



magnum

**MANUAL**

**DESOLDERING STATION**  
**MODEL 3000**

# **FEATURES OF MAGNUM 3000 DESOLDERING STATION**

## **FEATURES**

- \* HIGH EFFICIENCY VANE VACUUM PUMP
- \* DESOLDERING HANDPIECE
- \* PROPORTIONAL POWER PULSE
- \* TEMP BOOST
- \* TEMPERATURE CONTR SOLDERING IRON
- \* FOOT ACTIVATED VACUUM PUMP
- \* EARTHED HANDPIECES
- \* AIR VACUUM AND AIR PRESSURE

## **WARNING**

### **NEVER LUBRICATE OIL-LESS PUMP**

#### **FLUSHING**

PUMP HAS TO BE FLUSHED PERIODICALLY, TO DO THIS REMOVE STOP CLOG FILTER AND INTRODUCE A SMALL AMOUNT OF SOLVENT (ALCOHOL, FREON, ETC.) INTO VACUUM INLET WHILE OPERATING PUMP.

#### **PREVENTIUE MAINTENANCE**

1. TIPS: Clean outside every hour with wire brush.
2. HEATER ASSY: Clean while hot , every 3 hours of use ,with wire brush.
3. GLASS TUBE: Clean when 1/4 full or when vacuum decreases and replace filter felt regularly. (the above maintenance is necessary for clog free operation.)
4. STOP CLOG FILTER: Replace regularly.

