



## FEDERAL PACIFIC ELECTRIC, FPE STAB LOK® Electrical Panels & Circuit Breakers: Latent Fire & Shock Hazards

### FPE Stab-Lok® Equipment in Residential Properties: Hazards & Remedies

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This page summarizes information provided at the FPE Federal Pacific Electric Stab-Lok® Panel/Circuit-Breaker Hazards Website - at the online encyclopedia [InspectAPedia.com](http://InspectAPedia.com)®.



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## What is The FPE Stab-Lok® Hazard

Federal Pacific Electric (FPE Stab-Lok® ®) was a widely-distributed electrical panel brand throughout the United States and under the Federal Pioneer brand, also in Canada very similar product continues to be sold. For years, anecdotes and field reports about FPE Stab-Lok® ® hazards and defects have been discussed at professional conferences and occasionally in the media. Field reports of recalls, poor and even fraudulent manufacturing & labeling, house fires, and injuries have been reported attributed to this product. Independent testing confirms that FPE Stab-Lok® ® circuit breakers fail to trip, at times as much as 70-80 percent of the time. We have found no data indicating that circuit breakers from other manufacturers fail at anywhere near this high rate. The equipment is a fire and injury hazard.

1. **Fraudulent FPE Stab-Lok® ® practice:** In 2002, in a class action lawsuit in New Jersey, the Court ruled that over many years FPE had violated the NY Consumer Fraud Act. Specifically, the court found that "... *FPE knowingly and purposefully distributed circuit breakers which were not tested to meet UL standards as indicated on their label. This constitutes an unlawful practice proscribed by the Act.*" [1] The court's decision, which was based on extensive evidence that included FPE's own documents, confirmed long-standing allegations of FPE's fraudulent testing practices. [2]
2. **High FPE Stab-Lok® ® failure rates:** Despite FPE's fraudulent testing and falsified UL labeling, defective FPE Stab-Loc circuit breakers were installed in millions of residences throughout the United States. Tests on more than 500 Stab-Lok® breakers from homes across the country show defective performance for about 1/3 of the two-pole FPE Stab-Loc circuit breakers and about 1/5 of the single-pole FPE Stab-Loc circuit breakers in those tests. [3] Most recent FPE Stab-Lok® testing of 830 breakers from a New Jersey condominium found *failures to trip on response to overcurrent in up to 70% of cases* where 2-pole breakers were installed. 80% failure rate has been demonstrated on GFCI breakers, and 100% failures to trip occur on jammed 2-pole breakers experiencing a second overcurrent event. [5]
3. **FPE Stab-Lok® ® fire & injury hazard:** In addition to the failure of these circuit breakers to protect a building and its occupants from dangerous overcurrents, *switching an FPE Stab-Lok® circuit breaker to the "off" position may leave the breaker "on" internally*, risking serious or fatal electrical shock. Based on failure studies and field reports, experts estimate that FPE Stab-Lok® panels cause significant annual property damage losses, injuries, and deaths each year. [6]
4. **FPE Stab-Lok® ® is a latent fire and shock hazard:** the presence of the equipment in a home does not itself *initiate* a failure. Rather, when a dangerous overcurrent occurs, the equipment is likely to fail to provide the safety protection that is expected of circuit breakers. For this reason, an owner's failure to observe a problem "up to now" is absolutely no assurance that the panel is safe. It may simply be that an overcurrent has not previously occurred and the circuit breakers have not been called-on to do their job.
5. **FPE Stab-Lok® ® equipment violates the National Electrical Code** Because of the proven high defect rate, the FPE Stab-Loc breakers do not provide the circuit protection that is required by applicable codes and standards (NEC and UL). This constitutes an increased risk of fire and injury. [4] NEC-240-2 "*Equipment shall be protected against overcurrent ...*" - a building with FPE a Stab-Lok® electrical panel does not meet the requirements of the NEC nor of any other electrical code.

6. **FPE Stab-Lok® field inspection or testing not reliable:** There is no practical way that a licensed electrician, inspector, or engineer can determine which breakers in a given electrical panel are seriously defective internally. The only way to do that is by means of functional and life test procedures that they are not trained to do nor equipped to perform. *Do not attempt field testing of FPE Stab-Lok® equipment.* Doing so risks serious fire or injury, and testing, even simply switching breakers on and off increases the risk of a future failure to trip.

**Replace FPE Stab-Lok® equipment:** Given these facts, FPE Stab-Lok® electrical panels and circuit breakers should be considered an un-due fire and injury risk and we recommend that the equipment be replaced completely. (Do not purchase and install replacement circuit breakers)