

Support Products & Consumables



Solder, Desolder & Rework



SMT & Area Array Rework



Fume Extraction

Solutions and systems for soldering, rework and repair of electronics



PAGE[®]
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ST Systems

Optional Items and Replacement Parts



Description	Part Number
Power Cord (Domestic Systems only)	1332-0094-P1
Power Cord (Export Systems)	1332-0093-P1
Fiber Cleaning Tool for Surface Mount Tips	1100-0232-P1
Sponge Cleaning Tool for Surface Mount Tips	1100-0233-P1
Replacement Fiber Filler (for Fiber Cleaning Tool)	1127-0013-P2
Replacement Sponge Filler (for sponge cleaning tip)	4021-0006-P5
Replacement Sponges for Tip & Tool Stand (Before 11-07)	4021-0008-P3
Replacement Sponges for Tip & Tool Stand (After 11-07)	4021-0013-P3
Power Switch (All ST Series)	1157-0081-P1
ST 75 / 115 Motor Pump Assembly	1336-0037-P1
Pump Rebuild Kit	6993-0260-P1
ST 25 PCB	6020-0188-P1
ST 30, ST 65 & ST 75 PCB (IntelliHeat)	6020-0208-P1
ST 50 & ST 115 PCB (IntelliHeat)	6020-0209-P1
ST 70 PCB	6020-0210-P1
ST 100 PCB	6020-0211-P1
ST 65 Solenoid with Venturi Kit	6993-0201-P1
ST 65 Venturi with muffler	1338-0071-P1
ST 65 Air Inlet	1259-0116-P1
WJS 100 Printed Circuit Board (Main Control PC Board)	6020-0209-P1
TD 100 Handpiece, WJS version	6010-0165-P1
Tip & Tool Stand for TD 100	6019-0079-P1
Instant Set-back Tip & Tool Stand for TD 100	6019-0084-P1
TD 100 and ISB Tip & Tool Stand, Kit	6993-0296-P1
ST 70 Power Module Heat Level 5	1207-0446-01-P1
ST 70 Power Module Heat Level 5.5	1207-0446-02-P1
ST 70 Power Module Heat Level 6	1207-0446-03-P1
ST 70 Power Module Heat Level 6.5	1207-0446-04-P1
ST 70 Power Module Heat Level 7	1207-0446-05-P1
ST 70 Power Module Heat Level 7.5	1207-0446-06-P1
ST 70 Power Module Heat Level 8	1207-0446-07-P1
ST 70 Power Module Heat Level 8.5	1207-0446-08-P1
Fuse, 115V ST 25, 30, 50, 65, 75, 115	1159-0246-P5
Fuse, 230V ST 25E, 30E, 50E, 65E, 75E, 115E	1159-0213-P5
Fuse, 115V ST 100	1159-0275-01-P5
Fuse, 230V ST 100E	1159-0275-02-P5

