





First things first, 3 important Q & As...

Why was this Guide produced?

A. Hit The Switch has created this informative resource to help you safely sort out small yet annoying electrical problems before calling our licenced electricians...thus saving you time and money.

Who is it for?

A. This Guide is for all Melbourne home owners, although it is also equally relevant to those who run offices and other commercial premises, particularly in the CBD and Melbourne Eastern suburbs where we operate.

What will you get out of it?

A. Download, print and keep this Guide handy and you will always be able to quickly and safely identify what is causing an electrical fault and other electrical problems around your home. It may protect your property and – who knows – may even save your life.



How to Find an Electrical Fault.

You don't need to be a Master Electrician like Hit The Switch to find the source of an electrical problem.

You just have to look at things logically and then employ the old "divide and conquer" method.

A short circuit doesn't just happen, something is causing it.

Sometimes we find that an errant nail or screw has damaged a cable, or a rodent has been hard at work, but more often than not an electrical appliance is at fault – literally – and it's simply a matter of isolating parts of the circuit from each other until you locate the culprit.



Do this by following these steps.

- 1. Turn off all circuit breakers and safety switch/es on the Switch Board.
- 2. Add them back one-at-a-time in this order:
 - a) Safety Switch/es
 - b) Circuit Breakers one at a time.
- 3. The circuit breaker that trips the safety switch is the one that has the faulty appliance on that circuit.
- 4. Turn off the Circuit Breaker that tripped the Safety Switch.
- 5. Turn on the Safety Switch again.
- 6. Go inside and find out which circuit/power points now have no power.
- 7. Unplug ALL items (appliances / lights etc.) from the power points on that circuit
- 8. Turn on Circuit Breaker and see if there is still a fault.
- 9. Then add appliances / lights etc. back, one-at-a-time...until you find the fault!

WARNING: Only conduct this exercise if your existing switchboard has hard wired circuit breakers/safety switches and NOT semi-rewireable porcelain fuses.



NB. If the Circuit Breaker continues to trip in spite of all the disconnections/reconnections you made, then something more permanent is shorting, more often than not an outdoor fault, or a problem with or near the switchboard (which used to be called "the fusebox").

In this case, the problem is more serious and will necessitate a quick call to Hit The Switch.





things you need to know about Circuit Breakers.

Always make sure you turn the Circuit Breaker fully on and fully off as sometimes they can 'stick'. Similarly, never actually hold the Circuit Breaker on, just quickly and firmly push it on.

Most breakers can stand up to repeated shorting, so it is perfectly safe to keep resetting them.

Beware if you hear a hum or buzz coming from the breaker; call Hit The Switch if you do.



Common Electrical Problems and what you should do about them.

Lights flickering: If it is only one light, it may be the bulb or fluoro, in which case replace the bulb or starter. If several are doing this, it could mean a poor connection, or of course a Grid issue. If problems persist, call Hit The Switch to investigate.

Downlights going off and on: There may be a safety cut-out kicking in, or a dud transformer. Try a downlight you know works, and if it is still doing it, call us to replace the transformer.

Bulbs burn out too quickly: If you have to constantly change light bulbs, the bulb may have a higher wattage than your light fixture can handle. Replace with a lower wattage and see if this fixes the problem.

Circuit Breaker keeps tripping: Beware, there usually is a very good reason for this. Try the "Fault Finding" steps in this guide, and if that fails call us ASAP. Bear in mind that the wiring in older homes isn't designed to handle the high-wattage loads commonly experienced in today's homes, so a house rewiring or upgrade may be called for.

Switches getting warm: If there is a dimmer switch attached, this is fairly normal, however heat at a connection needs to be looked at fast as it could start a fire. Avoid plugging anything in that particular receptacle and check others in the room for heat or burn marks.

Only one 'Two Way" switch works: One of them is obviously faulty and needs replacing. Never attempt to D.I.Y. Call us instead.

Plugs get loose or fall out of power points:

This is more than annoying, it can be downright dangerous. The prongs on the power cord must be gripped tightly for a secure connection. If not, they could cause an arc and combust.

Our electricity bill seems higher than normal:

This could be anything, from a leaky hot water pipe in an electric water heater to using an expensive appliance (such as a clothes dryer) more frequently. If you are worried, Hit The Switch can carry out an electricity audit to pinpoint the cause and save you money.

