3.3 ASSEMBLY PRECAUTIONS

3.3.1 Handling MOS Integrated Circuits

Many of the IC's used in the Sol-PC are MOS devices. They can be damaged by static electricity discharge. Always handle MOS IC's so that no discharge will flow through the IC. Also, avoid unnecessary handling and wear cotton--rather than synthetic--clothing when you do handle these IC's.

3.3.2 Soldering ** IMPORTANT **

- 1. Use a fine tip, low-wattage iron, 25 watts maximum.
- 2. DO NOT use excessive amounts of solder. DO solder neatly and as quickly as possible.
- 3. Use only 60-40 rosin-core solder. NEVER use acid-core solder or externally applied fluxes.
- 4. To prevent solder bridges, position iron tip so that it does not touch adjacent pins and/or traces simultaneously.
- 5. DO NOT press tip of iron on pad or trace. To do so can cause the pad or trace to "lift" off the board and permanently damage the board.
- 6. The Sol-PC uses circuit boards with plated-through holes. Solder flow through to the component (front) side of the board can produce solder bridges. Check for such bridges after you install each component.
- 7. The Sol-PC circuit boards have integral solder masks (a lacquer coating) that shield selected areas on the boards. This mask minimizes the chances of creating solder bridges during assembly. DO, however, check <u>all</u> solder joints for possible bridges.
- 8. Additional pointers on soldering are provided in Appendix IV of this manual.
- 3.3.3 Power Connection (J10)

NEVER connect the DC power cable to the Sol-PC when power supply is energized. To do so can damage the Sol-PC.

3.3.4 Installing and Removing Integrated Circuits

NEVER install or remove integrated circuits when power is applied to the Sol-PC. To do so can damage the IC.

3.3.5 Installing and Removing Personality Module

NEVER install or remove the plug-in personality module when power is applied to the Sol-PC. To do so can damage the module.

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