MBT 250, 301 & 350

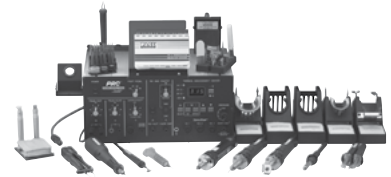
Optional Items and Replacement Parts



Description	Part Number
Fuse MBT 301 / 350 115V	1159-0275-01-P5
Fuse MBT 301E / 350E 230V	1159-0275-02-P5
Motor Pump Rebuild Kit (Unit date code of 37780 or lower MBT 250/E) "Diaphragm Style Pump" will also work on MBT 101's and 201's with a date code of 37780 or lower.	6993-0190-P1
MBT 201 / 250 Motor Pump Assembly (Unit date code prior to 37781)	6993-0188
Motor Pump Assembly MBT 250/E (Unit date code 37781 and higher)	1336-0064-P1
Motor Pump Rebuild Kit for 1336-0064-P1 and 1336-0083-P1	6993-0260-P1
VisiFilter	1309-0020-P1
Power Cord (Domestic Systems only)	1332-0094-P1
Power Cord (Export Systems only)	1332-0093-P1
Fuse, 2.0 Amp Slo Blo (MBT 250 Domestic Systems only)	1159-0247-P5
Fuse, 1.25 Amp Slo Blo (MBT 250 Export Systems only)	1159-0217-P5
Fiber Cleaning Tool for Surface Mount Tips	1100-0232-P1
Replacement Fiber Filler (for Fiber Cleaning Tool)	1127-0013-P2
Sponge Cleaning Tool for Surface Mount Tips	1100-0233-P1
Replacement Sponge Filler (for Sponge Cleaning Tool)	4021-0006-P5
Replacement Sponges for Tip & Tool Stand (SX, PS, SP)	4021-0008-P3
Sponges for Tip Maintenance Station	4021-0007-P7
New Style Replacement Sponges for Tip & Tool Stands	4021-0013-P3
Quick-Disconnect Insert (Male)	1259-0087-P1
Quick-Disconnect Receptacle (Female)	1259-0086-P1
Vacuum Tubing, Black Silicone 1370mm (54")	1342-0015-08-P1
Cable Marker Kit (Colored Tabs for hose/cord identification)	6993-0136-P1
Air Pressure Control Valve Assembly for MBT 250	1222-0081-P1
Air Pressure Control Assembly for MBT 301 / 350	6993-0308-P1
Vacuum, Panel Mount	1259-0085-P1
Main Power Switch	1157-0081-P1
Rubber Foot	1274-0021-P4
MBT 301 / 350 Motor Pump Assembly	1336-0083-P1
MBT 250 Main PCB (MBT 250A / 250AE)	6020-0091-P1
MBT 250 Display PCB (MBT 250A / 250AE)	6020-0063-P1
MBT 250 Connecting Rod	1338-0073-P1
MBT 301 PCB	6020-0207-P1
MBT 350 PCB	6020-0204-P1

PRC Systems

Optional Items and Replacement Parts



Description	Part Number
Tip Redi-Rak	6021-0007-P1
Tip & Tool Stand Tip Redi-Rak (included with Standard Version)	6021-0008-P1
Tip and Vacuum Cup Tool	1100-0239
Cushion Grip Kit for ThermoTweez Handpiece (requires a 6019-0056 TT Tip & Tool Stand)	6993-0184
One Year Consumables Kit	6550-0020
Auto SnapVac Kit	6993-0193
Tip and Temperature Selection System (charts only)	5050-0251

PRC 2000 Replacement Parts

Description	Part Number
Motor Pump Assembly Kit (for desoldering function)	6993-0188
Pump Rebuild Kit (for desoldering function)	6993-0190-P1
Micro Pump Assembly (for Paste Dispenser)	1336-0027-P1
Low Pressure Pik Pump Assembly	1334-0021-P1
Power Cord (PRC 2000 Domestic Systems only)	1332-0094-P1
Power Cord (PRC 2000 Export Systems only)	1332-0093-P1
Fuse, 2.5 Amp, Type T (Slo-Blo)	1159-0260-P5
Fuse, 5.0 Amp, Time Lag (PRC 2000 Domestic Systems only) 115V	1159-0253-P5
Fuse, 12.0 Amp , (PRC 2000 Domestic and Export Systems)	1159-0257-P5
Air Pressure Control Valve Assembly	1222-0081-P1
Vacuum, Panel Mount	1259-0085-P1
Main Power Switch	1157-0052-P1
Fiber Cleaning Tool for Surface Mount Tips	1100-0232-P1
Replacement Fiber Filler (for Fiber Cleaning Tool)	1127-0013-P2
Sponge Cleaning Tool for Surface Mount Tips	1100-0233-P1
Replacement Sponge Filler (for Sponge Cleaning Tool)	4021-0006-P5
Replacement Sponges for Tip & Tool Stand (SX, PS, SP)	4021-0008-P3
Sponges for Tip Maintenance Station	4021-0007-P7
Quick-Disconnect Insert (Male)	1259-0087-P1
Quick-Disconnect Receptacle (Female)	1259-0086-P1
Paste Dispense Tubing, Clear PVC 915mm (36")	1325-0003-10-P1
Vacuum Tubing, Black Silicon 1370mm (54")	1342-0015-08-P1
Cable Marker Kit (colored tabs for hose/cord identification)	6993-0136-P1
Paste Dispenser Tip & Tool Stand	6019-0038-P1
Accessory Kit for Paste Dispenser	6993-0152-P1
Vacuum Cups for Pik-Vac Wand	6993-0154-P1
PCB Assembly, Microprocessor, PPS-400/E	6020-0072-P1
PCB, Display, PPS-400/E	6020-0073-P1
PCB, Multifunction, PPS-400/E	6020-0074-P1
Pressure Reservoir	1140-0034-P1
Foot Pedal MBT/PRC	6008-0115-P1
10cc Barrel Adapter	1259-0091-P1
SMR Tip & Tool Stand Kit	6019-0022-P1
Redi-Rak Handpiece Kit	6019-0023-P1
Motor Pump Filter	1309-0020-P1
Solenoid, 12V, 6W	1194-0016-P1
Terminal Post, BLACK	1205-0045-P1
Rubber Foot	1274-0021-P4
Rod, Connecting PRC 2000 / MBT-250 Pump	1338-0073-P1

