

SERIES 769 FIRELOCK NXT™ PREACTION VALVE WITH SERIES 798 PNEUMATIC/PNEUMATIC ACTUATOR (DOUBLE-INTERLOCKED, PNEUMATIC/PNEUMATIC RELEASE)

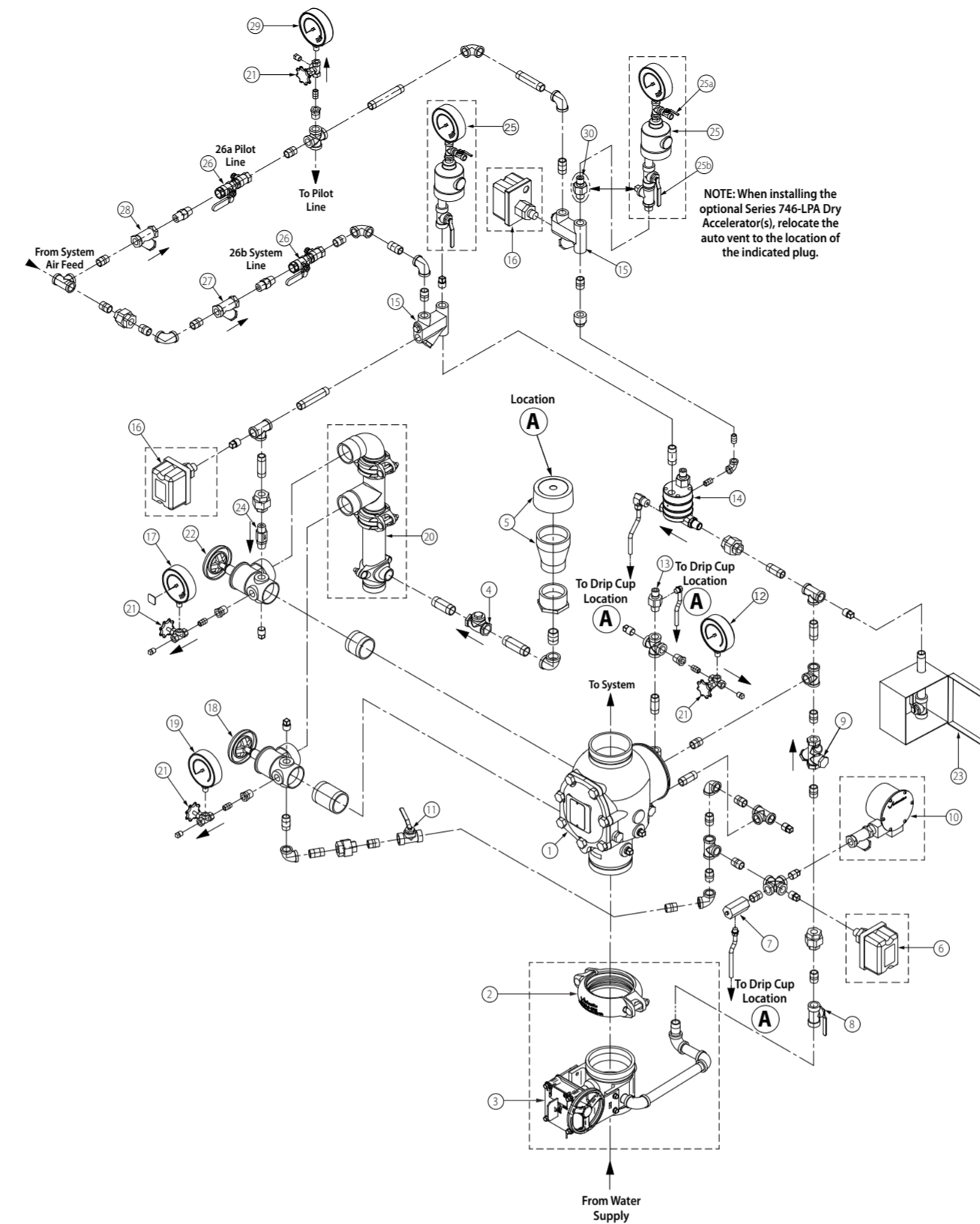


NOTE: THIS WALL CHART IS A GUIDE FOR PLACING THE SYSTEM IN SERVICE AND FOR PERFORMING WATER FLOW ALARM TESTS.

