16-2. Description of Image Transfer and Paper Separation

Image Transfer

The Image Transfer Corona applies a DC negative corona emission to the underside of the paper thereby attracting the positively charged toner onto the surface of the paper to form a visible, developed image of the original. The Corona Unit is provided with a Corona Wire cleaning mechanism: the operator has only to pull out the lever on which the Cleaner is mounted from the front of the copier, which cleans the Wire.
The mylar strips affixed to the housing of the Image Transfer Corona minimize current that flows to the housing, thereby reducing the amount of ozone that is produced.

Paper Separation

The Paper Separator Corona showers the underside of the paper with both positive and negative charges so that the paper can be easily separated from the PC Drum. In addition, two Paper Separator Fingers physically peel the paper off the surface of the PC Drum. (For details, see "PC Drum Paper Separator Fingers.")

Note: The Image Transfer/Paper Separator Coronas Unit is provided with a Pre-Image Transfer Guide Plate that determines the angle at which the paper comes into contact with the PC Drum and keeps an optimum distance between the paper and the PC Drum so that the image may be properly transferred onto the paper.

Note: The Image Transfer/Paper Separator Coronas Unit and Image Transfer/Paper Separator Coronas Unit Rail are insulated from the copier body. In addition, a 3.5-megohm resistor is connected to the unit rail. This improves the charge application efficiency from the Coronas Unit to the PC Drum and economizes on the output current from High Voltage Unit HV1.