

# Weller<sup>®</sup>

## WD1 / WD1001 / WD1002

**USA** Operating Instructions

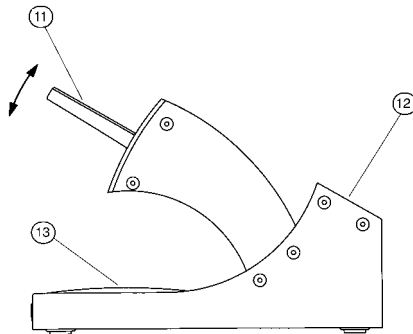
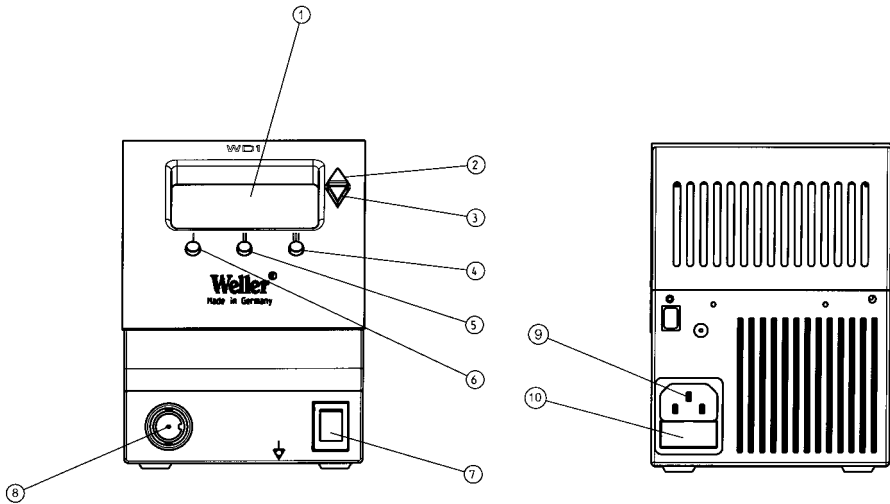


# **Table of Contents**

# **Page**

1. WD1 Detailed View	1
2. Cautions / Warnings!	2
3. Description	2
4. Technical Data / LCD Display	3
5. Placing into Operation	4
6. Special Functions	4-8
7. Operating Guidelines	8
8. Accessories	9
9. Packing Lists	9
10. WP80 Soldering Iron	10-12
11. LT Tips	12-14
12. WMP Soldering Iron	14-15
13. NT Tips	16-17
14. WD1 Circuit Diagram	18
15. WD1 Exploded View	19

## 1. WD1 Exploded View



1. LCD Display
2. UP Scroll Key
3. DOWN Scroll Key
4. Radio Button III
5. Radio Button II
6. Radio Button I
7. Power Switch
8. Soldering Iron Receptacle
9. Power Unit Receptacle
10. Primary Fuse
11. Soldering Tool Holder
12. Soldering Stand ( Tip Storage )
13. Tray / Sponge

Thank you for placing your trust in our company by purchasing the Weller WD1 / WD1001 / WD1002. This product meets or exceeds the requirements established by Weller for superior performance, versatility and quality.

## 2. Cautions! / Warnings!

Please read these Operating Instructions and the attached Safety Information carefully prior to initial operation. Failure to observe the safety warnings may result in accident, injury, or risk to health.

The manufacturer shall not be liable for damage resulting from misuse or unauthorized alterations of the equipment.

**Warning:** This product when used for soldering and similar applications, produces chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

### **Safety Information:**

- Always place the soldering iron in its original holder
- Remove all inflammable objects from the proximity of the hot soldering tool.
- Use suitable protective clothing to prevent the risk of burns associated with molten solder.
- Never leave a hot soldering iron unattended.
- Never work on electrically live circuits or components.
- Always wear eye protection when working with soldering and desoldering applications.

The Weller microprocessor-controlled soldering station WD1 / WD1001 / WD1002 corresponds to the EC Declaration of Conformity in accordance with the basic safety requirements of Directives 89/336/EEC and 73/23EEC.

## 3. Description


### 3.1 Control Unit

The WD Series microprocessor-controlled soldering stations were developed for industrial electronic production, including repair and laboratory applications. Digital electronic controls, a precision sensor and heat transfer technology in the soldering tool provides precise temperature control of the soldering tip.

Fast and precise sensor sampling in the closed loop control provides tip temperature accuracy and maximum temperature control under load. The soldering

tools are recognized automatically by the WD1 and the appropriate control parameters are set.

A Factory Control Check function, an Offset value input option, programmable temperature decrease (Setback) along with Standby and Lock functions enhance the functionality of this unit.

The desired temperature can be set in the range 150 °F – 850 °F (50 °C – 450 °C). “Set” and “Read” (actual tip temperature) values are displayed digitally. Three Radio Buttons (4) (5) (6) are used for selection of fixed/preset temperatures. The Heater Control Indicator flashes (“” symbol in the display) when the “Set” temperature is reached.

### 3.2 Tool Stand

When not in use, the soldering iron should always be placed in the Tool Stand.

The Tool Holder (11) for the soldering iron has four different settings, (30-80°) and can be moved to an operator's preferred position without the use of tools. Areas have been provided on the rear (12) of the Tool Stand for placing the soldering tip when not in use. The base of the Tool Stand contains a sponge (13) for cleaning the soldering tips. (Note: LT tips require tip retainer for storage in Tool Stand.)

### 3.3. Soldering Irons

#### **WP80 ( WD1002 ) :**

The WP80 Soldering iron is characterized by fast heat-up and precise control of the soldering tip. Due to its slim design, 80W heater output and short reach (tip to grip), this tool can be used for a variety of applications, from extremely fine soldering tasks to those requiring high temperatures.

