



Product Alert

July 26th, 2018

Type of Notification: Counterfeit

FM Approvals has been made aware of counterfeit automatic fire sprinklers found in Vietnam bearing an FM Approvals mark. FM Approvals has neither tested nor certified these products.

Product Identity: The sprinklers bear the marking “GLOBE” on the wrench boss, however, the identity of the manufacturer is unknown.

Description: ½” NPT frangible bulb type automatic concealed pendent sprinklers

FM Approval Status: **Not FM Approved**

Hazard Involved: These automatic sprinklers cannot be relied upon to react to or control a fire. Failure by any of the following mechanisms is possible: failure of the thermal element, orifice leakage, premature or delayed operation, bulb strutting (incomplete fracture), ejection of the deflector, inadequate or excessive discharge rate, corrosive attack, failure to operate, failure to produce an adequate discharge pattern, etc.

The sprinklers were not produced by Globe Fire Sprinkler Corporation.

If you suspect you are in possession of sprinklers bearing a counterfeit FM Approvals certification marking, please bring that to the attention of:

Antonio L. Pires
FM Approvals, Quality Department
Norwood, MA, USA
+1 (1)781 255 4825
Email: Antonio.pires@fmapprovals.com

Identification of Counterfeit Sprinklers

Figure 1 shows a counterfeit concealed pendent style sprinkler found bearing a counterfeit FM Approvals mark on the left and an authentic Globe GL5653 pendent sprinkler on the right for comparison. The most noticeable difference is the chrome plating on the counterfeit frame and deflector. FM Approved concealed sprinklers will not be plated or have other visually aesthetic coatings because the deflector, frame, and other parts are hidden from view by the cover plate when installed. Note, however, that some cover plates on FM Approved concealed sprinklers may be chrome plated as the cover plate is the only part that should show in the installed position.

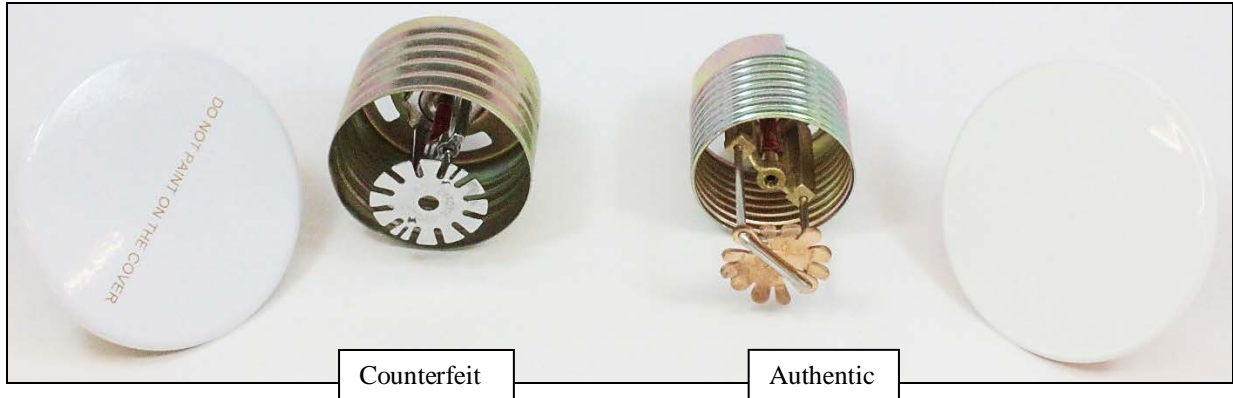


Figure 1. Comparison of a sprinkler found bearing the counterfeit FM Approvals mark and what appears to be a pendent style deflector (left) and an authentic Globe GL5653 concealed pendent sprinkler (right).

Figure 2 below shows the pendent style deflector bearing the counterfeit FM Approvals mark (left) and an authentic Globe GL5653 (right). The yellow arrows highlight the FM Approvals markings on each deflector. The counterfeit deflector is attached to the drop down pins only by the peened ends of the pins, while the drop down support on the authentic Globe sprinkler is a single piece of heavy gauge wire bent to support the deflector across its width.

