WS

WS

Thank you for placing your trust in our company by purchasing the Weller soldering stations WS 81 and WS 51. 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 81 and WS 51 corresponds to the EC Declaration of Conformity in accordance with the basic safety requirements of Directives 89/336/EEC and 73/23EEC.

2. Description

2.1 Control unit

The soldering stations WS 81 and WS 51 are a part of the range of products which were developed for industrial manufacturing as well as for the repair and laboratory sec- tor. The analog electronic control system guarantees the best possible controlperformance for various soldering tools. The high-powered 24 V heating elements make excel- lent 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 rea- ched.

2.2 Soldering irons

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

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 sen- sor, ensure constant temperatures at both ends.

LR 82: High-performance 80 watt soldering iron for soldering work with high heat require ments. The soldering tip is attached by a bayonet catch to ensure correct position when using different tips.

WSP 80: The soldering iron 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 solde- ring work. Work can be continued immedi- ately after switching soldering tips, since the temperature is reached again quickly.

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):	T500mA (dual-voltage version T800mA)
Temp. control:	50°C - 450°C
Precision:	± 9°C

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:

Hard-grounded:	No plug (delivery form)
Equipotential bonding:	With plug, equalizer at center contact (impedance 0 ohms)
Potential free:	With plug
Soft-grounded:	With plug and soldered resi stance.
Grounding with set	resistance value.

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 flu- xing 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

5 29 161 99 Soldering iron set WSP 80
5 33 131 99 Soldering iron set MPR 80
5 33 112 99 Soldering iron set LR 21, antistatic
5 33 113 99 Soldering iron set LR 82
5 33 133 99 Soldering iron set WTA 50
5 27 028 99 Preheating plate WHP 80
5 33 155 99 Soldering iron set WMP
5 25 030 99 Thermal insulating unit WST 20

7. Scope of supply

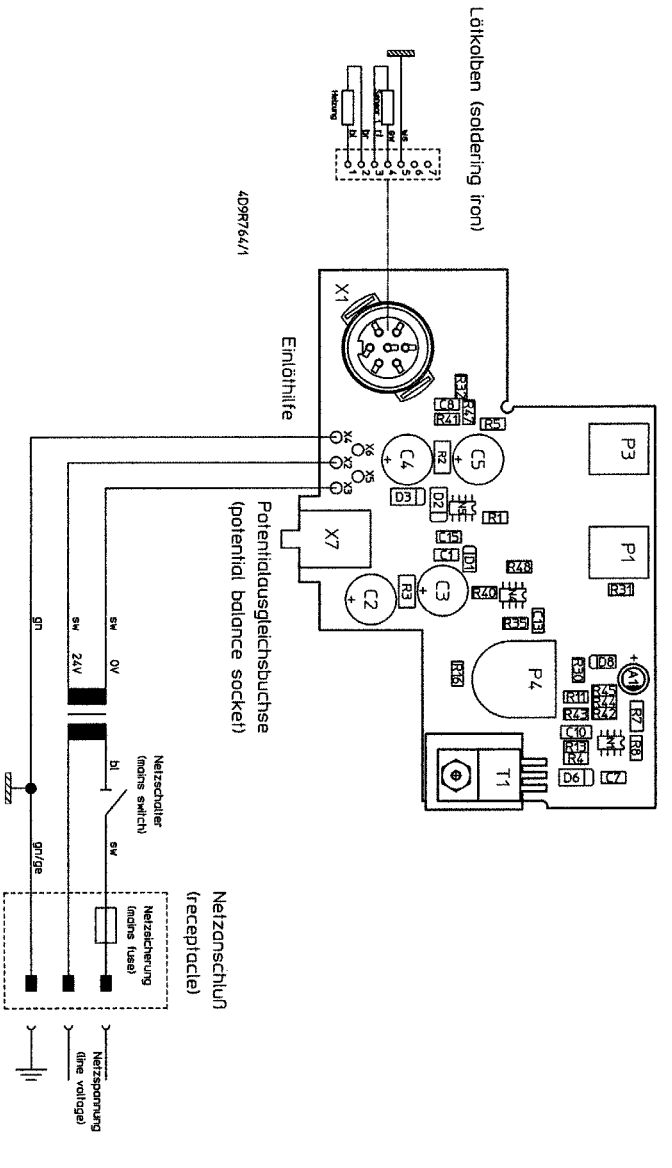
WS 81
Control unit
Soldering iron WSP 80
Power cable
Operating instructions
Soldering iron rest
Jack