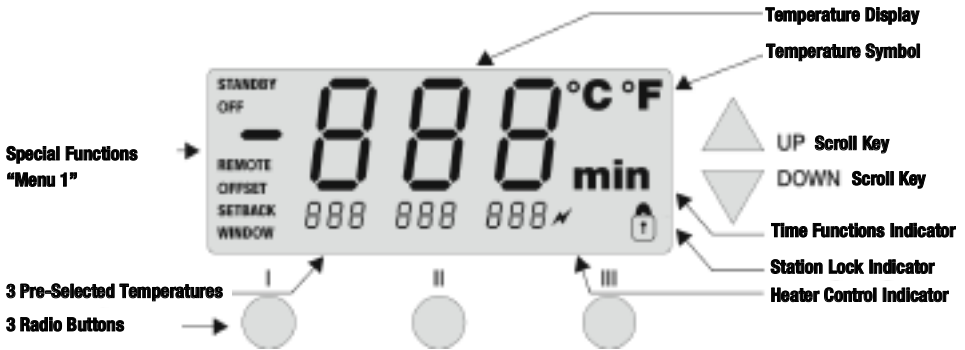
#### **WMP ( WD1001 ) :**

The WMP Micro Soldering Iron's very fast heat-up time and short reach (tip to grip), makes it ideal for precision SMT electronics. The short distance between the grip and soldering tip makes precise handling of the 65W soldering iron possible while performing very fine soldering tasks.

#### **WTA50 ( Optional ) :**

The WTA50 Desoldering Tweezers were designed specifically for desoldering SMT components. Two heating elements (2 x 25W), each with its own temperature sensor, maintain the same temperature on both tweezer tips.

## LCD Display



## 4. Technical Data

<b>Dimensions:</b>	5.27" L x 4.27" W x 5.77" H; (134mm L x 108mm W x 147mm H)
<b>Primary voltage:</b>	120 VAC / 50/60 Hz
<b>Power Input:</b>	85 Watts
<b>Power Output:</b>	24VAC
<b>Fuse (10):</b>	T1.0A (120 VAC) (5 x 20mm)
<b>Temperature Control:</b>	150 °F – 850 °F (50 °C – 450 °C)
<b>Temperature Accuracy:</b>	±17 °F (±9°C)
<b>Temperature Stability:</b>	±9 °F (±5°C)
<b>Tip to Ground Resistance</b>	< 2 Ω
<b>Tip to Ground Millivolt Potential</b>	< 2 mV

## 5. Placing into Operation

Take care when unpacking the unit and accessories. Place the soldering tool in the Tool Holder. Insert the soldering iron plug into the iron receptacle (8) on the front of the control unit and lock by turning clockwise. Verify the supply voltage matches the specification on the Base Unit Label and that the Power Switch (7) is Off. Connect the Power Cord into the receptacle (9) on the rear of the control unit and plug into a properly grounded power receptacle. Switch On the unit at the Power Switch (7). The unit performs a self-test when it is switched "On", whereby all LCD Icons are briefly displayed (1).

Following the self test, the "Set" temperature is displayed for a brief period. The electronic system then switches automatically to the "Read" value. The "✓" symbol appears and the three fixed temperatures of Radio Buttons I, II and III are displayed. The "✓" symbol serves as a Heater Control Indicator. When fully illuminated, the system is heating up. Flashing indicates the "Set" temperature has been reached and the tool temperature has stabilized.

### 5.1 Temperature Setting

#### 5.1.1 Setting Temperature with UP/Down Scroll Keys

As a rule, the main display (1) shows the tip temperature ("Read") value. By depressing the UP or DOWN Scroll Keys (2 & 3), the display switches to the current



"Set" value. The temperature symbol flashes °F (or °C). The "Set" value can now be changed by tapping or holding in the UP or DOWN Scroll Key (2) (3). If the Scroll Key is held depressed, the "Set" value changes rapidly. Approximately 2 seconds after the button is released, the display switches automatically back to the "Read" value.

#### 5.1.2 Setting Temperature with the Radio Buttons I, II, III

The "Set" temperature can also be changed via the 3 Radio Buttons I, II, III.

Default settings: I 300 °F ( 150 °C )  
 II 660 °F ( 350 °C )  
 III 720 °F ( 380 °C )

By depressing a Radio Button, the pre-selected value for that button now becomes the "Set" temperature. The new value appears for approximately 2 seconds in the display and the temperature symbol flashes °F (or °C). The display then switches back automatically to the "Read" value.



#### 5.1.3 Changing Preset Values of Radio Buttons I, II, III

The 3 Radio Buttons I, II, III can be preset with temperature values as desired.

Depress the UP or DOWN Scroll Key to set a desired temperature (see 5.1.1) in the large display. The °F (or °C) temperature symbol flashes.

Next, depress and hold the desired Radio Button I, II or III. While the button is depressed, the small display assigned to the Radio Button also flashes and, after 3 seconds, accepts the value of the large display. Release the Radio Button.



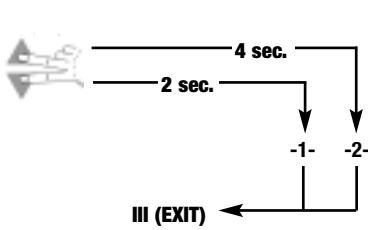
Setting a Radio Button to a low temperature gives you the option of manually and quickly decreasing temperature when the soldering iron is not being used.

## 6. Special Functions

The special functions are divided into two menu sections:

Special Function Menu 1: Often used functions such as; STANDBY (Temp.), OFFSET (Temp.), SETBACK (Time), etc.

