



Product Alert

January 5, 2016

Type of Notification: Suspect Counterfeit

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

Product Identity: The sprinklers bear the marking "TYCO" on the wrench boss and the Tyco Sprinkler Identification Numbers "TY3151" or "TY3251" on the deflector, however, the identity of the manufacturer is unknown.

Description: ½" NPT frangible bulb type automatic sprinklers with both upright and pendent deflectors

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 Tyco Fire Products.

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

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

Figure 1 below shows a comparison between the suspect counterfeit upright style sprinkler (left) with an authentic Tyco TY3151 sprinkler (right). The sprinkler on the left uses a Job model F5 glass bulb while authentic Tyco TY3151 sprinklers use only the Job model G5 glass bulb or Geissler 5mm bulb (shown in Figure 2 below). Authentic TY3151 sprinklers do not use chrome plated deflectors with brass frames as the suspect counterfeit sprinkler on the left does; the sprinkler should either appear with no coating (as pictured on the right) or with both the frame and deflector plated or coated. The orifice cap used in the sprinkler of the left (which also supports the pip end of the glass bulb, referred to as the “button” by Tyco) appears to be machined from brass, while authentic Tyco TY3151 sprinklers only use buttons formed from copper.

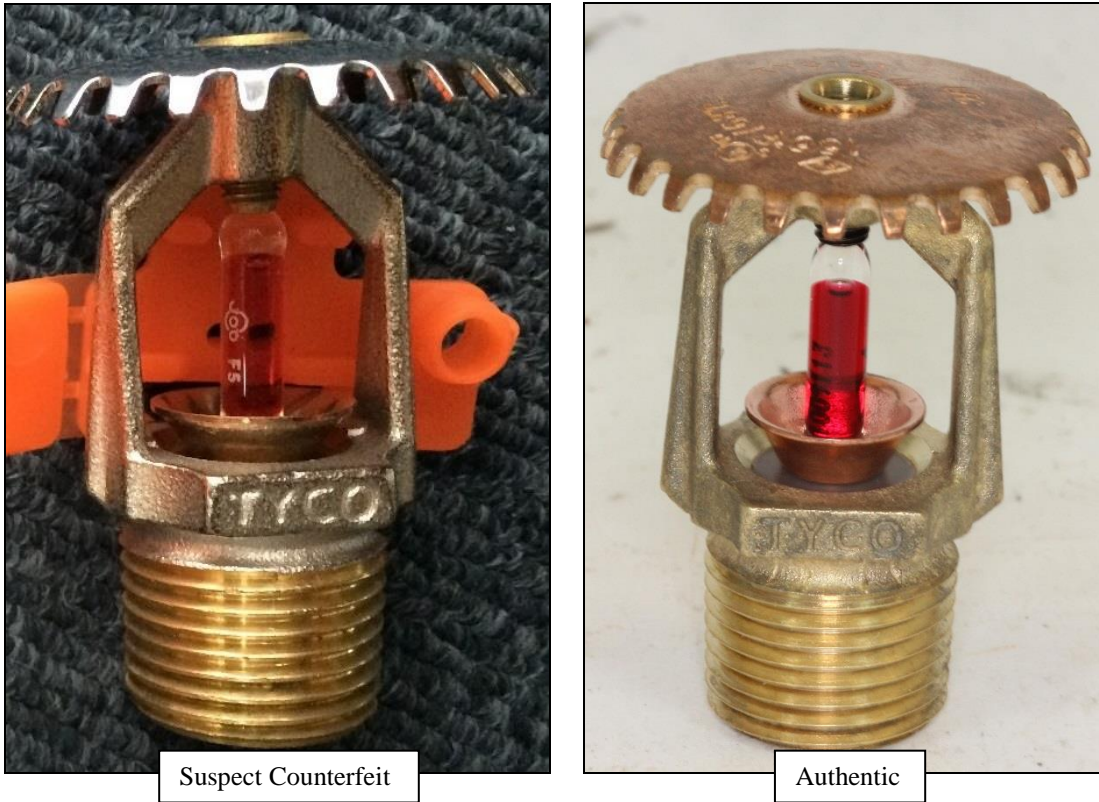


Figure 1. Comparison of a sprinkler found bearing the suspect counterfeit FM Approvals mark and what appears to be an upright style deflector (left) and an authentic Tyco TY3151 (right). *Photograph at left courtesy of Underwriters Laboratories, reproduced with permission.*



Figure 2. Geissler marking on the glass bulb of an authentic Tyco TY3151 sprinkler.
F 900/Rev. 0

Figure 3 below shows a comparison of the deflector markings on the suspect counterfeit upright style sprinkler (left) and an authentic TY3151 (right). The markings appear to be largely the same on both deflectors. There are only subtle differences in placement, size, and font.

