

Replacing the Clapper Seal or Clapper Assembly for Series 751, 756, 758, 764, 768/768N, and 769/769N FireLock™ Fire Protection Valves

⚠ WARNING



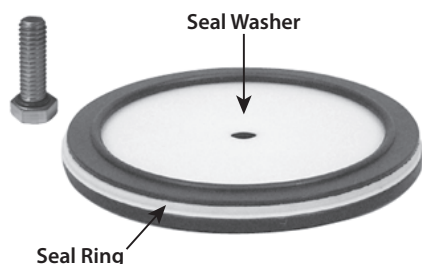
- Read and understand all instructions before attempting to install any Victaulic products.
 - Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
 - Wear safety glasses, hardhat, and foot protection.
- Failure to follow these instructions could result in death or serious personal injury and property damage.

- Series 751, 756, 758, 764, 768/768N, and 769/769N FireLock™ Fire Protection Valves shall be used only in fire protection systems that are designed and installed in accordance with current, applicable National Fire Protection Association (NFPA 13, 13D, 13R, etc.) standards, or equivalent standards, and in accordance with applicable building and fire codes. These standards and codes contain important information regarding protection of systems from freezing temperatures, corrosion, mechanical damage, etc.
 - These installation instructions are intended for an experienced, trained installer. The installer shall understand the use of this product and why it was specified for the particular application.
 - The installer shall understand common industry safety standards and potential consequences of improper product installation.
- Failure to follow installation requirements and local and national codes and standards could compromise system integrity or cause system failure, resulting in death or serious personal injury and property damage.

CONTENTS OF CLAPPER SEAL KIT

This kit may contain three clapper seals. It is important to determine the appropriate clapper seal for the valve being serviced. **THESE SEALS ARE NOT INTERCHANGEABLE.** If the clapper currently contains a seal that looks like "A" below, it **MUST** be replaced with the exact seal provided in this kit. Refer to the notes below for details.

CLAPPER SEAL "A"



Clapper seal "A" contains **BOTH** a white seal washer and a seal ring (instructions start on page 3).

This is the only seal design that can be used in the clapper for all sizes of Series 756, 758, 764, 768/768N, and 769/769N valves.

In addition, this seal design is used in the clapper for 1½ – 3-inch/ 48.3 – 88.9-mm and 8-inch/219.1-mm sizes of Series 751 valves.

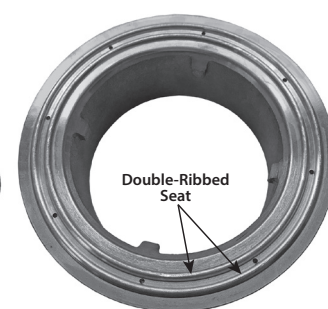
CLAPPER SEAL "B"



Clapper Seal "B" contains **ONLY** a white seal washer (instructions start on page 3).

This is the only seal design that can be used in the clapper for Series 751 valves in 4 – 6-inch/ 114.3 – 168.3-mm (including 165.1-mm) sizes with a manufacture date of September 2018 or after.

In addition, this seal design is used exclusively with valve bodies that contain a double-ribbed seat, as shown to the left.



CLAPPER SEAL "C"



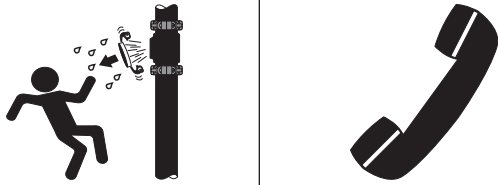
Clapper Seal "C" is a solid design and **DOES NOT** contain a white seal washer and a seal ring (instructions start on page 5).

For Series 751 Alarm Check Valves in North America: Seal "C" is designed for 4 – 6-inch/114.3 – 168.3-mm (including 165.1-mm) valve sizes.

For Series 751 Alarm Check Valve Stations in Europe: Seal "C" is designed for 3 – 6-inch/88.9 – 168.3-mm (including 165.1-mm) valve sizes. The design for Series 751 FireLock European Alarm Check Valve Stations must be specified upon ordering (these valves have a cover plate identification tag that contains VdS and CE markings).

