

Production of static electricity

All objects are made up of atoms which are electrically neutral; that is they have equal numbers of protons and electrons. However, when some materials are rubbed together, it is possible for some of the electrons from the atoms of one of the materials to transfer to the other material. This upsets the balance. The material that gains the electrons now has more electrons than protons and so becomes negatively charged. The material that loses the electrons now has fewer electrons than protons and so becomes positively charged.

An example of this occurs when you comb your hair with a plastic comb. Electrons are removed from the atoms of your hair and move onto the comb.