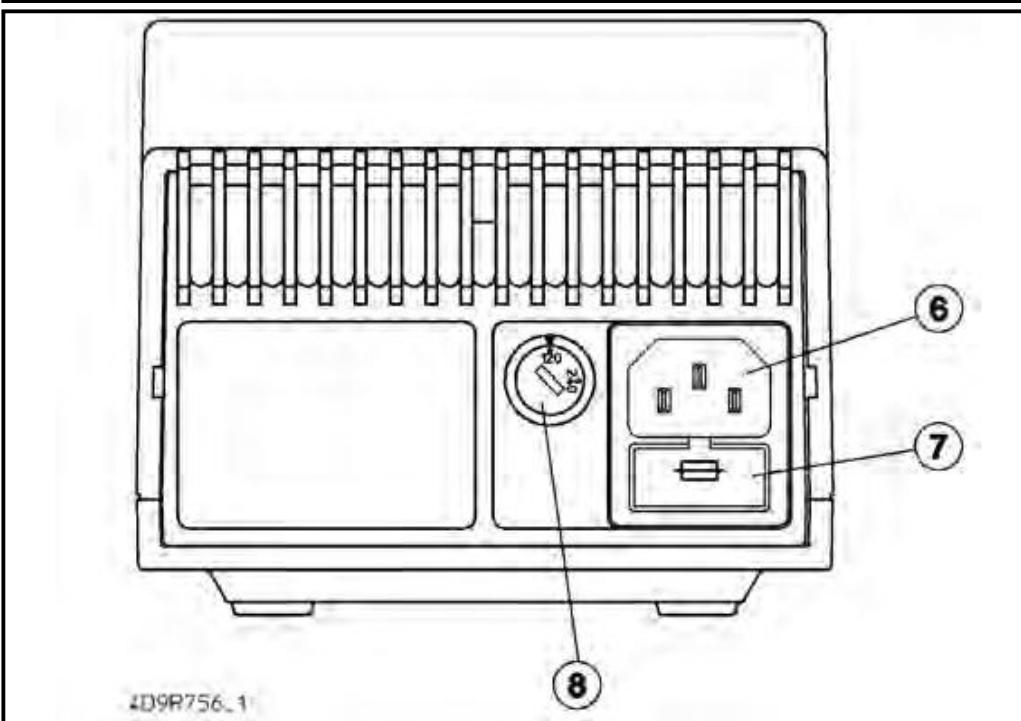
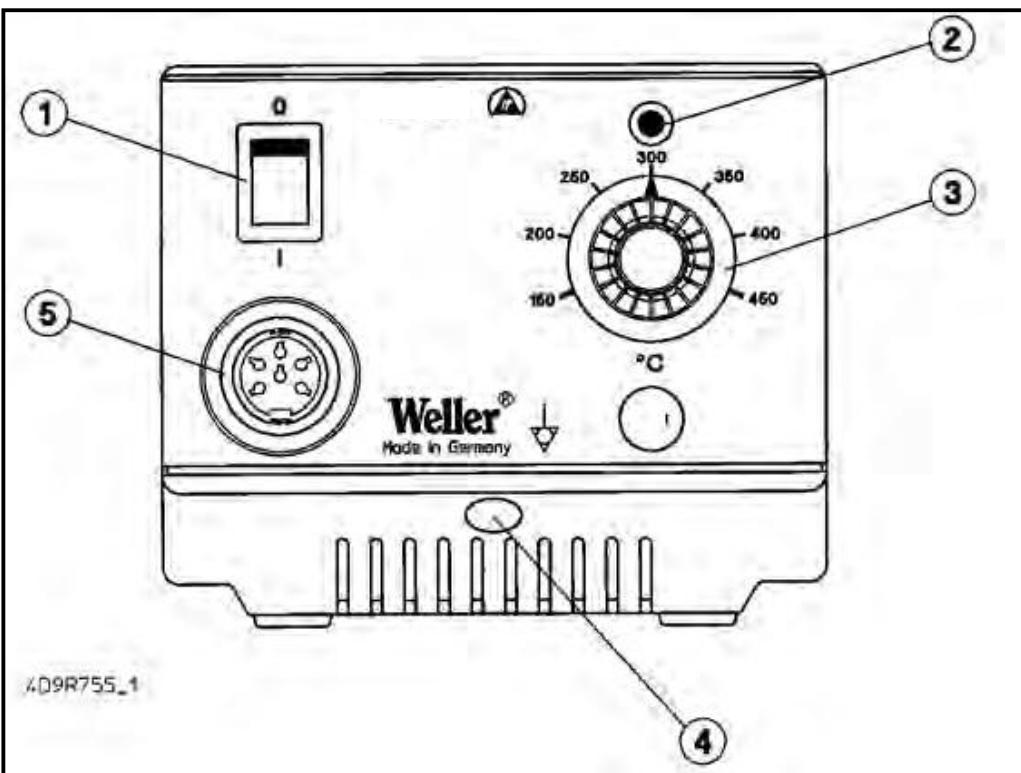