REMOVING THE SYSTEM FROM SERVICE AND PREPARING FOR CLAPPER SEAL REPLACEMENT

WARNING



- Before servicing or testing the system, notify the authority having jurisdiction.
- Depressurize and drain the piping system before attempting to remove the cover plate from the valve.
- The building owner or their representative is responsible for maintaining the fire protection system in proper operating condition.
- To ensure proper system operation, refer to NFPA 25, FM Datasheets, or any applicable local requirements for valve inspection requirements. 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, and always refer to the instructions in the installation, maintenance, and testing manual for additional requirements.
- The frequency of inspections shall be increased in the presence of contaminated water supplies, corrosive/scaling water supplies, and corrosive atmospheres.
- Any activities that require taking the valve out of service may eliminate the fire protection provided. A fire patrol is strongly recommended for the affected areas.

Failure to follow these instructions could cause system failure, resulting in death or serious personal injury and property damage.

1. Notify the authority having jurisdiction, remote station alarm monitors, and those in the affected area that the system is being taken out of service.
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. Close the water supply main control valve to take the system out of service.
5. Open the water supply main drain valve.
6. Confirm that water is not flowing from the water supply main drain valve.
7. Close the piston charge line ball valve (Series 756 and 758) or charge line ball valve (Series 764, 768/768N, and 769/769N).
8. Open the system main drain valve to drain any water that has accumulated and to release system air pressure.

NOTE: If the system has operated, open the remote system test valve (inspector's test connection) and any auxiliary drain valves.

9. **SHUT OFF THE AIR SUPPLY AND OPEN THE MANUAL PULL STATION VALVE (IF APPLICABLE).**
10. **REMOVE PRESSURE IN THE PISTON CHARGE LINE (SERIES 756 AND 758) OR DIAPHRAGM CHARGE LINE (SERIES 764, 768/768N, AND 769/769N) BY PUSHING DOWN ON THE AUTO DRAIN SCREW. ON NEWER AUTO DRAINS, THIS SCREW IS LOCATED WITHIN THE AUTO DRAIN SLEEVE AND CAN BE PUSHED BY USING A SCREWDRIVER. VERIFY THAT THERE IS NO PRESSURE ON THE GAUGES.**

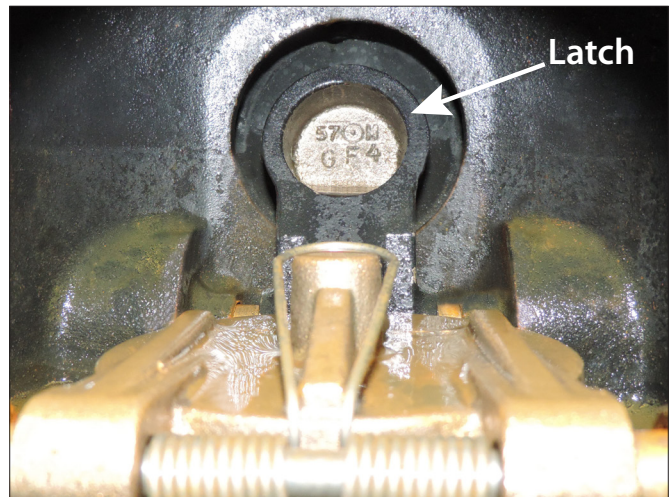
WARNING

- Verify that the valve is depressurized and drained completely before the cover plate bolts are removed.

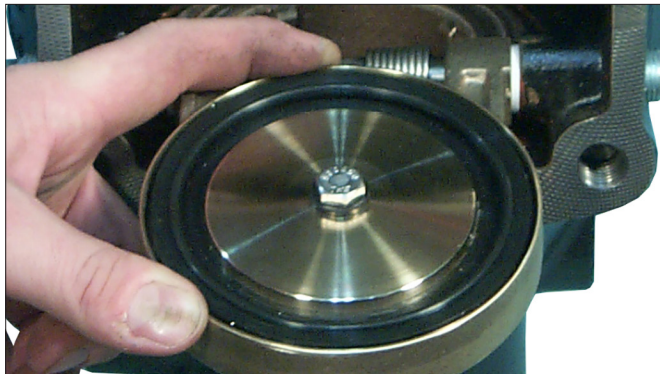
Failure to follow this instruction could result in death or serious personal injury and property damage.