ST Hot Air Systems

Optional Items and Replacement Parts



Description	Part Number
ST 300 Handpiece with Front Panel 115V	6010-0145-01-P1
ST 300 Handpiece with Front Panel 230V	6010-0146-01-P1
ST 325 Handpiece with Front Panel 115V	6010-0145-P1
ST 325 Handpiece with Front Panel 230V	6010-0146-P1
Handpiece Tip & Tool Stand ST 300 / ST325	6019-0048-P1
PCB ST 300 / ST 300E	6020-0163-P1
PCB ST 325 / ST 325E & ST 350 / ST 350E	6020-0190-P1
Fuse, 7 Amp, 125V ST 300 / 325 / 350	1159-0274-P5
Fuse, 5 Amp, 230V, ST 300E / 325E / 350E	1159-0266-P5
Fuse, 1 Amp, 125V ST 300	1159-0246-P5
Fuse, 0.5 Amp 125V ST 325 / 350	1159-0248-P5
Fuse, 0.5 Amp 23V, ST 300E / 325E / 350E	1159-0213-P5
PCB Support ST 350	6000-0287-P1
Calibration Nozzle ST 325 / 350	4028-2010-P1
ST 325/350 PC Software	1199-0019-P1
Board Holder Fingers	1321-0775-P1
Handpiece Vacuum Pump (FloPump)	1336-0035-P1
Blower Pump ST 300, ST 325 & 350	1336-0073-P1
Vacuum Pump ST 300, ST 325 & 350 - Air Vac Handpiece	1336-0078-P1
Heater 115V ST 300 / 325 / 350	6010-0091-P1
Heater 230V ST 300 / 325 / 350	6010-0122-P1
Replacement Vacuum Pik Kit ST 300 / ST 325 115V	6993-0198-P1
Replacement Vacuum Pik Kit ST 300E / ST 325E 230V	6993-0256-P1
Replacement Vacuum Pik Kit ST 350 115V	6000-0283-P1
Replacement Vacuum Pik Kit ST 350E 230V	6000-0284-P1
ST 500 Handpiece Fixture	6993-0258-P1
Swivel Ring	1321-0320-P1
ST 525 Board Holder 12"	6993-0253-P1
ST 550 Board Holder 18"	6993-0254-P1

ST Hot Air Systems

Optional Items and Replacement Parts

Description	Part Number
Power Cord, 115V (ST 300, ST 325, ST 350)	1332-0094-P1
Power Cord, 230V (ST 300E, ST 325E, ST 350E)	1332-0093-P1
PV-65 Handpiece (ST 300, ST 325, ST 350)	7027-0001-P1
Nozzle Adapter (ST 300, ST 325, ST 350)	4028-0001-P1
Hot Grip Removal Pad (ST 300, ST 325, ST 350)	1100-0307-P1
Hose Retention Kit	6018-0096-P1
Vacuum Cups	
Vacuum Cup Kit	6993-0196-P1
Vacuum Cup, Individual, 15.88mm (0.625") Diameter, BLUE	1121-0280-P2
Vacuum Cup, Individual, 10.16mm (0.400") Diameter, BLUE	1121-0281-P2
Vacuum Cup, Individual, 7.94mm (0.312") Diameter, BLUE	1121-0282-P2
Vacuum Cup, Individual, 4.95mm (0.195") Diameter, RED	1121-0382-P5
Vacuum Cup, Individual, 7.62mm (0.300") Diameter, RED	1121-0383-P5
Vacuum Cup, Individual, 12.70mm (0.500") Diameter, RED	1121-0384-P5

