

What is a Carbon Brush?

Rotating machines are used for the conversion of mechanical energy into electrical energy or vice versa. All electrical machines whether motors or generators using direct or alternating current, depend for their actions on the principles of electromagnetic induction.

Michael Faraday's fundamental discovery, that a conductor whilst being moved through a magnetic field becomes the seat of electromotive forces (emf) and furthermore the direction of the electromotive forces is at right angles to both the direction of motion and the direction of magnetic field.

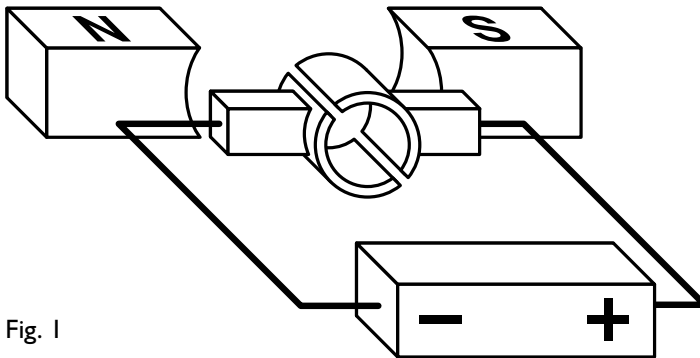


Fig. 1

The carbon brush is the integral part on the transfer of current in the rotating machine and although they differ in size, shape and technical composition carbon brushes and collectors all fulfil the same basic function. This is to transfer current from a moving device to a stationary point or vice versa within an electric circuit.

The Carbon Brush is fitted in a brush holder which is designed to hold it in the correct position and allow the brush to run on the surface of the commutator or slip ring (collector) to transfer that current at optimum performance.