Weller®

WS 51 / WS 81



Betriebsanleitung - Mode d'emploi - Gebruiksaanwijzing - Istruzioni per l'uso - Operating Instructions - Instruktionsbok - Manual de uso - Betjeningsvejledning - Manual do utilizador - Käyttöohjeet - Οδηγίες Λειτουργίας - Kullanım kılavuzu - Návod k použití - Instrukcja obsługi - Üzemeltetési utasítás - Návod na používanie - Navodila za uporabo - Kasutusjuhend - Naudojimo instrukcija - Lietošanas instrukcija



1. Netzschalter
2. Optische Regelkontrolle
3. Drehpotentiometer für Temperatur-einstellung (stufenlos 150°C - 450°C)
4. Potentialausgleichsbuchse
5. Anschlussbuchse für Lötkolben
6. Netzanschluß
7. Netzsicherung
8. Spannungswahlschalter
(nur umschaltbare Version)

1. Interrupteur secteur
2. Contrôle visuel du réglage
3. Potentiomètre rotatif pour le réglage de la température (en continu de 150°C à 450°C)
4. Prise de compensation du potentiel
5. Prise de raccordement du fer à souder
6. Raccordement secteur
7. Fusible secteur
8. Sélecteur de tension
(uniquement version commutable)

1. Netschakelaar
2. Optische regelcontrole
3. Draaipotentiometer voor temperatuurinstelling (traploos van 150°C - 450°C).
4. Potentiaalcompensatiebus
5. Aansluitbus voor soldeerapparaat
6. Netaansluiting
7. Netzekering
8. Spanningskeuzeschakelaar
(alleen omschakelbare versie)

WS 51



WS 81



Thank you for placing your trust in our company by purchasing the Weller soldering stations WS 51 and WS 81. Production was based on stringent quality requirements which guarantee the perfect operation of the device.



1.Caution!

Please read these Operating Instructions and the attached safety information carefully prior to initial operation. Failure to observe the safety regulations results in a risk to life and limb.

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

The soldering stations WS 51 and WS 81 corresponds to the EC Declaration of Conformity in accordance with the basic safety requirements of Directives 2004/108/EC, 2006/95/EC and 2011/65/EU.

2. Description

2.1 Control unit

The soldering stations WS 51 and WS 81 are a part of the range of products which were developed for industrial manufacturing as well as for the repair and laboratory sector. The analog electronic control system guarantees the best possible control performance for various soldering tools. The high-powered 24 V heating elements make excellent dynamic performance possible, so that the soldering tools can be used universally. Various equipotential bonding possibilities for the soldering iron tip, zero power switch and antistatic design of control unit and iron complete the high quality standard.

The desired temperature can be set by a rotary potentiometer in an infinitely variable range between 150°C - 450°C. The set temperature can be locked by the key switch (4) integrated in the front plate. Temperature settings cannot be changed when the unit is locked. A blinking green LED in the display signals that the preset temperature has been reached.

2.2 Soldering irons

WP 80: The soldering iron WP 80 / WSP 80 is characterized by its capacity for reaching the soldering temperature quickly and precisely. Its slim design and heating power of 80 watts makes universal usage possible - from extremely fine to high-temperature soldering work. Work can be continued immediately after switching soldering tips, since the temperature is reached again quickly.