SMR Pulse Heat Systems

Optional Items and Replacement Parts




Description	Part Number
Power Cord, Detachable, 120 VAC	1332-0094-P1
Foot Pedal, Treadlite	6008-0115-P1
Kit, Redi-Rak, Handpiece, SMR	6019-0085-P1
Tip & Tool Stand Kit, SMR	6019-0086-P1
Power Cord, Universal Handpiece, SMR	7000-0024-P1
Power Source Assembly, SMR, 120V	7008-0322-P1
Power Source Assembly, SMR, 230V	7008-0323-P1
SMR Replacement PCB	6020-0228-P1
Fuse, 2.5 Amp Time Lag, (120 Volts)	1159-0275-04-P5
Fuse, 2 Amp Time Lag, (230 Volts)	1159-0275-01-P5
Blade, Stripper, 24 through 18 Gauge	1121-0960-P1
Straight Edge Thermal Stripper Blade	1121-0003-P1
18 Gauge Tip	1121-0961-P1
20 Gauge Tip	1121-0962-P1
22 Gauge Tip	1121-0963-P1
24 Gauge Tip	1121-0964-P1

*For SMR Handpieces and SMR Handpiece parts see page 27.

Hot Air Nozzles

Listed below are standard nozzles available from PACE. Custom nozzles can be designed and manufactured to your specifications for special or non-standard applications. Contact PACE at **1.877.882.PACE** or **support@paceworldwide.com** for more information. Alignment templates are included with BGA nozzle assemblies.


Standard Nozzles for ST 300 / 325 / 350 Systems



BGA Nozzles	Description	Part Number
	26.4mm x 26.4mm (1.04" x 1.04")	4028-5001
	22.3mm x 22.3mm (0.89" x 0.89")	4028-5002
	34.4mm x 34.4mm (1.35" x 1.35")	4028-5003
	12.3mm x 12.3mm (0.48" x 0.48")	4028-5004
	14.4mm x 14.4mm (0.57" x 0.57")	4028-5005
	15.5mm x 17mm (0.61" x 0.67")	4028-5006
	13.5mm x 15mm (0.53" x 0.59")	4028-5007
	10.5mm x 10.5mm (0.41" x 0.41")	4028-5008
	12mm x 13.3 mm (0.47" x 0.52")	4028-5009
	8.7mm x 8.90mm (0.34" x 0.35")	4028-5010
	25mm x 25mm (0.98" x 0.98")	4028-5011
	39.2mm x 39.2mm (1.54" x 1.54")	4028-5012
	41.7mm x 41.7mm (1.64" x 1.64")	4028-5013
	30.3mm x 30.3mm (1.19" x 1.19")	4028-5014
	16.3mm x 16.3mm (0.64" x 0.64")	4028-5015
	20.3 mm x 20.3 mm (0.80" x 0.80")	4028-5016
	20.3mm x 20.3mm (0.80" x 0.80")	4028-5017 (short adapter)
	36.8mm x 36.8mm (1.45" x 1.45")	4028-5018
	18.3mm x 18.3mm (0.72" x 0.72")	4028-5019
	31.3mm x 31.3mm (1.23" x 1.23")	4028-5020
	28.3mm x 28.3mm (1.11" x 1.11")	4028-5021
	15.3mm x 15.3mm (0.60" x 0.60")	4028-5022
	13.2mm x 21.2mm (0.52" x 0.83")	4028-5023
	18.5mm x 18.5mm (0.73" x 0.73")	4028-5024
	17.8mm x 17.8mm (0.70" x 0.70")	4028-5025
	25.7mm x 25.7mm (1.01" x 1.01")	4028-5026
	29.3mm x 29.3mm (1.15" x 1.15")	4028-5027
	24.3mm x 31.6mm (0.96" x 1.24")	4028-5028
	42.3mm x 42.3mm (1.66" x 1.66")	4028-5029
	43.3mm x 43.3mm (1.70" x 1.70")	4028-5030
	21.3mm x 21.3mm (0.84" x 0.84")	4028-5032
	32.3mm x 32.3mm (1.24" x 1.24")	4028-5033
	46.8mm x 46.8mm (1.84" x 1.84")	4028-5034
	20.3 mm x 24mm (0.80" x 0.94")	4028-5035
	16.3mm x 16.3 (0.64" x 0.64")	4028-5036 (short adapter)
20.3mm x 20.3mm (0.80" x 0.80")	4028-5037 (small cup)	
10mm x 13mm (0.40" x 0.51")	4028-5038	
6mm x 8mm (0.24" x 0.32")	4028-5501	
6.55mm x 8mm (0.26" x 0.32")	4028-5502	
7mm x 4.5mm (0.28" x 0.18")	4028-5503	
Calibration Nozzle	4028-2010-P1	