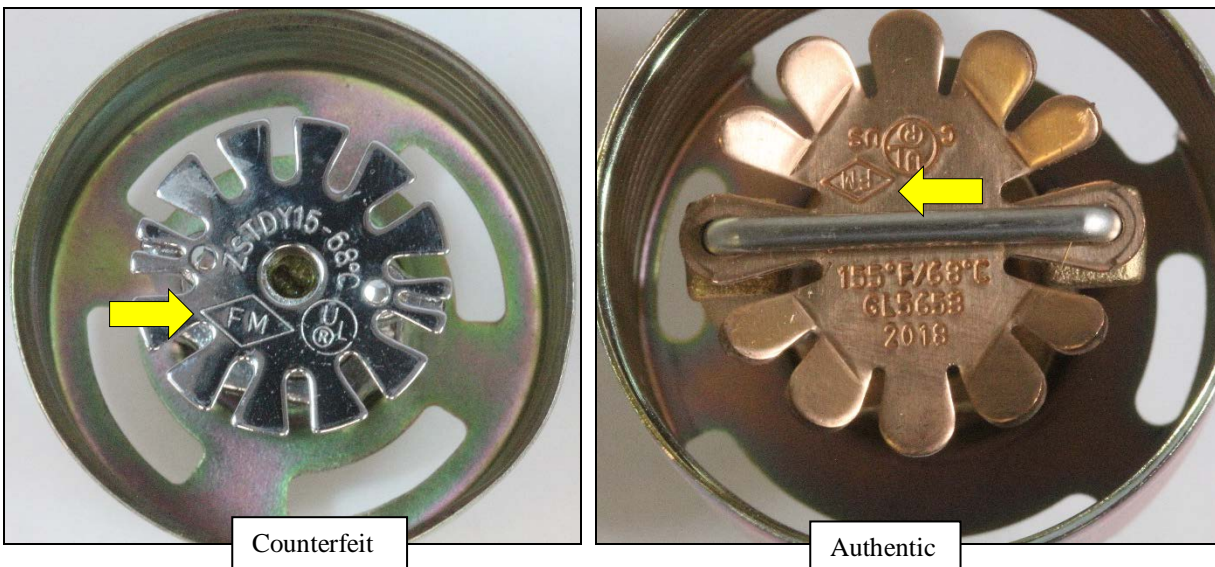


Figure 2. Counterfeit FM Approvals mark on the concealed pendent style sprinkler (left) and the authentic FM Approvals mark on an authentic Globe GL5653 sprinkler (right).

Figure 3 shows the markings on the different frangible glass bulbs used in the counterfeit Globe sprinklers (left) and authentic Globe sprinklers (right). The bulb in the counterfeit sprinkler is a Job Thermo Bulb model F5 while the authentic Globe sprinkler uses a Job model G5. There are no FM Approved sprinklers that use bulbs bearing the F5 model designation.

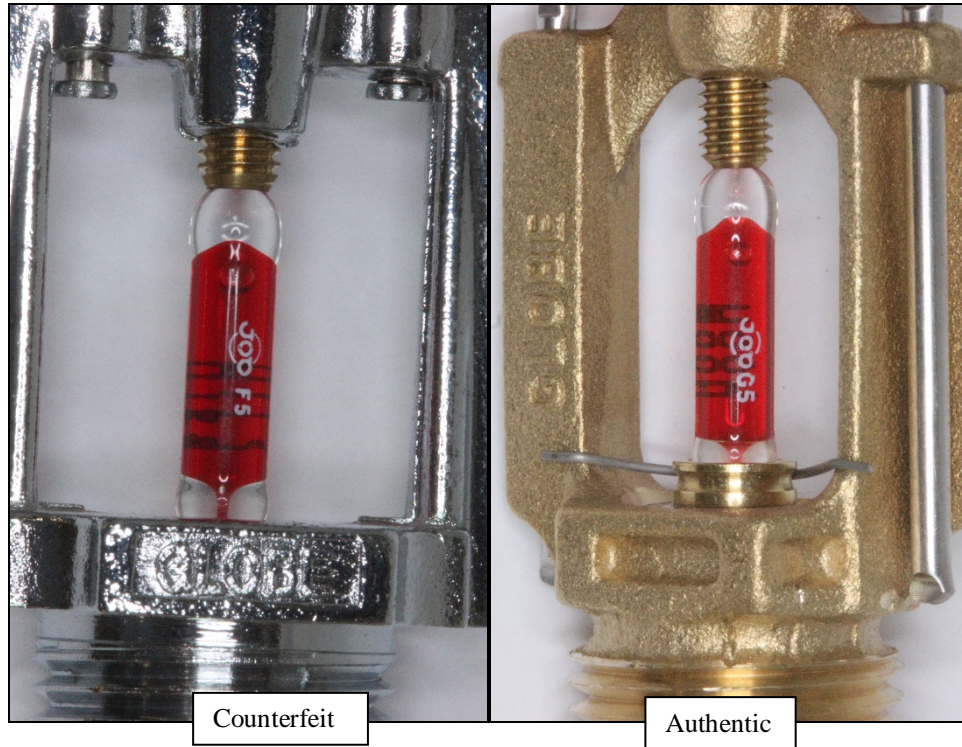


Figure 3. *The different bulbs used in the counterfeit sprinklers (left) and authentic Globe sprinklers (right)*

Figure 4 shows a comparison of the water side of the orifice seal caps used in the counterfeit sprinklers (left) and authentic Globe GL5653 sprinklers (right). The cap in the counterfeit sprinkler has a silver appearance and may be plated, while the cap in the authentic sprinkler is bare brass. Further, the counterfeit sprinkler uses an o-ring seal which is not visible from either side of the sprinkler while the authentic sprinklers use PTFE-coated Belleville washer seals, which are visible from both sides of the sprinklers. Use of o-ring seals has been widely discontinued in automatic sprinklers after their propensity to cause adhesion between the frame and orifice cap was discovered over fifteen years ago.



Figure 4. Differences in appearance of the water side of the orifice caps and seals of one of the counterfeit sprinklers (left) and an authentic Globe sprinkler (right).