Zinsco Electrical Panel Advice for Homeowners and Home Buyers

Zinsco and Zinsco-Sylvania circuit breakers of the design described here do not offer the level of overcurrent and fire protection provided by most other electrical panels and circuit breakers.

Zinsco Panel Field Failure Reports

With the exception of the more seriously failing FPE Stab-Lok electrical panels, we have not received any significant number of field failure reports concerning *other* electrical panel brands that also use aluminum parts and that are or were priced in the same range as Zinsco. This means homes with this equipment may be at greater risk of fire or other electrical hazard.

Zinsco Electrical Panel & Breaker Test Results

Limited test results reported by J. Aronstein indicate that the central Zinsco electrical panel and circuit breaker failure problem appears to be burnups at the clip-to-bus connections such as shown in our photo of a burned Zinsco electrical panel bus and breaker. The few circuit breakers tested by Dr. Aronstein were reported to trip within normal overcurrent limits. However a circuit breaker whose bus connection burns can lead to overheating damage to the circuit breaker itself, rendering it non-functional.

Photo (left) of a burned and failed Zinsco main circuit breaker, courtesy of J. P. Simmons - Mr. Electric. Simmons adds: "In this case the failure damaged the main wire to a mobile home also (you can see the melted wire to the left of the main). This is a

good example of why I do not like to see anyone remove these breakers. You can not tell how bad they are damaged by looking at them.

Zinsco & Zinsco-Sylvania Panel Replacement Recommended

Where Zinsco and Zinsco-Sylvania electrical panels are discovered in buildings they should be replaced to reduce some very real fire and shock hazards.

Building owners or electricians encountering problems with this equipment are asked to contact us to add that information to our electrical failure data base in an effort to develop accurate safety information which is then shared with appropriate federal and state agencies. Thanks to Mr. James Simmons, a licensed electrician with extensive field experience and the contributor of most of the photos and case reports at this web page.

Where Zinsco electrical panels and Zinsco circuit breakers are in use, arcing, contact-point burn, and even circuit breaker case blow-out have been observed in the field.

Our photo (above left) illustrates a burned-up electrical receptacle whose circuit was *protected* by a Zinsco circuit breaker that failed to trip and in fact had burned itself in the panel.

Zinsco Sylvania Panel Breaker-to-Bus Connection Arcing

A principal Zinsco™ circuit breaker (or Sylvania™ or GTE-Sylvania™ or Kearney™ electrical panel using this circuit breaker) point of failure appears to be at the point of contact where the circuit breaker contacts clip onto the electrical panel bus, combined with the use of an aluminum electrical panel bus.

As described at ZINSCO FAILURE REPORT PROCEDURE, expert testing on this equipment has shown that circuit breakers do not trip about 25% of the time when exposed to overcurrent - risking overheating, fire and other hazards. The failure rate of competitive-brand circuit breakers is much less than 1%.

Readers wanting to read specific advice on what to do if their building contains a Zinsco electrical panel should first read **ADVICE FOR ZINSCO OWNERS**, then also see ZINSCO FAILURE REPORT PROCEDURE to homeowners when a Zinsco Sylvania™ electrical panel is observed by a contractor, home inspector, or electrician.

In addition to advice on identifying Zinsco™ panels, inspecting Zinsco electrical panels, and repair/replacement advice, we provide field photographs of circuit breaker failures: overheating, burnups, failures to trip, overcurrent protection failure. This document includes field reports of failures and additional anecdotal evidence. See ZINSCO FAILURE PHOTOGRAPHS and ZINSCO FAILURE REPORTS