Hot Air Nozzles

Listed below are standard nozzles available from PACE. Custom nozzles can be designed and manufactured to your specifications for special or non-standard applications. Contact PACE at **1.877.882.PACE** or **support@paceworldwide.com** for more information.

Standard Nozzles for ST 300 / 325 / 350 Systems

Pattern Nozzles	Jet Spacing	Jet Length	Part Number
	4mm (0.16")	6.1mm (0.24")	4028-4001
	4mm (0.16")	10.9mm (0.43")	4028-4002
	7.9mm (0.31")	10.9mm (0.43")	4028-4003
	7.9mm (0.31")	13.5mm (0.53")	4028-4004
	7.9mm (0.31")	16mm (0.63")	4028-4005
	7.9mm (0.31")	18.5mm (0.73")	4028-4006
	11.7mm (0.46")	20.8mm (0.82")	4028-4007
	18.6mm (0.734")	11.68mm (0.460")	4028-4505
	10.4mm (0.41")	21.35mm (0.84")	4028-4506

Single Jet Nozzles	Shape of Jet Tubing	Nozzle Size (Nominal)	Part Number
 	Curved, Round	3.0mm diameter (0.1" diameter)	4028-1001-P1
	Curved, Round	5.0mm diameter (0.2" diameter)	4028-1002-P1
	Curved, Round	8.0mm diameter (0.3" diameter)	4028-1003-P1
	Straight, Round	3.0mm diameter (0.01" diameter)	4028-1011-P1
	Straight, Round	5.0mm diameter (0.2" diameter)	4028-1012-P1
	Straight, Round	8.0mm diameter (0.3" diameter)	4028-1013-P1
	Flat Jet	13.2mm length (0.52")	4028-1021-P1
	Flat Jet	23.4mm length (0.92")	4028-1022-P1

Pattern Nozzles	Nozzle Size (Nominal)	Part Number
 	8.6mm x 12.1mm (0.34" x 0.48")	4028-2001
	10.3mm x 10.3mm (0.41" x 0.41")	4028-2002
	12.8mm x 12.8mm (0.51" x 0.51")	4028-2003
	12.8mm x 15.39mm (0.50" x 0.61")	4028-2004
	17.9mm x 17.9mm (0.70" x 0.70")	4028-2005
	20.5mm x 20.5mm (0.81" x 0.81")	4028-2006
	25.6mm x 25.6mm (1.01" x 1.01")	4028-2007
	30.6mm x 30.6mm (1.20" x 1.20")	4028-2008
	38.9mm x 38.9mm (1.53" x 1.53")	4028-2009
	18.2mm x 24.2mm (0.72" x 0.95")	4028-2501
	17.1mm x 17.1mm (0.67" x 0.67")	4028-2502
	27mm x 27mm (1.06" x 1.06")	4028-2503
	31.95mm x 31.95mm (1.26" x 1.26")	4028-2504
	31.6mm x 31.6mm (1.24" x 1.24")	4028-2505
	34.7mm x 34.7mm (1.37" x 1.37")	4028-2506
	23.5mm x 23.5mm (0.924" x 0.924")	4028-2507
	32.5mm x 46.5mm (1.28" x 1.83")	4028-1501
	27.2mm x 27.2mm (1.07" x 1.07")	4028-2602
	11.5mm x 11.5mm (0.453" x 0.453")	4028-3002
15.5mm x 15.5mm (0.610" x 0.610")	4028-3004	
Calibration Nozzle	4028-2010-P1	