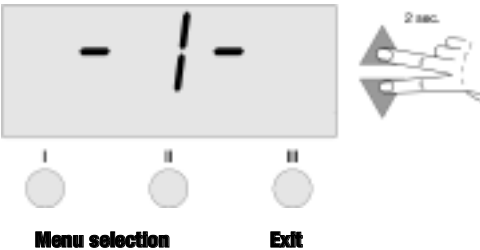
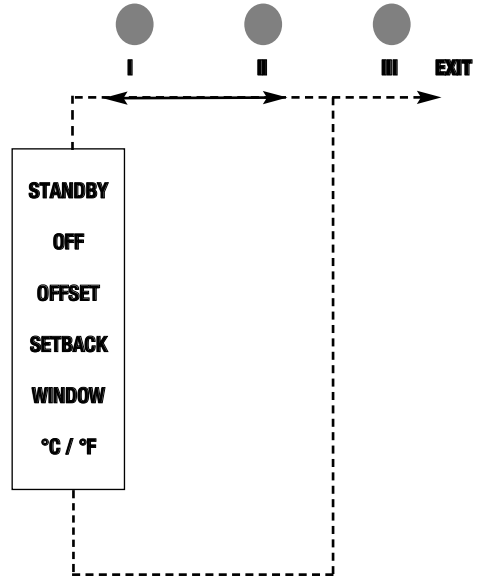
Special Function Menu 2: Factory Control Check (FCC) and REMOTE ID.



### 6.1 Special Functions Menu 1

If the **UP** and **DOWN** Scroll Keys are depressed simultaneously, after approximately 2 seconds, the menu selection for the Special Functions is activated and **-1-** appears in the display. Release the Scroll Keys.

#### Menu 1



#### 6.1.1 Standby Temperature

When the Setback time has elapsed, the "Set" temperature is decreased automatically to the Standby value. The "Read" temperature is displayed (flashing) and "STANDBY" appears in the display. The Standby temperature can be set in the range ( 200 - 600°F/100 - 300°C ).

Adjust the Standby temperature with the **UP** or **DOWN** Scroll Keys.

Switch to previous menu item with Radio Button **I**.  
Switch to next menu item with Radio Button **II**.

The following settings are possible:  
OFFSET, STANDBY, WINDOW (temperature settings); SETBACK, OFF (time settings); Lock function (On/Off);  
Temperature scale ( °F / °C ).  
Radio Buttons **I** and **II** are used for menu item selection.  
Radio Button **III** is used to exit the menu.

#### Resetting the Station to Factory Settings:

Depress and hold Radio Button **III**. Then depress the **UP** and **DOWN** Scroll Keys at the same time. "FSE", "Factory Setting Enabled" appears in the display. The soldering station is now reset to its factory default settings.



#### 6.1.2 Auto Off Time ("OFF")

When the soldering tool is not in use, it is automatically switched off after the "OFF" time has elapsed. The Auto Off time can be set from 0 – 999 minutes. With a setting of "0 min", the Auto Off function is disabled. Auto Off is carried out independently of the Setback function. The "Read" temperature is displayed (flashing) and may be monitored as a decreasing heat indicator; "OFF" appears in the display. Below 122°F ( 50°C ), a flashing dash appears in the center of the display.

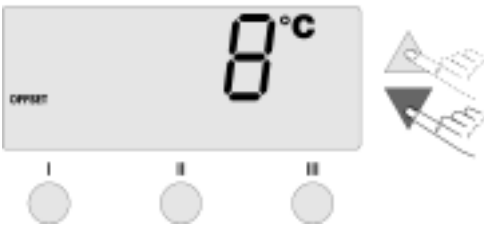
Change the "OFF" time with the **UP** or **DOWN** Scroll Keys.  
Switch to previous menu item with Radio Button I.  
Switch to next menu item with Radio Button II.



### 6.1.3 Temperature Offset

The actual soldering tip temperature can be changed  $\pm 72^{\circ}\text{F}/\pm 40^{\circ}\text{C}$  by the input of a temperature offset. The Offset function is used to match the station display to the tip temperature when measured with an external instrument.

Change the "Offset" value with the **UP** or **DOWN** Scroll Key.  
Switch to previous menu item with Radio Button I.  
Switch to next menu item with Radio Button II.



### 6.1.4 Setback Time

If the soldering tool is not being used, the temperature is decreased automatically to Standby temperature (see 6.1.1) after the specified Setback time has elapsed. The Setback time, after which the soldering unit switches to Standby mode, can be set from 0 – 99 minutes. With a setting of "0 min", the Setback function is switched Off. The Setback status is indicated by a flashing "Read" temperature and "STANDBY" appears in the display. Depress the **UP** or **DOWN** Scroll Key to end "Setback" and return the station to the "Set" temperature.

Change the "Setback" time with the **UP** or **DOWN** Scroll Key.  
Switch to previous menu item with Radio Button I.  
Switch to next menu item with Radio Button II.



### 6.1.5 Window Function

The Window Function allows the temperature to be adjusted within a range (max.  $\pm 180^{\circ}\text{F}$  ( $\pm 99^{\circ}\text{C}$ )), above and below the Locked temperature (see 6.1.7). The Locked temperature thus represents the middle of the settable temperature range.

**Note:** To utilize the window function, the station has to first be placed into Lock mode.

Use the **UP** / **DOWN** Scroll Keys to change the range of temperatures allowed within the operating "window".

Switch to previous menu item with Radio Button I.  
Switch to next menu item with Radio Button II.



### 6.1.6 Switching Temperature Scales °F/°C


Use the **UP** or **DOWN** Scroll Key to switch between  $^{\circ}\text{F}$  and  $^{\circ}\text{C}$  and vice versa.


Switch to previous menu item with Radio Button I.  
Switch to next menu item with Radio Button II.





### 6.1.7 Lock Function “”

The Lock Function locks the soldering station control so that no setting changes are possible. Radio Buttons I, II, and III remain operational in the lock mode. When the lock function is selected in the Special Functions menu, “OFF” and the flashing “” symbol appears in the menu display. If Radio Buttons I or II are depressed while “OFF” appears in the display, no code is saved.