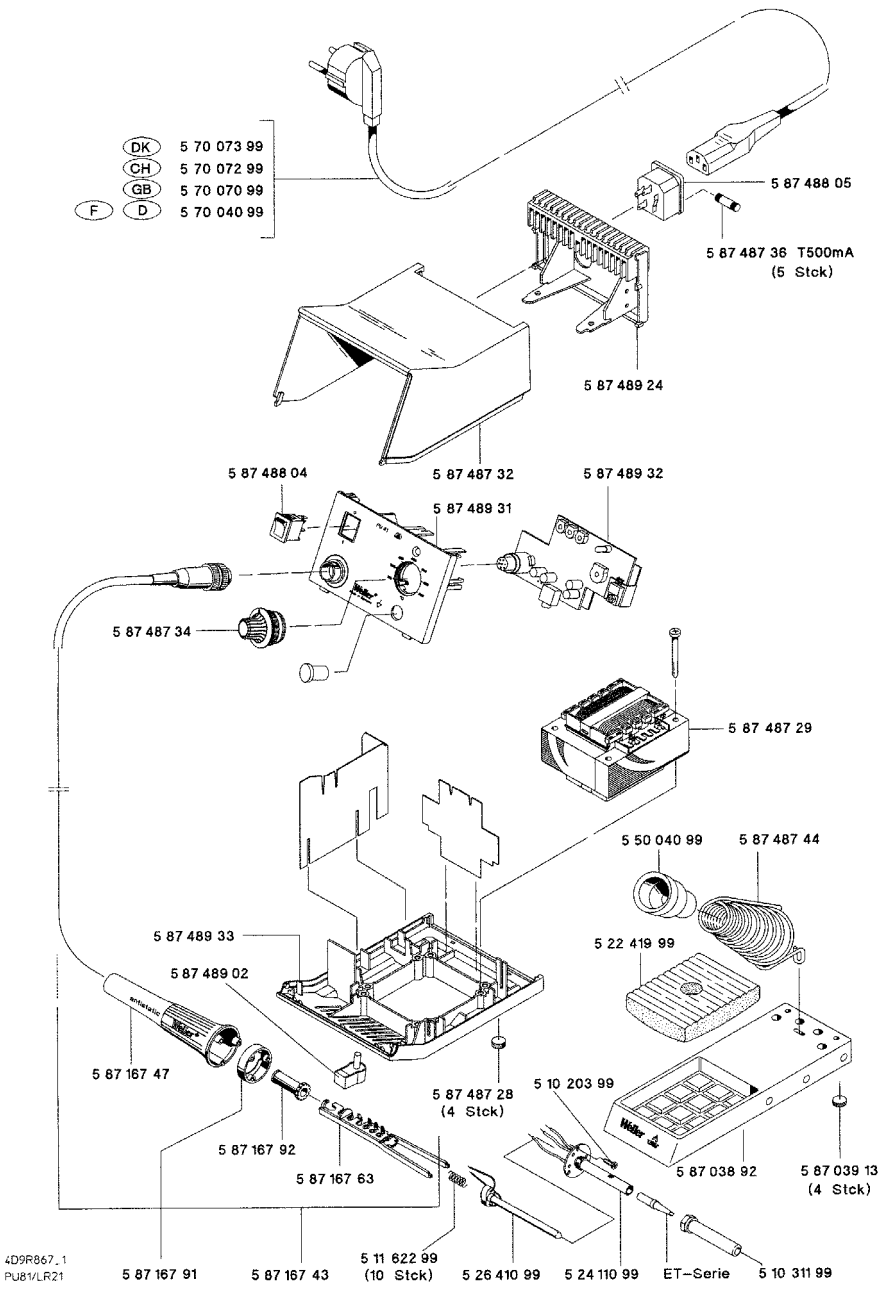
WS 51
Control unit
Soldering iron LR 21
Power cable
Operating instructions
Soldering iron rest
Jack

