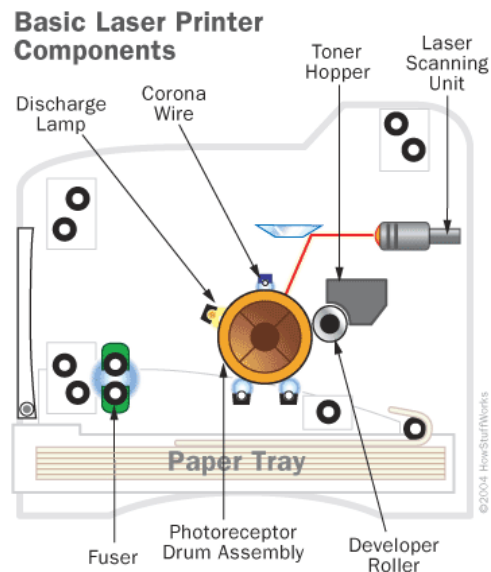


## How a Laser Printer Works



To start off the laser printing process, the charge corona wire, which is in close proximity to the drum, applies a negative charge to the surface of the drum. Using a laser light, it “draws” letters and images onto the drum as a pattern of electrical charges. This creates an electrostatic image. The areas struck by the laser become conductive and lose the negative charge. Then, the printer coats the drum with a positively charged toner, which will cling to the static/negative charge on the drum. A roller is also present in the toner that assists with applying the toner. After applying the pattern, paper is fed under the drum by the pickup roller and moves along a belt. Before the paper rolls under the drum, it is given a positive charge by the transfer corona wire, which is stronger than the charge of the electrostatic image. The toner powder clings to the paper while moving at the same speed as the drum. Immediately after picking up the toner, the paper is discharged by the static brush or detach corona wire to keep it from clinging to the drum. After being covered with a dry toner image, the printer passes the paper through the fuser, which is a pair of heated rollers. Here, the loose toner powder melts through heat and pressure, fusing with the fibers in the paper. After depositing toner on the paper, the drum surface passes the discharge lamp, in which the bright light exposes the entire photoreceptor surface, and thus erasing the electrical image. The drum surface then passes the charge corona wire, which reapplies the positive charge.