Electrical Appliances

In the Home

1

How Safe are your 'Portable' appliances

Some basic checks to ensure your safety

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Examples of Portable Appliance found in the home








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Class 1 Appliances

These are electrical appliances which require earth protection. Usually these appliances are made of metal as the Earth wire is connected to the casing ie.

(Fridge / Freezers, Washing Machines, Tumble Dryers, etc.).

The Cable plugged into the mains is 3 core which includes Brown wire (Live), Blue (Neutral) and Green / Yellow which is the Earth cable.

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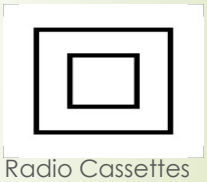
Class 2 Appliances

These appliances do not require earth protection as these are protected by 2 layers of insulation (Double Insulated) . This makes the appliance safer and not requiring an earth.

The Cable plugged into the mains only requires 2 cables. Brown (Live) and Blue (Neutral

Most Class 2 equipment has a double box symbol on it.



Examples of class 2 equipment. Dvd Players, Portable Cd, Radio Cassettes players, Hair Dryers, TVs and Lawnmowers, Power Tools.

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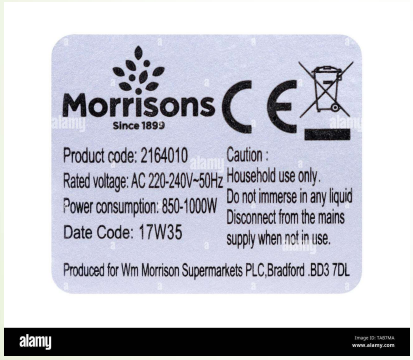
Rating Plate (Both Class 1)

5 Amp Fuse or 13 Amp



13 Amp Fuse required

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Class 2 Label

3 Amp Fuse fitted

Fig 4.4: Rating plate on drill

3 amp fuse fitted

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Power Rating

The power rating for electrical appliances is **measured in watts (W) or kilowatts (kW)**. A kilowatt is one thousand watts. If a 1 kW appliance runs for 1 hour, it will consume 1 kWh (kilowatt hour) of electricity. Units of electricity are measured in kWh and the price for a unit of electricity is shown in pence per kWh.

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Fuse Ratings

Up to 700 watt 3 amp

700 watt to 1,000 watt (1KW) 5amp or 13 Amp

Over 1,000 watt (1KW) 13 amp

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Visual Check of Your Appliances

Check the lead supplying power to the Appliance.

Check the power rating of the Appliance.

Check the Plug has the two insulation sleeves, Replace if not.

Check the fuse rating is correct for the appliance Power Rating.

If able open the plug and check no loose screws, clamp is tight, no flying wires, Live, neutral and earth (if fitted) and are in the right terminal.

Look for arcing on connectors and or the fuse (Black).

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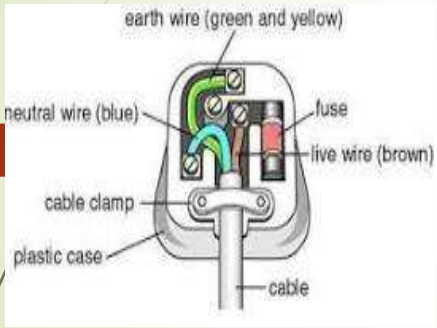
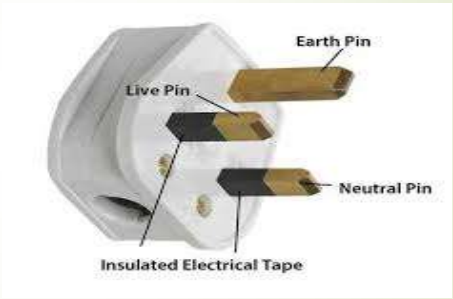
The Three Pin Plug inside and outside





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Check of the Appliance

Does it work,
Does it have any physical damage
Does it Switch on and off correctly
Is it used in a safe position.

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Actions

If IN DOUBT THROW it OUT

Replace plug if no protection on live and neutral pins.

Replace Plug if Case damaged.

Replace Fuse if too high a rating

Tighten loose screws, cable connectors and clamp.

Remake connections if badly made and 'flying wire'.

Plug Clamp should be clamping on the outer cable.

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