The UP or DOWN Scroll Keys can be used to enter a 1, 2 or 3-digit Lock code. Confirm the code by depressing Radio Button III for 5 seconds. The station is now Locked and the “” symbol appears in the main display.

To unlock, activate the Lock Function in Special Functions menu 1. “ON” appears in the display. Enter the code and confirm by depressing Radio Button III. The station is now unlocked.

Switch to previous menu item with Radio Button I.  
Switch to next menu item with Radio Button II.

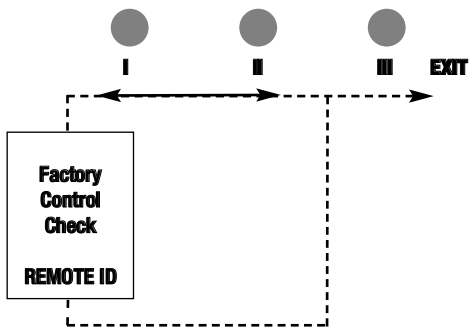
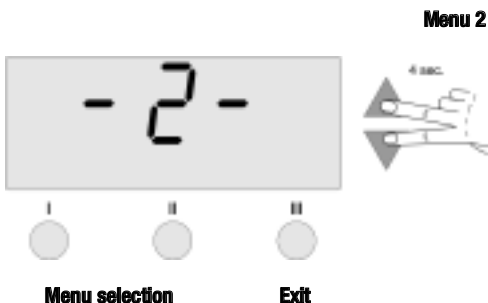


5 sec.

### 6.2 Special Functions Menu 2

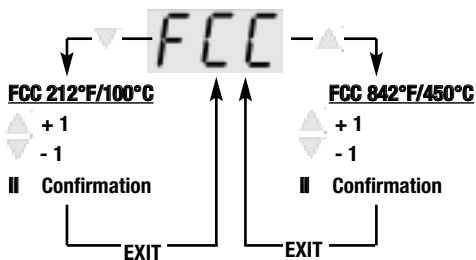
If the UP and DOWN Scroll Keys are pressed simultaneously, after approximately 4 seconds, the menu selection for the Special Functions is activated and - 2 - appears in the display. Release the Scroll Keys.

Radio Buttons I and II are used for menu selection.



### 6.2.1 Factory Control Check Function ( FCC )

This function checks temperature accuracy of the soldering station and allows modifications if necessary. To perform the “FCC” function, the soldering tip temperature must be measured using an external temperature measuring instrument.



Select the “FCC” High or Low Set point with the UP or DOWN Scroll Key. After the “FCC” function is complete at both “Set” points, Radio Button III is used to exit the menu.

UP Scroll Key: High “Set” point 842°F/450°C  
DOWN Scroll Key: Low “Set” point 212°F/100°C



### Resetting the Special Functions to Factory Settings

Press and hold the III Radio Button. Then press the UP and DOWN Scroll Keys at the same time. “FSE”, “Factory Setting Enabled” appears in the display. The station is now reset to its factory default settings.

**Important:**

The soldering tool becomes hot during the Factory Control Check. Never leave combustible materials near the hot soldering iron.

### 6.2.2 Adjusting Factory Control Check Settings ( FCC ) Control Check at 212°F/100°C

#### Depress the DOWN Scroll Key

The station sets the temperature of the soldering tip to 212°F/100°C. Once the temperature becomes stable (at which point the indicator flashes), the soldering tip temperature reading on the external device is compared to that shown on the station display. If the temperature readings differ, the **UP/ DOWN** Scroll Keys can be used to make adjustments. The temperature Offset is indicated in the display. A maximum temperature adjustment of  $\pm 72^\circ\text{F}/\pm 40^\circ\text{C}$  is possible. After the measured temperature matches that shown on the station display, depress the Radio Button **III** to confirm. The temperature Offset is reset to 0. This concludes the Factory Control Check adjustments at 212°F/100°C.

Press Radio Button **III** to exit the menu without saving any changes.



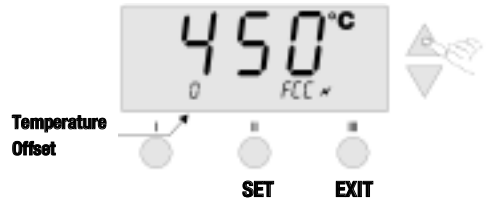
### Control Check at 842°F/450°C

#### Depress the UP Scroll Key

The station sets the temperature of the soldering tip to 842°F/450°C. Once the temperature becomes stable (at which point the indicator flashes), the soldering tip temperature reading on the external device is compared to that shown on the station display. If the temperature readings differ, the **UP/ DOWN** Scroll Keys can be used to make adjustments. The temperature offset is indicated in the display. A maximum temperature adjustment of  $\pm 72^\circ\text{F}/\pm 40^\circ\text{C}$  is possible. After the measured temperature matches that shown on the display, depress the Radio Button **II** to confirm. The temperature offset is reset to 0. This concludes the Factory Control Check adjustment at 842°F/450°C.

Press Radio Button **III** to exit the menu without saving any changes.

After both control points, 212°F(100°C) and 842°F (450°C), have been set and confirmed, the Factory Control Check process is complete.



### 6.2.3 Station Code (ID number)

When using multiple WD stations, you can assign a number from 0 - 999 to each soldering station for identification purposes.

Use the **UP / DOWN** Scroll Keys to change the ID number.

Switch to previous menu item with Radio Button **I**.

Switch to next menu item with Radio Button **II**.

Radio Button **III** is used to exit Special Functions Menu 2.