11. After all pressure is released from the system, loosen the cover plate bolts slowly. **NOTE:** DO NOT remove any cover plate bolts until all cover plate bolts are loosened.
12. Remove all cover plate bolts, along with the cover plate and cover plate gasket. **NOTE:** The 1 1/2-inch/48.3-mm and 2-inch/60.3-mm Series 764, 768/768N, and 769/769N valve sizes contain washers under the heads of the cover plate bolts. Keep these washers for re-installation.



For Series 764, 768/768N, and 769/769N Valves: Push the latch back (toward the diaphragm).



13. Rotate the clapper out of the valve body. At this point, determine which seal is currently installed in the clapper. Refer to the "Contents of Clapper Seal Kit" section on page 1 for details.
14. Follow the appropriate replacement steps on the following pages.

REPLACEMENT OF CLAPPER SEALS "A" AND "B"

1. Perform steps 1 – 15 of the "Removing the System from Service and Preparing for Clapper Seal Replacement" section.



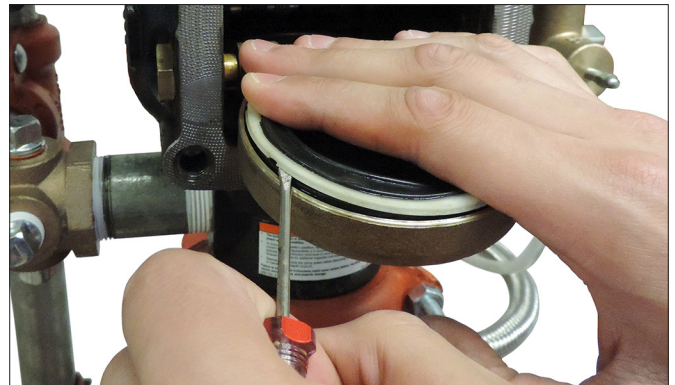
2. Remove the seal assembly bolt/bolt seal from the clapper seal.



3. Remove the seal retaining ring. Save the seal retaining ring for re-installation.



4. Pry the edge of the old seal washer from inside the clapper seal, as shown above. Remove and discard the old seal washer.



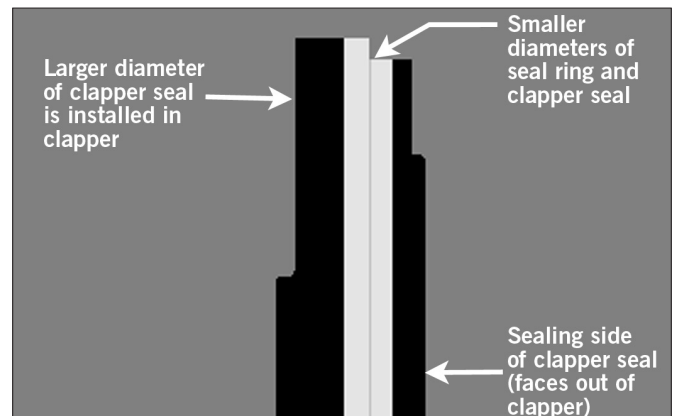
5. Pry the old clapper seal out of the clapper (along with the seal ring of the clapper seal "A" design). Discard the clapper seal.

CAUTION

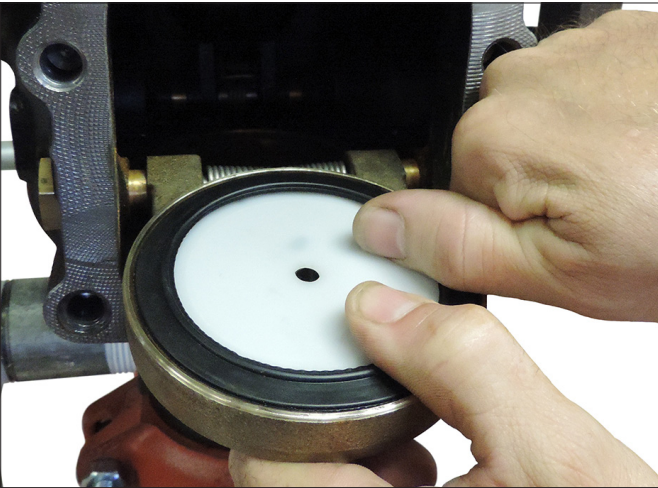
- **DO NOT** use solvents or abrasives on or near the valve body seat ring.
- Use only Victaulic-supplied replacement parts.

