



Captured Vent Kit

NOTICE

The O-rings in the captured vent kit are lubricated with Fluorolube. This lubricant may migrate onto the outer surface of the vent ring. This lubricant is non-hazardous and is compatible with all gases. If desired, the lubricant can be removed from the outer surface using alcohol, mineral spirits, or other similar solvents. Do not remove the lubricant from the O-rings.

INSTALLATION AND OPERATION INSTRUCTIONS

Before Installing or Operating, Read and Comply with These Instructions

Controls Corporation of America
1501 Harpers Road • Virginia Beach, VA 23454
To Order Call 1-800-225-0473 or 757-422-8330 • Fax 757-422-3125
www.concoa.com

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USER RESPONSIBILITY

This equipment will perform in conformity with the description contained in this manual and accompanying labels and/or inserts when installed, operated, maintained, and repaired in accordance with the instructions provided. This equipment must be checked periodically. Improperly working equipment should not be used. Parts that are broken, missing, worn, distorted or contaminated, should be replaced immediately. CONCOA recommends that a telephone or written request for service advice be made to CONCOA Customer Service in Virginia Beach, Virginia, PHONE: 1-800-225-0473, FAX: 1-757-422-3125, or E-MAIL: e-mail@concoa.com.

This equipment or any of its parts should not be altered without prior written approval by CONCOA. The user of this equipment shall have the sole responsibility for any malfunction that results from improper use, faulty maintenance, damage, improper repair, or alteration by anyone other than CONCOA or a service facility designated by CONCOA.

DESCRIPTION OF PRODUCT

The captured vent kit is added to a 400 Series regulator spring case to redirect the gas in the event of a diaphragm failure. Simply rotating the ring orients the captured vent port. A single vent kit is needed for single stage regulators; two vent kits are needed for dual stage regulators. If a relief valve is present on the regulator, the relief valve and the vent kit outlet(s) are to be piped to a safe discharge area. Suitable tubing must be used between the vent kit and discharge area. A female 1/8" NPT connection is on the vent kit ring.

The following steps should be performed each time the vent kit is installed on a regulator with a knob:

1. The captured vent kit consists of two different sized o-rings lubricated with oxygen compatible lubricant, one vent kit ring, and one retaining ring. The o-rings should be placed in the o-ring grooves of the vent kit ring before installation. The larger o-ring installs in the larger o-ring groove.
2. Wipe the regulator bonnet with a clean rag to remove foreign matter. Inspect the bonnet for scratches and dents in the o-ring seating area (see Figure 1 on the next page). Do not install the vent kit on the regulator if the bonnet is damaged in the o-ring seating area.
3. Using a screwdriver, pry the regulator knob cap off the regulator knob.
4. Loosen and remove the top knob nut using a 17mm socket wrench.

5. Remove the regulator knob; **do not remove or turn the bottom knob nut.**
6. Check the o-rings in the vent kit ring for shipping damage (splits, cuts, or gouges).
7. Slide the vent kit ring over the bonnet until it is against the bonnet hex as shown. Do not pinch the o-rings between the vent kit ring and the bonnet; this may damage the o-rings.
8. Install the retaining ring in the retaining ring groove on the bonnet.
9. Install the regulator knob.
10. Install the top knob nut. Tighten the knob nut to 80 in-lbs. minimum.
11. Install the knob cap.
12. Pressurize the tubing from the safe discharge area to 20-30 PSI using nitrogen. Check the vent kit ring, bonnet, pipe joints, tubing, and fittings for leaks. Repair or replace any components that leak.
13. For the first stage of a dual stage regulator or a regulator without a knob, perform steps 1,2, 6, 7, 8, and 12. (Refer to Figure 2.)

MAINTENANCE

O-rings degrade over time, losing their elasticity. O-rings should be checked regularly for splits or cracks by pressure testing as described above; checks should become more frequent as the vent kit ages or if used in extreme environmental conditions.

A unit which is not functioning properly should not be used until all required repairs have been completed and the unit has been tested to ascertain that it is in proper operating order.

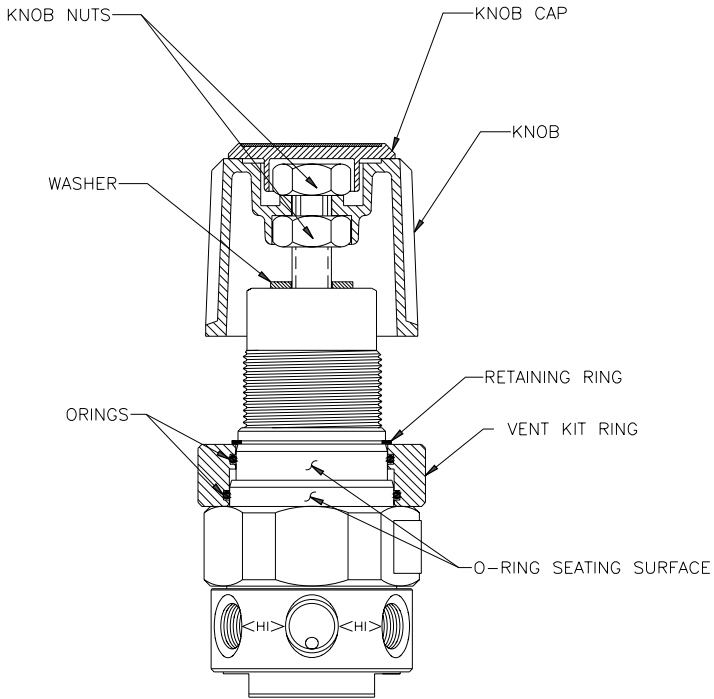


Figure 1. Regulator with knob and captured vent kit.

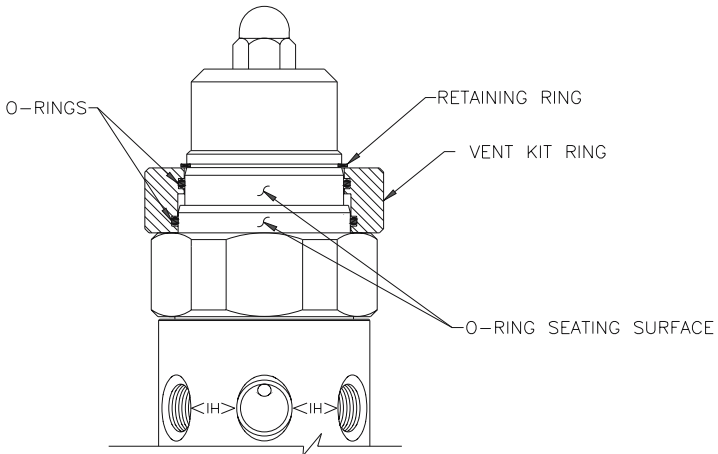


Figure 2. First stage of a dual stage regulator.