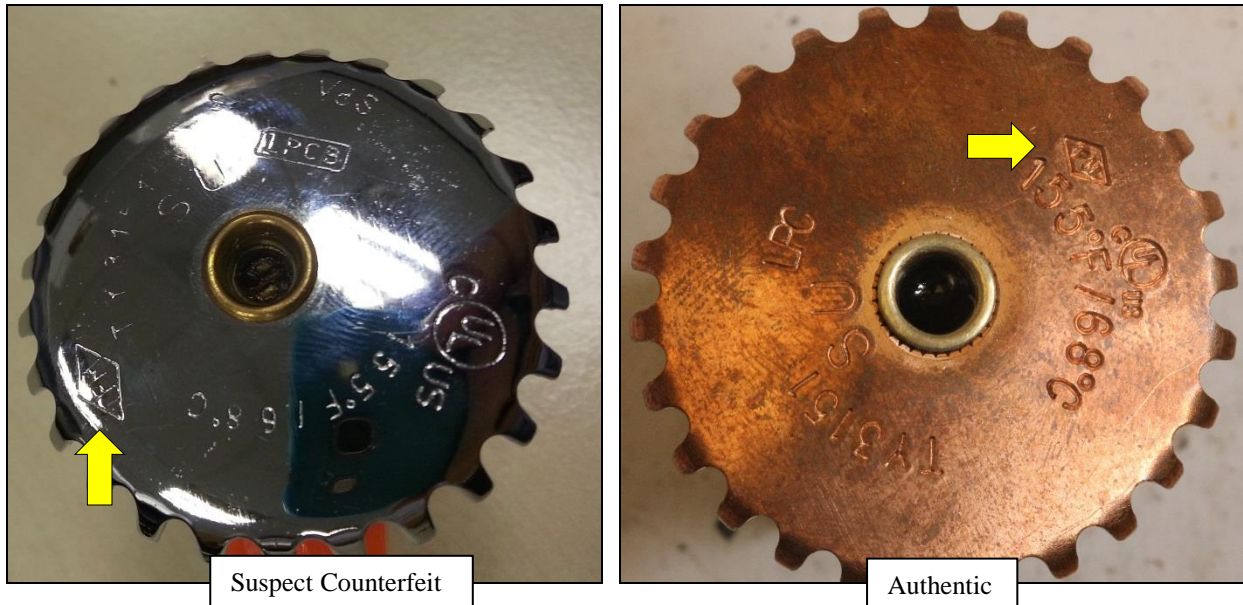


Figure 3. The suspect counterfeit FM Approvals mark (left) and an authentic FM Approvals mark on a Tyco TY3151 (right). *Photograph at left courtesy of Underwriters Laboratories, reproduced with permission.*

Figure 4 on the following page shows the suspect counterfeit pendent style sprinkler found bearing a suspect counterfeit FM Approvals mark (left) and an authentic Tyco TY3251 pendent sprinkler (right). The “F5” is clearly visible on the bulb in the sprinkler on the left. The authentic sprinkler on the right has a Geissler bulb. Like the suspect counterfeit upright style sprinkler, the pendent also has a chrome plated deflector attached to a brass frame. Authentic Tyco sprinklers only use a chrome plated deflector with a chrome plated frame or an uncoated deflector and uncoated frame.

