



Product Alert

July 6th, 2017

Type of Notification: Counterfeit

FM Approvals has been made aware of counterfeit automatic fire sprinklers found in Malaysia 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 and the code “GN5651” on the deflector, however, the identity of the manufacturer is unknown. For additional description see “Identification of Counterfeit Sprinklers” attached.

The sprinklers were not produced by Globe Fire Sprinkler Corporation.

Description: ½” NPT frangible bulb type automatic 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.

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

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Identification of Counterfeit Sprinklers

Figure 1 below shows a counterfeit pendent style sprinkler found bearing a counterfeit FM Approvals mark on the left and an authentic Globe GL5651 pendent sprinkler on the right. While the shape of the frames is similar, the counterfeit has a smoother, glossier plating while the rough finish of the sand casting process is discernable on the authentic sprinkler. The counterfeit also has plating over its inlet threads while the authentic sprinkler does not.

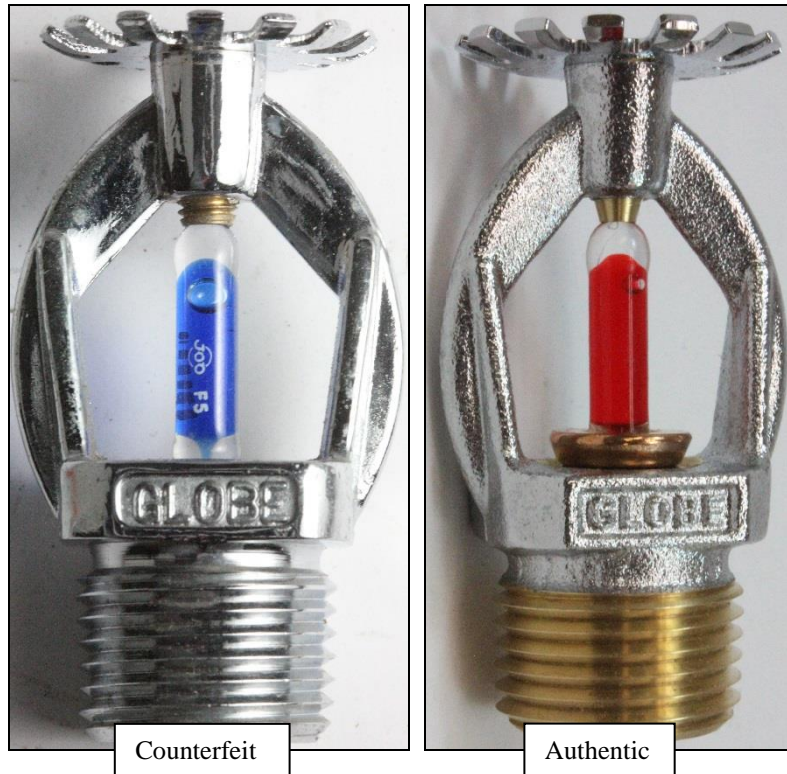


Figure 1. Comparison of a sprinkler found bearing the counterfeit FM Approvals mark and what appears to be a pendent style deflector (left) and an authentic Globe GL5651 pendent sprinkler (right).

Figure 2 on the following page shows the pendent style deflector bearing the counterfeit FM Approvals mark (left) and an authentic Globe GL5651 (right). The markings on the counterfeit sprinkler deflector, as well as the shape of the deflector itself, are very similar to those found on the authentic Globe sprinkler. The yellow arrows highlight the FM Approvals markings on each deflector. The counterfeit sprinkler is different, however, in that the head of the load screw at the center of the deflector is filled over with what is probably thread adhesive, while the adhesive is used more judiciously in authentic Globe sprinkler, being applied only to the threads and leaving the head of the screw visible and accessible.