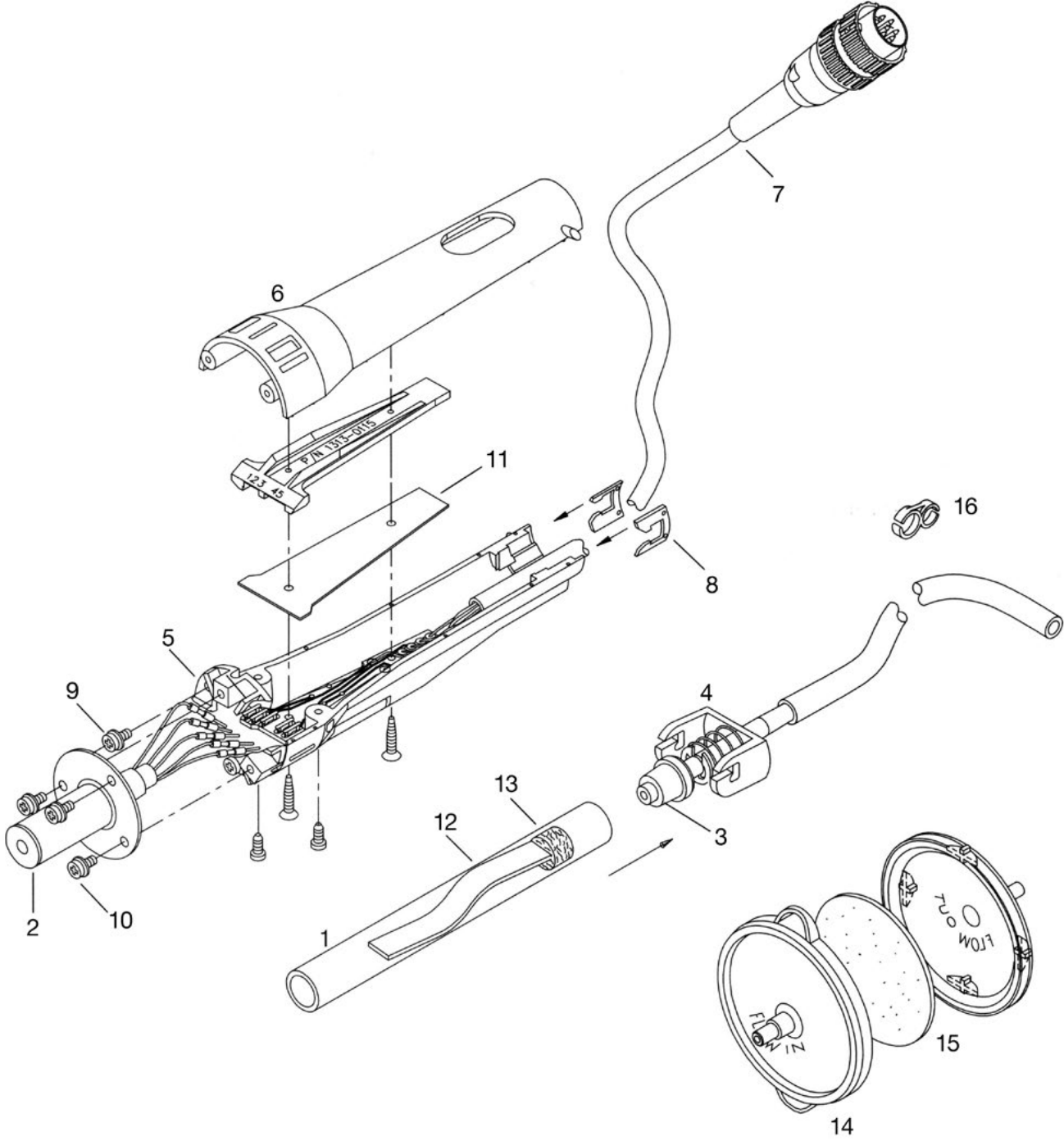
SX-70 Handpiece

SX-70 Replacement Parts Diagram



SX-70 parts Diagram

See page 9 for the description of parts



SX-70 Handpiece

SX-70 Replacement Parts



Item	Description	Part Number*
	SX-70 Handpiece	6010-0077-P1
	SX-70 Kit	6993-0227-P1
1	Glass Chamber	1265-0009-P1
	Silicone Chamber	1265-0010-P1
2	SX-70 Heater and Seal Assembly	6010-0080-P1
	Front Seal, Heater	1213-0033-P1
3	Rear Seal	1213-0001-P1
4	Rear Seal Retainer Assembly	4010-0106-P1
5	Heat Dissipator	1360-0005-P1
6	Replacement Handle Kit (SX, TP, TJ) (includes Top/Bottom Plates, Heat Dissipator, and Hardware)	6993-0140-P1
	Replacement Hardware Kit (SX, TP, TJ) (includes Screws and Handle Clips)	6993-0189-P1
7	Switch and Cord Assembly (SX-70 only)	4010-0098-P1
8	Handle Clips	1209-0006-P5
	Replacement Button	1119-0119-P1
9	Dissipator Mounting Screws (mounts dissipator to handle)	1405-0534-P3
10	Heater Mounting Screws	1405-0395-P3
11	Solder Shield (comes with the purchase of any Heater Assembly)	1213-0072-P10
12	"S" Baffle	4010-0033-P1
13	Sodr-X-Tractor Filter	
	Package of 10	1309-0018-P10
	Package of 50	1309-0018-P50
	VisiFilter, Fixed	1309-0020-P1
14	VisiFilter, Replaceable	1309-0028-P1
15	Replaceable VisiFilter Elements	
	Package of 10	1309-0027-P10
	Package of 25	1309-0027-P25
	Package of 50	1309-0027-P50