## 7. Operating Guidelines

During initial heat-up, tin the soldering tip with solder to remove oxidation and contamination on the soldering tip. Before placing tool in holder, be sure the soldering tip is well tinned. Use of an aggressive flux will shorten tip life.

The contact surfaces between the heating element/sensor and the soldering tip must not be obstructed. Dirt or foreign materials could cause damage and could affect tip temperature accuracy.

## Handling the Soldering Tips

- Select the lowest working temperature possible.
- Select the largest possible soldering tip for the application. Rule of thumb: approximately as large as the soldering pad.
- Maximize heat transfer between soldering tip and solder joint by tinning the soldering tip.
- To extend tip life, switch the soldering system off, or use the Weller Standby/Setback function to decrease temperature before work breaks or extended periods of non-use.
- Tin the tip before placing the soldering iron in the Tool Holder.
- When making a connection, solder should be applied to the solder joint and not to the tip.
- Where necessary, use the appropriate tool to change the soldering tips.
- Never apply mechanical force to the soldering tip.

## 8. Accessories

WMP	Soldering Pencil, WMP Micro, 65W
0052918099	Soldering Pencil, WP80 / 80W, Short Grip
0058744846	Long Grip Tip Retainer, WP80
0053313399	Desoldering Tweezer Set WTA50
0053315199	FE75 / Fume Extraction Pencil, 80W Set
0051512299	WDH20 Soldering Iron Holder for WMP
0051512199	WDH10 Soldering Iron Holder for WP80/WSP80
0051504299	AK51 Tweezer Stand for WTA50
0052241999	Sponge
0052609899	10' Extension Cordset for WP80 ( Made to Order ) Not Shown

## 9. Packing List

### WD1001/1002

WD1 Control Unit  
 120 VAC Power Cord  
 WMP Soldering Iron, (WD1001)  
 WDH20 Tool Holder,(WD1001)  
 WP80 Soldering Iron, (WD1002)  
 WDH10 Tool Holder, (WD1002)  
 Operating Instructions  
 Safety Information Booklet

### WD1

Control Unit  
 120 VAC Power Cord  
 Operating Instructions  
 Safety Information Booklet

**Subject to technical change without notice.**

## 10. Weller WP80 Soldering Iron

Thank you for placing your trust in our company by purchasing the Weller WP80 Soldering Pencil. The ergonomic anti-static design, grounded soldering tip, unique thermal transfer system, and selectable barrel length provide the superior performance, versatility, and quality standards established by Weller.

### 10.1. Description

The WP80 Soldering Iron is characterized by fast heat up and precise control of the soldering tip temperature. A particularly powerful 80 W heating element assures excellent dynamic performance. The combination of slim design and short distance from handle to soldering tip means that universal applications are possible, from extremely fine soldering tasks to much heavier tasks requiring high temperatures and high thermal capacity.

Tip grounding is designed into the soldering iron. With an ESD safe, anti-static handle and cordset, the WP80 satisfies all EOS and ESD requirements.

### 10.2. Placing into Operation

Place the soldering iron in the tool holder. Remove all combustible objects away from the soldering iron and the work area. Insert the connector (5) into the power supply receptacle and lock it by turning clockwise. Turn the station power switch "On" and set the required temperature on the control. Once the tool has reached the desired temperature, tin the soldering tip with solder.

### 10.3. Grounding

Tip grounding is designed into the WP80 soldering iron. The tool meets all military and commercial soldering specifications for tip grounding.

### 10.4. Operating Information

**Warning: Once the tip retainer is loosened, the hot soldering tip is no longer secured. The tip retainer and tip must be maintained in a horizontal or downward position to prevent the loose tip from falling out of the back end of the retainer.**

#### Changing soldering tips

- Hold soldering iron horizontally
- Grasp soldering iron on rear grip area (6) and loosen the tip retainer (3) by rotating clockwise
- Carefully remove tip retainer (3) and tip from the front of the tool
- The soldering tip (1) is now loose in the tip retainer (3) and can be deposited onto the base of the metal Tool Stand
- The tip retainer should be used to store the tip on the back of the Tool Stand until cool.

#### Warning: Soldering Tip is HOT!

Do not place or leave the hot soldering tip on the cleaning sponge or on plastic surfaces.

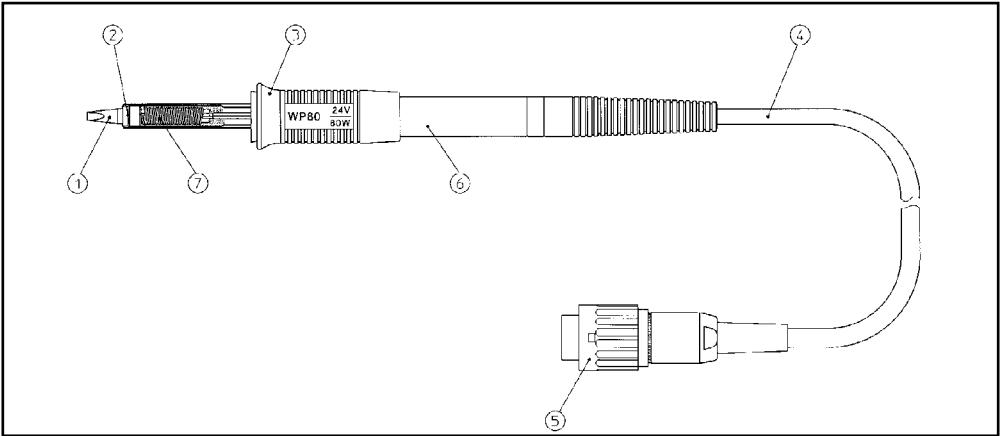
When using several types of soldering tips, it is recommended to use the soldering tip (1) in conjunction with the tip retainer (3) as a fast change system.

Keep the heating element and soldering tip heat transfer surfaces clean.