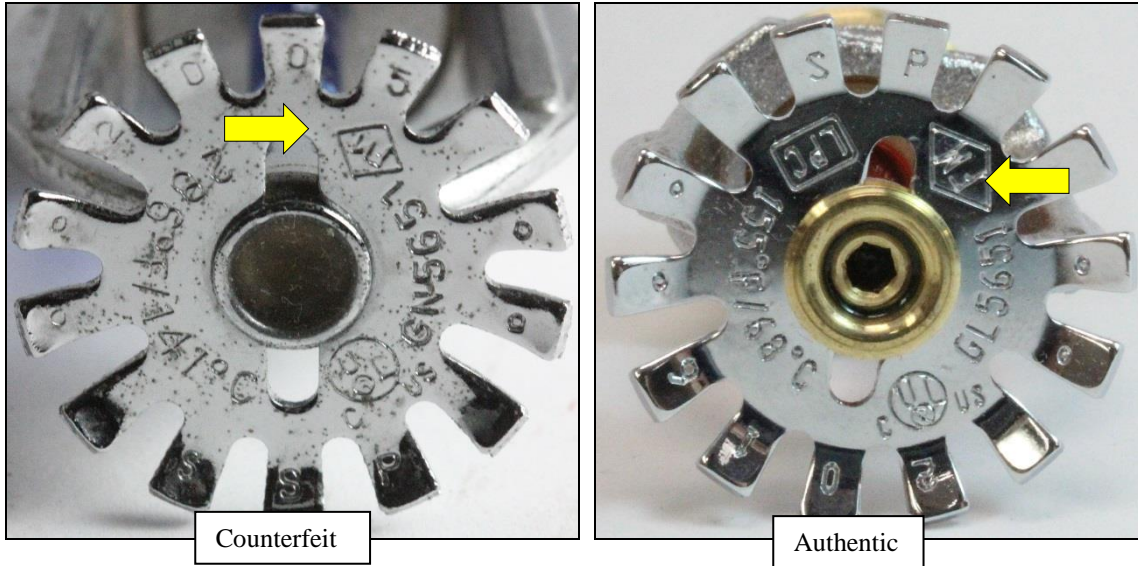


Figure 2. Counterfeit FM Approvals mark on the pendent style sprinkler (left) and the authentic FM Approvals mark on an authentic Globe GL5651 sprinkler (right).

Figure 3 below 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 model G5. Note also that the load screw on the counterfeit version is threaded all the way down to the tip where it contacts the dome of the bulb, while the load screw in the authentic sprinkler is machined to a smooth taper.

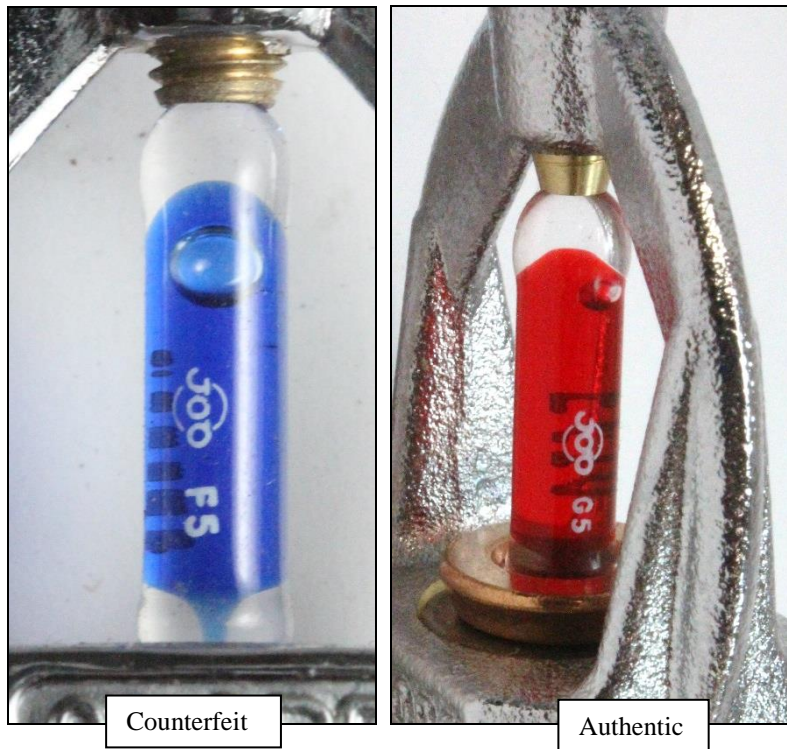


Figure 3. The different bulbs used in the counterfeit sprinklers (left) and authentic Globe sprinklers (right)

Figure 4 below shows a comparison of the water side of the orifice seal caps used in the counterfeit sprinklers (left) and authentic Globe GL5651 sprinklers (right). The authentic sprinklers use caps cold formed from copper while the counterfeit sprinkler uses a solid machined cap of unknown material. 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.

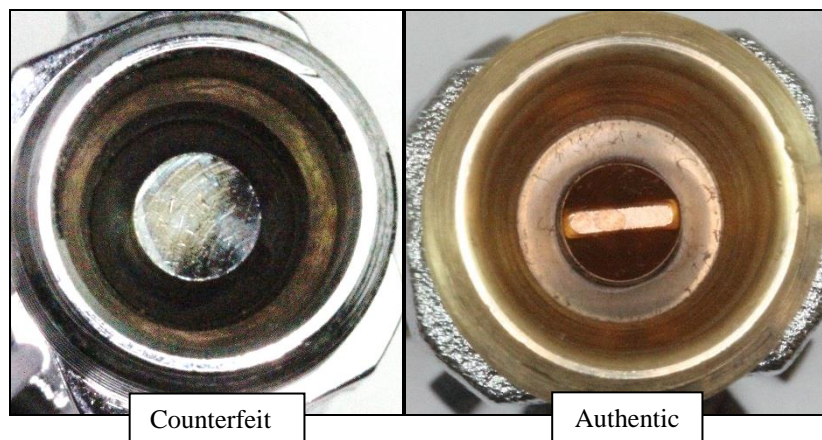


Figure 4. Differences in appearance of the water side of the orifice caps and seals of one of the counterfeit sprinklers (left) and an authentic Globe sprinkler (right).

