

SERIES 769 FIRELOCK NXT™ PREACTION VALVE WITH SERIES 767 ELECTRIC/PNEUMATIC ACTUATOR (DOUBLE-INTERLOCKED, ELECTRIC/PNEUMATIC RELEASE)



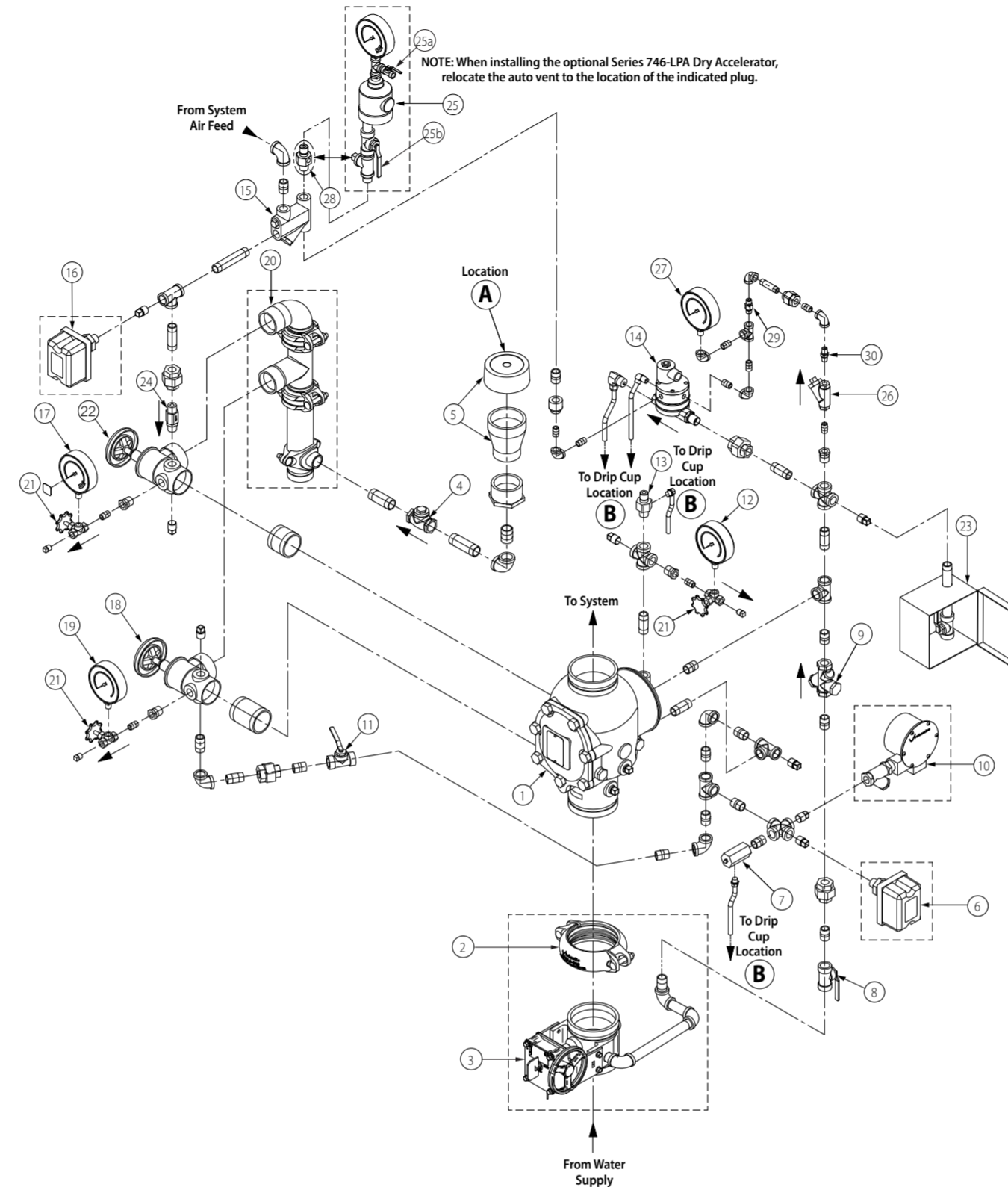
NOTE: THIS WALL CHART IS A GUIDE FOR PLACING THE SYSTEM IN SERVICE AND FOR PERFORMING WATER FLOW ALARM TESTS.

