23-1. Fusing Temperature Control

The Upper Fusing Roller is heated by Fusing Heater Lamp H1 which is an AC halogen lamp. Fusing Thermistor 1 TH1 and Thermistor 2 TH2 installed on the Upper Fusing Roller helps keep the optimum fusing temperature.

The fusing temperature is normally controlled at 200°C during a copy cycle and at 190°C in the standby state. To ensure good fusing performance even when the Lower Fusing Roller remains cool immediately after warm–up in the early morning, the temperature is controlled as follows when the copier is turned ON.

- Temperature is controlled at 200°C for one hour after the copier has completed warming up, which is followed by a temperature control at 190°C.

If a copy cycle is started while the temperature is being controlled at 190°C, the temperature control at 200°C begins. As soon as the copy cycle is completed, control is again switched to 190°C.

TH1 is positioned at a point 30.5 mm from the paper path reference position, thereby preventing offset caused by low temperature and degraded fusing performance for small-size paper.

The control temperature in the Energy Saving Mode is 155°C. With EP5000, the control temperature is 180°C in the Energy Saving Mode.

Fusing Thermoswitch TS1, installed above the Upper Fusing Roller, cuts off the power to the Fusing Unit if the temperature of the Upper Fusing Roller becomes excessively high. It eliminates the possibility of a fire that could occur when H1 remains ON due to a faulty temperature control circuit.