Failure to follow these instructions could cause improper valve operation, resulting in property damage.

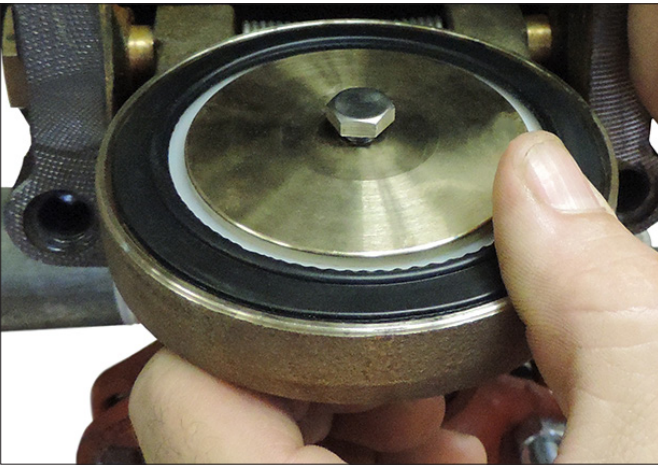
6. Remove any debris from the clapper. Inspect the clapper for damage that may affect the sealing capabilities of the new clapper seal. Clean out any holes that are plugged in the valve body seat ring. **DO NOT USE SOLVENTS OR ABRASIVES.** If the clapper requires replacement, contact Victaulic and follow the "Removing and Replacing the Clapper Assembly" section.



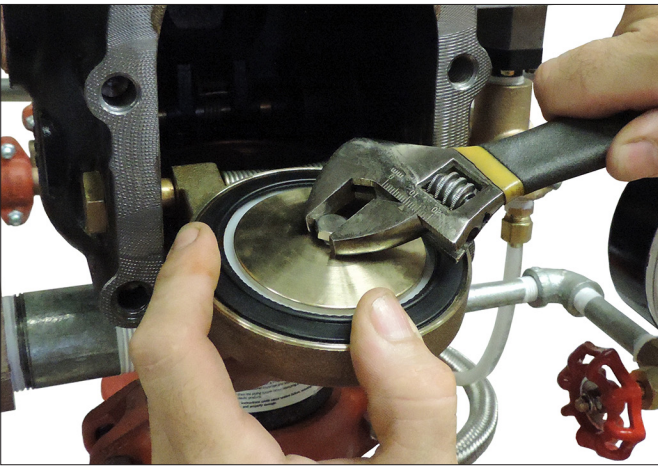
For Clapper Seal "A": Verify that the seal ring is installed in the new clapper seal properly, as shown above. The smaller diameter of the seal ring must be installed toward the sealing surface of the clapper seal.



7. Install the new clapper seal into the clapper carefully.
For Clapper Seal "A": Verify that the seal ring snaps into the clapper completely.



8. Place the seal retaining ring (flat side down) onto the seal washer of the clapper seal, as shown above. Install the seal assembly bolt/ bolt seal through the seal retaining ring and clapper.



9. Tighten the seal assembly bolt/bolt seal to the torque value listed in the table on this page to ensure a proper seal.

REQUIRED SEAL ASSEMBLY BOLT/BOLT SEAL TORQUES FOR CLAPPER SEAL "A"

Nominal Size inches or mm	Required Torque inch-lbs/N•m
1 ½	40 5
2	40 5
2 ½	90 10
76.1 mm	90 10
3	90 10
4	110 12
165.1 mm	160 18
6	160 18
8	160 18

REQUIRED SEAL ASSEMBLY BOLT/BOLT SEAL TORQUE FOR CLAPPER SEAL "B"

Nominal Size inches or mm	Required Torque inch-lbs/N•m
All Sizes	75 9

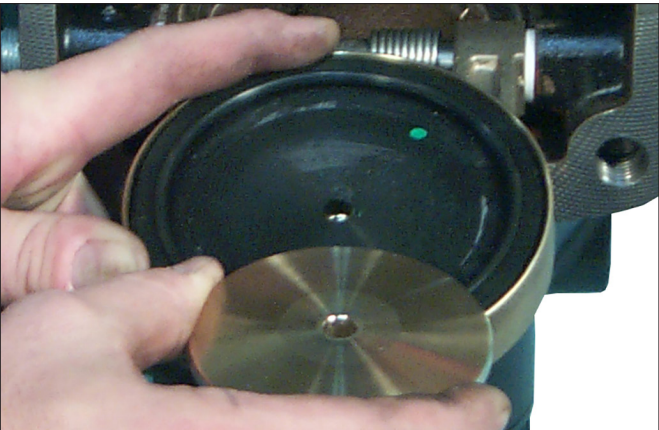
10. Follow all steps in the "Installing the Cover Plate" section.

