



TJ -80 **Precision ThermoJet**

Operation Manual

P/N 5050-0524
Rev A-CB

Features

The TJ-80 Precision ThermoJet is a precision air pencil that is ideal for delivering concentrated heat for the installation and removal of chip components, SOT's, SOIC's, PLCC's and QFP's. Multiple quick-change nozzles are available. The handpiece features a slim design for maximum operator comfort and control

1. Specifications:

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|-------------------|---|
| Temperature Range | 260° – 424° C (500° – 800° F) |
| Air Flow Rate | Approx. .48 Bar (7 p.s.i.) nominal at maximum setting. Airflow rate will vary depending on setting and nozzle selected. |

2. Safety Information

The following are safety precautions that personnel must understand and follow:

- a. Utilize all standard electrical safety precautions when using this or any other electrical equipment.
- b. Always use this handpiece (and system) in a well-ventilated area.
- c. Do not leave this system unattended when in use.
- d. Repair on this product should be performed by qualified service personnel only.

3. Set-Up

Connect your TJ-80 Precision ThermoJet to the power source using the following procedure (refer to figure 1.):

- a. Align guide on connector with slot of power receptacle
- b. Insert connector into power receptacle
- c. Turn connector housing clockwise to lock in place.

4. TJ-80 Hose Installation

Set up your TJ-80 air hose connection per the following instructions:

- a. Attach one end of the 137cm (54 inch) length of air hose to the fitting on the back of the handpiece.
- b. Attach the hose to the handpiece power cord using the supplied hose clamps. Space them evenly along the length of power cord.
- c. Insert the barbed end of the male quick connect hose into the free end of the hose.
- d. Insert the end of the quick connect hose fitting into the controllable air flow fitting in the power source
- e. Refer to the MTS 200 manual for operation and maintenance instruction for the MTS 200.

5. Nozzle Installation

Install and/or change the nozzles on your TJ-80 using the following procedure (refer to figure 2.)

- a. While the handpiece is cool, install the nozzle by inserting heater end into nozzle opening. Press the nozzle firmly onto the heater until it is firmly seated.
- b. If installing or removing a nozzle while the handpiece is hot, use the Hot-Grip Removal pad, which is provided in your packout.

Use extreme caution while handling hot nozzles and heaters.

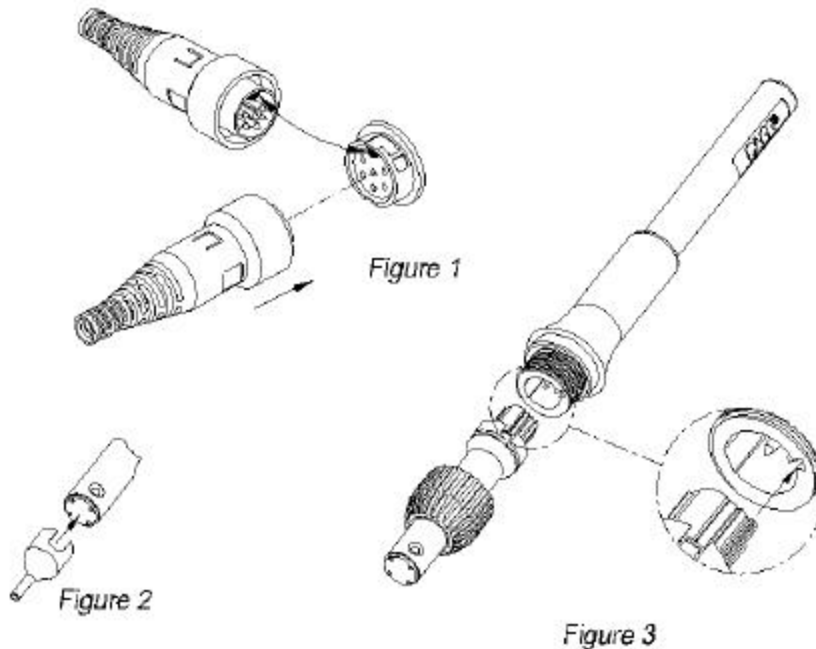
6. Temperature Selection

Adjust the airflow and temperature to the desired settings that will provide rapid yet controllable melt of the entire solder joint. Ideal soldering/desoldering temperature varies by application but is normally between 260°- 371°C. Airflow temperatures in excess of 400°C may cause damage to the PC board. Airflow can be adjusted by varying the collar around the pressure port on the front panel of the system. Airflow should be adjusted to the minimum flow rate necessary to perform the task at hand.

7. Heater Replacement

Replace the heater in your TJ-80 using the following procedure (refer to figure 3).

- a. Remove nozzle
- b. Remove heater-retaining nut.
- c. Pull heater from the handle and discard as required.
- d. Align the connector key on the end of the replacement heater with the keyway slot in the handle. Fully insert and seat the replacement heater onto the handle.
- e. Re-install the heater-retaining nut. Tighten firmly to secure.
- f. Re-install nozzle as required.



8. Replacement Parts

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|--------------------|--------------|
| TJ-80 Handpiece | 6010-0142-P1 |
| TJ-80 Kit | 6993-0247-P1 |
| Single Jet Nozzle | 1259-0129-P1 |
| Flat End Nozzle | 1259-0131-P1 |
| Curved Nozzle | 1259-0130-P1 |
| Replacement Heater | 6010-0143-P1 |