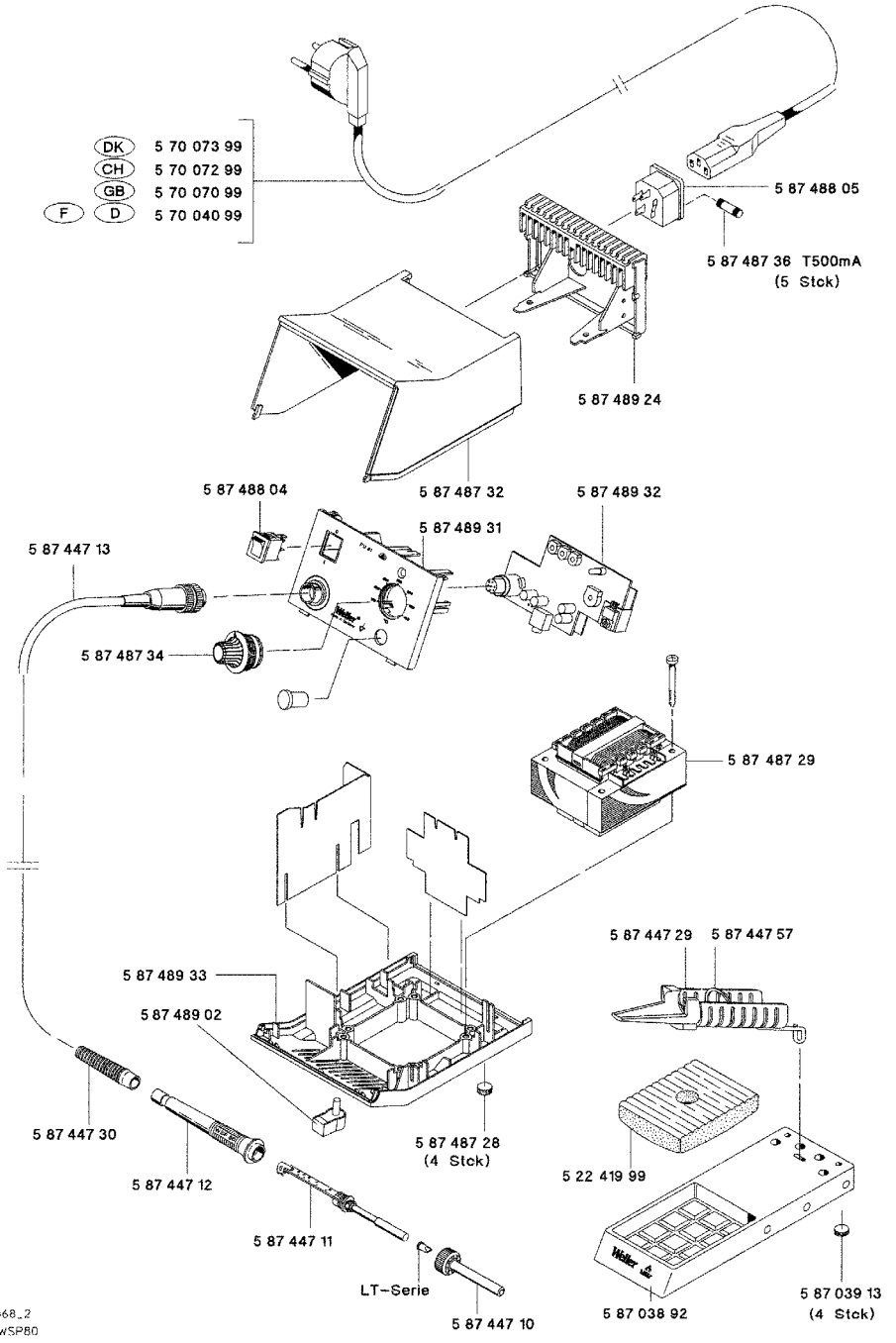
PU 81
Control unit
Power cable
Operating instructions
Jack

Illustration: Circuit diagram, see Page 43
Illustration: Exploded view, see Page 44 + 45

Subject to technical alterations and amendments!


Leiterplatte Regelung °C 0058748932
(control board)
Lötkolben (soldering iron)
4D9R764/1
Einlöthilfe
Potentialausgleichsbuchse
(potential balance socket)
Netzanschluß
(receptacle)
Netzschalter
(mains switch)
Netzsicherung
(mains fuse)
Netzspannung
(line voltage)
sw
0V
24V
bl
gn
gn/ge
X1
X7
P1
P3
P4
T1
4D9R764/1


DK 5 70 073 99
CH 5 70 072 99
GB 5 70 070 99
F D 5 70 040 99
5 87 488 05
5 87 487 36 T500mA
(5 Stck)
5 87 489 24
5 87 488 04
5 87 487 32
5 87 489 32
5 87 489 31
5 87 487 34
5 87 487 29
5 50 040 99
5 87 487 44
5 87 489 33
5 87 489 02
5 22 419 99
5 87 167 47
5 87 487 28
(4 Stck)
5 10 203 99
5 87 167 92
5 87 167 63
5 87 038 92
5 87 039 13
(4 Stck)
4D9R867_1
PU81/LR21
5 87 167 91
5 87 167 43
5 11 622 99
(10 Stck)
5 26 410 99
5 24 110 99
ET-Serie
5 10 311 99


DK 5 70 073 99
CH 5 70 072 99
GB 5 70 070 99
F D 5 70 040 99
5 87 488 05
5 87 487 36 T500mA
(5 Stck)
5 87 489 24
5 87 487 32
5 87 488 04
5 87 489 31
5 87 489 32
5 87 447 13
5 87 487 34
5 87 487 29
5 87 489 33
5 87 489 02
5 87 447 29
5 87 447 57
5 87 447 30
5 87 447 12
5 87 447 11
LT-Serie
5 87 447 10
5 87 487 28
(4 Stck)
5 22 419 99
5 87 038 92
5 87 039 13
(4 Stck)
4D9R868_2
PU81/WSP80