

## BULLETIN

**DATE:** AUGUST 18, 2004  
**FIELD BULLETIN No.:** 04-080-T  
**PRODUCT AFFECTED:** CHEMETRONICS 500 and 600 SERIES DETECTORS  
**TOPIC:** SECURITY of TERMINAL PLATE RIVETS  
**STATUS:** ADVISORY  
**REQUESTED ACTION:** a) SPECIAL ATTENTION DURING INSTALLATION  
b) POTENTIAL SOURCE OF FIELD SERVICE ISSUES

**BACKGROUND:** Chemetronics has received field reports (during installation; service; inspection) of wire terminal plates separating from the Series 500 and 600 heat detectors. The terminal plates connect the wires to the detector. Should separation occur, the detector is no longer connected to the alarm circuit. These reports have been infrequent, cite a very small number of units and have a very low probability of occurrence.

**CAUSE:** The root cause has been determined to be a small number of rivets that were out of dimensional tolerance in combination with the unlikely event that the stack up of assembled components is also at the high end of the dimension allowed by tolerances. Under these rare conditions, the rivets can partially fracture in the post section during assembly. When torque is then applied to secure the wire or lug to the terminal screw, or there is excessive pulling on the wire, separation of the rivet post can occur.

**MANUFACTURING CORRECTIVE ACTION:** Corrective actions in manufacturing have been implemented which include a change to the rivet dimension and assembly procedure, and were implemented for all product starting in W01-Y04 (week 1, 2004). The terminal plate separations reported have been random, and have been identified to be a very small number of 500 and 600 Series Detectors with manufacturing lot codes ranging from W01-Y02 (week 1, 2002) to W52-Y03 (week 52, 2003). Most terminal plate separations occurred during the installation of the heat detector as the wire or terminal lug was being attached to the terminal plate. Therefore, the defect was immediately noted and the detector replaced.

### **ACTION:**

**INSTALLATION:** If during installation or inspection, terminal plate separation occurs on Series 500 or 600 heat detectors, contact Chemetronics to request replacement units and obtain a Return Authorization Number (RMA) to return the defective units.

**ROUTINE SERVICE:** If during scheduled service or a trouble call, check the terminal plates of each detector for rivet security. If a defect is detected on series 600 heat detectors, contact Chemetronics customer service to request replacement units and obtain a Return Authorization Number (RMA) to return the defective units.



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