Anti-static plastics containing conductive fillers are used to prevent static charge build-up. This also means that the insulating properties of the plastics are reduced.

In addition to the information included in this manual, please see the safety manual and the instructions for the applicable power unit.

**Subject to technical change without notice!**



1. Soldering Tip (LT series)
2. Heat Transfer Surface
3. Tip Retainer and Grip area
4. Heat-Resistant Antistatic Silicone Rubber, Burn Resistant Cordset
5. Lockable Connector / Plug
6. Rear Grip area
7. Heating Element / Sensor Assembly



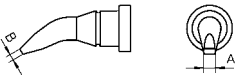
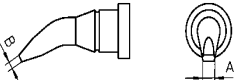
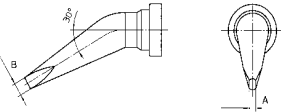
**Technical Data**

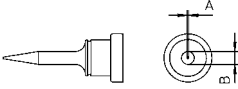
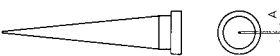

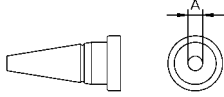
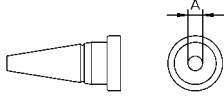
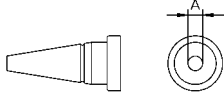
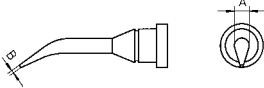
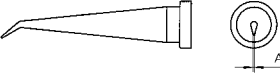
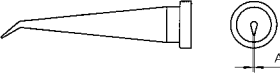

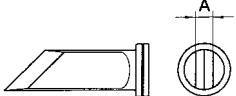
Supply Voltage:	24 VAC
Power Rating:	80 W
Heat Up Time:	approx. 20 sec. 75°F - 750°F (24°C - 399°C) w/LTB pin
Max. Temp.:	850°F (450°C)
Min. Temp.:	150°F (66°C)
Tip Type:	LT series
Tip Voltage:	Less than 2 mv TRMS to line cord ground pin
Tool Cord:	Silicone Rubber, Burn resistant
Connector:	Polarized, 6 pin locking
Tool Weight:	2 ounces
Tool Material:	Static dissipative thermoplastic handle and stainless steel
Sensor Type:	Platinum RTD
Heater Type:	Nichrome wirewound
Tip Recovery Time:	Less than 9 seconds from 250°F (121°C) drop with LTB at 750°F (399°C)

**Replacement Parts and Accessories**

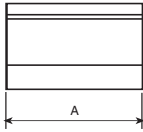
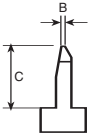
Key No.	Part No.	Description
1-7	0052918099	WP80 Solder Pencil, Short Grip
Not Shown	0051512199	WDH10 Holder for WSP80 / WP80
3	0058744845	Short Grip / Tip Retainer for WP80
3	0058744846	Long Grip / Tip Retainer for WP80
Not Shown	0052241999	Sponge

## 11. LT Soldering Tips for WP80 / WSP80

	Model	Description	Width A	Length B	Reach
	LTA	Chisel	0.063 in. 1,6 mm	0.028 in. 0,7 mm	0.380 in. 9,7 mm
	LTB	Chisel	0.094 in. 2,4 mm	0.031 in. 0,79 mm	0.430 in. 10,9 mm
	LTC	Chisel	0.126 in. 3,2 mm	0.031 in. 0,79 mm	0.430 in. 10,9 mm
	LTD	Chisel	0.181 in. 4,6 mm	0.031 in. 0,79 mm	0.430 in. 10,9 mm
	LTH	Chisel	0.031 in. 0,79 mm	0.016 in. 0,4 mm	0.430 in. 10,9 mm
	LTK	Chisel long	0.047 in. 1,2 mm	0.016 in. 0,4 mm	0.730 in. 18,5 mm
	LTL	Chisel long	0.078 in. 2,0 mm	0.039 in. 1,0 mm	0.790 in. 20 mm
	LTM	Chisel long	0.126 in. 3,2 mm	0.047 in. 1,2 mm	0.790 in. 20 mm
	LT4X	Bent Chisel	0.047 in. 1,2 mm	0.016 in. 0,4 mm	0.590 in. 15,0 mm
	LTAX	Bent Chisel	0.063 in. 1,6 mm	0.032 in. 0,8 mm	0.500 in. 12,7 mm
	LTHX	Bent Chisel	0.031 in. 0,79 mm	0.016 in. 0,4 mm	0.790 in. 20 mm

	Model	Description	Width A	Length B	Reach
	LT1S	Conical	ø 0.008 in ø 0,2 mm		0.790 in 20 mm
	LT1L	Long Conical	ø 0.008 in ø 0,2 mm		0.980 in 25,0 mm
	LTS	Long Conical	ø 0.016 in ø 0,4 mm		0.790 in 20,0 mm
	LT1	Conical	ø 0.010 in ø 0,25 mm		0.430 in 10,9 mm
	LTAS	Conical	ø 0.063 in ø 1,6 mm		0.380 in 9,7 mm
	LTCS	Conical	ø 0.126 in ø 3,2 mm		0.430 in 10,9 mm
	LT1SLX	Bent Round	ø 0.012 in ø 0.30 mm		0.760 in 19,2 mm
	LT1X	Bent Round	ø 0.010 in ø 0,25 mm		0.370 in 9,4 mm
	LT1LX	Long Bent Round	ø 0.008 in ø 0,2 mm		0.980 in 25,0 mm
	LTF	Single Flat	ø 0.047 in ø 1,2 mm		0.490 in 12,5 mm
	LTKN	Knife Tip	0.079 in 2,0 mm	0.177 in 4,5 mm	0.520 in 13,0 mm

## SMD Soldering Tips for WP80 / WSP80



LTSMT01P

SMT Blade

10,4 mm

0,6 mm

7,1 mm

0.410 in

0.022 in

0.280 in

LTSMT02P

SMT Blade

16,8 mm

0,6 mm

7,1 mm

0.620 in

0.022 in

0.280 in

LTSMT03P

SMT Blade

20,8 mm

0,6 mm

7,1 mm

0.820 in

0.022 in

0.280 in

### WMP Iron

## 12. Weller WMP Soldering Iron

### 12.1. Description

Due to its handy design, the Weller WMP micro soldering iron is suitable for work on professional SMD electronics. The short distance between the soldering tip and handle, “tip-to-grip” ensures precise handling of the soldering iron while performing the most detailed of soldering tasks. A high-quality sensor and heat transfer technology provides precise temperature control at the soldering tip. Due to straightforward tip changing and the extremely fast heat up time, various types of tips can be used for multiple applications.

