

# Model PV-ACL-3

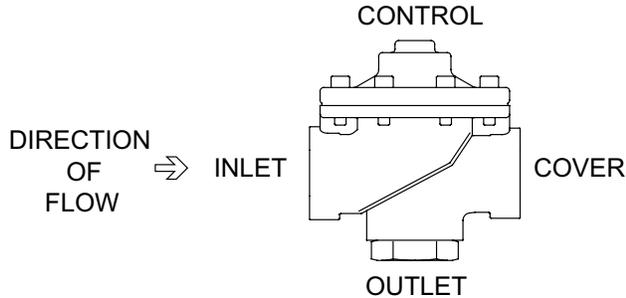
## 3-Way Accelerator Pilot



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### Maintenance Instructions

The 3-Way Accelerator Pilot may be installed in any position. The valve ports are labeled below.



#### DISASSEMBLY

Prior to disassembly, relieve all pressure in pilot system and then remove the PV-ACL-3. Note the pilot connections and reinstall the pilot with the same connection placement when finished with maintenance.

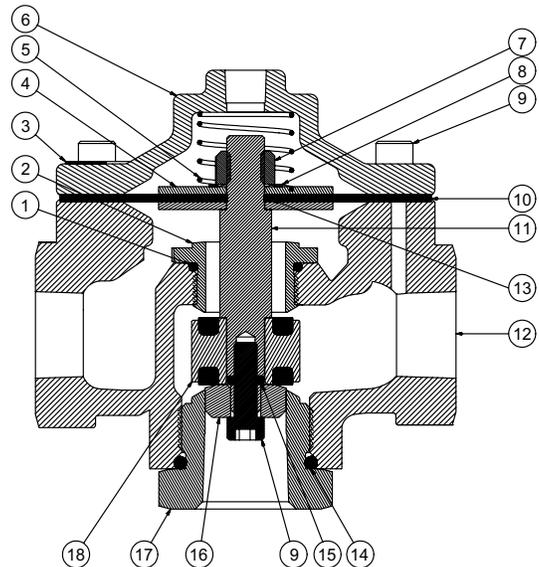
- Secure valve body and remove bottom seat on bottom of valve using an adjustable wrench.
- Next remove 8 socket head screws around the pilot bell using a 5/32" hex key.
- Remove the pilot bell and the spring.
- Use a 5/32" hex key for the bottom plunger screw and a 12mm socket or adjustable wrench on the diaphragm nut to disassemble the plunger/diaphragm assembly. Unscrew one end of the stem.
- At this point slide the plunger/diaphragm assembly out of the valve body.
- Use soft jaws or a towel and pliers to clamp the stem. Remove the plunger, stem guide, screw, and small o-ring from the plunger assembly and 2 large washers, diaphragm, lock washer, o-ring and nut from the diaphragm assembly.
- 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 1-1/16" socket.

#### PV-ACL-3 VALVE REASSEMBLY

Reassembly of the PV-ACL-3 is the reverse of disassembly.

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

- Next slide stem assembly into body through pilot seat.
- Then slide the plunger onto the stem via the bottom seat hole followed by the small stem o-ring, stem guide and cap screw. While holding diaphragm nut, tighten the cap screw with Allen wrench.
- Install bottom seat in bottom of valve body with new o-ring. The cross shaped stem guide must slide into the bottom seat.
- Install spring and pilot bell on the valve body.
- Insert socket head cap screws into pilot bell holes and thread into valve body. Tighten all screws in a cross pattern.
- Reinstall into the pilot system once maintenance is completed. For further assistance or ordering replacement parts go to [www.zurn.com](http://www.zurn.com) or call product support 877-222-5356.



ITEM	DESCRIPTION
1	O-RING
2	PILOT SEAT
3	TAG, ACCELERATOR PILOT
4	DIAPHRAGM WASHER
5	ACL STEM SPRING
6	ACL BELL
7	5/16-18 DIAPHRAGM NUT
8	5/16" INT TEETH LOCKWASHER
9	10-32x5/8 SKT HEAD CAP SCREW

ITEM	DESCRIPTION
10	DIAPHRAGM
11	ACL STEM
12	BODY
13	DIAPHRAGM O-RING
14	O-RING, BUNA -N
15	STEM O-RING
16	STEM GUIDE
17	ACL MAIN CAP/SEAT
18	ACL PLUNGER ASSY.

**PV-ACL-3 SPECS:**  
Max Inlet Pressure: 400 psi

⚠ **WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
 ⚠ **ADVERTENCIA:** Cáncer y daño reproductivo - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
 ⚠ **AVERTISSEMENT:** Cancer et néfastes sur la reproduction - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



# Troubleshooting

## **PROBLEM**

1. ACL does not seal on upper seat

## **POSSIBLE CAUSES**

1. The spring is over compressed
2. Foreign matter obstruction between diaphragm assy. and bell or seat and plunger
3. Cut, worn or chipped plunger seal or seat
4. Damaged diaphragm or stem o-rings
5. ACL bell port is clogged

## **CORRECTIVE ACTION**

1. Disassemble and remove obstruction
2. Disassemble and remove obstruction, replace parts as necessary
3. Replace with new plunger or seat.
4. Disassemble and replace diaphragm or o-ring
5. Remove obstruction

2. ACL does not seal on lower seat

1. Weak or no spring compression
2. Cut, worn or chipped plunger seal or seat
3. Damaged diaphragm or stem o-rings
4. Foreign matter between plunger or stem guide and lower seat
5. ACL bell port is clogged
6. Loose diaphragm nut

1. Check and replace spring as needed
2. Replace with new plunger or seat.
3. Disassemble and replace diaphragm or o-ring
4. Disassemble and remove obstruction
5. Remove obstruction
6. Disassemble and re-tighten the diaphragm nut

3. Leakage from valve

1. Damaged diaphragm or lower seat o-ring
2. Ports not sealed

1. Disassemble and replace damaged part as needed
2. Remove and reinstall port fittings with Teflon tape or pipe sealant

**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.**

**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.

