

# Installation Instructions

# 1 1/2" and 2" Inline Single Check **Backflow Preventers/Device**

# 701 Series

Model Number Explanation

#### COMPONENTS and REPAIR PARTS

#### SPACE 1, 2, & 3

Basic single check valve model number:

701 = Inline valve

#### SPACE 4

(-) Standard

C = With 1" FNPT tap in cap

F = With 1 1/2" FNPT Tap in cap

G = With 2" FNPT Tap in cap

#### SPACE 5

Single check valve size:

7 = 2"

#### SPACE 6

Inlet connection type:

D -Meter flange

### SPACE 7

Outlet connection type:

E = Female iron pipe integral

#### SPACE 9 Meter flange size

METER SIZE	FLANGE SIZE	METER DESIGNATION		
1 1/2	1 1/2"	6		
2	2"	7		

#### SPACE 10

Sizes for outlet connections

 $1 \frac{1}{2}$ " = 6 2" = 7

# - 0-ring repair part 3138-153 θutlet→ Poppet assembly

#### **HOW TO ORDER**

Not all sizes or combinations available - contact factory.

#### **UNIT REQUIRED (Example):**

- Inline style valve
- Inlet Meter flange
- No test valve
- Outlet FNPT integral 2"

- Valve size 2"

#### Order Model 701-7DE 77

_	SPACE 1, 2, & 3	SPACE 4	SPACE 5	SPACE 6	SPACE 7	SPACE 8	SPACE 9	SPACE 10
	701	-	7	D	E		7	7

### INSTALLATION INSTRUCTIONS

- 1. The device can be installed in any position.
- 2. The device shall be installed in an accessible location to facilitate the removal for servicing and testing.
- 3. Service lines should be thoroughly flushed before installing the device. Excessive pipe sealant or Teflon tape may foul checks. A suitable strainer should be installed upstream of the device.
- 4. DO NOT use Vaseline®, plumber's grease, or any other petroleum based product on any seals or O-rings.
- 5. Insure that device is installed in proper flow direction. Refer to flow direction arrow on body.
- 6. Do not over-tighten O-ring cap seal or across body cylinder to avoid distortion.
- 7. Any sweat fittings must be completed before installing device.
- 8. A pressure relief valve or expansion tank is recommended downstream of device if thermal expansion conditions are possible.
- 9. Use only on cold water services. Protect from freezing.
- 10. Refer to pressure and temperature ratings on device.

#### (Field Inspection and Test procedures on opposite side)



WARNING: It is unlawful in CALIFORNIA & VERMONT (effective 1/1/2010); MARYLAND (effective 1/1/2012); LOUISIANA (effective 1/1/2013) and the UNITED STATES OF AMERICA (effective 1/4/2014) to use any product in the installation or repair of any public water system or any plumbing in a facility or system that provides water for human consumption if the wetted surface area of the product has a weighted average lead content greater than 0.25%. This prohibition does not extend to service saddles used in California, Louisiana or under USA Public Law 111-380.

# Mº Donald

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Inlet-

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#### SPACE 5

Single check valve size:

7 = 2"

#### SPACE 6

Inlet connection type:

D -Meter flange

#### SPACE 7

Outlet connection type:

E = Female iron pipe integral

# SPACE 8

Blank

#### SPACE 9

Meter flange size

METER SIZE	FLANGE SIZE	METER DESIGNATION		
1 1/2	1 1/2"	6		
2	2"	7		

#### SPACE 10

Sizes for outlet connections

11/2" = 62" = 7

**HOW TO ORDER** Not all sizes or combinations available - contact factory.

- 0-ring repair part

θutlet→

3138-153

#### **UNIT REQUIRED (Example):**

- Inline style valve - Inlet - Meter flange - Outlet - FNPT integral 2" - No test valve

# - Valve size 2"

## Order Model 701-7DE 77

701	_	7	D	E		7	7
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#### FIELD INSPECTION AND TEST PROCEDURE

#### A. DISASSEMBLY

- 1. Remove the device cap.
- Remove the poppet assembly by rotating either direction until the tabs disengage, using care not to damage device or components. See Diagram A.
- 3. Visually inspect seals, sealing surfaces, etc. for debris or damage.

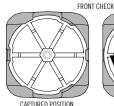
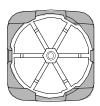


DIAGRAM A

#### B. TESTING

- Place poppet assembly into body lining up tabs and slots.
   Press in the poppet bracket until it has uniform contact all the way around. Rotate the poppet bracket about 1/6 of a turn See Diagram E until cross bracket lines up with body interlocks.
- 2. Add water to test kit level to upper red line 42 inches (1.5 psig).
- 3. Observe water level for up to 5 minutes. Water level should not fall below lower red line 28 inches (1.0 psig).
- If water column falls below 28 inches the poppet assembly should be cleaned and re-tested or replaced.
- Remove the poppet assembly by rotating either direction until the tabs disengage, using care not to damage device or components. See Diagram A.

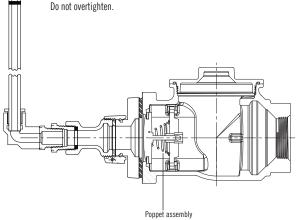


CAPTURED POSITION

DIAGRAM E

# C. REASSEMBLY

- 1. Clean and inspect device and components.
- Place check poppet assembly into body lining up tabs and slots. Press in the
  poppet bracket until it as uniform contact all the way around. Rotate the poppet bracket
  about 1/6 of a turn See Diagram E until cross bracket lines up with body interlocks.
- 3. Reassemble device cap.



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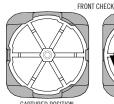




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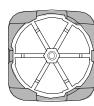
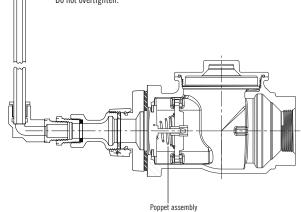


DIAGRAM E

# C. REASSEMBLY

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  poppet bracket until it as uniform contact all the way around. Rotate the poppet bracket
  about 1/6 of a turn See Diagram E until cross bracket lines up with body interlocks.
- 3. Reassemble device cap. Do not overtighten.



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