REPLACEMENT OF CLAPPER SEAL "C"

1. Perform steps 1 – 15 of the "Removing the System from Service and Preparing for Clapper Seal Replacement" section.



2. Remove the seal assembly bolt/bolt seal from the clapper seal.



3. Remove the seal retaining ring. Save the seal retaining ring for re-installation.



4. Remove the old solid clapper seal from the clapper. Discard the solid clapper seal.

⚠ CAUTION

- **DO NOT** use solvents or abrasives on or near the valve body seat ring.
 - Use only Victaulic-supplied replacement parts.
- Failure to follow these instructions could cause improper valve operation, resulting in property damage.

5. Remove any debris from the clapper. Inspect the clapper for damage that may affect the sealing capabilities of the new solid clapper seal. Clean out any holes that are plugged in the valve body seat ring. **DO NOT USE SOLVENTS OR ABRASIVES.** If the clapper requires replacement, contact Victaulic and follow the "Removing and Replacing the Clapper Assembly" section.



6. Install the new solid clapper seal into the clapper, as shown above.
NOTE: Verify that the sealing lip is pointing upward.



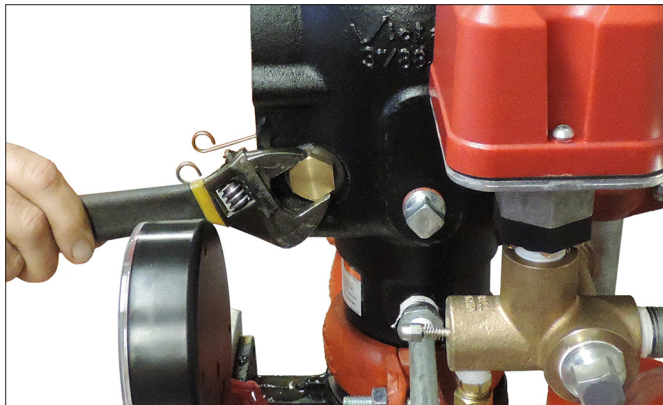
7. Place the seal retaining ring (flat side down) onto the solid seal, as shown above.



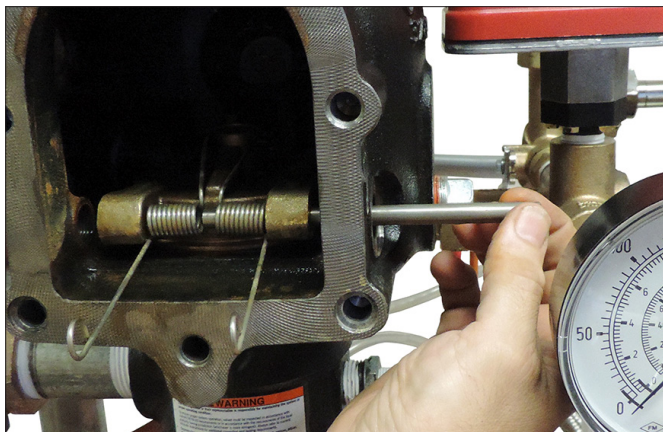
8. Install the seal assembly bolt/bolt seal through the seal retaining ring and clapper. Tighten the seal assembly bolt/bolt seal to a maximum of 70inch-lbs/8N•m to ensure a proper seal.
9. Follow all steps in the "Installing the Cover Plate" section.

