



49124597  
Revision A  
August 2015

## PacE Flow Controller, O-Ring Replacement Kit

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# Installation & Service Instructions



**Save These Instructions**



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**⚠ WARNING**

**To avoid unpredictable system behavior that can cause personal injury and property damage:**

- Disconnect electrical supply (when necessary) before installation, servicing, or conversion.
- Disconnect air supply and depressurize all air lines connected to this product before installation, servicing, or conversion.
- Operate within the manufacturer's specified pressure, temperature, and other conditions listed in these instructions.
- Medium must be moisture-free if ambient temperature is below freezing.
- Service according to procedures listed in these instructions.
- Installation, service, and conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.
- After installation, servicing, or conversion, air and electrical supplies (when necessary) should be connected and the product tested for proper function and leakage. If audible leakage is present, or the product does not operate properly, do not put into use.

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## INTRODUCTION

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Follow these instructions when installing, operating, or servicing the product.

**⚠ WARNING**

**Product rupture can cause serious injury.  
Do not connect flow controller to bottled gas.  
Do not exceed maximum primary pressure rating.**

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## PACE INSTALLATION

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**Please read these instructions before installing this product.**

**IMPORTANT INSTALLATION INSTRUCTIONS FOR:  
PACE 0.5", 1" and 2**

1. DO NOT install the unit until you have read this entire product information sheet.
2. Product is specifically designed for clean, dry, compressed air service, and use with any other fluid (liquid or gas) is a misapplication. For example, use with, or injection of certain hazardous liquids or gases in the system (such as alcohol or liquid petroleum gas) could be harmful to unit or result in combustible condition or hazardous external leakage. Manufacturer's warranties are void in the event of misapplication and manufacturer assumes no responsibility for any resulting loss. Maximum inlet pressure rating is 300 psig (21 bar) and a control range of 0-160 psi (11 bar). Temperature range is -4 °F to 176 °F (-20 °C to 80 °C).
3. INSTALL upstream of and as close as possible to where controlled compressed air is needed.
4. INSTALL with air flow in direction into "Inlet" and out "System"(as noted on chassis housing).
5. DO NOT restrict the air flow with undersize piping or fittings, unless maximum air flow is not needed.
6. INSTALLATION of a 5 micron rated filter upstream of controller is recommended.
7. WITH THE INDICATOR DIAL in the OFF position, allow the inlet side pressure to slowly build and settle to full pressure.
8. DO NOT fill tank on inlet side of system to full pressure and then open ball valve blasting full pressure to inlet of PACE Controller. This may cause damage. Always throttle valve to slowly increase pressure to controller.
9. TO CONTROL SYSTEM AIR turn adjustment knob clockwise to raise the controlled air pressure and counter clockwise to lower controlled air pressure.

## MAINTENANCE

1. TO DISASSEMBLE: Shut off air and vent air lines on both sides of the Pace. Remove retaining ring and lift cover and piston out of body. Remove bottom plug (PACE 0.5" and 1") or plate (PACE 2") and pull out main valve.
2. TO ASSEMBLE: Relubricate all seals and sealing surfaces with supplied lubricant. Assemble main valve, main valve spring, and bottom plug or plate. Insert piston into body and install cover and retaining ring. Ensure retaining ring is fully locked into retaining groove in body.
3. IF UNIT WILL NOT REGULATE TO PRESSURE, OR IF PRESSURE DROP BECOMES EXCESSIVE:
  - A. Check pilot air line for leaks, crimps, etc., and the pilot flow controller for proper operation.
  - B. Remove bottom plug or plate and main valve. Clean and check seals valves and valve seats for wear and damage. Relubricated o-rings with supplied lubricant. If main valve is worn or damaged, install the proper repair kit.

### CAUTION

**ENSURE RETAINING RING IS FULLY LOCKED INTO RETAINING GROOVE IN BODY.**

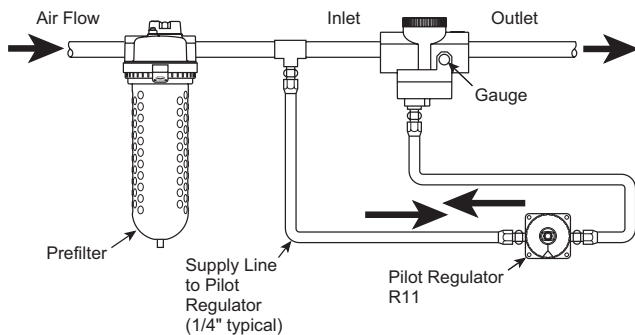
**Failure to properly seat retaining ring into groove in body could allow separation of cover assembly from body when pressurized, causing personal injury or damage.**

### WARNING

**FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.**

**This document and other information from The Company, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure and review the information concerning the product or systems in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.**

**The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by The Company and its subsidiaries at any time without notice.**