Tip grounding is designed into the soldering iron. With an ESD safe, anti-static handle and cordset, the WMP satisfies all EOS and ESD requirements.

### 12.2. Placing into Operation

Place the soldering iron in the tool holder. Remove all combustible objects away from the soldering iron and the work area. Insert the connector (4) into the power supply receptacle and lock it by turning clockwise. Turn the station power switch “On” and set the required temperature on the control. Once the tool has reached the desired temperature, tin the soldering tip with solder.

### 12.3. Operating Information

**Warning:** Once loosened, the hot soldering tip is no longer secured. The Guide Hex Tool and tip must be maintained in a horizontal or upward position to prevent the loose tip from falling out of the Hex Tool.

#### Changing soldering tips

##### Straight soldering tips

- Hold soldering iron horizontally or a slight downward angle.
- Guide hex tool for changing the tip over the heater element to the stop on the handle.
- Undo soldering iron tip and remove it from the front.

Ensure that you do not touch the hot soldering tip or the heating element, as this could result in serious injuries.

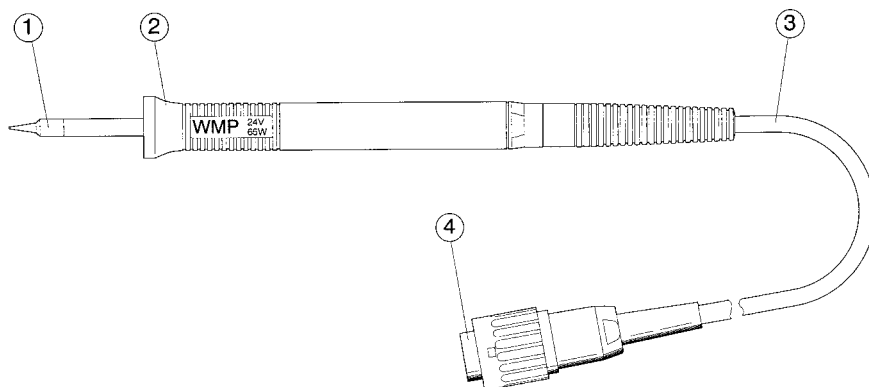
##### Curved soldering tips and SMT soldering tips

Use a heat resistant silicone pad to unscrew the soldering tip and to pull it out to the front. Hold the silicone pad in your hand in such a way that prevents direct contact with the soldering tip from occurring.



Ensure that you do not touch the hot soldering tip or the heating element, as this could result in serious injuries.





1. Soldering Tip (NT Series)
2. Short Reach Handle/ Grip Area
3. Heat-Resistant Antistatic Silicone Rubber, Burn Resistant Cordset
4. Lockable Connector / Plug

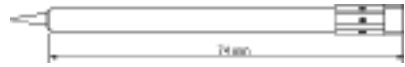
### Technical Data

Supply Voltage:	24 VAC
Power Rating:	65 W
Heat Up Time:	approx. 20 sec. 75°F - 750°F (24°C - 399°C) w/NT1 tip
Max. Temp.:	850°F (450°C)
Min. Temp.:	150°F (66°C)
Tip Type:	NT series
Tip Voltage:	Less than 2 mv TRMS to line cord ground pin
Tool Cord:	Silicone Rubber, Burn resistant
Connector:	Polarized, 6 pin locking
Tool Weight:	1.2 ounces
Tool Material:	Static dissipative thermoplastic handle and stainless steel
Sensor Type:	Platinum RTD
Heater Type:	Nichrome wirewound

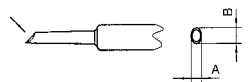
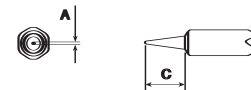
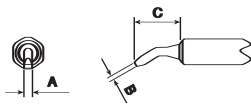
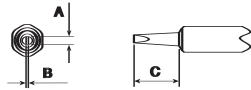
## Replacement Parts and Accessories

Key No.	Part No.	Description
1-4	WMP	WMP Solder Pencil
Not Shown	0051512299	WDH20 Holder for WMP
Not Shown	0052241999	Sponge

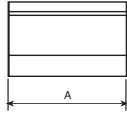
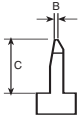
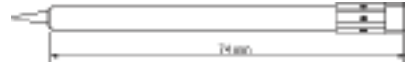
### 13. NT Soldering Tips for WMP