- | | |
|---------|---|
| LR 21: | Our "standard" soldering iron. With a power of 50 watts and a wide spectrum of soldering tips (ET series) this soldering iron can be used anywhere in the electronics sector. |
| MPR 80: | The Weller Peritronic MPR 80 soldering iron has an adjustable working angle of 40° to enable an individually ergonomic soldering process. The 80-watt power and slim design makes this soldering iron suitable for fine soldering work. |
| WTA 50: | The unsoldering tweezers WTA 50 were specially designed for unsoldering SMD components. Two heating elements (2 x 25 watts), each with its own temperature sensor, ensure constant temperatures at both ends. |
| LR 82: | High-performance 80 watt soldering iron for soldering work with high heat requirements. The soldering tip is attached by a bayonet catch to ensure correct position when using different tips. |

See "Accessories" for additional tools.

Technical Data

Dimensions in mm:	166 x 115 x 101 (l x w x h)
Supply voltage (6):	230 V / 50 Hz (120 V / 60 Hz for dual-voltage version)
Power input:	95 watts
Class:	1 (control unit) and 3 (soldering iron)
Fuse (7):	T500 mA (dual-voltage version T800 mA)
Temp. control:	50°C - 450°C
Precision:	± 9°C
Equipotential bonding (4):	Via a 3.5 mm jack (initial state - hard-grounded)

3. Starting

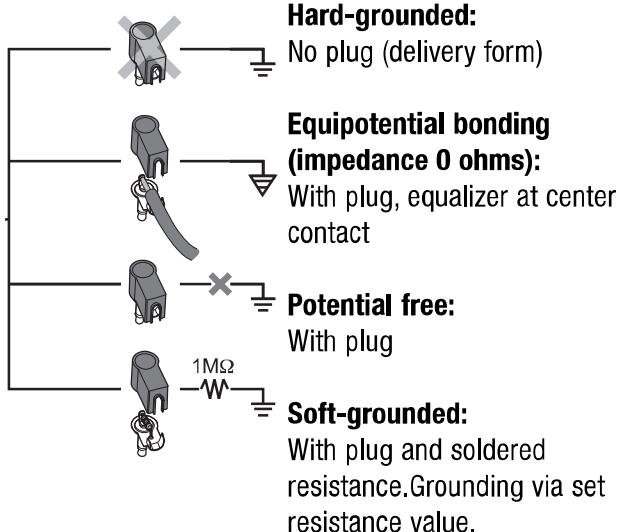
Assemble soldering iron rest (see exploded drawing). Place the soldering iron in the safety rest. Insert the soldering iron plug into the connection bush (5) of the control unit and lock by turning to the right. Check that the power supply corresponds to the specifications on the name plate and that the power switch (1) is in the OFF position. On version that can be switched, set the voltage on selection switch (8) (set in the factory to 240 V). Connect the control unit to the power supply. Set the temperature at the rotary potentiometer (3). Switch on unit at the supply switch (1). Green LED (2) will illuminate. This LED functions as the optical regulator. Constant illumination means that the system is overheating. The blinking light signals that the operating temperature has been reached.

Maintenance

The transition between the heating element / sensor and the tip of the soldering iron may not come in contact with dirt, foreign particles or become damaged, since this affects the precision of the temperature control.

4. Equipotential bonding

The various circuit elements of the 3,5 mm jack bush (4) make 4 variations possible:



5. Instructions for use

For initial heating, coat the selective tinnable tip with solder. This removes any oxidation or dirt on the tip which may have occurred during storage. During pauses between soldering and before storing the soldering iron, ensure that the tip of the soldering iron is well coated. Do not use aggressive fluxing agents.

Note:

Always ensure the proper position of the soldering iron tip.

These soldering irons have been adjusted for an average-size tip. Deviations can occur due to exchanging of the tip or using other tip designs.

