

How to Do a Breaker Test with an Electromechanical (Dial) Meter

Breaker tests can help you learn which appliances have the most impact on your electricity usage, troubleshoot a power draw of which you might not be aware, or identify a problem such as a short circuit.

To perform a breaker test, you will need one person at the breaker or fuse box and one person at the meter. If possible, an electrician should help with this test.

When you perform a test, it's important that appliances that heat, pump or cool – such as your electric water heater, heat pump, electric heaters, space heaters, hot tub, oven, washer and dryer – are running so you can note how they affect your usage. For example, you should turn on your hot water faucet until the water heater comes on or turn on your electric space heater to allow the test to show how your meter dial is affected.

- 1. With all of the circuit breakers on, watch the disc on your meter revolve and note the speed at which the disc turns.
- 2. Shut off all circuit breakers and wait for the meter disc to stop moving. Since the meter disc operates with magnets, the meter will continue to move until the magnetic field is broken.
- 3. Leaving each individual breaker off, turn the main breaker back on. The meter disc should remain stopped. If it does not stop, that indicates a problem.
- 4. Turn one breaker on and watch for the speed of the disc for 2 minutes.
- 5. Shut the individual breaker back off and wait about 5 minutes. After 5 minutes expires, test another individual breaker.
- 6. Continue this process with each breaker until all circuits are tested.
- 7. The faster the disc turns, the more electricity is being used on that circuit. Use the information you gathered to confirm which appliances are connected to each circuit and perform any additional research into areas where you identify the highest usage.
- 8. When complete, reset clocks and other items that would normally need to be reset after a power interruption.

Please contact our Customer Service Center at 973-2000 or 1-855-363-7211 between 7:30 am and 5:00 pm, Monday through Friday, if you have any questions.