

A Fire Waiting to Happen?

Inspector/Underwriter Advisory

Safety Defect in Federal Pacific Stab-Lok (R) Electric Panels and Circuit Breakers

- What is recommended when found on a property.
- Safety Warning.
- Report Incidents to the US CPSC.
- How to identify Federal Pacific Electric Stab-Lok (FPE) Electric Panels.



Federal NOARK exterior panel emblem

Up to 28 million Federal Pacific (FPE) Stab-Lok breaker panels were installed in U.S. homes from 1965 through the mid 1980's. Replacement FPE circuit breakers are still available on the internet and secondary markets. These breaker panels and circuit breakers have been shown to fail at alarming rates, causing a latent fire hazard.

FPE Stab-Lok is no longer an active corporation, and subrogation recovery for any resulting fire losses is not a realistic concern. However, being aware of the latent fire hazard these panels and circuit breakers present may prevent loss of property and life.

The New Jersey Superior Court determined that FPE Stab-Lok conducted fraudulent testing of circuit breakers in order to obtain Underwriters Laboratories (UL) approval (Superior Court of New Jersey, Law Division: Middlesex County—Docket No. L-2904-97.)

FPE Stab-Lok circuit breakers present a latent fire hazard when they fail to interrupt electrical power as intended during overload and short circuit conditions. The hazard is worse for double-pole breakers. Under certain conditions, it is possible for one leg of these circuits to attempt to trip the breaker, resulting in a jammed breaker, which will not trip under any load condition afterwards.

What is recommended when FPE Stab-Lok panels and circuit breakers are found on a property?

If this electrical equipment is found on an insured property during a claim or underwriting inspection, a complete replacement of the entire panel and circuit breakers should be recommended to the property owner. Underwriting action should be taken to non-renew if the policyholder does not comply.

Panel replacement can involve significant expense, typically \$800 to \$1,200 depending on service and other factors. DO NOT simply replace individual FPE Stab-Lok circuit breakers. Any replacement FPE breaker may be prone to the same defects.

Safety Warning

While opening the hinged door provided for consumer use to access and reset breakers is permitted, because there is risk for dangerous, or even fatal electric shock in any electrical panel interior, only an expert should actually remove the front cover.

Report Incidents to the US CPSC

Report incidents related to FPE Stab-Lok electrical panel or circuit breakers to the U.S. Consumer Product Safety Commission. You can download a form from the CPSC website: <https://www.cpsc.gov/cgibin/incident.aspx> or you can send the CPSC email on incidents to: info@cpsc.gov.

How to identify Federal Pacific Electric Stab-Lok (FPE) electric panels

The names, labeling, and appearance of FPE panels vary both by age and by area of the country where the products were distributed. Names and panel labels associated with the Federal Stab-Lok design include at least::

- Federal Pacific Electric
- FPE
- Stab-Lok
- FPE-Stab-lok
- Federal Electric
- Federal NOARK
- Federal Pioneer (Canada)

For examples of the FPE Stab-Lok electrical equipment and further details, visit:

<http://www.inspect-ny.com/fpe/fpeid.htm>.

Sources:

Dr. Jesse Aronstein BME, MSME, PhD

FPE Stab-Lok Electric Panels and Circuit Breakers: Information for Inspectors and Homeowners

Fifty FPE Field Failures Reported to US CPSC—2006

U.S. Consumer Product Safety Commission

<http://www.cpsc.gov/CPSCPUB/PREREL/prhtml83/83008.html>

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Dan is an educator, author, and building failures researcher. Photo examples in this bulletin were taken from his website. A wealth of information documenting issues related to Federal Pacific Electric Panels can be found at:

<http://www.inspect-ny.com/fpe/fpepanel.htm>.



FPE Stab-Lok interior panel cover



Load Center label for FPE Federal Pacific/ Stab-Lok design



Red Center Stab-Lok panel label

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