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

PLACING THE SYSTEM IN SERVICE

- 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 798 Pneumatic/Pneumatic Actuator (Item 14).
- Close the diaphragm-charge-line ball valve (Item 8).
- Confirm that the alarm test ball valve (Item 11) is closed.
- Open the "Shut-Off" valve (yellow handle) on the pilot line (Item 26a). **NOTE:** Failure to leave the "Shut-Off valve on the pilot line open may allow pilot pressure to drop, resulting in valve operation in the event of a system leak.
- Open the ball valve on the pilot fill line (Item 26a) to the "Open – Fast-Fill" position. Charge the pilot line to 13 psi/90 kPa/0.96 Bar minimum.
- Confirm that the pilot line is charging by observing the air pressure gauge (Item 29). If the gauge is not showing an increase in air pressure, there is a leak or an opening in the pilot line. Repair any leaks or openings and restart the setup procedure.
- When the pressure reaches approximately 10 psi/69 kPa/0.7 Bar, pull up on the pilot chamber's Auto Vent Sleeve (Item 30), which is located on the air manifold of the Series 798 Pneumatic/Pneumatic Actuator trim. **NOTE:** The pilot chamber's Auto Vent Screw (Item 30) should seal and remain in the set ("UP") position.
- When pilot line air pressure is established, close the ball valve on the pilot fill line (Item 26a) to the "Closed – Restricted Fill" position.
- Open the "Shut-Off" valve (yellow handle) on the system line (Item 26b). **NOTE:** Failure to leave the "Shut-Off" valve on the system line open may allow pressure to drop, resulting in valve operation in the event of a system leak.
- Open the ball valve on the system fill line (Item 26b) to the "Open – Fast-Fill" position.
 - 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 line is charging by observing the air pressure gauge (Item 17). If the gauge is not showing an increase in air pressure, there is a leak or an opening in the system 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 798 Pneumatic/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 798 Pneumatic/Pneumatic Actuator. If Series 746-LPA Dry Accelerators (Item 25) are installed, make sure the accelerators are not flooded.
- When the 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 chamber's Auto Vent Sleeve on the Series 798 Pneumatic/Pneumatic Actuator (Item 14). **NOTE:** The system chamber's Auto Vent Screw should seal and remain in the set ("UP") position.
- When system line air pressure is established, close the ball valve on the system fill line (Item 26b) to the "Closed – Restricted Fill" position.
- 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.
 - If pressure in the diaphragm charge line drops, the diaphragm must be replaced and 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.



Item	Item
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 798 Pneumatic/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)
18	Water Supply Main Drain Valve – Flow Test

Item	Item
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	Air Feed Valve Assembly
26a	Pilot Line Fill Valve and Shutoff Valve (Shutoff Valve has Yellow Handle)
26b	System Line Fill Valve and Shutoff Valve (Shutoff Valve has Yellow Handle)
27	System Air Line Strainer (100 Mesh)
28	Pilot Line Strainer (100 Mesh)
29	Pilot Line Pressure Gauge (0 – 80 psi/0 – 552 kPa/0 – 5.5 Bar with Retard)
30	Auto Vent for Series 798 Pneumatic/Pneumatic Actuators

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

PLACING THE SYSTEM IN SERVICE (CONTINUED)

- 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 below).

NORMAL OPERATING POSITIONS FOR VALVES

Valve	Normal Operating Position
Diaphragm-Charge-Line Ball Valve	Open
Alarm Test Ball Valve	Closed
Pilot Line Shut-Off Valve	Open
Pilot Line Fill Valve	Closed – Restricted Fill
System Line Shut-Off Valve	Open
System Line Fill Valve	Closed – Restricted Fill
Water Supply Main Control Valve	Open
Water Supply Main Drain Valve	Closed
System Main Drain Valve	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

NOTE: 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.

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.

