

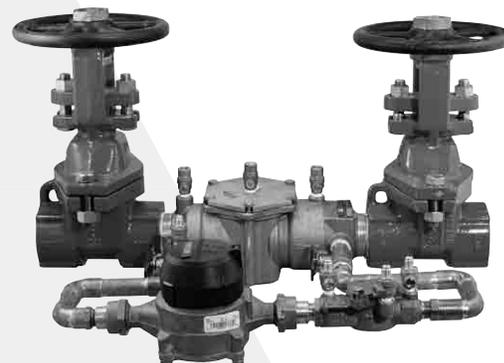
# Installation, Maintenance, & Repair

## Series 3000B

### Double Check Detector Backflow Prevention Assembly



3000BM1-FP



3000BM1-OSY

#### Models & Sizes Included: 2" (65mm)

- 3000BM1 2" (50mm)
- 3000B 2" (50mm)

#### IMPORTANT NOTICE:

Before installing the Series 3000B, inquire with local governing authorities for approved installation code requirements.

The Series 3000B Double Check Detector Assembly is specifically designed to protect against possible backpressure and backsiphonage conditions for non-health hazard [i.e., pollutant] application in accordance with Local Governing Water Utility Code. This device assembly is primarily used on potable drinking water systems where Local Governing Code mandates protection from non-potable quality water being pumped or siphoned back into the potable water system.

For technical assistance or copies of the following cut sheets, please contact your local Ames Representative.

- Field Testing Procedures for Ames ATG-1
- Ames Repair Parts Price List PL-A-RP-BPD
- WattsBox Insulated Enclosure Sheet

**IMPORTANT: INQUIRE WITH GOVERNING AUTHORITIES FOR LOCAL INSTALLATION REQUIREMENTS**

#### WARNING

You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product. **FAILURE TO COMPLY WITH PROPER INSTALLATION AND MAINTENANCE INSTRUCTIONS COULD RESULT IN PRODUCT FAILURE WHICH CAN CAUSE PROPERTY DAMAGE, PERSONAL INJURY AND/OR DEATH.** Watts is not responsible for damages resulting from improper installation and/or maintenance.

Local building or plumbing codes may require modifications to the information provided. You are required to consult the local building and plumbing codes prior to installation. If this information is not consistent with local building or plumbing codes, the local codes should be followed.

**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. 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.

# Installation Instructions

Annual inspection of all water system safety and valves is required. Regular inspection, testing and cleaning assures maximum life and proper product function.

The Series 3000B may be installed in either a horizontal or vertical-up orientation for service on commercial potable water or fire sprinkler systems. Supply pipe lines should be thoroughly flushed to remove foreign material before installing the unit that may cause unnecessary check fouling. The backflow assembly must be installed with the arrow on the valve body pointing in the direction of flow for proper operation.

It is recommended this device is installed downstream of a water meter and/or main line insulation shut-off valves with installation techniques that comply with the latest edition of the Uniform Plumbing Code. Please consult Local Governing Code for proper installation and agency code requirements.

## CAUTION:

### Strainer Installations:

The installation of a strainer upstream of the Backflow Assemblies is recommended to prevent the check modules from unnecessary fouling when used on commercial potable water systems. **DO NOT** install a strainer when the Backflow Preventer is called upon for emergency deluge or used on a fire sprinkler system and/or individual sprinkler feed.

## CAUTION:

### Fire Protection System Installations:

The National Fire Protection Agency [NFPA] Guidelines require a confirming flow test to be conducted whenever a "main line" valve such as the shutoff valves or a backflow assembly have been operated. A Certified Backflow Tester must conduct this test. The trim valves located on the detector meter bypass line [if equipped] should be fully closed during the confirming flow test of the "main line" Backflow Assembly. Once complete, the trim valves must be returned to a fully open position.

## CAUTION:

### Flange Connections:

It is recommended to inspect and retighten all flange gasket bolts on the Backflow Assembly during installation. Flange gasket bolts may have loosened due to storage, transport and/or static system hydro-testing.

### Indoor Installations:

For indoor installation, it is important the Backflow Assembly be easily accessible to facilitate testing, "main line" valve servicing and/or removal of the detector meter bypass line. **DO NOT** install a Backflow Assembly in a concealed location.

