Instructions
No. TK-7
Backflow Preventer Test Kit

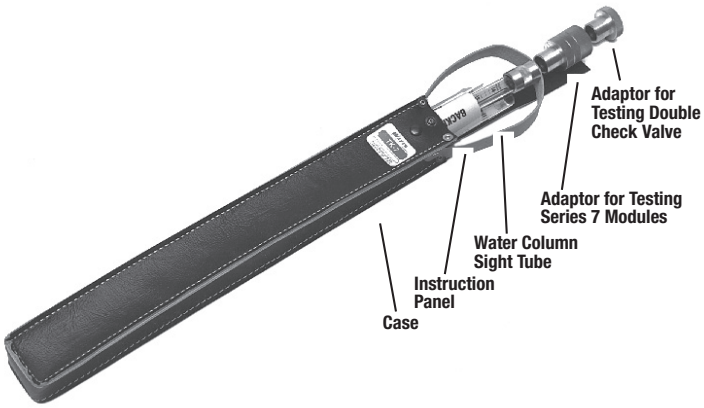
⚠ WARNING

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.

THINK SAFETY FIRST



Operating and Field Test Procedure

The Watts No. TK-7 Backflow Preventer Test Kit is especially made to test the individual check modules of the Watts Series 7 residential dual check backflow preventers and can also be used to test any double check valve backflow preventer, Series 709/LF709 or 007/LF007. The test kit contains three segments of durable shatterproof tubing, two brass adaptors used to assemble the three tubing segments, and test hardware to enable testing of Series 7 check modules and standard double checks. A rugged simulated leather carrying case is provided for ease of handling and compactness.

Specifications

- Total working height of tube - 44"
- Adaptors - (2) Brass, for Series 7 modules and double checks
- Tubing - Three segments of plastic tubing
- Moisture resistant instruction panel
- Case - Durable simulated leather - weather proof and mildew proof

NOTICE

Backflow prevention assemblies **MUST** be installed by a licensed journeyman tradesperson, who is recognized by the authority having jurisdiction, and inspected for compliance with local safety codes. Certified testing and maintenance are required to ensure proper function and maximum effectiveness of assemblies. These services must begin upon installation and be provided at intervals not to exceed one year and as system conditions warrant.

Field Testing Procedure

No. 7 Check Modules

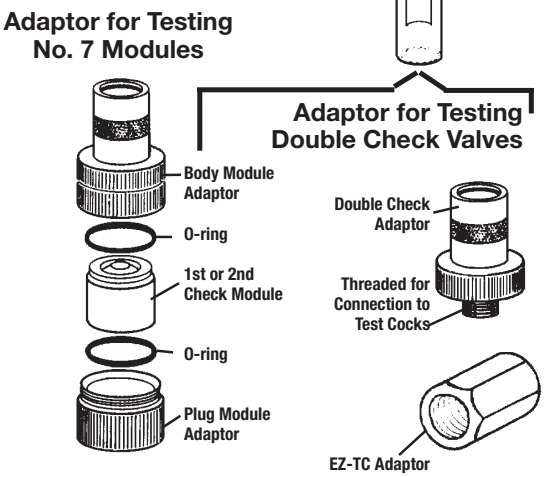
Complete valve cannot be tested in the line, however, each check module Part No. SA7B16 can be tested individually as follows:

Module Test Procedure

Purpose: To test check valves for tightness in the direction of flow.

Using Watts TK-7 test kit proceed as follows:

1. Remove first check module from valve body and insert complete with O-ring in plug module adaptor. Seat firmly with moving portion of check module facing up.
2. Assemble module adaptor hand tight to bottom half.
3. Assemble 3 piece water column sight tube in numerical sequence and attach to top half of body module adaptor.
4. Holding in vertical position, fill sight tube with water (no water leakage can be permitted at sight tube joints).
5. Observe liquid level. Liquid level may drop but as minimum water column of 28 inches (1.0psi) (6.9 kPa) or greater should be maintained when the check module is operating correctly. If water column falls below 28 inches, check module is fouled and should be replaced (See assembly instructions).
6. Remove first check module from module adaptor, and repeat above procedure with second check module.



