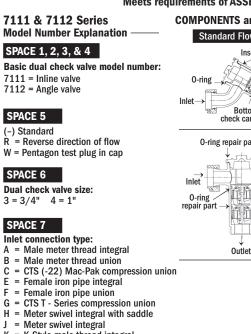


Installation Instructions Angle Dual Check Backflow Preventers/Device

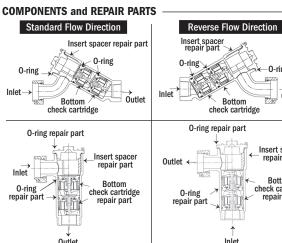
Meets requirements of ASSE 1024 and CSA B64.6



- K = K-Style male thread integral
- L = K-Style female thread union
- M = Male iron pipe union
- N = Meter female thread union
- P = Male iron pipe thread integral
- 0 = K-Style male thread union
- S = Male meter thread with O-ring seal integral T = CTS T - Series compression integral
- W = Yokebox Cradle
- Y = Yoke style thread male integral 2 = CTS (-22) Mac-Pak compression integral

SPACE 8

- **Outlet connection type:**
- A = Male meter thread integral
- B = Male meter thread union
- C = CTS (-22) Mac-Pak compression union
- G = CTS T Series compression union
- E = Female iron pipe integral
- F = Female iron pipe union H = Meter swivel integral with saddle
- K = K-Style male tread integral
- L = K-Style female thread union
- M = Male iron pipe union
- N = Meter female thread union
- P = Male iron pipe thread integral
- Q = CTS Q Series compression integral
- R = Copper flare integral
- T = CTS T Series compression integral
- V = CTS Q Series compression integral 2 = CTS (-22) Mac-Pak compression integral



SPACE 9 Blank

SPACE 10 & 11

Sizes for inlet (8) and outlet (9) connections: 1 = 1/2"3=3/4" 5 = 11/4" 2 = 5/8" 4 = 1" $6 = 1 \frac{1}{2}$

Thread size of meter swivel nut:

METER SIZE	THREAD SIZE	METER DESIGNATION
5/8	3/4"	3
5/8 x 3/4	1"	4
3/4	1"	4
1	1 1/4"	5

for Iron Yokes use the following designation:			
METER	THREAD	METER	
SIZE	SIZE	DESIGNATION	
5/8	-	2	
5/8 x 3/4	-	3	
3/4	-	3	

HOW TO ORDER

Not all sizes or combinations available contact factory.

UNIT REOUIRED (Example):

- Angle style valve - No test valve - Valve size 3/4" - Outlet - FNPT integral 3/4"
- Inlet Meter swivel integral with saddle (5/8 x 3/4 meter)

Order Model 7112-3HE43

1





SPACE 1, 2, 3, & 4

7111 = Inline valve

7112 = Angle valve

SPACE 5

(-) Standard

SPACE 6

SPACE 7

Dual check valve size:

Inlet connection type:

E = Female iron pipe integral

G = CTS T - Series compression union

H = Meter swivel integral with saddle

K = K-Style male thread integral

L = K-Style female thread union

N = Meter female thread union

P = Male iron pipe thread integral 0 = K-Style male thread union

T = CTS T - Series compression integral

S = Male meter thread with O-ring seal integral

F = Female iron pipe union

J = Meter swivel integral

M = Male iron pipe union

3 = 3/4" 4 = 1"

Outlet

Insert spacer

repair part

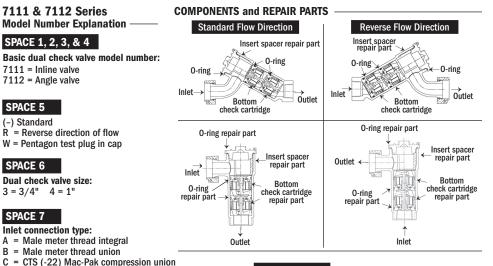
Bottom

check cartridge

repair part

Installation Instructions **Angle Dual Check Backflow Preventers/Device**

Meets requirements of ASSE 1024 and CSA B64.6



Blank

SPACE 10 & 11

Sizes for inlet (8) and outlet (9) connections: 1 = 1/2"3 = 3/4" 5 = 11/4"