## MAGNUM 1000SP SOLDERING IRON

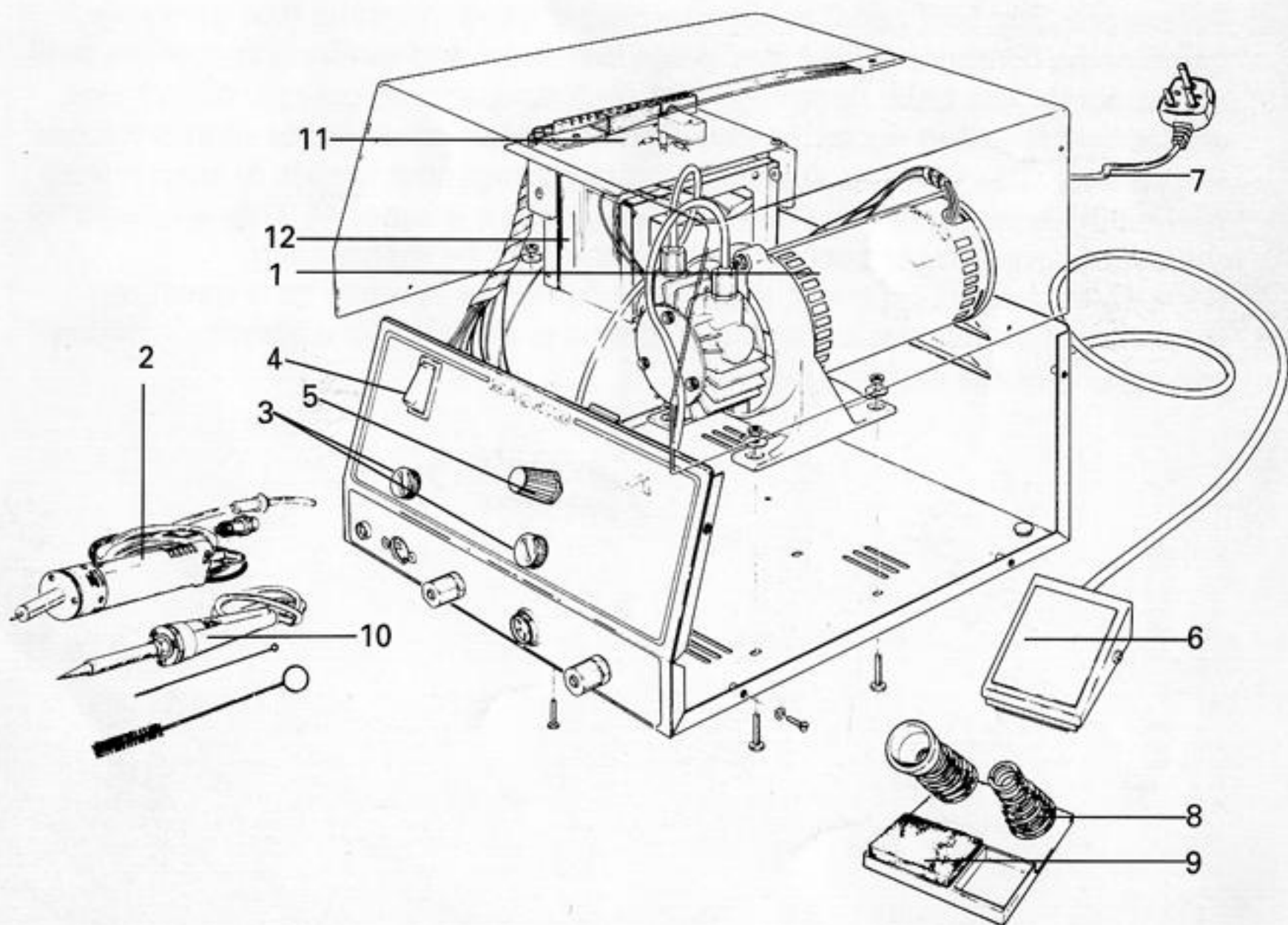
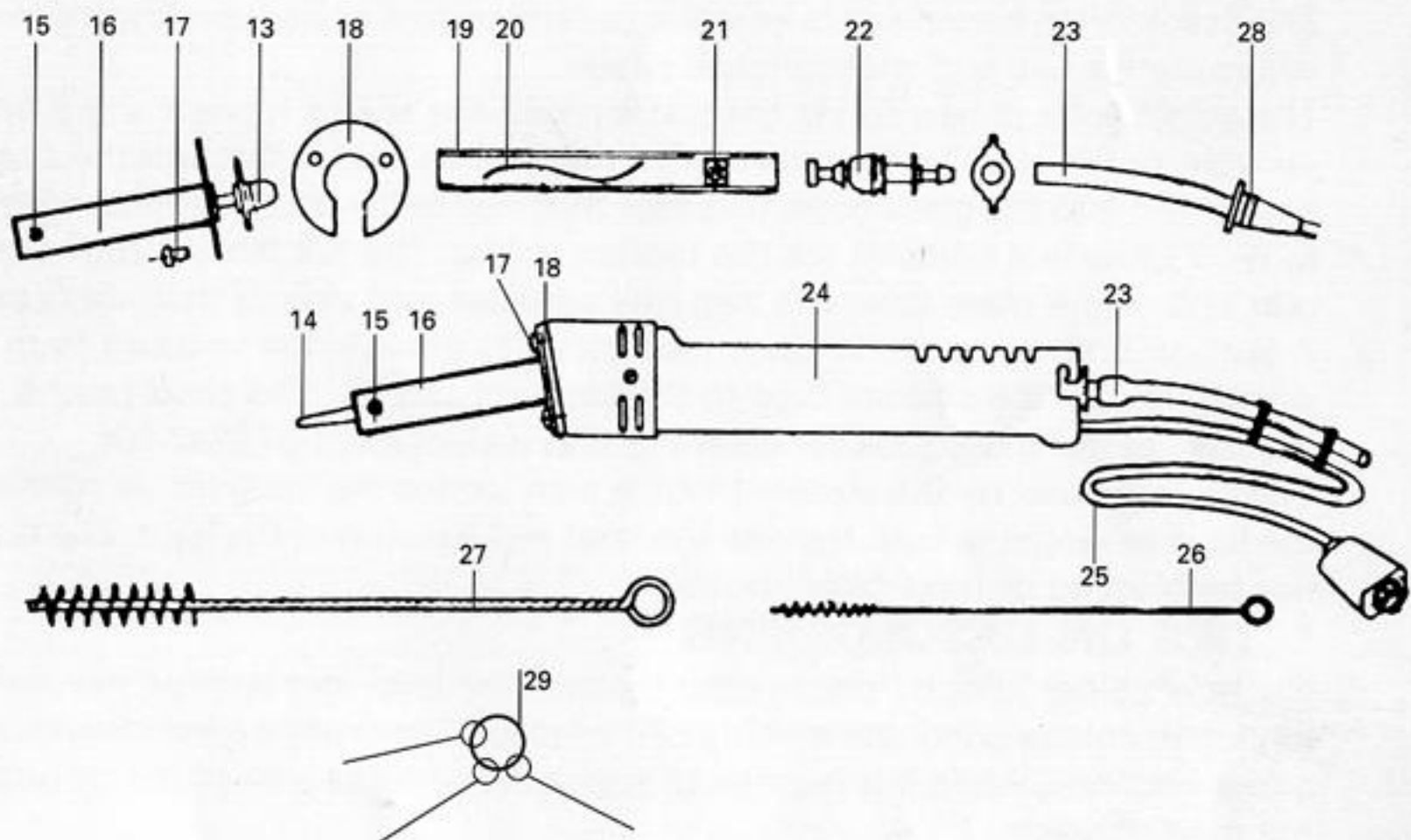
- \* LOW VOLTAGE 24V 50W AC
- \* ADJUSTABLE TEMPERATURE CONTROL (BETWEEN 200° - 420° C)
- \* PROPORTIONAL CONTROLLER
- \* ZERO CROSSING SWITCHING (NO RFI)
- \* LARGE SELECTION OF TIPS