REMOVING AND REPLACING THE CLAPPER ASSEMBLY

1. Perform steps 1 – 13 of the “Removing the System from Service and Preparing for Clapper Seal Replacement” section.



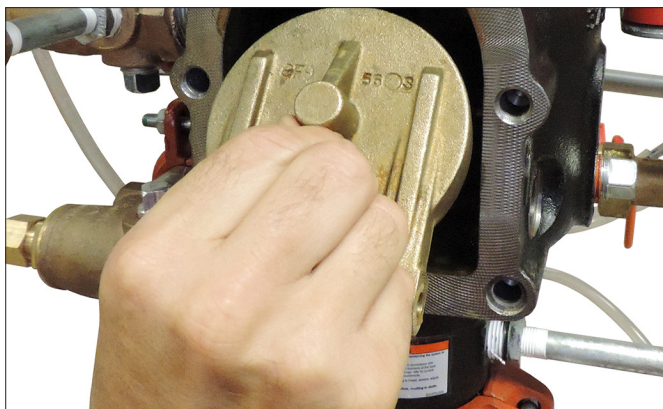
2. Remove the clapper shaft bushings with o-rings (Series 764, 768/768N, and 769/769N) or clapper shaft retaining plugs (Series 751, 756, 758) from the valve body.



3. Remove the clapper shaft.

For Series 764, 768/768N, 769/769N Valves: As the shaft is being removed, the clapper spring will drop out of position. Save the clapper spring for re-installation.

For Series 751, 756, 758 Valves: As the shaft is being removed, the two spacers and clapper spring will drop out of position. Save the spacers and clapper spring for re-installation.

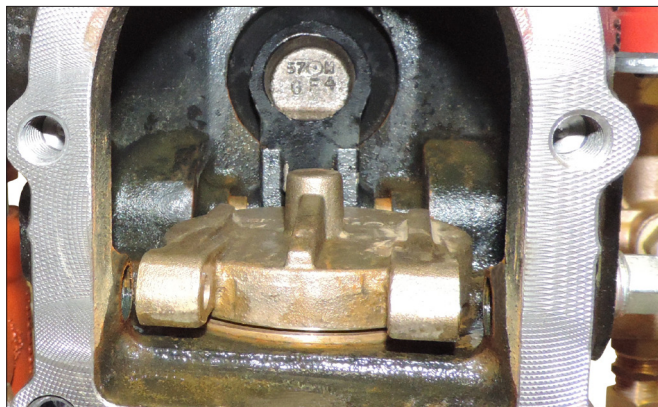


4. Remove the clapper assembly from the valve body seat ring. Clean out any holes that are plugged in the valve body seat ring. **DO NOT USE SOLVENTS OR ABRASIVES.**

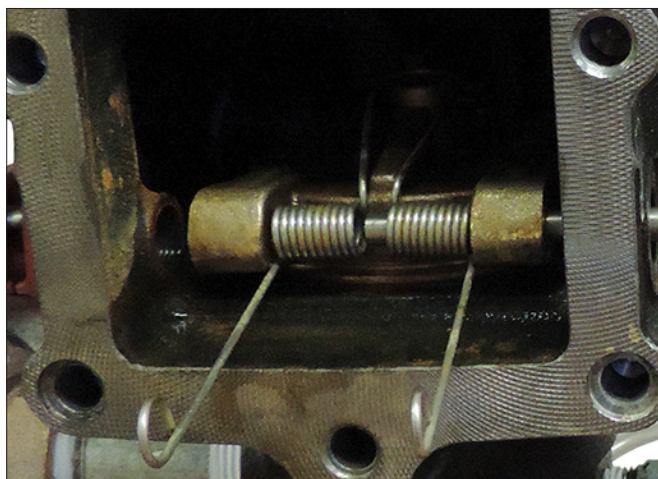
CAUTION

- **DO NOT** use solvents or abrasives on or near the valve body seat ring.
- Use only Victaulic-supplied replacement parts.

Failure to follow these instructions could cause improper valve operation, resulting in property damage.