6. Accessories

T005 29 180 99	Soldering iron set WP 80
T005 29 161 99	Soldering iron set WSP 80
T005 33 131 99	Soldering iron set MPR 80
T005 29 187 99	Soldering iron set LR 21, antistatic
T005 29 188 99	Soldering iron set LR 82
T005 33 133 99	Soldering iron set WTA 50
T005 27 028 99	Preheating plate WHP 80
T005 29 179 99	Soldering iron set WMP

WS 81:

T005 25 032 99	Thermal insulating unit WST 82KIT1
T005 25 031 99	Thermal insulating unit WST 82KIT2

7. Scope of supply

WS 81

Control unit
Soldering iron WSP 80
Power cable
Soldering iron rest
Jack
Operating Instructions
Safety Information

WS 51

Control unit
Soldering iron LR 21
Power cable
Soldering iron rest
Jack
Operating Instructions
Safety Information

PU 81

Control unit
Power cable
Jack
Operating Instructions
Safety Information

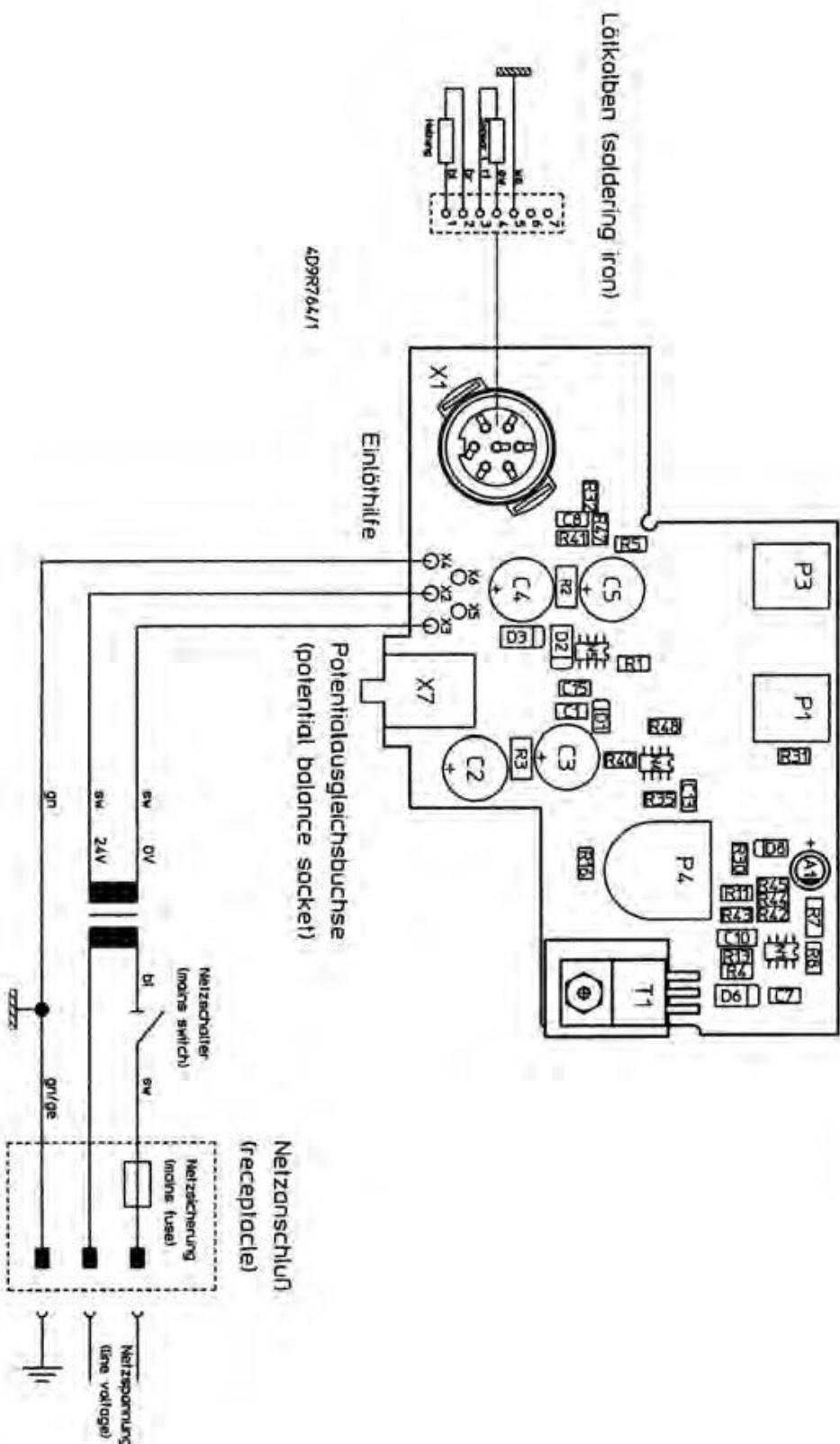
Illustration: Circuit diagram, see Page 43