### REPLACEMENT PARTS

ITEM	DESCRIPTION	PART No
1.	ELEMENT	SM1001E
2.	THERMOCOUPLE	SM1002TH
3.	THERMO - CONTROL BOARD	SM1003PC
4.	SILICON CORD	SM100046
5.	PLUG 5 PIN DIN 180'	SM100047
6.	HANDLE BLUE WITH OPENING	SM100013
7.	TIP EW 305 (STANDARD)	SM100048
8.	BARREL+NUT	SM100001

## MAGNUM 3000 REPLACEMENT PARTS

ITEM	DESCRIPTION	QTY	PART No
1.	VACUUM PUMP ASSY.	1	SM300057
2.	HANDPIECE COMPLETE (TUBING, STOP CLOG FILTER)	1	SM3000HP
3.	FUSE. (3 AMP)	3	SM200215
4.	NEON ILL ROCKER SWITCH	1	SM200016
5.	CONTROLLER AC (PULSE)	1	SM3000VC
6.	FOOTPEDAL ASSY	1	SM3000FP
7.	MOULDED POWER CORD	1	SM300016
8.	DOUBLE DESOLDERING STAND	1	SM300003
9.	SPONGE 50*70	1	SM200019
10.	1000 SP SOLDERING IRON	1	SM1000SP
11.	RELAY CONTROL BRD.	1	SM3000PC
12.	TRANSFORMER 24V+24V 85W	1	SM300006
13.	SILICON SEAL	2	SM300033
14.	TIPS (SET OF FOUR)	4	SM300007
15.	SET SCREW	1	SM300067
16.	ELEMENT	1	SM3000E
17.	ELEMENT RETAINING SCREWS	3	SM300066
18.	ELEMENT INSULATOR	1	SM300065
19.	GLASS TUBE	1	SM300064
20.	"S" BAFFLE	1	SM300063
21.	FILTER FELT	1	SM300055
22.	END CAP ASSEMBLY	1	SM300062
23.	SILICON TUBING	1	SM300069
24.	DESOLDERING HANDEL	1	SM300060
25.	SILICON CORD	1	SM300046
26.	WIRE BRUSH	1	SM300059
27.	BRISTLE BRUSH	1	SM300058
28.	STOP CLOG FILTER	1	SM300056
29.	TIP CLEANING KIT	1	SM300061



## SOLDERING JOINT REMOVAL

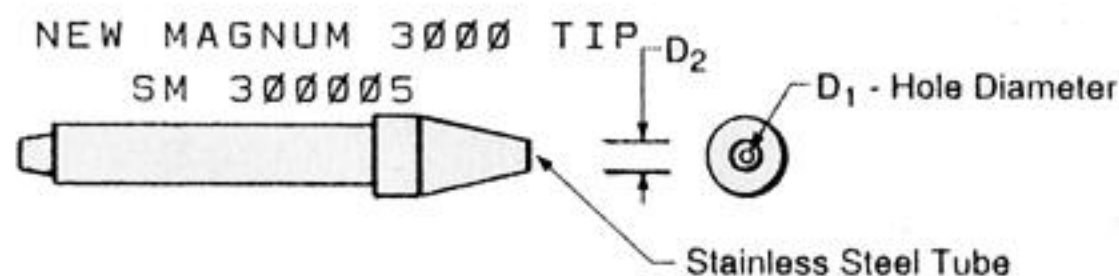
The desoldering handpiece is a simple but critical tool, understanding its function will make its use and maintenance easier.

1. The solder joint is heated via the tip to make the solder molten and then the vacuum pump is energised to remove the molten solder through the tip and heater and into the glass collection tube. A metal baffle is positioned in the glass tube to provide a heatsink for the molten solder. The felt filter at the rear end of the glass tube will trap fine particles and vapors that are drawn in.
2. A seal on both ends of the glass tube serve to provide the vacuum from the pump through the silicone tube to the element and tip. The seals permit quick removal of the glass tube for cleaning and replacement of filter felt.
3. The tip is heated by the element which also carries the vacuum. A tight seal at the tip is essential to both transfer the heat and vacuum to the joint. The tip must not be blocked or have blow holes.

