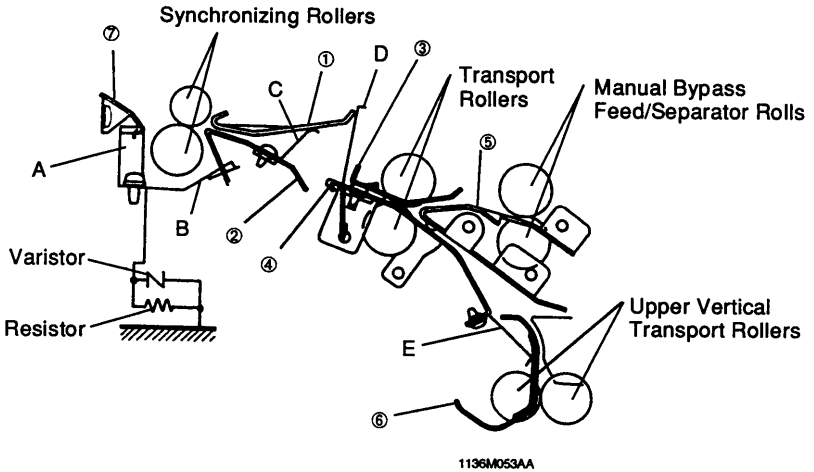
15-4. Prevention of Low Image Density on Copy

During conditions of high humidity when the paper is damp, charges would tend to flow from the Image Transfer Corona through the paper and guide plates to the ground. This results in low image density on the copies. To prevent this from occurring, a plastic spacer is installed between the copier frame and each guide plate around the Synchronizing Rollers so that it remains insulated. Instead of using the plastic spacer, an electrodeposition coating has been applied to some of those guide plates. If, however, the resistance with the ground is made infinity, the guide plate would build up charges and a spark can occur with other guide plates, resulting in a malfunction. To prevent this, an 82-megohm resistor and a 1-kV varistor are connected to the guide plates. The guide plates are connected by flat springs as illustrated below.



No.	Guide Plate Name	Insulation Method
①	Upper Pre-Synch Guide Plate	Plastic Spacer
②	Lower Pre-Synch Guide Plate	Plastic Spacer
③	Upper Transport Roller Guide Plate	None [Fitted to top of guide plate no. ④]
④	Lower Transport Roller Guide Plate	Plastic Spacer
⑤	Manual Bypass Guide Plate	Electrodeposition Coating
⑥	Vertical Transport Guide Plate	Plastic Spacer
⑦	Pre-Image Transfer Guide Plate	Fitted to plastic holder of Image Transfer/Paper Separator Coronas