

## **Domestic Electrical Faults**

### Safety

The three most important points to remember are:

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Domestic supplies can, and do, kill.

ALWAYS turn off (Isolate) the supplies to the circuit or appliance that you are working on.

If in any doubt get a qualified electrician to do the work.

### General Advice

Get as much information about the problem as you can.

- If an electrical socket is not working is it just the one socket not working or are no sockets working? Are all ceiling lights not working or just one?
- If a boiler is not working, do the TV and tumble-dryer work? Have all supplies, to the house, been lost, or just to one circuit or one appliance?
- Is the problem something that is happening regularly? Is there a history of electrical problems in this room, on this circuit or in this house?
- Is it always the same bulb, fuse or RCD (Residual Current Device) that blows?
- Always check RCDs even if you think the RCD is not the problem.

### RCD (Residual Current Device) has Tripped and Won't Reset

- The problem is almost never the RCD; the problem will be an appliance causing the RCD to trip.
- Unplug all electrical appliances, for instance TVs and kettles – does the RCD reset now? If yes, one of the appliances is at fault; if no, call a qualified electrician.
- If the RCD resets after unplugging all the electrical appliances plug each appliance back in, one at a time, to find out which appliance is causing the problem.

### Electric or Gas Boiler not Working

- Check the fuse, gas boilers sometimes have electrical supplies, – the fuse will be near the boiler or on the main fuse board.
- If replacing the fuse does not solve the problem call an electrician or gas engineer.

### Free-Standing (Table or floor) Lamp not Working

- Replace the bulb.
- If replacing the bulb does not work remove the supply to the lamp and clean the inside of the bulb holder – scrape with a knife or screwdriver. The lamp holder often becomes 'oxidised' (Black in colour); this prevents good electrical contact between the bulb and bulb holder.
- Is the power cable in good condition? Has it been damaged?

### Ceiling Light not Working

- Replace the bulb.
- If replacing the bulb does not work call a qualified electrician; many ceiling lights have transformers to change the input voltage to the bulb, this may be causing the problem.

### Electrical Socket not Working

- Are all electrical sockets not working or just the one?
- If no electrical sockets are working has an RCD tripped or a fuse blown? Check all fuses and RCDs.

### Tumble-Dryer not Working

- Is the supply to the tumble-dryer OK? Plug another appliance into the electrical outlet – does this appliance work? If the tumble-dryer does not have a plug but is 'hard-wired' (flex outlet) into a supply there will usually be a small light in the surround of the supply outlet at the wall – is the light on? Is there a use – has the fuse blown?
- Has the tumble-dryer overheat switch tripped? This often happens if you stop the tumble-dryer before the 'cool air' part at the end of the cycle (Usually the last 10 minutes or so). There is usually a reset button on the back of the tumble-dryer.