# SERIES 769N FIRELOCK NXTTM PREACTION ACTUATED VALVE WITH DOUBLE-INTERLOCKED ELECTRIC/PNEUMATIC RELEASE "FG" TRIM

THIS WALL CHART IS A GUIDE FOR PLACING THE SYSTEM IN SERVICE AND FOR PERFORMING WATER FLOW ALARM TESTS.

AN EXPERIENCED, TRAINED INSTALLER SHALL READ AND UNDERSTAND THE FULL CONTENTS OF THE INSTALLATION, MAINTENANCE, AND TESTING MANUAL AND ALL WARNING MESSAGES BEFORE ATTEMPTING TO PLACE THE SYSTEM INTO SERVICE.

## **INITIAL SYSTEM SETUP**

### NOTICE

Before proceeding with initial system setup, verify that the following steps have been completed:

- . Verify that the system air feed piping is connected to the location indicated on the trim drawing.
- Verify that an approved control panel is installed for proper system operation.

THE FOLLOWING INSTRUCTIONS APPLY TO SOLENOIDS THAT ARE CLOSED (DE-ENERGIZED). IF THE SOLENOIDS ARE OPEN (ENERGIZED), RESET THE CONTROL PANEL BEFORE ATTEMPTING TO PLACE THE SYSTEM IN SERVICE.

### Step 1:

Confirm that all system drains are shut and that the system is free of leaks.

# Step 2:

Confirm that the system has been depressurized. The gauges should indicate zero pressure.

Step 2a: If a Series 746-LPA Dry Accelerator (Item 8) is installed, confirm that the isolation ball valve (Item 8b) is closed.

Step 2b: If a Series 746-LPA Dry Accelerator is installed (Item 8), open the 1/4-turn vent ball valve (Item 8a).

# Step 3:

Confirm that the alarm test ball valve (Item 15b) of the priming manifold assembly (Item 15) is closed.

### Step 4:

Charge the system with air by turning on the compressor or by opening the fast-fill ball valve (Item 21b) on the Victaulic Air Maintenance Trim Assembly (AMTA – Item 21). Charge the system to 13 psi/90 kPa/0.9 Bar minimum.

### Step 5:

When the system reaches approximately 10 psi/69 kPa/0.7 Bar, and no additional moisture is being released from the Auto Vent, pull up on the Auto Vent Sleeve (Item 11a) of the Series 767 Electric/Pneumatic Actuator (Item 11). NOTE: The Auto Vent Screw should seal and remain in the set ("UP") position

# Step 6:

When system air pressure is established, close the fast-fill ball valve (Item 21b) on the AMTA (Item 21).

Open the slow-fill ball valve (Item 21a) on the AMTA (Item 21). **NOTE:** Failure to leave the slow-fill ball valve (Item 21a) open may allow system pressure to drop, resulting in valve operation in the event of a system leak.

# Step 8:

Open the charge line ball valve (Item 15a) of the priming manifold assembly (Item 15). Allow water to flow through the auto drain tube. Step 9:

Open the manual pull station (Item 14) valve to bleed off any air that is present, then close the manual pull station valve. Verify that the charge line pressure (Item 13) and Series 767 upper chamber pressure (Item 12) are equal to the supply pressure and that the auto drain is set by pulling up on the auto drain sleeve (Item 15c) of the priming manifold assembly (Item 15). Verify that no water is draining from the Series 767 Electric/ Pneumatic Actuator (Item 11).

Step 9a: If a Series 746-LPA Dry Accelerator (Item 8) is installed, close the 1/4-turn vent ball valve (Item 8a).

Step 9b: If a Series 746-LPA Dry Accelerator (Item 8) is installed, open the isolation ball valve (Item 8b). This will set the accelerator.

# **Step 10:**

Open the water supply main drain valve (Item 5).

Open the water supply main control valve (Item 3) slowly until water flows steadily from the open water supply main drain valve (Item 5). Step 12:

# Close the water supply main drain valve (Item 5) when a steady flow of water occurs.

**Step 13:** 

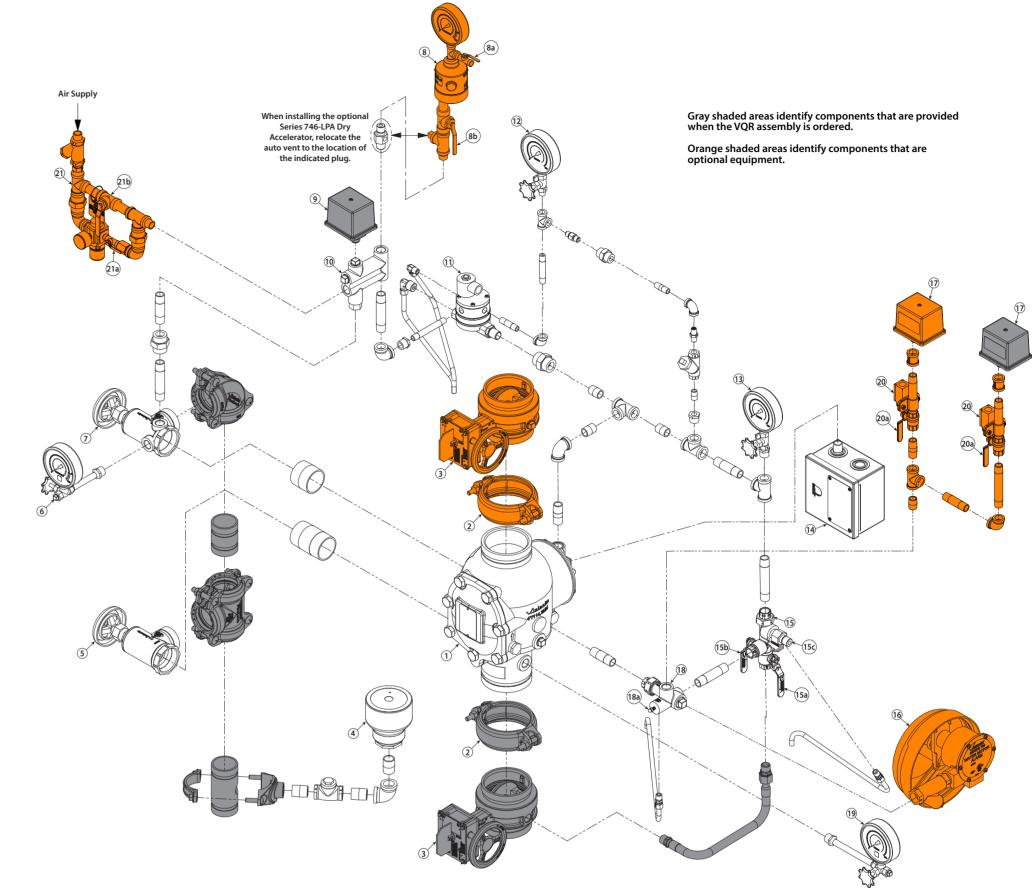
# Open the water supply main control valve (Item 3) fully. Step 14:

Confirm that all valves are in their normal operating positions (refer to the table below).

# NORMAL OPERATING POSITIONS FOR VALVES

Valve	Normal Operating Position
Water Supply Main Control Valve	Open
Water Supply Main Drain Valve	Closed
System Main Drain Valve	Closed
Charge Line Ball Valve of the Priming Manifold Assembly	Open
Alarm Test Ball Valve of the Priming Manifold Assembly	Closed

Valve	Normal Operating Position
Slow-Fill Ball Valve of the Victaulic AMTA (if applicable)	Open
Fast-Fill Ball Valve of the Victaulic AMTA (if applicable)	Closed
Isolation Ball Valve for Series 746-LPA Dry Accelerator (if applicable)	Open
1/4-Turn Vent Ball Valve for Series 746-LPA Dry Accelerator (if applicable)	Closed
Alarm Line Monitoring Ball Valve	Open



Item	Description
1	Series 769N FireLock NXT Actuated Valve
2	FireLock Rigid Coupling
3	Water Supply Main Control Valve
4	Drip Cup
5	Water Supply Main Drain Valve – Flow Test
6	System Pressure Gauge/Gauge Valve Assembly
7	System Main Drain Valve
8	Series 746-LPA Dry Accelerator
8a	Series 746-LPA Dry Accelerator ¼-Turn Vent Ball Valve
8b	Series 746-LPA Dry Accelerator Isolation Ball Valve
9	Air Supervisory Pressure Switch

Item	Description
10	Air Manifold
11	Series 767 Electric/Pneumatic Actuator
12	Upper Chamber Pressure Gauge/Gauge Valve Assembly for Series 767 Electric/Pneumatic Actuator
13	Charge Line Pressure Gauge/Gauge Valve Assembly
14	Series 755 Manual Pull Station
15	Priming Manifold Assembly
15a	Charge Line Ball Valve
15b	Alarm Test Ball Valve
15c	Auto Drain Sleeve
16	Series 760 Water Motor Alarm Assembly

Item	Description
17	Alarm Pressure Switch
18	Alarm Manifold Assembly
18a	Ball Drip Plunger
19	Water Supply Pressure Gauge/Gauge Valve Assembly
20	Alarm Line Monitoring Limit Switch Assembly
20a	Alarm Line Monitoring Ball Valve
21	VIctaulic Air Maintenance Trim Assembly (AMTA)
21a	Slow-Fill Ball Valve of the Victaulic AMTA
21b	Fast-Fill Ball Valve of the Victaulic AMTA

# REQUIRED WATER FLOW ALARM TEST

Refer to NFPA 25, FM Datasheets, or any applicable local requirements to perform water flow alarm tests. The authority having jurisdiction in the area may require these inspections on a more frequent basis. Verify these requirements by contacting the authority having jurisdiction in the affected area.

- 1. Notify the authority having jurisdiction, remote station alarm monitors, and those in the affected area that the water flow alarm test will be performed.
- 2. Open the water supply main drain valve (Item 5) fully to flush the water supply of any contaminants.
- **3.** Close the water supply main drain valve (Item 5).
- 4. Open the alarm test ball valve (Item 15b) of the priming manifold assembly (Item 15). Confirm that mechanical and electrical alarms are activated and that remote monitoring stations, if provided, receive an alarm signal.
- **5.** Close the alarm test ball valve (Item 15b) of the priming manifold assembly (Item 15) after verifying proper operation of all alarms.
- **6.** Push in the ball drip plunger (Item 18a) on the alarm manifold assembly (Item 18) to verify that there is no pressure in the alarm line.
- 7. Verify that all alarms stopped sounding, that the alarm line drained properly, and that remote station alarms reset properly.
- 8. Confirm that the ball drip on the alarm manifold assembly (Item 18) is not leaking water or air.
- **9.** Provide test results to the authority having jurisdiction, if required.