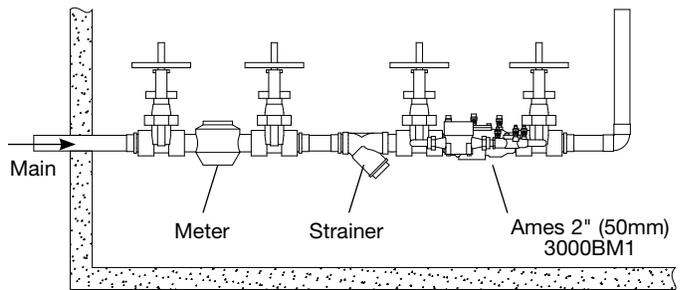
### Outdoor Installations:

For outdoor installations, care must be taken to ensure the Backflow Assembly is not subjected to periods of freezing conditions. Freezing conditions may damage the product and produce a non-operational assembly. If the installation is subjected to freezing conditions, the use of an insulated and/or heated enclosure [WattsBox] may be required.

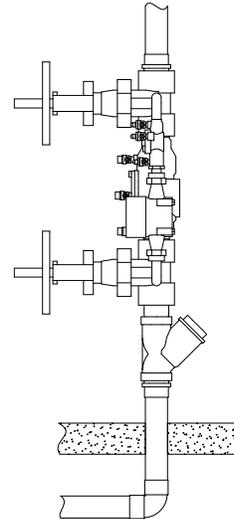
### Below Ground Installations:

The Series 3000B is not recommended for below ground [burial] installations. The most satisfactory installation is above ground and should be installed in this manner whenever possible. If below ground installation is required, the use of a "valve box" to shield the Backflow Assembly from contact with soil organics and provide adequate drainage in the event of rain-fall is recommended. Consult your Local Governing Code for proper below ground installation and agency code requirements.