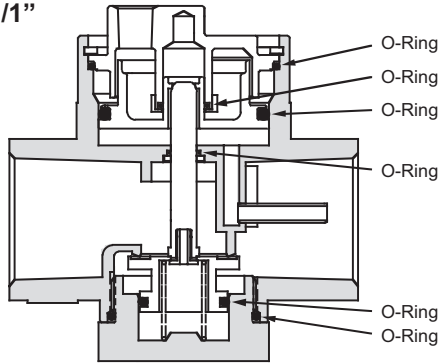
**'Typical Installation for  
PACE 0.5", 1" and 2" Flow Controllers**

# LUBRICATION INSTRUCTIONS

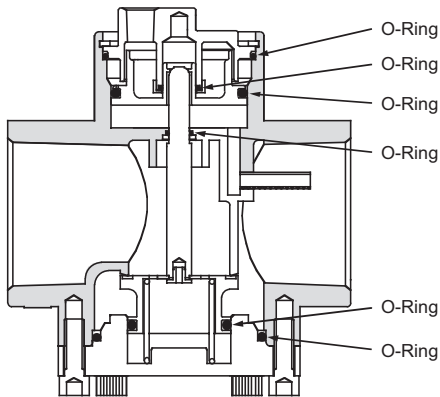
## Symptoms of a Dry Flow Controller

1. Loss of Calibration.
2. Flow Controller cannot attain high secondary pressures.
3. Erratic secondary pressures.

**PACE 0.5"/1"**



**PACE 2"**



**PACE 0.5", 1" and 2"**

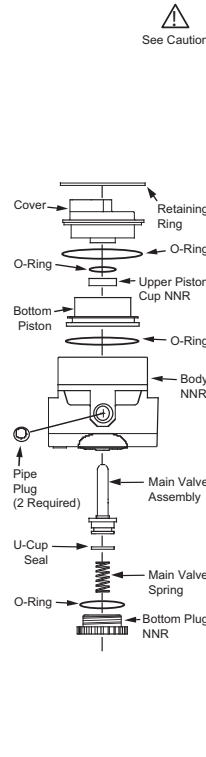
Disassemble flow controller and lubricate seals with supplied lubricant. If supplied lubricant is not available, use a heavy grease such as Magnalube-G®, Lubriplate, or Molykote; however, expect "wash out" of these lubricants much sooner. Under no conditions should you use oil as a lubricant.

THE FACTORY LUBRICATES ALL MOVING SEALS WITH SUPPLIED LUBRICANT. UNDER NORMAL CONDITIONS THIS WILL LAST THROUGH MILLIONS OF CYCLES. HOWEVER, UNDER CONDITIONS OF WET AIR, HIGH FLOWS, OR LIGHT OIL FROM A LUBRICATOR SOMEWHERE IN THE CIRCUIT, MOISTURE CAN GET INTO THE DIAL-AIR™ FLOW CONTROLLER AND THE LUBRICATION CAN BE WASHED OUT. PROPER LUBRICATION OF DIAL-AIR™ FLOW CONTROLLERS IS ABSOLUTELY ESSENTIAL.

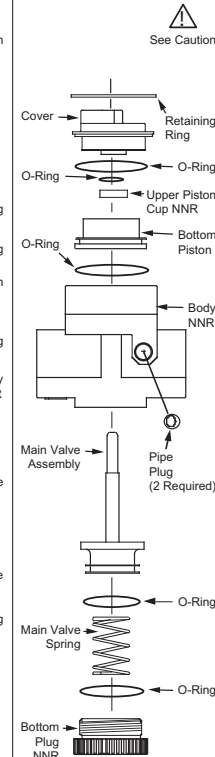
## CAUTION

**ENSURE RETAINING RING IS FULLY LOCKED INTO RETAINING GROOVE IN BODY.**  
**Failure to properly seat retaining ring into groove in body could allow separation of cover assembly from body when pressurized, causing personal injury or damage.**

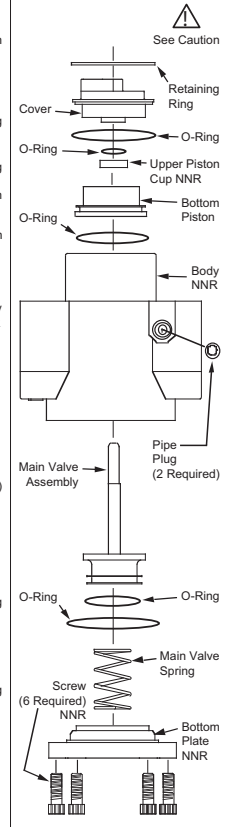
**PACE 0.5"**



**PACE 1"**



**PACE 2"**



NNR = NOT NORMALLY REPLACED

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## ORDER INFORMATION

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<b>Replacement Kits and Parts</b>	
<b>CCN</b>	<b>Description</b>
49124480	KIT, O-RING REPLACEMENT, 1/2" PACE
49124498	KIT, O-RING REPLACEMENT, 1" PACE
49124506	KIT, O-RING REPLACEMENT, 2" PACE



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