

## Frequently Asked Questions

---

**Q: *Every time I turn my vacuum cleaner on in one of my bedrooms, the circuit breaker trips, but I do not have a problem when using my vacuum in other rooms in my home. What is the problem?***

- A. As of January 1, 2001 the National Electrical Code requires the use of a special kind of circuit breaker to protect bedroom circuits in new home construction. Called Arc Fault Circuit Interrupters (AFCI), these circuit breakers offer enhanced fire protection features and represent the latest in circuit breaker technology.

Basically, these sophisticated circuit breakers are programmed to recognize variances in the flow of electricity through a circuit that could represent an electrical arcing condition—one of the contributing factors to fire in a home.

Certain electronic-equipped appliances, including vacuum cleaners, can exhibit start-up characteristics which the arc fault circuit interrupter recognizes as an electrical arc. When this happens, the AFCI believes it is seeing a hazardous arc and opens the electrical circuit.

**Q. *What can I, as a homeowner, do to eliminate this problem?***

- A. The issue is limited to a fairly narrow range of vacuum cleaner models and as such we have begun working with the vacuum manufacturers affected to ensure that this incompatibility will not occur on future models. The cause of this situation is being eliminated in the new designs of both circuit breakers and electronic controlled vacuums.

"Based on the type and model of Kenmore, Panasonic and Miele vacuum cleaners, use one of the following procedures:"

1. **For Uprights:**  
Start the motor in "HIGH/CARPET" mode prior to lowering the handle to the cleaning position.
2. **For Canisters:**  
Tip the wand assembly back, raising the nozzle off the floor:
  - ❑ If the unit has a 3 position switch, then start the unit in the "FLOOR" mode, pause one second, then move to the switch to "CARPET" mode
  - ❑ If you have a variable speed model, start in "BARE FLOOR HIGH" mode, then switch to "CARPET" mode.
  - ❑ If you have a push button model, start the unit in the "BARE FLOOR" mode, and then switch to "CARPET" mode.Lower the nozzle using the handle release button.
3. Plug the vacuum into a different outlet. This may require the addition of a properly sized (16 gauge or heavier) extension cord.

**Q. What have the manufacturers done to eliminate this problem?**

- A. We are working together with the vacuum cleaner manufacturers to ensure that this incompatibility will not occur on future models. The cause of this situation is being eliminated in the new designs of both circuit breakers and electronic controlled vacuums. In addition, we are continuing to monitor the marketplace for similar situations and work with the identified manufacturers, as appropriate.

**Q. My electrician suggested that I have a “classified” AFCI made by another manufacturer installed. Is this OK?**

- A. We do not endorse the use of circuit breakers produced by other manufacturers in Square D load centers. Often called “classified breakers”, they can represent compromised performance of your electrical distribution system and may affect your warranty should a problem occur. Please see [Classified Circuit Breakers Brochure](#) (0106BR0502) for further information on the hazards relating to the use of classified products.