

# Field Test Procedure for ASSE 1013 (RP) Assemblies Using 5-Valve Test Kit

## Flush Test Cocks (TC)

- Step #1 - Install test adapters (if applicable)
- Step #2 - Open TC #4; let trickle
- Step #3 - Open TC #1; close
- Step #4 - Open TC #2; close
- Step #5 - Open TC #3; close
- Step #6 - Close TC #4

## Attach Test Kit

- Step #1 - Close High, Low and Bypass valves and High and Low bleed valves on test kit
- Step #2 - Attach High hose to TC #2
- Step #3 - Attach Low hose to TC #3
- Step #4 - Open TC #2
- Step #5 - Open High bleed valve; bleed air; close
- Step #6 - Open TC #3
- Step #7 - Open Low bleed valve; bleed air; close
- Step #8 - Attach Bypass hose to TC #4
- Step #9 - Open High valve
- Step #10 - Open Bypass valve
- Step #11 - Loosen Bypass hose at TC #4; bleed air; tighten
- Step #12 - Slowly open Low bleed valve to cause differential reading to rise; close

## Test #1 - Tightness of #2 Shutoff Valve

- Step #1 - Close #2 shutoff valve
- Step #2 - Open TC #4
- Step #3 - Close TC #2
- Step #4 - Read differential gauge

**Test Results:** If the differential gauge reading remains steady, record #2 shutoff valve as tight.

### **Test #2 - #2 Check with Back Pressure Test**

Record gauge value. If in Test #1, the differential gauge remains steady, record #2 check valve as tight.

### **Test #3 - #1 Check Differential**

- Step #1 - Close Bypass valve
- Step #2 - Open TC #2
- Step #3 - Open Low bleed valve to cause reading to increase
- Step #4 - Close Low bleed valve

**Test Results:** Record gauge value. Record the pressure differential across #1 check valve. If the differential reading is 5 psid or above, record #1 check valve as tight.

### **Test #4 - Relief Valve Opening**

- Step #1 - Slowly open Low valve

**Test Results:** The relief valve must drip when the differential gauge is 2 psid or above.

### **Restore System**

- Step #1 - Close all TCs
- Step #2 - Remove hoses
- Step #3 - Open all valves on test kit to drain water
- Step #4 - Restore #2 shutoff valve to pre-test state

The tester shall provide copies of the test results to the owner and other appropriate parties as required.

The tester shall maintain a copy for his/her records in accordance with AHJ.

A shutoff valve on a fire sprinkler system shall never be left in the closed position.

# Field Test Procedure for ASSE 1013 (RP) Assemblies Using 3-Valve Test Kit

## Flush Test Cocks (TC)

- Step #1 - Install test adapters (if applicable)
- Step #2 - Open TC #4; let trickle
- Step #3 - Open TC #1; close
- Step #4 - Open TC #2; close
- Step #5 - Open TC #3; close
- Step #6 - Close TC #4

## Attach Test Kit

- Step #1 - Close High and Low valves and open Bypass valve on test kit
- Step #2 - Attach High hose to TC #2
- Step #3 - Attach Low hose to TC #3
- Step #4 - Open TC #2
- Step #5 - Open High valve; bleed air; close
- Step #6 - Open TC #3
- Step #7 - Open Low valve; bleed air; close
- Step #8 - Attach Bypass hose to TC #4
- Step #9 - Open High valve
- Step #10 - Loosen Bypass hose at TC #4; bleed air; tighten

## Test #1 - Tightness of the #2 Shutoff Valve

- Step #1 - Close #2 shutoff valve
- Step #2 - Open TC #4
- Step #3 - Close TC #2
- Step #4 - Read differential gauge

**Test Results:** If the differential gauge reading remains steady, record #2 shutoff valve as tight.

## Test #2 - #2 Check with Back Pressure Test

Record gauge value. If in Test #1, the differential gauge remains steady, record #2 check valve as tight.

## Test #3 - #1 Check Differential

- Step #1 - Close TC #4
- Step #2 - Close High valve
- Step #3 - Remove Bypass hose from TC #4
- Step #4 - Open TC #2

- Step #5 - Open Low valve to cause differential gauge reading to increase
- Step #6 - Close Low valve

**Test Results:** Record gauge value. Record the pressure differential across #1 check valve. If the differential reading is 5 psid or above, record #1 check valve as tight.

#### **Test #4 - Relief Valve Opening**

- Step #1 - Close Bypass valve
- Step #2 - Open High valve
- Step #3 - Slowly open Low valve

**Test Results:** Record relief valve psid opening point. The relief valve must drip when the differential gauge is 2 psid or above.

#### **Restore System**

- Step #1 - Close all TCs
- Step #2 - Remove hoses
- Step #3 - Open all valves on test kit to drain water
- Step #4 - Restore #2 shutoff valve to pre-test state

The tester shall provide copies of the test results to the owner and other appropriate parties as required.

The tester shall maintain a copy for his/her records in accordance with AHJ.

A shutoff valve on a fire sprinkler system shall never be left in the closed position.