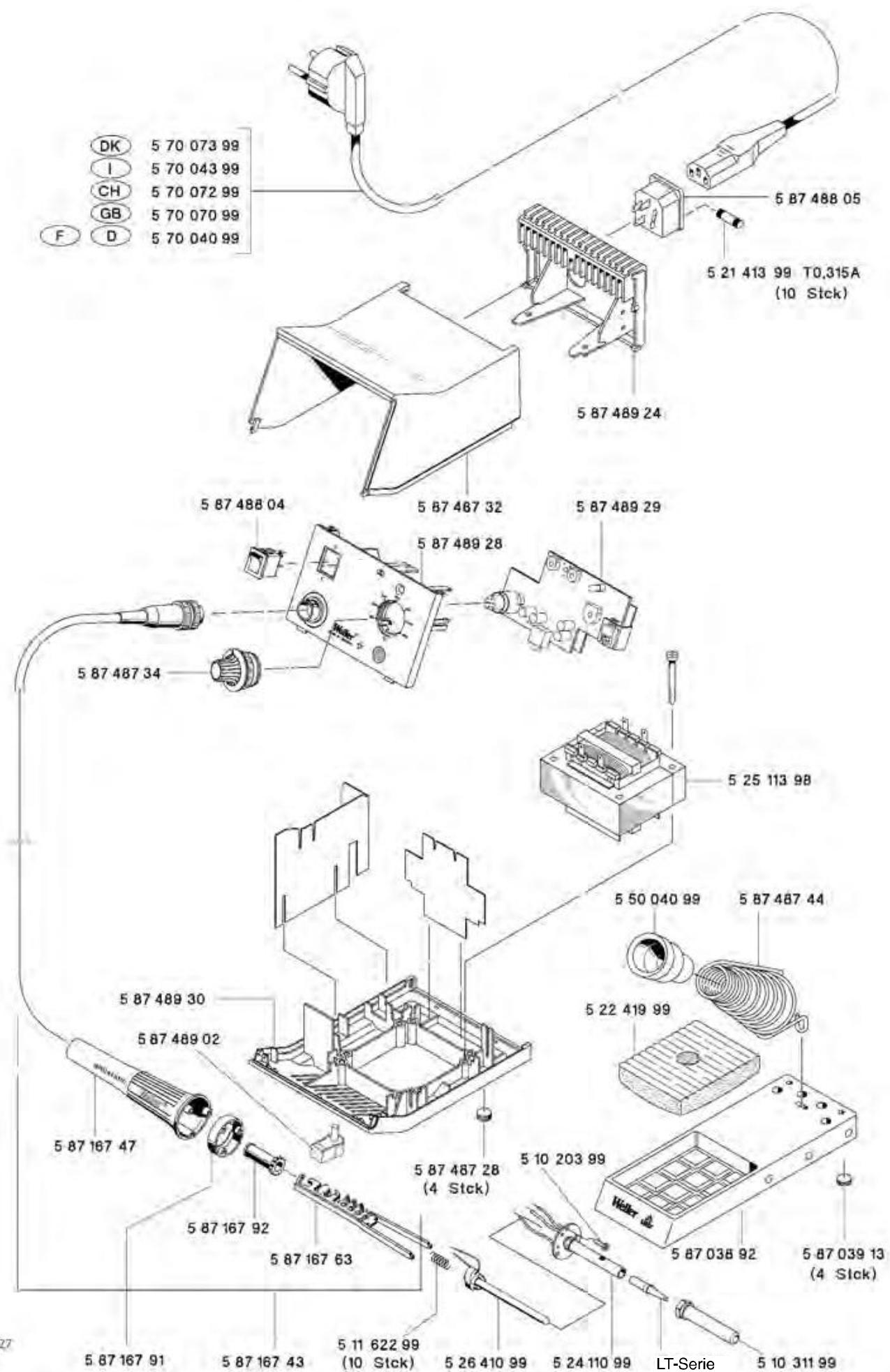
Illustration: Exploded view, see Page 44 + 45

