

# SERIES 769N FIRELOCK NXT™ ACTUATED VALVE WITH DOUBLE-INTERLOCKED PNEUMATIC/PNEUMATIC RELEASE PREACTION TRIM

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

AN EXPERIENCED, TRAINED INSTALLER MUST 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

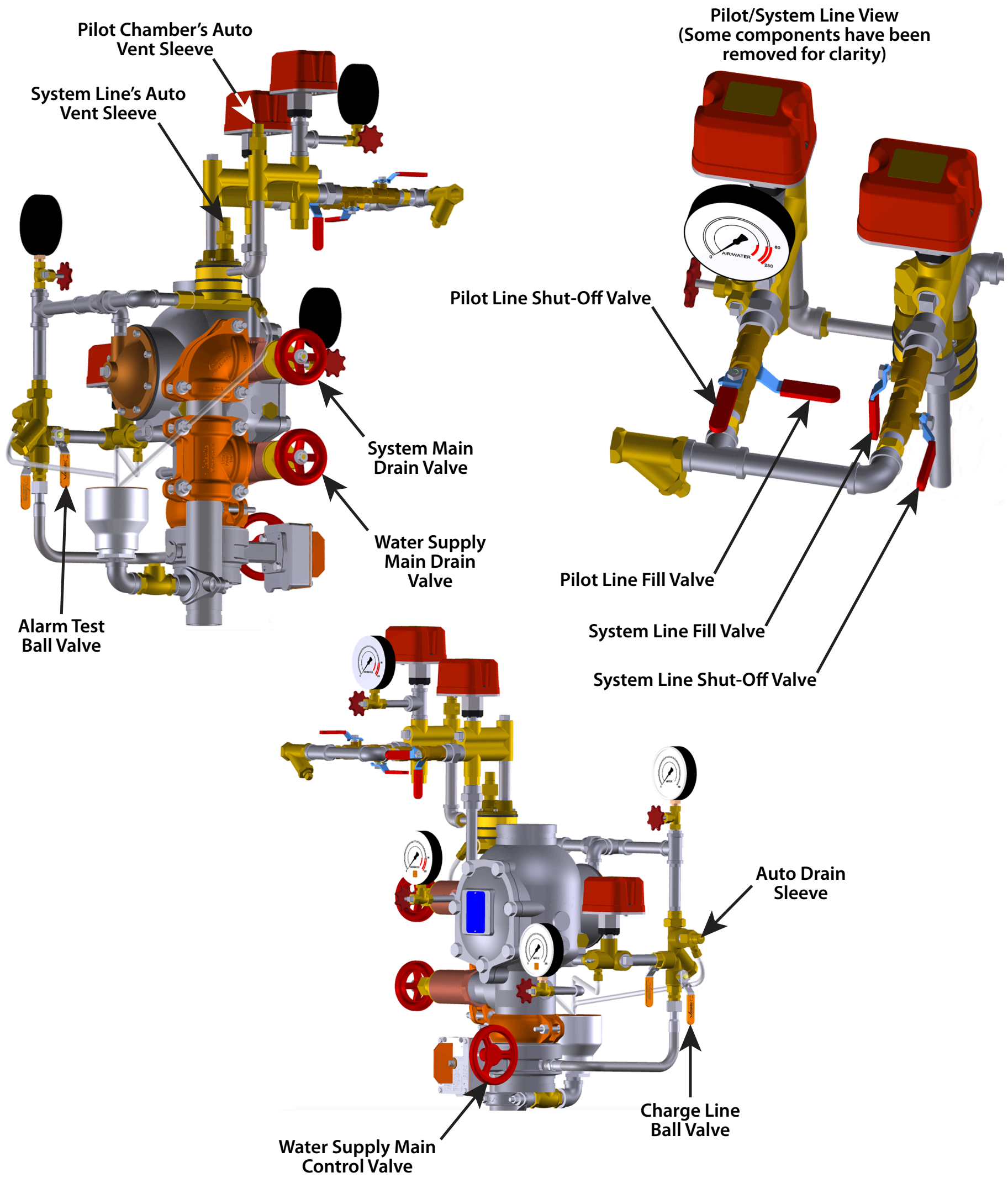
NOTICE
• Before proceeding with initial system setup, verify that the system air feed piping is connected to the location indicated on the trim drawing.