## Horizontal Installation

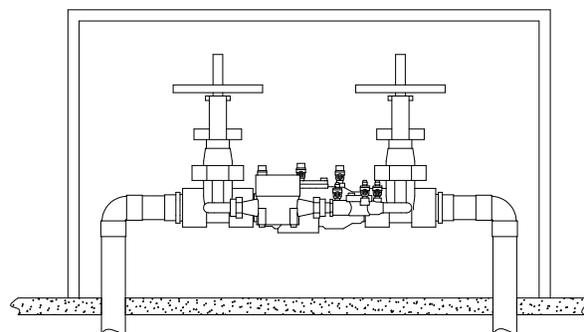


## Vertical-Up Installation



## Outdoor Installation

WattsBox



**WattsBox Insulated Enclosures,**  
for more information, send for literature ES-WB.

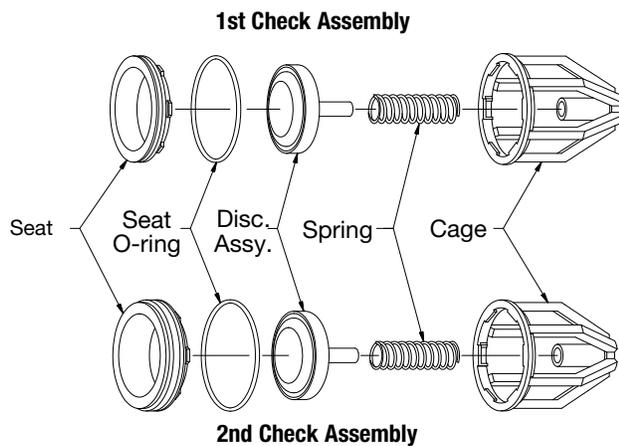
# Servicing Instructions

## Servicing the First and Second Check Valves

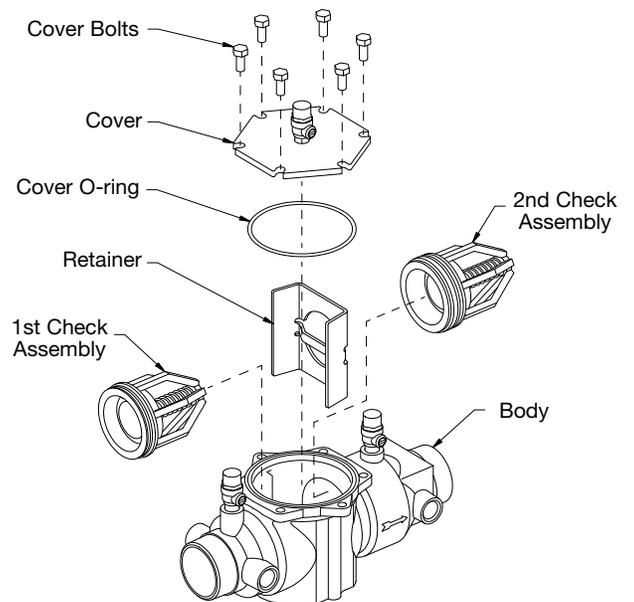
1. Remove cover bolts and cover.
2. Remove the retainer from the body bore. The check valve modules can now be removed from the valve by hand or with a screwdriver.
3. The check seats are attached to the cage with a bayonet type locking arrangement. Holding the cage in one hand, push the seat inward and rotate counterclockwise against the cage. The seat, spring cage, spring and disc assembly are now individual components.
4. The disc assembly may now be cleaned and reassemble or depending on its condition, may be discarded and replaced with a new assembly from the repair kit. O-rings should be cleaned or replaced as necessary.
5. Reassemble the check valve modules. Check modules are installed in the valve body with the seats facing the valve inlet. The modules must be securely in place before the retainer can be replaced.

**NOTE: No special tools required to service Model 3000B and 3000BM1.**

### Check Module



### Exploded View



# Replacement Parts

When ordering, specify Ordering Code, Kit Number and Valve Size.

## Main Line Backflow Assembly Kits

Model	Ordering Code	Kit No.	Size	
			in.	mm

### First Check Kit

3000BM1/3000B	7016200	ARK 3000B CK1	2	50
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Kit includes: Seat, Seat O-ring, Disc assembly, Spring, Spring retainer, Check Cage and Cover O-ring.

### Second Check Kit

3000BM1/3000B	7016201	ARK 3000B CK2	2	50
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Kit includes: Seat, Seat O-ring, Disc assembly, Spring, Spring retainer, Check cage and Cover O-ring.

### Complete Rubber Parts

3000BM1/3000B	7016202	ARK 3000B RT	2	50
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Kit includes: Two seat discs, Two seat O-rings, Two Cover O-rings.

### Cover Kit

3000BM1/3000B	7016203	ARK 3000B C	2	50
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Kit includes: Cover, Cover O-ring.

### Seat Kit

3000BM1/3000B	7016204	ARK 3000B S1	2	50
	7016205	ARK 3000B S2	2	50

Kit includes: Seat, Seat O-ring.

**Use only original equipment manufactured parts to protect the validated warranty.**

## Meter By-pass Assembly Kits

Model	Ordering Code	Kit No.	Size	
			in.	mm

### Total Repair Kit

2000B	0887033	RK 007-T	½	15
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Kit consists of: Seats, Seat O-Ring, Disc Assembly, Spring, Spring retainer, Check Cage and Cover O-Ring.

### Replacement Meter By-pass Assembly

3000BM1	7019788	SA-3000BM1FA203-GPM	2	50
	7019789	SA-3000BM1FA203-CFM	2	50
3000B	7018665	Bypass 2-3000B GPM	2	50
	7018664	Bypass 2-3000B CFM	2	50

Kit consist of: Complete by-pass assembly, including shutoff valves, water meter & Backflow Assembly

#### CALIFORNIA PROPOSITION 65 WARNING

**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (California law requires this warning to be given to customers in the State of California.)

For more information: [www.watts.com/prop65](http://www.watts.com/prop65)

**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.**



[www.amesfirewater.com](http://www.amesfirewater.com)



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**Control Valves-** Houston, TX • Tel: (713) 943-0688 • Fax: (713) 944-9445

**Canada:** Burlington, ON • Tel: (905) 332-4090 • Fax: (905) 332-7068

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