

My FX-971 is not melting solder and my IR thermometer shows the tip temperature is low

It is not recommended to use an IR thermometer for measuring soldering iron tip temperature. The spot size for making the measurement is too large for a small soldering iron tip, and this results in an erroneous low temperature reading. In addition, the reflective nature of the stainless steel and chrome plating as well as curved surface of the tip are not ideal for IR measurement. The ideal method for measuring tip temperature is to use a HAKKO FG-100B Tip Thermometer or other contact thermocouple measurement.

Most likely, the soldering iron tip is oxidized, which inhibits heat transfer.

Using the HAKKO FS-100 Tip Polish or your own flux-cored wire solder, repeat application to the tip to remove oxidation and clean the tip between each application. The thicker the oxidation layer, the more the re-tinning process needs to be repeated.

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