OLD CERAMIC/PORCELAIN FUSES IN SWITCH BOARD: WHY THEY NEED TO BE REGULARLY INSPECTED TO PREVENT ELECTRICAL FIRES IN YOUR SWITCH BOARD.

Rewireable Ceramic fuses have been around for a long time and have been largely used in all Australian homes until the late 1990’s regardless of the fact the circuit breakers were already present for domestic use since the late 1970.

From 1970 until the late 90’s, Circuits breakers were a lot more expensive for domestic use in a typical three bedroom home or double story houses. Due to this, semi-enclosed rewireable fuses were largely used.

In Flats and Units, the typical compact “Federal fuse board” were used. In most cases they were installed in hallways and kitchen areas (near stoves or inside cupboard).

Burn and overheated Fuse Tips and used copper wire as a fuse wire.

Those fuses only provided short-circuit and overload protection if the correct sized fuse wire replacement was used, but did not provide any protection from fire within the switch board or to electric shock.

These days it is very uncommon to find a switch board from the 60’s 70’s 80’s or 90’s that fit within rewirable fuses and are still in good condition. Some of them have problems resulting from over burn electrical contact in the fuse base or tip’s, whilst others have a burnt wire at the back from excess over heating caused by years of overload or bead management of the fuses.
Burn and overheated Fuse Tips and used copper wire as a fuse wire over the years when the occasional overload occurs, the fuse wire was often replaced with a large sized fuse wire to avoid the fuse blowing up again, or as I have seen over the years, when fuse wires were not available, people would replace it with a filament or 2 copper wire from a piece of electrical cable.

In more recent years, some people have gone to the extent of replacing the fuse plug with a new one (so called plug in circuit breakers). Do-It-Yourself repairs are often done incorrectly; unless the base of the fuses are in clean condition with no burn or damage to the base contact, it is a very bad idea to plug a new fuse or plug in circuit breaker into a damaged fuse base.

The result is the damaged parts of the fuse base will overheat and will consequently will overheat the insulation of the cable connected. As the insulation breakdown and tends to burn, other cables within close proximity have the potential to burn and start a fire inside the back of your switch board.

This potential electrical fire can develop in a short time or over the span on some years depending on factors such as power usage of the particular circuit, humidity inside the switch board box, corrosion, oxidation due to proximity to the sea, cleanliness of your switch board equipment or quality of the connections of any device in the switch board.

As we all know, these days we all have some electrical work around the house. It could be a light fitting or a power point replacement, but how many people get the switch board inspected or maintained?

There is no way to know when an electrical fire could start in your switch board, but leave a switch board with old fuses unmaintained and uninspected by a professional and licensed electrician for 10, 20 or even 30 years is never a good idea.

Ask yourself:

- How well do I know the condition of your switch board?
- Are all your switch board electrical parts in good working condition?
- Does it need any repairs?
- Has your switch board been professionally inspected by a licensed Electrical Contractor who specialises in switch board inspection and repairs?

If your answer is no to any of these questions, I strongly recommend that you a switch board electrical inspection carried out as soon as possible by a local reliable electrical contractor that is specialise in switchboard assessment and repairs.

Paul

RoJess Electrical

0412214259

Your local Shellharbour Electrical Contractor since 1992