Type / Order No.	Description	Width A	Length B	Reach C
NT6		0.063 in. 1.60 mm	0.016 in. 0.40 mm	0.372 in. .331 mm
NTA		0.063 in. 1.60 mm	0.016 in. 0.40 mm	0.331 in. 8.40 mm
NTB		0.094 in. 2.40 mm	0.031 in. 0.80 mm	0.289 in. 7.35 mm
NTC	Chisel	0.126 in. 3.20 mm	0.031 in. 0.80 mm	0.305 in. 7.75 mm
NTD		0.157 in. 4.00 mm	0.031 in. 0.80 mm	0.305 in. 7.75 mm
NTH		0.031 in. 0.80 mm	0.016 in. 0.40 mm	0.331 in. 8.40 mm
NTK		0.047 in. 1.20 mm	0.016 in. 0.40 mm	0.331 in. 8.40 mm
NTAX	Bent Chisel	0.063 in. 1.60 mm	0.031 in. 0.80 mm	0.339 in. 8.61 mm
NT1X	Bent Round	0.016 in. 0.40 mm	0.063 in. 1.60 mm	0.321 in. 8.15 mm
NT4	Round	0.047 in. 1.20 mm	- -	0.390 in. 9.90 mm
NT1	Micro	0.010 in. 0.25 mm	- -	0.291 in. 7.40 mm
NT1S		0.010 in. 0.25 mm	- -	0.333 in. 8.45 mm
NTGW	Gull Wing for Drag Soldering	0.079 in. 2.00 mm	0.118 in. 3.00 mm	0.528 in. 13.40 mm

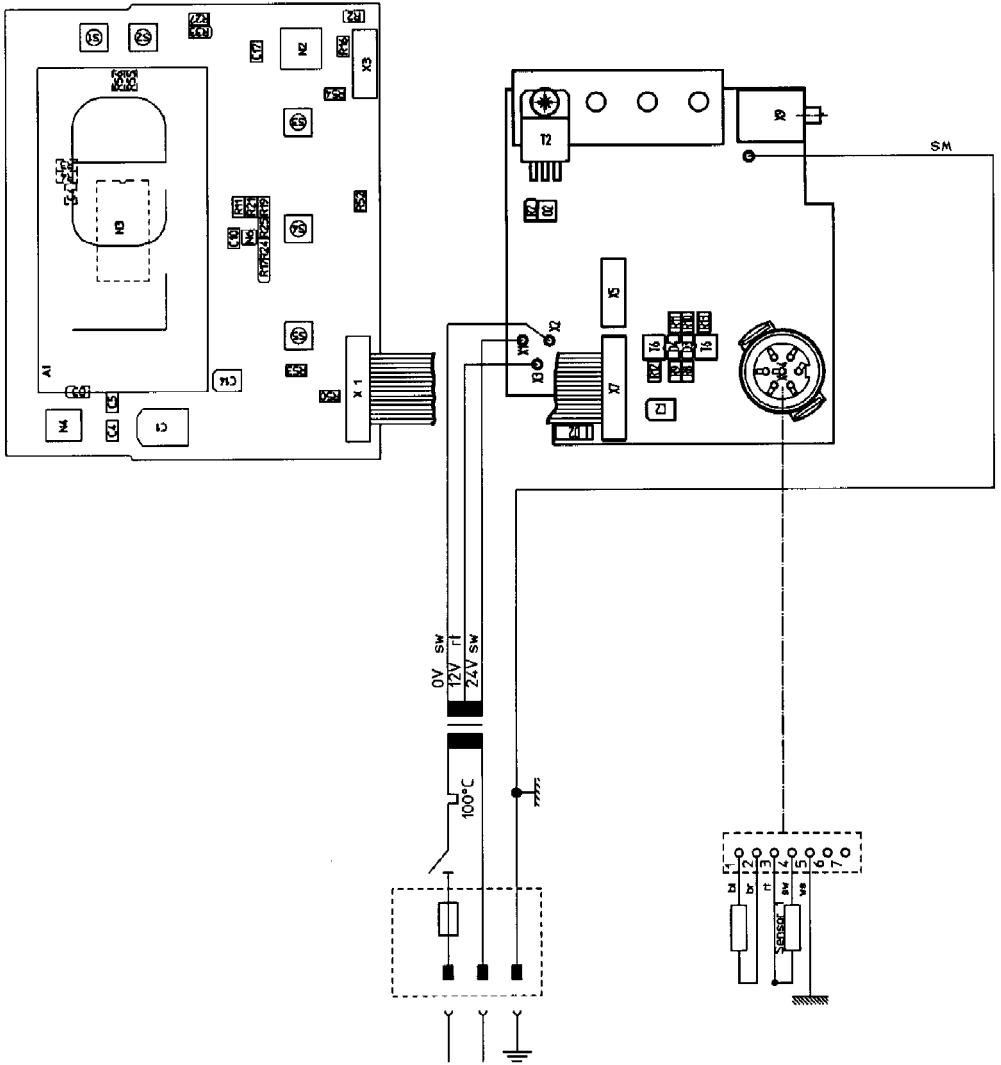


### 13. NT Soldering Tips for WMP



Type / Order No.	Description	Width A	Length B	Reach C
NTSMT01	SMT Blade	0.410 in 10,4 mm	0.022 in 0,6 mm	0.280 in 7,1 mm
NTSMT02	SMT Blade	0.620 in 16,8 mm	0.022 in 0,6 mm	0.280 in 7,1 mm
NTSMT03	SMT Blade	0.820 in 20,8 mm	0.022 in 0,6 mm	0.280 in 7,1 mm

# 14. WD1 Circuit Diagram







[www.cooperhandtools.com](http://www.cooperhandtools.com)

**U.S Mailing Address:**

**Cooper Hand Tools**

P.O. Box 728

Apex, NC 27502-0728

**U.S Shipping Address:**

1000 Lufkin Road

Apex, N.C. 27539

Tel: (919) 387-0099

Fax: (919) 387-2379

For inquiries concerning Technical /

Customer Service please call:

(800) 476-3030 Ext. 1

**Canada Shipping Address:**

**Cooper Tools**

164 Innisfil Street

Barrie, Ontario

Canada L4N 3B7

Attn: Repairs

Fax: 1-800-403-TOOL (8665)

Phone: 705-728-5564 Ext. 2026

Weller is a registered Trademark and registered Design of Cooper Industries, Inc.