

WMRP/WMRT

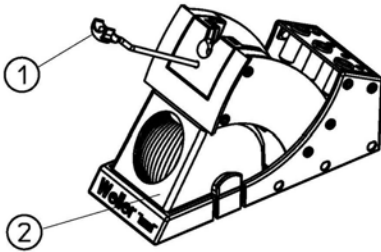
Operating Instructions



WMRP

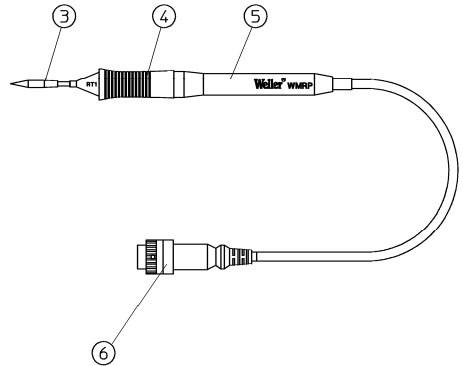
Device overview

WDH 50



1. Magnetic holder
2. Tip cleaning sponge
3. Soldering tip

WMRP

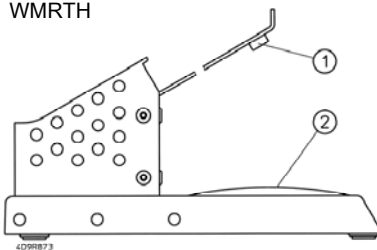


4. Tip grip
5. Hand piece
6. Connector/plug

WMRT

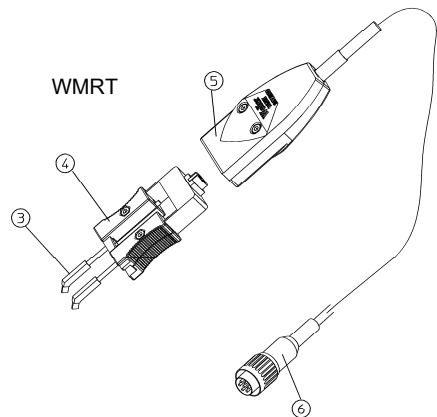
Device overview

WMRTH



1. Magnetic holder
2. Tip cleaning sponge
3. Soldering/desoldering tip pair

WMRT



4. Desoldering tip cartridge with molded grips
5. Hand piece
6. Connector/plug

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1 About these instructions

Thank you for placing your trust in our company by purchasing the Weller WMRP soldering pencil or the Weller WMRT micro desoldering tweezers.

These products meet or exceed the requirements established by Weller for superior performance, versatility and quality.

These instructions contain important information which will help you to start up, operate and service the WMRP soldering pencil and WMRT micro desoldering tweezers safely and correctly, as well as to eliminate simple faults/malfunctions yourself.

- ▷ Please read these instructions carefully and the attached safety guidelines before you put the WMRP soldering pencil or WMRT micro desoldering tweezers into operation.
- ▷ Keep these instructions in a place that is accessible to all users.

1.1 Directives taken into consideration

The Weller WMRP soldering pencil and WMRT micro desoldering tweezers correspond to the EC Declaration of Conformity in accordance with the basic safety requirements of Directives 2004/108/EC and 2006/95/EC.

1.2 Applicable documents

- Operating instructions for your power unit
- WMP/WMRT operating instructions
- Accompanying booklet on safety

2 For your safety

- The WMP soldering pencil and WMRT micro desoldering tweezers have been manufactured in accordance with state-of-the-art technology and recognized safety rules and regulations. There is nevertheless the risk of personal injury and damage to property if you fail to observe the safety information set out in the enclosed booklet accompanying these operating instructions and the warnings given therein.
- Always pass on the WMP soldering pencil or WMRT micro desoldering tweezers on to third parties along with these operating instructions.
- The manufacturer shall not be liable for damage resulting from misuse of the tool or unauthorized alterations
- **State of California warning:**

When used for soldering and similar applications, this product produces chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

2.1 Please observe the following:

General instructions

- Always place the WMP soldering pencil and WMRT micro desoldering tweezers in their original holders.
- Remove all flammable objects from the vicinity of the hot soldering tool.
- Always wear suitable protective clothing when using the WMP or WMRT.
- Never leave the hot WMP or WMRT unattended.
- Do not carry out work on live parts
- Always wear eye protection when working with soldering and desoldering applications.
- There are no parts that can be serviced by the user.
- Read and observe the operating instructions of the applicable power unit.