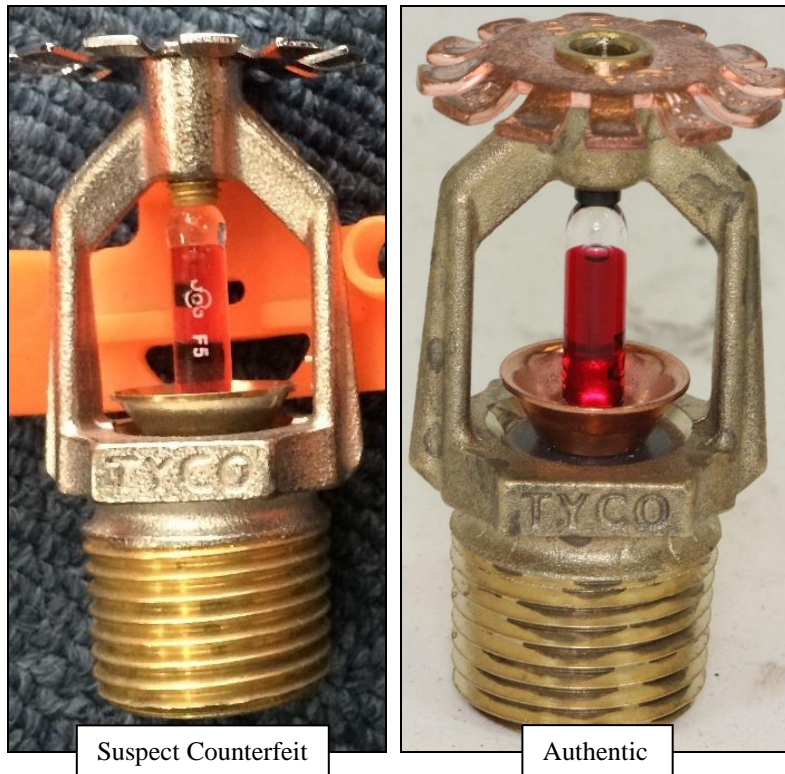


Figure 4. Comparison of a sprinkler found bearing the suspect counterfeit FM Approvals mark and what appears to be a pendent style deflector (left) and an authentic Tyco TY3151 (right). *Photograph at left courtesy of Underwriters Laboratories, reproduced with permission.*

Figure 5 on the following page shows the pendent style deflector bearing the suspect counterfeit FM Approvals mark (left) and an authentic Tyco TY3251 (right). The markings are again largely the same, although more markings appear on the tines of the deflector on the authentic sprinkler.

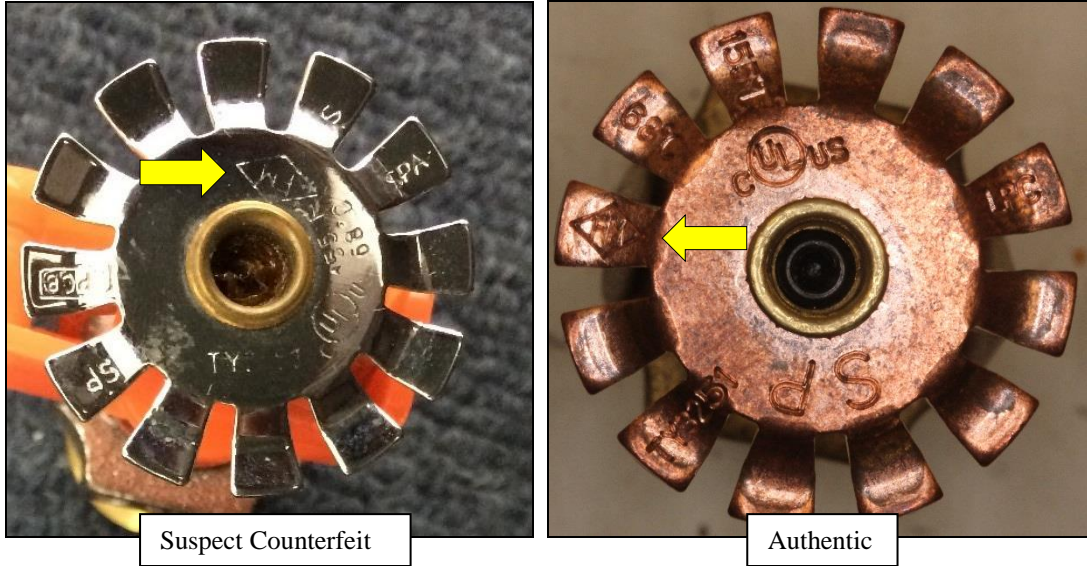


Figure 5. Suspect counterfeit FM Approvals mark on the pendent style sprinkler (left) and the authentic FM Approvals mark on a Tyco TY3251 (right). *Photograph at left courtesy of Underwriters Laboratories, reproduced with permission.*