INFORMATIONAL BULLETIN: 2022-010

APPROVED BY: C. Kodat, Fire Marshal, 1/1/2023

RECOMMENDATIONS TO PREVENT THEFT OF FIRE DEPARTMENT CONNECTION (FDC) FITTINGS FOR THE FIRE SPRINKLER SYSTEM

Purpose:

This bulletin is intended to provide building owners and fire sprinkler contractors direction and to develop a process to help prevent the theft of Fire Department Connection (FDC) fittings for the fire sprinkler system.

Scope:

The FDCs are a vital part of the system used by the fire apparatus in supplementing/increasing water supply to the fire sprinkler system during a fire. The following step by step recommendations will help prevent such theft and are provided as a sample of various FDC configurations. Please contact your fire sprinkler contractor should you need any help with the procedures. Contact the City of Riverside Fire Department at (951) 826-5737 should you have any questions on securing your FDC. The City of Riverside Fire Department recommends that you report theft or damage of your fire sprinkler system to your local law enforcement agency.

Disclaimer:

The following recommendations are to help prevent the theft of equipment and are not a guarantee. Please contact a licensed fire sprinkler contractor should you need help with the procedures, as the City of Riverside Fire Department does not provide such service.

1. Locate the FDC and determine the type and design features.

2. Turn the FDC connections so that the Set screw faces upward

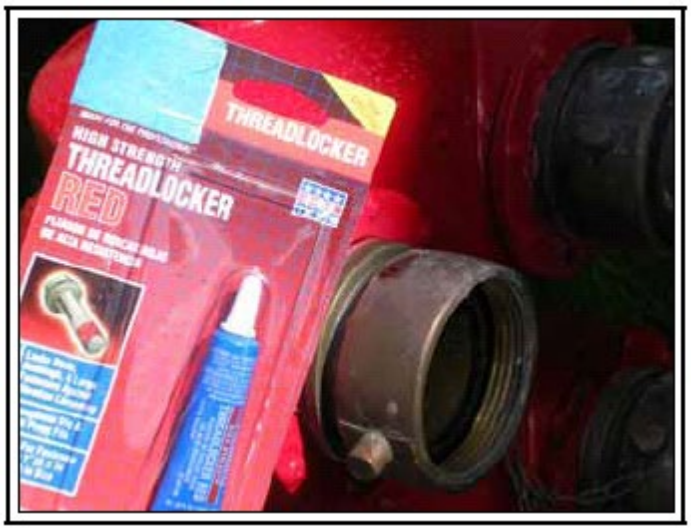
3. Remove the set screw. Please note that this is a very small item shaped like a hockey puck. A pan or tray placed under the connection may capture any small parts from falling onto the ground.

4. Insert a small amount of graphite into the opening between the bearings.

5. Replace the set screw, flush with casing, and spin the connector several times, spreading the graphite. Repeat step 4, as the graphite cannot be forced in one application.

6. Remove the set screw, keeping the bearing opening upward so as not to lose the ball bearings.

7. Apply a small amount of thread locking chemical on the thread of the set screw per manufacturer directions. Red thread locker is the strongest product.



Tape helps to hold the set screw on its side, while applying thread locker

8. Replace the set screw flush with the casing and apply a small amount of red thread locker around the set screw. Allow to harden per manufacturer's directions.

9. Drill out the slot of the set screw with a 1/4-inch drill bit until the slot is no longer visible. Check progresses several times so as not to drill through the set screw.

Depending on the configuration of your FDC, steps 10 & 11 may be required to prevent the removal of the brass body. Please note that design and model features may vary.

10. Sample FDC model #1
Drill and tap a 3/8-inch hole through the manifold case and inner threads.

11. Measures the total thickness through the case and pipe thread so that a stainless-steel tamper resistant bolt can be inserted, not to exceed ½ inch into the water flow of the pipe. A tamper resistant bolt is designed to be tightened with a flat head screwdriver but cannot be loosened.

Sample FDC model #2

Drill and tap a 3/8-inch hole through the manifold case and inner threads. Measure the total thickness through the case and pipe thread so that a stainless-steel tamper resistant bolt can be inserted, not to exceed ½-inch into the water flow of the pipe. A tamper resistant bolt is designed to be tightened with a flat head screwdriver but cannot be loosened.

Sample FDC model #3

Drill and tap a 3/8-inch hole through the manifold case and inner threads. Measure the total thickness through the case and pipe thread so that a stainless-steel tamper resistant bolt can be inserted, not to exceed 1/2-inch into the water flow of the pipe. A tamper resistant bolt is designed to be tightened with a flat head screwdriver but cannot be loosened.

For this FDC model, cover the brass unit set screw with epoxy.

Manifold Bolt Alternative

The following suggestion is for FDC models that do not have enough room, or the design of the manifold does not allow a bolt penetration. Insert and thread the brass case ½ inch into the manifold. Apply epoxy around the remaining threads and insert the case tightly before the epoxy hardens.