- Handling soldering/desoldering tips**
- Do not place or leave the hot soldering/desoldering tips on the cleaning sponge (2) or on plastic surfaces.
 - Coat the tin-plated soldering/desoldering tips with solder when heating the iron for the first time, as this will remove any oxide films or impurities from the soldering/desoldering tips that have accumulated during storage.
 - During breaks between soldering/desoldering and before storing the tool, ensure that the soldering/desoldering tips are well-coated.
 - Do not use aggressive fluxing agents.
 - Always make sure that the soldering/desoldering tips are seated correctly.
 - Select the lowest possible working temperature.
 - Select the largest possible soldering/desoldering tips shape for the application: approx. as large as the soldering pad.
 - Coat the soldering/desoldering tips well to ensure efficient heat transfer between the soldering/desoldering tips and the soldering point.
 - Switch off the system if you do not intend to use the soldering/desoldering tool for longer periods.
 - Coat the tips before placing the soldering/desoldering tool in the holder.
 - Apply the solder directly at the soldering point, not on the soldering/desoldering tips.
 - Do not subject the soldering/desoldering tips to physical forces.
 - Always keep the cleaning sponge (2) damp. Use only distilled or de-ionized water.
 - Always ensure that the hand piece (5) is properly seated in the tool holder (1).

2.2 Intended use

Use the WMRP soldering pencil or WMRT micro desoldering tweezers exclusively for the purpose indicated in the operating instructions of releasing, accommodating and setting down chip components under the conditions specified here. Intended use of the WMRP soldering pencil or WMRT micro desoldering tweezers also includes that

- you read and follow these instructions,
- you read and follow all additional accompanying documents,
- you observe the national accident-prevention regulations applicable at the location where the device is used.

The manufacturer accepts no liability for damages resulting from failure to use the device in compliance with these operating instructions or unauthorized modifications to the device.

3 Scope of supply

WMRP:

- WMRP soldering pencil, T005 29 171 99
- WDH 50 safety rest with stop + go function for WMRP T005 15 156 99
- RT 3 soldering tip 40 W, T005 44 603 99
- Operating instructions
- Safety booklet

WMRT:

- WMRT micro desoldering tweezers, T005 13 174 99
- WMRTH safty rest with stop + go function for WMRT, T005 15 146 99
- RTW 2 Tip Set 0,7 x 0,4 mm, 45°, T005 44 652 99
- Operating instructions
- Safety booklet

4 Device description

4.1 WMRP soldering pencil

The WMRP soldering pencil is a extremely powerful 40 W fine soldering iron with the heating system integrated into the soldering tip. Due to a plug-in system, the soldering tip can be changed without tools. The soldering tip temperature is reached rapidly and controlled precisely. Thanks to a sensor installed in the handle, the soldering iron is shut off automatically when it is placed in the WDH 50 holder.

Note The Weller WMRP soldering pencil may only be used with WD 1M, WD 2M, WD 3M, WR 3M series power units.

4.2 WMRT micro desoldering tweezers

Weller WMRT micro desoldering tweezers are designed for reworking and repairing precision SMT electronic devices. The soldering/desoldering tip set can be quickly and easily changed without the use of tools. The tips are pre-aligned and additional alignment is not required. The integrated (2 x 40 W) heating elements ensure that the soldering/desoldering tip temperature is reached very quickly and controlled precisely. The desoldering tweezers are switched off automatically when placed in the WMRTH tool holder.

Note The Weller WMRT micro desoldering tweezers may only be used with WD 1M, WD 2M, WD 3M, WR 3M series power units.