- 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 Series 746-LPA Dry Accelerators are installed, confirm that the isolation ball valves are closed.  
**Step 2b:** If Series 746-LPA Dry Accelerators are installed, open the ¼-turn vent ball valves.
- Step 3:**  
Confirm that the alarm test ball valve is closed.
- Step 4:**  
Open the pilot line shut-off valve. **NOTE:** Failure to leave the pilot line shut-off valve open may allow pilot line pressure to drop, resulting in valve operation in the event of a system leak.
- Step 5:**  
Open the pilot line fill valve to the “OPEN – FAST-FILL” position. Charge the pilot line to 13 psi/90 kPa/0.9 Bar minimum.
- Step 6:**  
When pilot pressure reaches approximately 10 psi/69 kPa/0.7 Bar, pull up on the pilot chamber Auto Vent Sleeve, which is located on the air manifold of the pilot line. **NOTE:** The pilot chamber Auto Vent Screw should seal and remain in the set (“UP”) position.
- Step 7:**  
When pilot line air pressure is established, close the pilot line fill valve to the “CLOSED – RESTRICTED FILL” position.
- Step 8:**  
Open the system line shut-off valve. **NOTE:** Failure to leave the system line shut-off valve open may allow system line pressure to drop, resulting in valve operation in the event of a system leak.
- Step 9:**  
Open the system line fill valve to the “OPEN – FAST-FILL” position. Charge the system line to 13 psi/90 kPa/0.9 Bar minimum. Refer to the “Air Supply Requirements” section.
- Step 10:**  
When system pressure reaches approximately 10 psi/69 kPa/0.7 Bar, and no additional moisture is being released from the Auto Vent, pull up on the system line Auto Vent Sleeve on the Series 798 Pneumatic/Pneumatic Actuator. **NOTE:** The system line Auto Vent Screw should seal and remain in the set (“UP”) position.
- Step 11:**  
When system line air pressure is established, close the system line fill valve to the “CLOSED – RESTRICTED FILL” position.
- Step 12:**  
Open the charge line ball valve. Allow water to flow through the auto drain tube.
- Step 13:**  
Open the manual pull station valve to bleed off any air that is present, then close the manual pull station valve. Verify that the charge line pressure and pilot line pressure are equal to the supply pressure and that the auto drain is set by pulling up on the auto drain sleeve. Verify that no water is draining from the Series 798 Pneumatic/Pneumatic Actuator.
- Step 13a:** If Series 746-LPA Dry Accelerators are installed, close the ¼-turn vent ball valves.  
**Step 13b:** If Series 746-LPA Dry Accelerators are installed, open the isolation ball valves. This will set the accelerators.
- Step 14:**  
Open the water supply main drain valve.
- Step 15:**  
Open the water supply main control valve slowly until water flows steadily from the open water supply main drain valve.
- Step 16:**  
Close the water supply main drain valve when a steady flow of water occurs.
- Step 17:**  
Open the water supply main control valve fully.
- Step 18:**  
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
Pilot Line Shut-Off Valve	Open

Valve	Normal Operating Position
Pilot Line Fill Valve	Closed – Restricted Fill
System Line Shut-Off Valve	Open
System Line Fill Valve	Closed – Restricted Fill
Isolation Ball Valve for Series 746-LPA Dry Accelerators (if applicable)	Open
¼-Turn Vent Ball Valve for Series 746-LPA Dry Accelerators (if applicable)	Closed



## WATER FLOW ALARM TEST

Perform the water flow alarm test on a frequency required by the current NFPA-25 code. The authority having jurisdiction in the area may require these tests 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 fully to flush the water supply of any contaminants.
3. Close the water supply main drain valve.
4. Open the alarm test ball valve. 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 after verifying proper operation of all alarms.
6. Push in the ball drip plunger on the alarm manifold assembly 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 is not leaking water or air.
9. Provide test results to the authority having jurisdiction, if required.