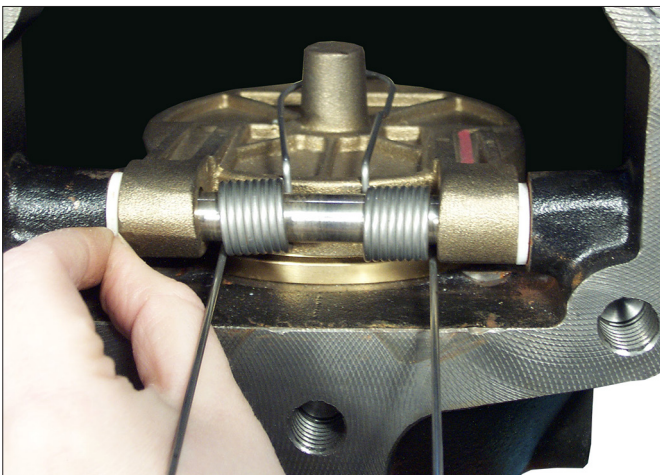
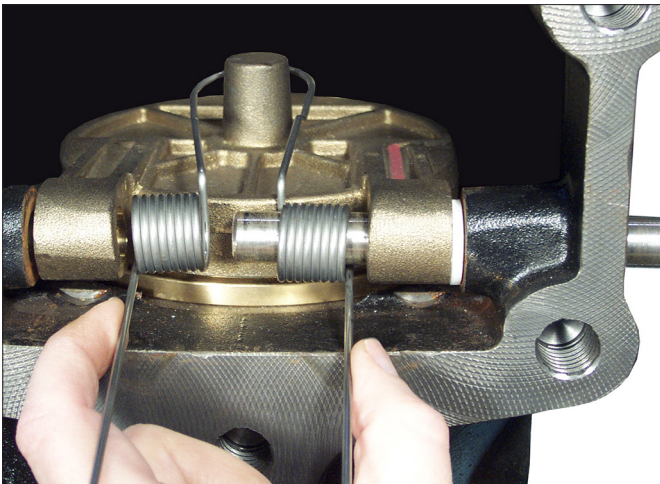
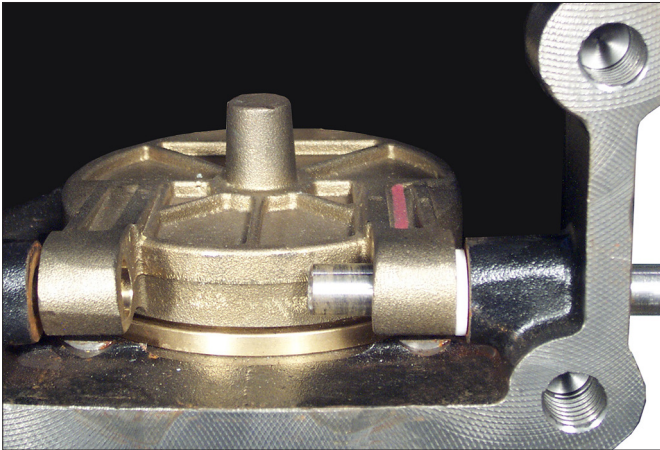
5. Place the new clapper assembly onto the valve body seat ring. Verify that the holes in the clapper arms align with the holes in the valve body.



6. **For Series 764, 768/768N, 769/769N Valves:** Insert the clapper shaft halfway into the valve body.

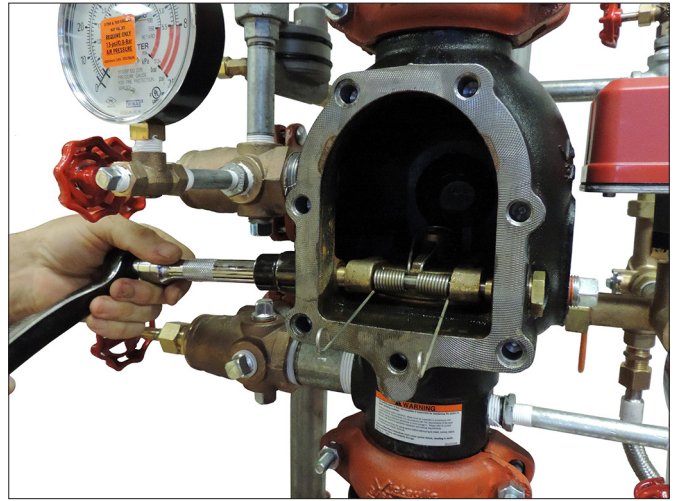
Install the clapper spring onto the clapper shaft. Verify that the loop of the clapper spring is facing the clapper, as shown above.

Finish inserting the clapper shaft through the clapper arm and valve body.



- 6a. For Series 751, 756, 758 Valves:** Start the clapper shaft into the valve body and place one spacer between the clapper and valve body, as shown above.
- Install the clapper spring onto the clapper shaft. Verify that the loop of the clapper spring is facing the clapper, as shown above.
- Place the other spacer between the clapper and valve body. Finish inserting the clapper shaft through the clapper arm and valve body, as shown above.