2 = 5/8"	4 = 1"	6 = 1 1/2"

Thread size of n	neter swivel	nut:
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METER SIZE	THREAD SIZE	METER DESIGNATION
5/8	3/4"	3
5/8 x 3/4	1"	4
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5/8	-	2		
5/8 x 3/4	-	3		
3/4	-	3		
1	-	4		

HOW TO ORDER

- Not all sizes or combinations available contact factory.
- UNIT REOUIRED (Example):
 - Angle style valve - No test valve - Valve size 3/4" - Outlet - FNPT integral 3/4" - Inlet - Meter swivel integral with saddle (5/8 x 3/4 meter)

Order Model 7112-34E/3

VIUCII	nouci	1115-	JIILTJ				
Space 1-4	Space 5	Space 6	Space 7	Space 8	Space 9	Space 10	Space 11
7112	-	3	Н	Е		4	3
(Installation and test procedures on opposite side)							

Y = Yoke style thread male integral 2 = CTS (-22) Mac-Pak compression integral SPACE 8

W = Yokebox Cradle

- **Outlet connection type:**
- A = Male meter thread integral
- B = Male meter thread union
- C = CTS (-22) Mac-Pak compression union G = CTS T - Series compression union
- E = Female iron pipe integral
- F = Female iron pipe union
- H = Meter swivel integral with saddle
- K = K-Style male tread integral
- L = K-Style female thread union
- M = Male iron pipe union
- N = Meter female thread union
- P = Male iron pipe thread integral
- Q = CTS Q Series compression integral
- R = Copper flare integral
- T = CTS T Series compression integral
- V = CTS Q Series compression integral
- 2 = CTS (-22) Mac-Pak compression integral

SPACE 9



Installation Instructions **Angle Dual Check Backflow Preventers/Device**

- 1. Use only for residential and mobile home supply service or individual outlets.
- 2. The device can be installed in any position.
- 3. The device shall be installed in an accessible location to facilitate the removal for servicing and testing.
- 4. 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.
- 5. DO NOT use Vaseline[®], plumber's grease, or any other petroleum based product on seals or 0-rings.
- 6. Insure that device is installed in proper flow direction. Refer to flow direction arrow on body.
- 7. Do not over-tighten O-ring cap seal or across body cylinder to avoid distortion.
- 8. Any sweat fittings must be completed before installing device.
- 9. A pressure relief valve or expansion tank is recommended downstream of device if thermal expansion conditions are possible.
- 10. Use only on cold water services. Protect from freezing.
- 11. Refer to pressure and temperature ratings on device tag.

FIELD INSPECTION & TEST PROCEDURE

A. DIS-ASSEMBLY

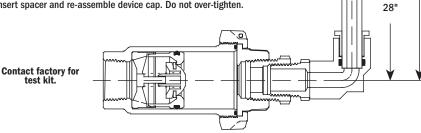
- 1. Remove the device cap.
- 2. Remove the two check assemblies using care not to damage device components.
- 3. Visually inspect seals, sealing surfaces, etc. for debris or damage.

B.TESTING

- 1. Insert top check assembly into A.Y. McDONALD angle test kit as shown in drawing.
- 2. Add water to test kit level to upper red line 42 inches (1.5 PSIG).
- Observe water level for up to 5 minutes until water level stabilizes. 3. Water level should not fall below lower red line - 28 inches (1.0 PSIG).
- 4. If water column falls below 28 inches the check assembly should be cleaned and re-tested or replaced.
- 5. Repeat steps B1 B4 for bottom check cartridge.

C. RE-ASSEMBLY

- 1. Clean and inspect device components.
- 2. Check cartridge O-rings should be lightly lubricated with a NSF approved silicone lubricant.
- 3. Insert check assemblies into body correctly corresponding to flow direction on the device body.
- 4. Insert spacer and re-assemble device cap. Do not over-tighten.



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.

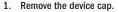


Installation Instructions **Angle Dual Check Backflow Preventers/Device**

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FIELD INSPECTION & TEST PROCEDURE

A. DIS-ASSEMBLY



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test kit.



3210-373

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42'

42'

28"