4.3 Technical data

Temperature range	100°C – 450°C (212°F – 850°F)
Tool cable	Silicone rubber, heat resistant
Heating element	Heating wire integrated in tip cartridge
Sensor	Thermocouple integrated in tip cartridge

WMRP

Heating output	40 W (55 W with RT 11)
Heating voltage	12 VAC
Heat-up time	(ca.) 3 s (50°C from ambient to 380°C (120°F from ambient to 750°F))
Connector	Polarized, 5-pin locking
Tool weight	26 g incl. tip cartridge without cord
Tip type	RT series

WMRT

Heating output	80 W (2 x 40 W)
Heating voltage	12 VAC
Heat-up time	(ca.) 3 s (50°C from ambient to 380°C (120°F from ambient to 750°F))
Connector	Polarized, 6-pin locking
Tool weight	42 g incl. tip cartridge without cord
Tip type	RTW series

5 Commissioning the device

WARNING! Risk of burns



The soldering iron and desoldering tweezers become hot during soldering and desoldering.

There is a risk of burns from touching the soldering/desoldering tips.

▷ Keep the hot soldering iron and desoldering tweezers well away from flammable objects and do not touch.

1. Carefully unpack the WMRP soldering pencil or WMRT micro desoldering tweezers.
2. Insert the connector (6) into the power supply socket and lock it by turning clockwise.
3. **WMP:**
Place the soldering iron in the safety WDH 50 tool stand and ensure that the soldering iron grip (5) is correctly seated against the magnetic tool holder (1).
WMRT:
Place the tweezers in the WMRTH safety tool stand and ensure that the hand piece (5) is correctly seated against the magnetic tool holder (1).
4. Check whether the main supply voltage matches the voltage indicated on the rating plate.
5. Turn the station power switch to “On” and set the required temperature on the control.
6. Once the tool has reached the desired temperature, tin the soldering tip with solder.

6 Changing WMRP soldering tips

WARNING! Risk of burns



The soldering iron becomes hot during soldering and desoldering. There is a risk of burns from touching the soldering tip.

- ▷ The soldering tool must stand at least 3 min. in the safety tool holder (WDH 50) before the soldering tip is cold. Soldering tips must only be changed when cool.

Removing old tip

1. Place the soldering tool on the tool holder.
Always ensure that the soldering tip is properly seated.
2. Turn the station power switch to "OFF".
3. Wait 3 min. until the soldering tip is cold.
4. Grasp the soldering iron on the soft grip area (4) and pull the soldering tip from the tool.

Installing a new soldering tip:

CAUTION! Risk of malfunction



The soldering tip must be completely inserted.

Operation with a soldering tip that is not completely inserted can cause the tip to malfunction.

- ▷ Ensure that the soldering tip is inserted completely up to the stop in a single motion.

5. Grasp the soldering iron on the soft grip area (4) and push the new tip on to the soldering tool.
6. Turn the station power switch to "On" and set the required temperature on the control.

Note When using several types of soldering tips, it is recommended to store the tip on the back of the tool stand WDH 50.

7 Changing WMRT soldering/desoldering tips

WARNING! Risk of burns



The tweezers become hot during soldering and desoldering.

There is a risk of burns from touching the soldering/desoldering tips.

- ▷ The tweezers must stand at least 3 min. in the safety tool holder (WMRTH) before the soldering/desoldering tips are cold. Soldering/desoldering tips may only be changed when cool.

Removing old tips

1. Place the tweezers on the tool holder.
Always ensure that the hand piece (5) is properly seated.
2. Turn the station power switch to "OFF".
3. Wait 3 min. until the soldering/desoldering tips (3) are cold.

The desoldering tip cartridge (4) is inserted into the front of the hand piece (5). The 5-pin mini-plug on the back of the tip cartridge is polarized for correct alignment with the hand piece.

4. Grasp the molded grips and pull outward to release the tip cartridge (4) from the hand piece.
5. Grasp the molded grips and pull the soldering/desoldering tips (3) from the desoldering tip cartridge (4).

Installing new soldering/desoldering tips:

CAUTION! Risk of malfunction



The soldering/desoldering tips must be completely inserted.

Operation with a soldering/desoldering tip that is not completely inserted can cause the tip cartridge to malfunction.

- ▷ Ensure that the soldering/desoldering tips and the desoldering tip cartridge are inserted completely against the stop in a single motion.

Note The top of the tip cartridge (4) is printed with L (left) and R (right) as indicators for proper orientation. The indicators align with the L and R indicators printed on the hand piece (5).