- 7. For Series 764, 768/768N, 769/769N Valves:** Verify that an o-ring is installed on each clapper shaft bushing.
- Apply thread sealant to each clapper shaft bushing (Series 764, 768/768N, and 769/769N) or clapper shaft retaining plugs (Series 751, 756, 758). Install the clapper shaft bushings or clapper shaft retaining plugs into the valve body until hand-tight.



- 8. For Series 764, 768/768N, 769/769N Valves:** Tighten the clapper shaft bushings until metal-to-metal contact occurs with the valve body. DO NOT exceed 10 ft-lbs/14 N•m of torque on the clapper shaft bushings.
- For Series 751, 756, 758 Valves:** Tighten the clapper shaft retaining plugs until metal-to-metal contact occurs with the valve body.
- 9.** Check the clapper for freedom of movement.
- 10.** Replace the cover plate by following the “Installing the Cover Plate Gasket and Cover Plate” section.

Replacing the Clapper Seal or Clapper Assembly for Series 751, 756, 758, 764, 768/768N, and 769/769N FireLock™ Fire Protection Valves

INSTALLING THE COVER PLATE GASKET AND COVER PLATE

CAUTION

- Use only Victaulic-supplied replacement parts.
- Failure to follow this instruction could cause improper valve operation, resulting in property damage.

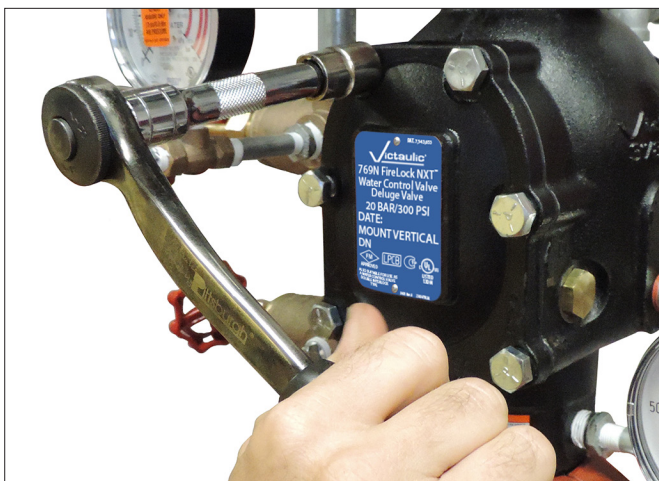
1. Verify that the cover plate gasket is in good condition. If the gasket is torn or worn, replace it with a new, Victaulic-supplied gasket.



2. Align the holes of the cover plate gasket with the holes in the cover plate.
3. Insert one cover plate bolt through the cover plate and cover plate gasket to ease alignment. **For 1 1/2-inch/48.3-mm and 2-inch/60.3-mm Series 764, 768/768N, 769/769N Valve Sizes:** A washer must be re-installed under the head of each cover plate bolt.

CAUTION

- DO NOT over-tighten the cover plate bolts.
- Failure to follow this instruction could cause damage to the cover plate gasket, resulting in valve leakage.



4. Align the cover plate/cover plate gasket to the valve. Verify that the clapper spring's arms are rotated to their installed position. Tighten all cover plate bolts into the cover plate/valve body.
5. Torque all cover plate bolts in an even, crossing pattern. Refer to the "Required Cover Plate Bolt Torques" table below for the required torque values. DO NOT over-tighten the cover plate bolts.

REQUIRED COVER PLATE BOLT TORQUES

Nominal Size inches or mm	Required Torque ft-lbs/N•m
1 1/2	30 41
2	30 41
2 1/2	60 81
76.1 mm	60 81
3	60 81
4	100 136
165.1 mm	115 156
6	115 156
8	100 136

6. Place the system back in service by following the "Placing the System in Service" section in the appropriate installation, maintenance, and testing manual supplied with the valve. These manuals can be downloaded at victaulic.com or by scanning the applicable QR code below.

SCAN APPLICABLE QR CODE FOR ACCESS TO INSTALLATION, MAINTENANCE, AND TESTING MANUALS AND ADDITIONAL PUBLICATIONS



ALARM
VALVE



DRY
VALVE



DELUGE
VALVE



PREACTION
VALVE

For complete contact information, visit victaulic.com

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