



Model CV-1F Check Valve Maintenance Kit

General Description

The TYCO Model CV-1F Check Valve Maintenance Kit is specially designed to allow the maintenance procedure of backflushing through the fire department connection. The Maintenance Kit is intended to ease the task of backflushing without removing the Model CV-1F Check Valve from the pipe line. This is accomplished by replacing the cap/clapper assembly with the Maintenance Kit (see Installation section for full procedure).

NOTICE

The Model CV-1F Check Valve Maintenance Kit described herein must be installed and maintained in compliance with this document, as well as with the applicable standards of the NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the performance of this device.

The owner is responsible for maintaining his fire protection system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.

Technical Data

Sizes

2 in., 2-1/2 in., 76,1 mm, 3 in., 4 in., 139,7 mm, 5 in., 165,1 mm, 6 in., 8 in., 10 in., 12 in.

Physical Characteristics

Cap: Ductile Iron conforming to ASTM A536, Grade 65-45-12

IMPORTANT

Refer to Technical Data Sheet TFP2300 for warnings pertaining to regulatory and health information.

Installation

Note: All replacement parts must be obtained from the manufacturer to assure proper operation of the valve.

NOTICE

The Maintenance Cap is provided with warning labels and tags to indicate that the check valve is out of service. Any system maintenance or inspection that involves placing a valve "out of service" will eliminate the fire protection normally provided by the fire protection system. Prior to proceeding, be certain to secure permission from all authorities having jurisdiction and notify all personnel who may be affected during system shutdown. A fire watch during maintenance periods is a recommended precaution.

Step 1. Verify that the system is depressurized and drained on both sides of the Check Valve.

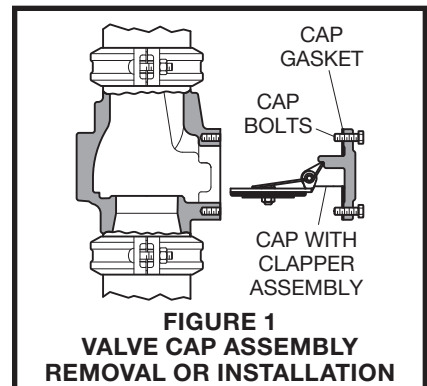
Step 2. Remove the bolts from the cap and remove cap with clapper assembly and cap gasket from the check valve. (Ref. Figure 1) Inspect the elastomer seal facing on the spring loaded clapper to verify that there is no damage. If there is damage to the elastomer seal, a clapper repair kit will be required, contact Johnson Controls for details.

Step 3. Inspect the valve seat surface to verify it is free of all loose debris and dirt which could affect proper sealing.

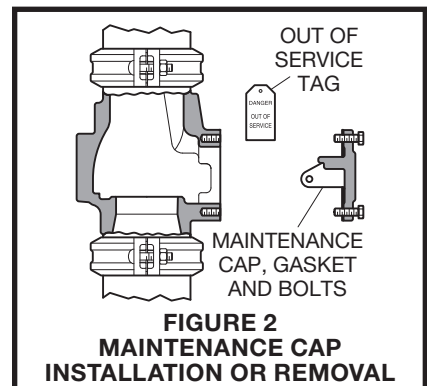
Step 4. Clean the surface for the cap gasket and place the new gasket (supplied) on the cleaned surface.

Step 5. Insert the Maintenance Cap (supplied) (Ref. Figure 2). Tighten all bolts (supplied) uniformly to bring the cap and gasket firmly together and ensure that the bolts are sufficiently torqued to the proper values (Ref Table A).

Step 6. Backflush the system. When done backflushing, verify that the system is depressurized and drained.



**FIGURE 1
VALVE CAP ASSEMBLY
REMOVAL OR INSTALLATION**



**FIGURE 2
MAINTENANCE CAP
INSTALLATION OR REMOVAL**

| Check Valve Size | Bolt Torque, Lbs.-Ft. (Nm) |
|---------------------|----------------------------|
| 2" | 15 (21) |
| 2-1/2", 76,1 mm, 3" | 39 (54) |
| 4", 139,7 mm, 5" | 39 (54) |
| 165,1 mm, 6" | 60 (82) |
| 8", 10", 12" | 120 (164) |

**TABLE A
CAP BOLT TORQUE VALVES**

Step 7. Remove the bolts from the maintenance cap, and remove the cap (Ref. Figure 2).

Step 8. Replace the cap with clapper assembly (removed in Step 2) into the Check Valve body (Ref Figure 1). Apply LOCTITE 242 to bolts. Torque all bolts (Ref. Table A), uniformly bringing the cap and gasket firmly together.

Step 9. Restore system into service.

Care and Maintenance

Before closing a fire protection system main control valve for maintenance work on the fire protection system that it controls, obtain permission to shut down the affected fire protection system from the proper authorities and notify all personnel who may be affected by this decision.

After placing a fire protection system in service, notify the proper authorities and advise those responsible for monitoring proprietary and/or central station alarms.

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of the NATIONAL FIRE PROTECTION ASSOCIATION (e.g., NFPA 25), in addition to the standards of any authority having jurisdiction. Contact the installing contractor or product manufacturer with any questions. Any impairments must be immediately corrected.

Limited Warranty

Ordering Procedure

Contact your local distributor for availability. When placing an order, indicate the full product name and part number (P/N).

Model CV-1F Check Valve Maintenance Kit *

Specify: Quantity, Model CV-1F Check Valve Maintenance Kit, Size (specify), P/N (specify):

| | |
|----------------|--------------|
| 2 in. | 59-592-1-020 |
| 2-1/2 in. | 59-592-1-025 |
| 76.1 mm | 59-592-1-076 |
| 3 in. | 59-592-1-030 |
| 4 in. | 59-592-1-040 |
| 139.7 mm | 59-592-1-139 |
| 5 in. | 59-592-1-050 |
| 165.1 mm | 59-592-1-165 |
| 6 in. | 59-592-1-060 |
| 8 in. | 59-592-1-080 |
| 10 in. | 59-592-1-100 |
| 12 in. | 59-592-1-120 |

* Maintenance Kit consists of cap, gasket, bolts, warning label and "Out of Service" tag.