

Installation, Maintenance, & Repair

Series 1000DCV

Detector Check Valve Assemblies

Sizes: 4" – 10" (100 – 250mm)**

⚠ WARNING



Read this Manual **BEFORE** using this equipment.

Failure to read and follow all safety and use information can result in death, serious personal injury, property damage, or damage to the equipment.



Keep this Manual for future reference.

⚠ WARNING

You are required to consult the local building and plumbing codes prior to installation. If the information in this manual is not consistent with local building or plumbing codes, the local codes should be followed. Inquire with governing authorities for additional local requirements.

⚠ WARNING

Need for Periodic Inspection/Maintenance: This product must be tested periodically in compliance with local codes, but at least once per year or more as service conditions warrant. If installed on a fire suppression system, all mechanical checks, such as alarms and backflow preventers, should be flow tested and inspected in accordance with NFPA 13 and/or NFPA 25. All products must be retested once maintenance has been performed. Corrosive water conditions, and/or unauthorized adjustments or repair could render the product ineffective for the service intended. Regular checking and cleaning of the product's internal components helps assure maximum life and proper product function.

NOTICE

For Australia and New Zealand, line strainers should be installed between the upstream shutoff valve and the inlet of the backflow preventer.

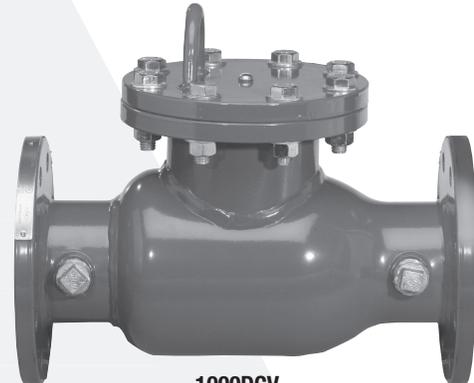
Testing

For field testing procedure, refer to Ames installation sheets IS-A-ATG-1 found on www.amesfirewater.com.

For other repair kits and service parts, refer to our Backflow Prevention Products Repair Kits & Service Parts price list PL-A-RP-BPD found on www.amesfirewater.com.

For technical assistance, contact your local Ames representative.

** Metric Dimensions are nominal pipe diameter. This product is produced with ASME/ANSI flanged end connections.



1000DCV

Basic Installation Instructions

NOTICE

Installation

- The installation and maintenance of any Ames Detector Check Valve should be performed by a qualified licensed technician. Failure to do so may result in a malfunctioning assembly. All instructions should be read thoroughly by the technician before installation or performing any maintenance on the assembly.
- Before installing an Ames Detector Check Valve, flush the lines thoroughly to remove all debris, chips and other foreign objects. Failure to do so may make the assembly inoperable.

⚠ WARNING Depressurize valve before servicing.

Removal & Replacement of Knuckle Joint Assembly

(Internal Closing Assembly)

- Shut down water system and lock out if possible.
- Loosen vent screw in lid slowly to ensure system pressure has been relieved.
- Loosen and remove all inspection port bolts and remove lid and gasket from valve.
- Install proper size clapper retainer clip (see Figure 1). Be sure clip is pushed to within 1/2" of linkage.
- Loosen equally the two knuckle joint mounting bolts, until assembly is free. As bolts are loosened, linkage will release slightly and lock clapper retainer clip in place.
- Remove knuckle joint from body assuring clapper retainer clip is not disturbed, as preloaded knuckle joint springs have considerable tension in this position.

Removal & Replacement of Knuckle Joint Assembly Cont.

7. Bolt the knuckle joint to the outside of the body using the new $\frac{3}{8}$ " bolts supplied with the new knuckle joint (see Figure 2).
8. Push on clapper plate to release clapper retainer clip, remove and slowly release tension on clapper. Unbolt knuckle joint assembly from outside of body.
9. Bolt replacement knuckle joint assembly to body.
10. Push on clapper plate to extend springs and install clapper retainer clip, making sure springs are seated on pins. Unbolt knuckle joint assembly from body bolt hole.
11. Insert two new $\frac{3}{8}$ " mounting bolts and washers through mounting holes in body. Position knuckle joint in place inside body, and finger tighten both bolts.
12. Torque knuckle joint mounting bolts to 60 inch-pounds. **Remove clapper retainer clip.**
13. Replace lid and new gasket.

Item #	Description
1.	Knuckle Joint Assembly (Complete Unit)
2.	Clapper Plate with Attached Link
3.	Spring
	4", 6" Knuckle Joint Assembly
	8", 10" Knuckle Joint Assembly
4.	$\frac{3}{8}$ " Stainless Steel Bolts
5.	Washer (not shown)
6.	Bronze Seat (Replaceable in line)
7.	Seat O-ring
8.	Vent Screw
9.	Bonnet Gasket
10.	Clapper Retainer Clip (not shown)

Figure 1

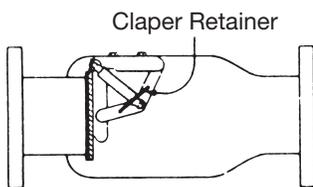
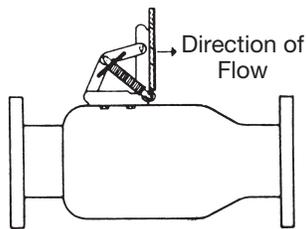
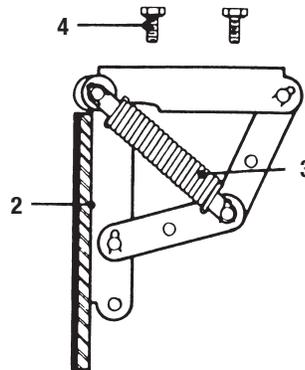


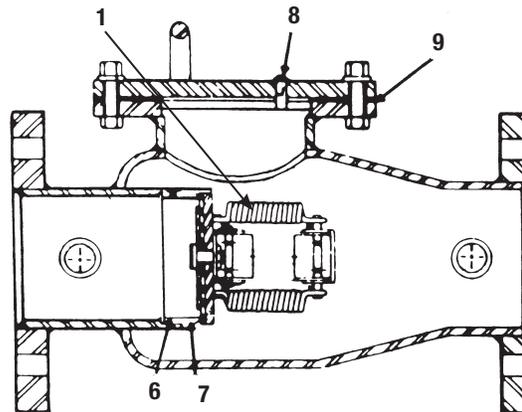
Figure 2



Knuckle Joint Assembly



Housing Half Section



Limited Warranty: Ames Fire & Waterworks (the "Company") warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge.

THE WARRANTY SET FORTH HEREIN IS GIVEN EXPRESSLY AND IS THE ONLY WARRANTY GIVEN BY THE COMPANY WITH RESPECT TO THE PRODUCT. THE COMPANY MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. THE COMPANY HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The remedy described in the first paragraph of this warranty shall constitute the sole and exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemical, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misuse, misapplication, improper installation or improper maintenance or alteration of the product.

Some States do not allow limitations on how long an implied warranty lasts, and some States do not allow the exclusion or limitation of incidental or consequential damages. Therefore the above limitations may not apply to you. This Limited Warranty gives you specific legal rights, and you may have other rights that vary from State to State. You should consult applicable state laws to determine your rights. **SO FAR AS IS CONSISTENT WITH APPLICABLE STATE LAW, ANY IMPLIED WARRANTIES THAT MAY NOT BE DISCLAIMED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO ONE YEAR FROM THE DATE OF ORIGINAL SHIPMENT.**

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
For more information: www.watts.com/prop65



www.amesfirewater.com



A Watts Water Technologies Company

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