ALWAYS REFER TO THE INSTALLATION, MAINTENANCE, AND TESTING MANUAL FOR COMPLETE INFORMATION.

PLACING THE SYSTEM IN SERVICE

The following instructions apply to a solenoid that is de-energized. If the solenoid is energized, reset the panel before attempting to place the system in service.

- Open the system main drain valve (Item 22). Confirm that the system is drained.
- Close the system main drain valve (Item 22).
- Confirm that all system drains are shut and that the system is free of leaks.
 - Confirm that the system has been depressurized. The gauges should indicate zero pressure.
- If a Series 746-LPA Dry Accelerator (Item 25) is installed, confirm that the isolation ball valve (Item 25b) is closed.
 - If a Series 746-LPA Dry Accelerator (Item 25) is installed, open the ¼-turn vent ball valve (Item 25a).
- Open the diaphragm-charge-line ball valve (Item 8).
- Confirm that water is flowing steadily from the Auto Drain (Item 13). Pull up on the Auto Drain Sleeve, and confirm that water is flowing through the Series 767 Electric/Pneumatic Actuator (Item 14).
- Close the diaphragm-charge-line ball valve (Item 8).
- Confirm that the alarm test ball valve (Item 11) is closed.
- Charge the system with air by turning on the compressor or by opening the fast-fill ball valve on the optional air maintenance trim assembly (AMTA).
 - The minimum air pressure for a Series 769 FireLock NXT Preaction Valve installed with or without a Series 746-LPA Dry Accelerator shall be 13 psi/90 kPa/0.9 Bar. The maximum air pressure shall be 18 psi/124 kPa/1.2 Bar.
- Confirm that the system is charging by observing the air pressure gauge. If the gauge is not showing an increase in air pressure, there is a leak or an opening in the line. Repair any leaks or openings and restart the setup procedures.
 - Confirm that no water is being exhausted from the Auto Vent of the Series 767 Electric/Pneumatic Actuator (Item 14). If water is being exhausted from the Auto Vent, continue to run air through the system in order to remove moisture from the upper chamber of the Series 767 Electric/Pneumatic Actuator. If a Series 746-LPA Dry Accelerator (Item 25) is installed, make sure the accelerator is not flooded.
- 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 of the Series 767 Electric/Pneumatic Actuator (Item 14). **NOTE:** The Auto Vent Screw should seal and remain in the set ("UP") position.
- When system air pressure is established, close the fast-fill ball valve on the optional AMTA.
- Open the slow-fill ball valve on the optional AMTA. **NOTE:** Failure to leave the slow-fill ball valve open may allow system pressure to drop, resulting in valve operation in the event of a system leak.
- Open the diaphragm-charge-line ball valve (Item 8). Allow water to flow through the Auto Drain tube.
- Open the manual pull station (Item 23).
- Close the manual pull station (Item 23).
- Pull up on the Auto Drain Sleeve (Item 13) until the screw is in the set ("UP") position. Verify that there is pressure on the gauge (Item 12) to the diaphragm charge line.
- When the diaphragm charge line is pressurized, temporarily close the diaphragm-charge-line ball valve (Item 8). Confirm that the diaphragm charge line is maintaining pressure by observing the diaphragm-charge-line pressure gauge (Item 12).
 - If pressure in the diaphragm charge line drops, the diaphragm must be replaced and/or any leaks in the diaphragm charge line must be corrected.
 - If pressure in the diaphragm charge line does not drop, re-open the diaphragm-charge-line ball valve (Item 8), and proceed to the following step.
- If a Series 746-LPA Dry Accelerator (Item 25) is installed, close the ¼-turn vent ball valve (Item 25a).
- If a Series 746-LPA Dry Accelerator is installed (Item 25), open the isolation ball valve (Item 25b). This will set the accelerator.
- Observe the system air pressure over a 24-hour period to confirm system integrity. If there is degradation in system air pressure, find and correct all leaks.
- Open the water supply main drain valve (Item 18).
- Open the water supply main control valve (Item 3) slowly until water flows steadily from the open water supply main drain valve.
- Close the water supply main drain valve (Item 18) when a steady flow of water occurs.
- Confirm that there is no leakage from the intermediate valve chamber. The drip check (Item 7) in the alarm line should not be leaking water or air.
- If water is flowing from the drip check (Item 7), close the water supply main control valve (Item 3), and start over at step 1.
- Open the water supply main control valve (Item 3) fully.
- Record the system air pressure and the water supply pressure.
- Confirm that all valves are in their normal operating positions (refer to table in next column).



