San Francisco Fire Department

Division of Training

Training Bulletin 22-4

High-Pressure Hydrant Inspection

April 2022

High-Pressure Hydrant Inspection Procedure

1. Remove all caps. If all the caps are not removed before the hydrant is pressurized, a leaking Gate Valve will prevent the cap from being removed.

The Sliding Gate Valves are not designed to be watertight when in the closed position. It is normal for a small amount of water to leak past a closed gate valve when the King Valve is opened.

2. Open all Gate Valves completely. Close all Gate Vales, checking that the valve is centered in the outlet.

Do not force the Outlet Gate Valve below the centered position. Doing so can cause damage to the Gate Valve Carrier.

3. Pressurize Hydrant:
   a. Open the Pilot Valve (1-4 rotations of the King Valve) until water begins to fill the hydrant barrel.
   b. After the hydrant barrel has filled, and pressure has equalized, SLOWLY open the King Valve completely. This requires an average of **14 complete rotations of the King Valve.**
   c. If there is an existing leak in the King or Pilot Valve, the hydrant barrel will likely be charged and no water flow will be heard.

Do not open the King Valve until the Pilot Valve has filled the barrel. If the King valve is forced open before pressure equalization, the King Valve can be damaged.

4. Close King Valve.

5. Crack a Gate Valve to drain the hydrant barrel.

Do not open gates and flow water under high pressure without attaching a Gleeson Valve!

6. Replace all caps.

7. Locate and attempt to remove Hydrant Gate Valve Shut Off cover. The Gate Valve cover is 11" and is marked "HYDRANT H·P·F·S."
   a. A stamped arrow on the bonnet indicates the direction to the Gate Valve.
   b. Distance to the Gate Valve is stamped on the King Valve.

The hydrants shall be inspected for the following:

- Excessive rust.
- Missing caps.
- Absent or improper markings.
- Incorrect hydrant location designation.
- Graffiti.
- Water leaks from hydrant Bonnet, King Valve, and Pilot Valve.
- Excessive water leak from a centered Gate Valve.
- Obstructions that prohibit access to outlets.
- Debris that prevents access to Hydrant Shut Off Gate Valve.
- King and Gate Valves that are difficult to operate.

Note any deficiencies in the monthly Hydrant Cistern Report. If any hydrant is discovered to have an uncontrollable major leak or is found to be nonoperational, immediately report this information to SFPUC dispatch for repair (415-550-4956).

If the King Valve or any of the Gate Valves require excessive force to operate, return valves to closed position and report hydrant as nonoperational

High-Pressure Hydrant Shutoff Gate Valve Cover