### TIPS ON DESOLDERING

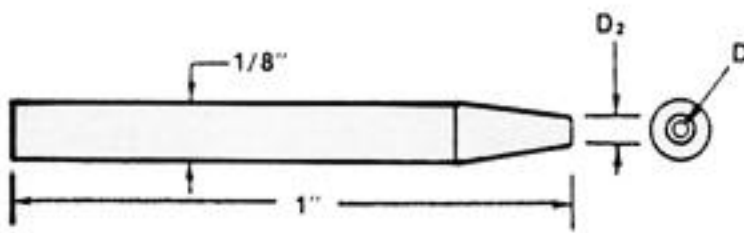
- a) Heat the solder joint by placing the tip over the lead and against the pad lead junction to ensure adequate melting of the solder. The time needed should be only a few seconds, while it is helpful to watch the obverse side of the pc board for full melt of solder.
- b) Start vacuum by pressing the foot pedal to remove solder from joint while holding tip at right angle to the board pressing gently on the pad.
- c) Before pressing foot pedal to remove solder begin vigorous (but gentle) oscillation of the component lead then press foot pedal and continue to oscillate until all the solder has been removed. This oscillating should only be done to the component lead and not to the pad. Care should be taken not to scratch the pad with the tip. The purpose of oscillating the component lead is to keep it from resweating against the joint until the temperature is reduced. This is caused by the continuous flow of cool air through the joint by the vacuum.
- d) Remove tip from component lead maintaining the vacuum for a count of three to ensure that the solder has had time to enter into the glass tube and will not solidify in the element riser tube.


PLATO NO :	D1	D2
3Ø - Ø3Ø	Ø, 8	1, 7
3Ø - Ø4Ø	1, Ø	2, 2
3Ø - Ø5Ø	1, 3	2, 9



#### Premium Quality for Long Life

Iron plated to resist erosion by solder. Stainless steel tube prevents erosion by solder.



D1	D2	Plato No.	A.P.E. No.	Pace No.
0,64	1,5	20-0109	1212-0025	1121-0214
1,0	2,0	20-0110	1212-0040	1121-0215
1,5	2,5	20-0111	1212-0060	1121-0217
2,3	3,2	20-0112	1212-0080	1121-0091
1,3	2,3	20-0113	1212-0050	1121-0216
	All Magnum Series		50 x 70	

### Plato Tips EW-Tips

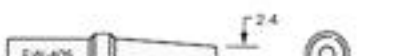
to fit Magnum 1000  
2000i  
2002i  
2004i  
Weller  
EC-1000  
EC-2000  
WECF  
T-3000  
WEC-24

Tip drawings are actual size. All points 0.8mm thick unless otherwise noted.



#### TYPICAL TIP DRAWING

The interior surfaces of these tips are protected to prevent adhesion to the sensor.



#### Weller-Plato Cross Reference

Weller No.	Plato No.
ET A	EW-303
ET B	EW-305
ET C	EW-307
ET D	EW-103
ET E	EW-105
ET F	EW-511
ET H	EW-301
ET K	EW-304
ET L	EW-306
ET M	EW-308
ET O	EW-404
ET P	EW-403
ET R	EW-101
ET S	EW-402
ET BS	EW-405
ET CC	EW-517
ET CS	EW-407
ET DS	EW-409
--	EW-302
--	EW-401
--	EW-513
--	EW-515
--	EW-519

## SPECIFICATIONS

Size:	Height 140 mm (5,50"). Width 205 mm (8,00"). Depth 235 mm (9,25")	Vacuum:	268mbar (22" Hg).
Mass:	6,1Kg (13,45lbs)	Flow Rate:	1,54m <sup>3</sup> /hour (0,91 CMF).
Construction:	Corrosion proof aluminium. Blue power coat finish.	Temp.range:	Soldering extractor – 200°C to 450°C (392°F to 842°F)
Protection:	Input – 1 x 3 A fuse. Output – 2 x 3 A fuses. Motor – Thermal trip.	Soldering Iron:	24V 50W Temp.controlled
		Desoldering handpiece:	24V 35W
		Power in:	220/240V 50/60HzAC.
		Power out:	2 x 24V 2A,AC.