



Hazardous Electrical Panels

During the inspection of your home, we noted one of the following brands of electrical panel:

Federal Pacific Stab-Lok

Zinsco

Pushmatic Bulldog

Federal Pacific Stab-Lok

Federal Pacific Electric (FPE Stab-Lok®) was a widely-distributed electrical panel brand throughout the United States. 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.

We hear it all the time from homeowners: "It's been there for 30 years and hasn't caused a problem." That may be so, but there is simply no way to know whether the panel will react when needed. The failure rate of FPE breakers, where they fail to trip when needed, means that you cannot rely on them to protect your home from a potentially catastrophic fire.

Zinsco Sylvania

The issue with these panels is that the breakers have been found to fuse to the bus bar, meaning the electric current will continue to flow through the circuit breaker even if the breaker appears to have tripped. The bus bars also appear to be more prone to corrosion, and the connection between the breakers and the bus bar is not as secure as with more modern electrical panels. Some of the aluminum components of a Zinsco panel have made them more prone to arcing inside the panel, and this damage is not always apparent during a visual inspection.

Pushmatic Bulldog

These circuit breakers have an obsolete design that relies on a thermal trip mechanism, as opposed to today's breakers which incorporate both magnetic and thermal tripping mechanisms, increasing safety and the likelihood that they will function properly in the event of an overload or short circuit.

Also, the breakers have an internal grease lubricant, and if the switches are not tested (exercised) and serviced regularly, the greased parts can fail to operate.

Push-Matic breakers have an indicator flag showing whether the circuit is on or off. Many times, on old Push-Matic breakers, this on/off flag will stay fixed in either position, giving you a false indication of the condition of the circuit. The internal flagging mechanism that indicates the state of the circuit breaker as "on", "Tripped", "off" fails inside of individual circuit breakers, making it difficult for a building occupant or owner to know the condition of the breaker - in our opinion this is a significant potential shock hazard.

Inspecting Hazardous Panels

Part of the process of a normal home inspection is to remove the cover, or "dead front panel," of electrical panels in the home. However, due to the safety issues and the possibility of injury or damage, we do not remove the covers of these three brands of panels. We recommend having a licensed, qualified electrician remove the panel and replace it, and all the breakers, with modern, safe equipment.

Some electricians may not agree that these panels are dangerous; if so, ask them to state their professional opinion, in writing, on their letterhead.

For Additional Information:

<http://www.ismypanelsafe.com>

<http://inspectapedia.com/fpe/fpepanel.htm>

<http://inspectapedia.com/electric/Zinsco.htm>

<http://inspectapedia.com/electric/Pushmatic.htm>