6. Grasp the molded grips and push the new tips on to the soldering/desoldering tip cartridge (4).
7. Grasp the molded grips and push the desoldering tip cartridge (4) with the new tips on to the hand piece (tweezers) (5).
8. Turn the station power switch to "On" and set the required temperature on the control.

8 Accessories

8.1 RT soldering tips for WMRP soldering pencil

8.2 WMRP replacement parts and accessories

Order no.	Description
T005 29 171 99	WMRP soldering pencil for RT soldering tips
T005 15 156 99	WDH 50 safety rest with stop + go function
T005 44 603 99	RT 3 soldering tip 40 W
T005 87 518 16	Bracket that can be plugged sideways into the stand and hold two RT tips
T005 22 419 99	Sponge (70 x 55 x 16 mm)

8.3 RTW soldering/desoldering tips for WMRT micro desoldering tweezers

8.4 WMRT replacement parts and accessories

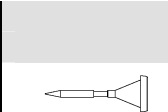
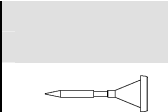
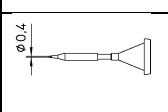
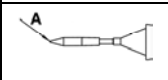
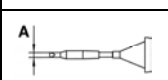
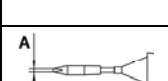



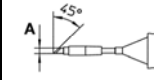
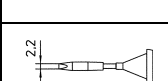
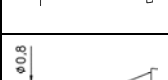
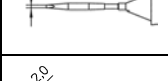
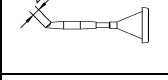
Order no.	Description
T005 13 174 99	WMRT micro desoldering tweezers
T005 15 146 99	WMRTH safety rest with stop + go function
T005 44 652 99	RTW 2 tip set 0.7 x 0.4 mm, 45°
T005 22 419 99	Sponge (70 x 55 x 16 mm)



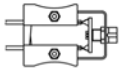
9 Disposal

Dispose of replaced equipment parts, filters, or old devices in accordance with the rules and regulations applicable in your country.

RT soldering tips for WMPR

Model		Type description	Width A		Order no.
			inch	mm	
RT1		Needle tip	∅ 0.008	∅ 0,2	005 44 601 99
RT 1NW		Needle tip	∅ 0.004	∅ 0,1	005 44 625 99
RT 1SC		Chisel tip	0.020 x 0.039	0,4 x 0,15	005 44 612 99
RT 1SCNW		Chisel tip	0.012 x 0.004	0,3 x 0,1	005 44 626 99
RT2		Fine point tip R	∅ 0.0315	∅ 0,8	005 44 602 99
RT3		Chisel tip	0.050 x 0.020	1,3 x 0,4	005 44 603 99
RT4		Chisel tip	0.060 x 0.020	1,5 x 0,4	005 44 604 99
RT5		Chisel tip 30° bent	0.030 x 0.020	0,8 x 0,4	005 44 605 99
RT6		Round tip	0.050 x 45°	1,2 x 45°	005 44 606 99
RT7		Knife tip	0.090 x 45°	2,2 x 45°	005 44 607 99
RT8		Chisel tip	0.090 x 0.020	2,2 x 0,4	005 44 608 99
RT9		Chisel tip	0.030 x 0.020	0,8 x 0,4	005 45 609 99
RTW 10GW		Gull wing	0.090 x 0.078	1,2 x 2,0	005 44 610 99
RT 11		Chisel tip	0.1417 x 0.0354	3,6 x 0,9	005 44 611 99
RT		Measuring tip			005 44 613 99

Subject to technical change without notice!

RT soldering/desoldering tips for WMRT


Model		Type description	Dimension			Order no.
			inch	mm	Degree	
RTW 1 tip set		Point tip	Ø 0.0157	Ø 0,4	45°	005 44 651 99
RTW 2 tip set		Chisel tip	0.028 x 0.016	0,7 x 0,4	45°	005 44 652 99
RTW 3 tip set		Soldering tip	0.1181 x 0.0394	3 x 1,0	45°	055 44 653 99
RTW 4 tip set		Soldering tip	0.2362 x 0.0394	6 x 1,0	45°	005 44 654 99
RTW 6NW tip set		Unwettable for soldering and desoldering of micro-devices	Ø 0.008	Ø 0,2	45°	005 44 656 99

Subject to technical change without notice!