



Federal Pacific Electric (FPE) Stab-Lok Breakers and Panelboards

HSB, part of Munich Re, is a technology-driven company built on a foundation of specialty insurance, engineering and technology, all working together to drive innovation in a modern world.

What is the best course of action when discovered?

Federal Pacific Electric Company (FPE) manufactured many electrical products while in business including a panelboard and breaker line called *Stab-Lok*. The *Stab-Lok* products are no longer manufactured, but millions had been installed in residential and commercial buildings between 1950 and 1985.

The purpose of the breaker is to protect the building from fire in the event of an electrical circuit abnormality.

The Consumer Product Safety Commission (CPSC) investigated many reports in 1982 of *Stab-Lok* breakers failing to trip as required by Underwriters Laboratories (UL) testing standards. The CPSC did not have the funding to further investigate this problem or arrive at a definitive conclusion.

Tests by the CPSC and independent consulting engineers concluded that certain *Stab-Lok* breakers do not trip according to UL requirements and in some cases, can jam in the “on” position. In addition, overheating problems have been found within the panelboard internal bus connections.

Unfortunately, this information surfaced after many *Stab-Lok* installations were completed and had been in service for years.

In 2002, a New Jersey class-action lawsuit decided that the manufacturer of the *Stab-Lok* breakers committed fraud over many years in issuing UL labels to products they knew did not meet the UL testing requirements.



The National Electrical Code requires that all installed products must be listed and labeled by an independent testing agency to be acceptable for the intended use.

Due to the fraudulent UL testing, the original *Stab-Lok* panelboards and breakers were never verified as suitable for the intended use. This is because they did not pass the UL tests at the time.

A licensed electrical contractor should confirm whether Federal Pacific Electric *Stab-Lok*® breakers and panelboards are currently in use.

Based on these issues, when a Federal Pacific Electric *Stab-Lok* installation is discovered, the safest course of action is to replace it with a completely new panelboard and breaker installation.

For a detailed review of the FPE *Stab-Lok* problem and equipment identification refer to: *Hazardous FPE Circuit Breakers and Panels*, J. Aronstein, December 2, 2011.