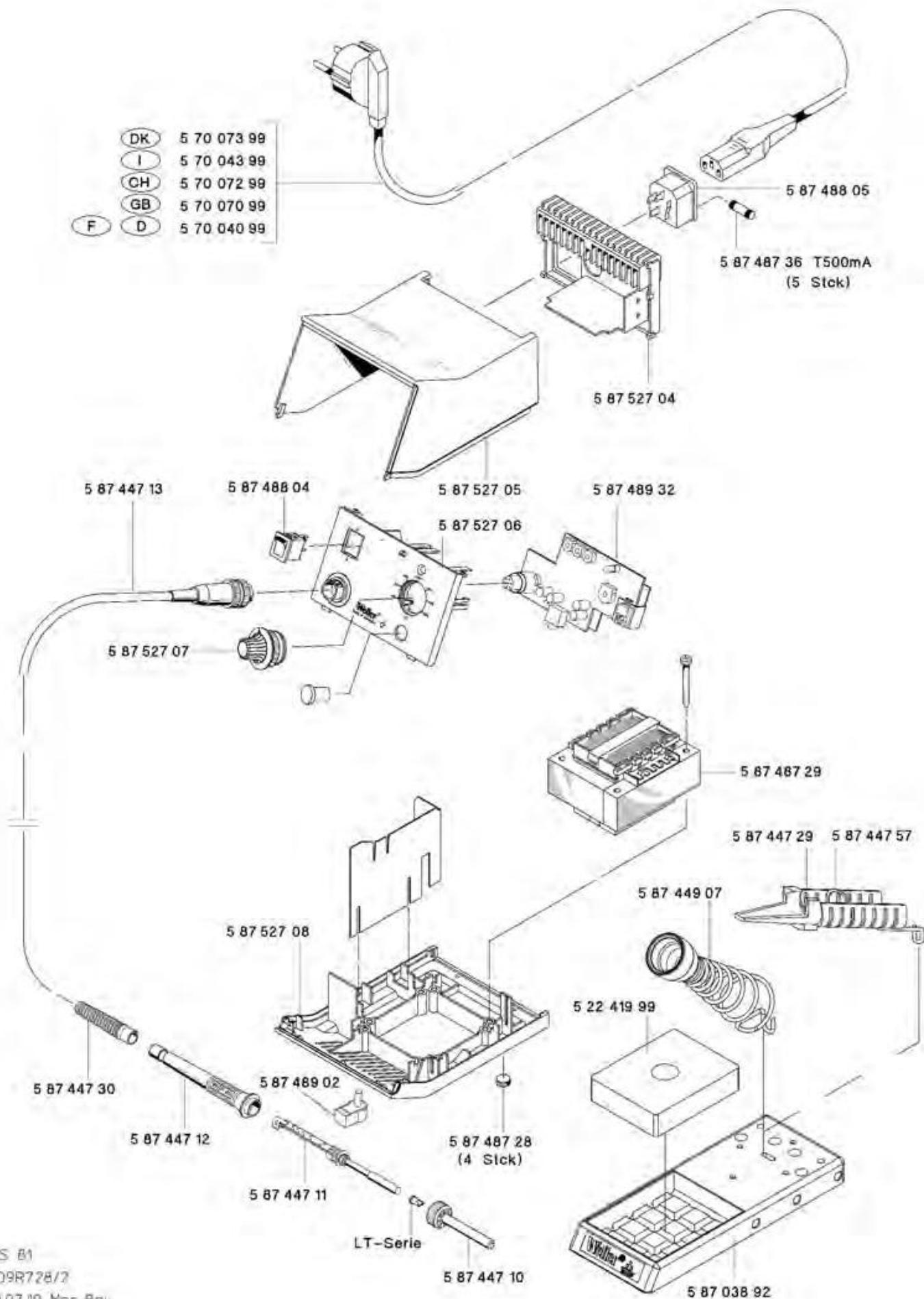
Subject to technical alterations and amendments!

See the updated operating instructions at
www.weller-tools.com.

Leiterplatte Regelung °C 0058748932
(control board)







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