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Test of Check Valve No. 1

Purpose: To test valve No. 1 for tightness against reverse flow.
Requirement: Valve must be tight against reverse flow.

1. Bleed test cocks No. 2, 3 and 4 to remove any trapped air.
2. Install sight tube in test cock 3.
   A. Open test cock 3 and allow water to fill the tube to the top. Use a tube length of at least 42 inches. This will provide a head of 1.5psi. Close test cock 3. When using EZ-TC test cocks to perform this test, close No. 1 and 2 shutoffs, install adaptor fitting in test cock 3 and install sight tube in adaptor. Slightly open shutoff valve No. 1 and allow water to fill the tube to the top then close No. 1 shutoff.
3. Close shutoff No. 2
4. Close shutoff No. 1
5. Open test cock 2.
   Installing EZ-TC adaptor opens test cock 2.
6. Open test cock 3. EZ-TC on test cock 3 would already be open. The water should maintain its position in the sight tube.
   A. If it slowly drops and simultaneously runs out through test cock 2, the check valve No. 1 is leaking and must be serviced.
   B. If it slowly drops and does not run out through Test Cock No. 2, then No. 2 ball valve has a small leak, but No. 1 check valve is tight.
   C. If it does not drop but there is a small leakage at test cock No. 2, then No. 1 ball valve has a small leak, but No. 1 check valve is tight.

Test of Check Valve No. 2

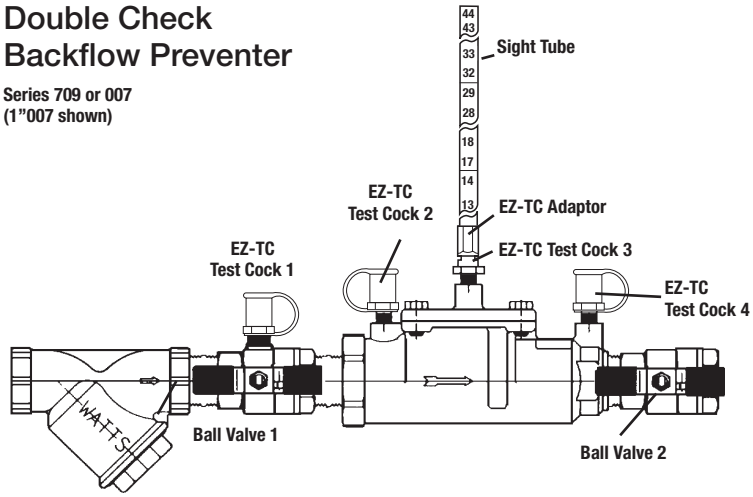
Purpose: To test check valve No. 2 for tightness against reverse flow.

Requirement: Valve must be tight against reverse flow.

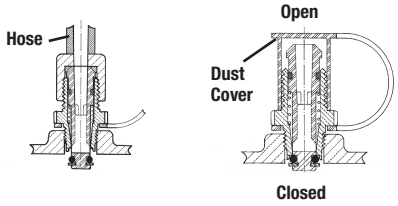
1. Install sight tube in test cock 4 and fill with water as before. When using EZ-TC, close No. 1 and 2 shutoffs and install sight tube using adaptor fitting. Fill tube as in step 2 above.
2. Open test cock 3. Installing EZ-TC adaptor fitting opens test cock 3.
3. Open test cock 4. EZ-TC on test cock 4 would already be open. The water should maintain its position in the sight tube.
   A. If it slowly drops and simultaneously runs out through test cock No. 3, check valve No. 2 is leaking and must be serviced.
   B. If it slowly drops and does not run out through test cock No. 3, then No. 2 ball valve has a small leak, but No. 2 check valve is tight.
   C. If it does not drop, but there is slow leakage at test cock No. 3, then No. 1 ball valve has a small leak, but No. 2 check valve is tight.

Double Check Backflow Preventer

Series 709 or 007
(1"007 shown)



EZ-TC Test Cock



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

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