 3. Use the 5/32 hex key in the plunger screw and a wrench on the diaphragm nut to unscrew one end of the stem.
- 4. At this point the PRV stem is free to move and can be slid out of the valve body.
- Continue to remove the 5/16" diaphragm nut, lock washer, and upper diaphragm retainer, diaphragm, diaphragm o-ring, lower diaphragm washer, stem guide, stem o-ring, and plunger from the stem.
- After complete disassembly, thoroughly clean and inspect all components before reassembly. Replace any parts as necessary after inspection.
- The pilot seat generally does not need to be removed, but if after inspection it requires replacement it can be removed with a 1-1/8" socket.

#### 1/2" PV-PRD VALVE

#### REASSEMBLY

Reassembly of the PV-PRD is the reverse of disassembly.

 Install the lower diaphragm washer (with round edge toward the diaphragm), new o-ring, followed by new diaphragm and diaphragm retainer. Then place lock washer over stem threads along with the 5/16" diaphragm nut and tighten.

- 2. Next slide stem assembly into body through pilot seat.
- 3. Then slide the plunger onto the stem via the main cap hole followed by the small stem o-ring, stem guide and cap screw. While holding diaphragm nut, tighten the cap screw with Allen wrench.
- 4. Install main cap in bottom of valve body with new o-ring.
- 5. Install spring, spring disc, and pilot bell on the valve body.
- 6. Insert socket head cap screws into pilot bell holes and thread into valve body. Tighten all screws in a cross pattern.
- Install adjusting screw by hand with jam nut. Set valve once reinstalled into pipe system. For further assistance or ordering replacement parts go to www.zurn.com or call product support 877-222-5356.



#### PV-PRD SPECS:

Adjustment Range Pressure:30 - 250 psi(Flowing residual outlet pressure)Max Inlet Pressure:400 psi

**WARRANTY:** ZURN WILKINS Valves are guaranteed against defects of material or workmanship when used for the services recommended. If in any recommended service, a defect develops due to material or workmanship, and the device is returned, freight prepaid, to ZURN WILKINS within 12 months from date of purchase, it will be repaired or replaced free of charge. ZURN WILKINS' liability shall be limited to our agreement to repair or replace the valve only.

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## Installation Instructions

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Before installing the pressure reducing valve, flush out the line to remove loose dirt and scale which might damage the plunger and seat. Install the valve according to the illustration shown on the first page. All valves will be furnished with stock settings. To readjust reduced pressure, loosen the outer locknut and turn the adjustment bolt clockwise (into the bell housing) to raise the reduced pressure, or counterclockwise (out of the bell housing) to lower the reduced pressure. The valve may be installed in a horizontal or vertical position.

Troubleshooting		
PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
1. Outlet pressure is above set pressure	1. The spring is over compressed	1. Loosen the adjusting screw
	2. Foreign matter obstruction	2. Disassemble and remove obstruction, replace parts as necessary
	3. Cut, worn or chipped plunger seal or seat.	3. Replace with new plunger or seat.
	4. Damaged diaphragm or stem o-ring	4. Disassemble and replace diaphragm or o-ring
2. Outlet pressure is below set pressure	1. Weak or no spring compression	1. Turn adjusting screw in to increase pressure regulation
	2. Spring damaged	2. Disassemble and replace spring as needed
	3. Spring disc out of place	<ol> <li>Disassemble and replace or adjust spring disc as needed</li> </ol>
	4. Foreign matter between plunger or stem guide and main cap	4. Disassemble and remove obstruction
3. Leakage from valve	<ol> <li>Damaged diaphragm, stem or main cap o-ring</li> </ol>	1. Disassemble and replace damaged part as needed
	2. Ports not sealed	<ol> <li>Remove and reinstall port fittings Teflon tape or pipe sealant</li> </ol>
	3. Loose diaphragm nut	3. Disassemble and re-tighten the diaphragm nut

NOTICE: Annual inspection and maintenance is required of all plumbing system components. To ensure proper performance and maximum life, this product must be subject to regular inspection, testing and cleaning.



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