

# **ORANGE COUNTY FIRE AUTHORITY**

Safety & Environmental Services Section

## **INFORMATIONAL BULLETIN**

### **RECOMONDATIONS TO PREVENT THEFT OF FIRE DEPARTMENT CONECTION (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**

OCFA has received reports of an increase in thefts of a fire sprinkler component known as the FDC. The FDC connections 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 different FDC configurations. Please contact your fire sprinkler contractor should you need any help with the procedures. Contact the OCFA at (714)573-6000 should you have any questions on securing your FDC. OCFA 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 therefore is not a guarantee. Please contact a licensed fire sprinkler contractor should you need help with the procedures, as the OCFA does not provide such service.

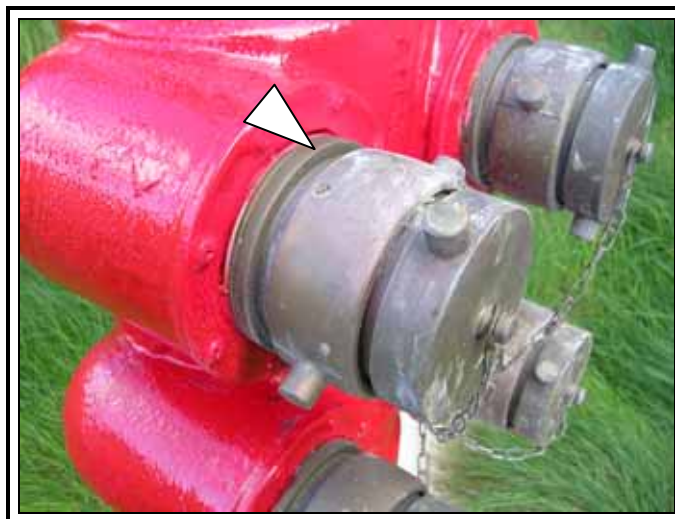
# Step #1

Locate the FDC and determine the type and design features.



# Step #2

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



## Step #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.



## Step #4

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



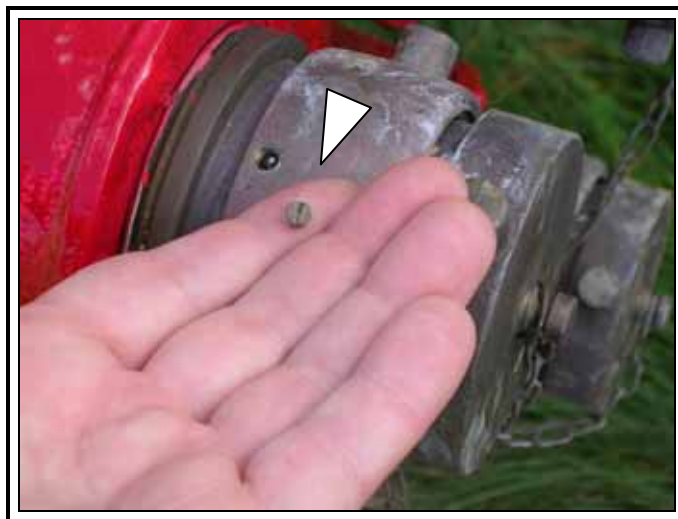
## Step #5

Replace the set screw ( flush with casing ) and spin the connector several times, flowing the graphite. Repeat step #4 a second time, as the graphite can not be forced in one application.



## Step #6

Remove the set screw, keeping the bearing opening upward as not to loose the ball bearings.

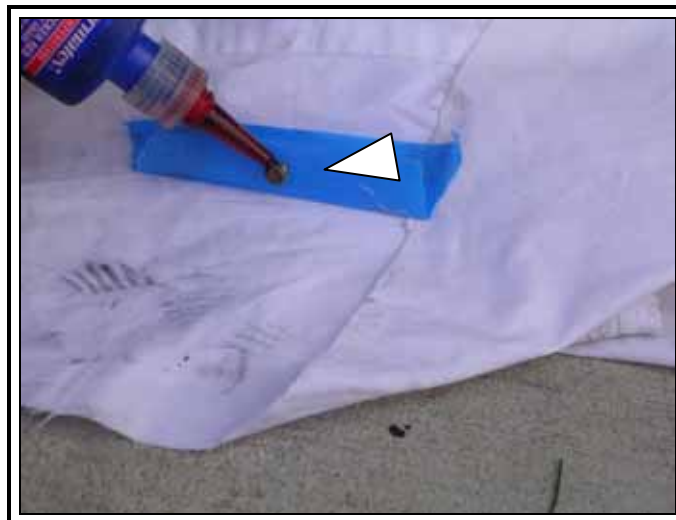


## Step #7

Apply a small amount of thread locking chemical on the thread of the set screw per manufacture directions. Red thread locker is the hardest product.



Tape helps to hold the set screw on it's side, while applying thread locker.



## Step #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 manufacture directions.



## Step #9

Drill out the slot of the set screw with a 1/4 inch drill bit until the slot is no longer visible. Check progress several times 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.

## Step #10 (sample FDC model #1)

Drill and tap a 3/8 hole through the manifold case and inner threads.



## Step #11

Measure the total thickness through the case and pipe thread so that a stainless steel tamper resistant bolt can be inserted, not to exceeding 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 can not be loosened.



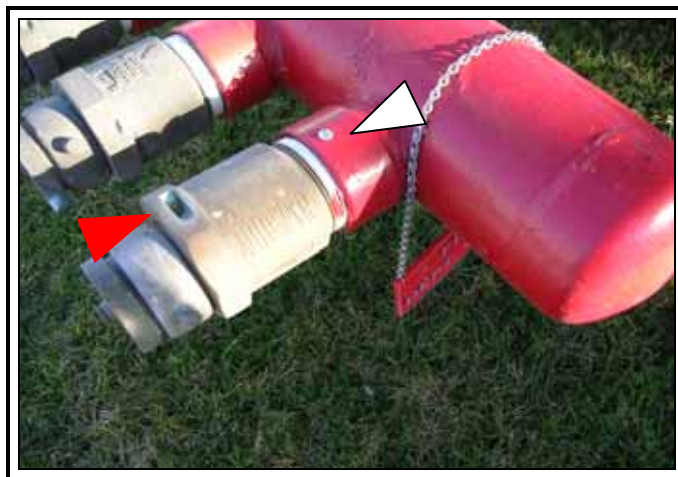
## Step #10 & 11 (sample FDC model #2)

Drill and tap a 3/8 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 exceeding 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 can not be loosened.



## Step #10 & 11 (sample FDC model #3)

Drill and tap a 3/8 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 exceeding 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 can not 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 a ½ inch into the manifold. Apply an epoxy around the remaining threads and insert the case tightly before the epoxy hardens.