Item	Description
1	Series 769 FireLock NXT Preaction Valve
2	FireLock Rigid Coupling *
3	Water Supply Main Control Valve *
4	Drain Swing Check Valve
5	Drip Cup with Cap
6	Alarm Pressure Switch *
7	Series 729 Drip Check Valve
8	Diaphragm-Charge-Line Ball Valve (Normally Open)
9	3-in-1 Strainer/Check/Restrictor Assembly
10	Series 760 Water Motor Alarm **
11	Alarm Test Ball Valve
12	Diaphragm-Charge-Line Pressure Gauge (0 – 300 psi/0 – 2068 kPa/0 – 20.7 Bar)
13	Series 749 Auto Drain
14	Series 767 Electric/Pneumatic Actuator
15	Air Manifold
16	Air Supervisory Pressure Switch *
17	System Pressure Gauge (0 – 80 psi/0 – 552 kPa/0 – 5.5 Bar with Retard)

Item	Description
18	Water Supply Main Drain Valve – Flow Test
19	Water Supply Pressure Gauge (0 – 300 psi/0 – 2068 kPa/0 – 20.7 Bar)
20	Drain Connection Kit *
21	Gauge Valve
22	System Main Drain Valve
23	Series 755 Manual Pull Station
24	Series 748 Ball Check Valve
25	Series 746-LPA Dry Accelerator **
25a	¼-Turn Vent Ball Valve (Series 746-LPA Dry Accelerator)
25b	Isolation Ball Valve (Series 746-LPA Dry Accelerator)
26	Upper Chamber Strainer (100 Mesh)
27	Upper Chamber Pressure Gauge for Series 767 Electric/Pneumatic Actuator
28	Auto Vent for Series 767 Electric/Pneumatic Actuator
29	Upper Chamber Inlet Restrictor .032-inch for Series 767 Electric/Pneumatic Actuator
30	Upper Chamber Check Valve (1/4-inch) for Series 767 Electric/Pneumatic Actuator

* Optional/sold separately - comes standard when VQR assembly is ordered
 ** Optional/sold separately

NORMAL OPERATING POSITIONS FOR VALVES

Valve	Normal Operating Position
Diaphragm-Charge-Line Ball Valve	Open
Alarm Test Ball Valve	Closed
Water Supply Main Control Valve	Open
Water Supply Main Drain Valve	Closed
System Main Drain Valve	Closed
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
¼-Turn Vent Ball Valve for Series 746-LPA Dry Accelerator (If Applicable)	Closed

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WATER FLOW ALARM TEST

Perform the water flow alarm test on a frequency required by the local authority having jurisdiction. Verify these requirements by contacting the authority having jurisdiction in the affected area.

- Notify the authority having jurisdiction, remote station alarm monitors, and those in the affected area that the water flow alarm test will be performed.
- Open the water supply main drain valve (Item 18) fully to flush the water supply of any contaminants.
- Close the water supply main drain valve (Item 18).
- Open the alarm test ball valve (Item 11). Confirm that mechanical and electrical alarms are activated and that remote monitoring stations, if provided, receive an alarm signal.
- Close the alarm test ball valve (Item 11) after verifying proper operation of all alarms.
- Push in the plunger of the drip check (Item 7) to verify that there is no pressure in the alarm line.
- Verify that all alarms stopped sounding, that the alarm line drained properly, and that remote station alarms reset properly.
- Confirm that there is no leakage from the intermediate valve chamber. The drip check (Item 7) in the alarm line should not be leaking water or air.
- Notify the authority having jurisdiction, remote station alarm monitors, and those in the affected area that the valve is back in service.
- Provide test results to the authority having jurisdiction, if required.