	Tubing, Length 1370mm (54"), BLACK	1342-0015-08-P1
16	Black Hose Clamps	1321-0085-01-P6
	Hose Fitting, Female (Quick Disconnect)	1259-0086-P1
	Hose Fitting, Male (Quick Disconnect)	1259-0087-P1
	Tubing, Length (2") Translucent	1342-0001-01-P1
	Gender Bender Adaptor (Allows SensaTemp Handpieces to be used on IntelliHeat power sources)	6993-0278-P1
	SX Tool Stand	6019-0082-P1
	Tip Tool	1100-0206-P1

*Endura tips can only be used for SX-70, SX-80 and SX-100/SX-90 with date code prior to 10/06.

SX-100 / SX-90 Sodr-X-Tractor

SX-100 / SX-90 Replacement Parts



	Item	Description	Part Number
		SX-100/SX-90 SensaTemp Handpiece	6010-0106-P1
		SX-100/SX-90 SensaTemp Kit (includes Handpiece, Tip & Tool Stand & Tip Tool)	6993-0213-P1
		SX-100/SX-90 Handpiece IntelliHeat	6010-0149-P1
		SX-100/SX-90 Handpiece Kit IntelliHeat	6993-0266-P1
		SX-100/SX-90 Tip & Tool Stand	6019-0060-P1
	1	FLUX/SODR TRAP (Package of 10)	1309-0054-P10
	1	FLUX/SODR TRAP (Package of 100)	1309-0054-P100
	2	SX-100/SX-90 Heater Assembly (Black Connector also fits SX-80)	6010-0107-P1
		SX-100/SX-90 Heater Assembly (Blue Connector only fits SX-100/SX-90's that come with Blue Connector heater)	6010-0163 -P1
	3	Handle Assembly (Includes the Switch, PCB, and Cord Assembly) SensaTemp	6010-0115-P1
	3	Handle Assembly (Includes the Switch, PCB, and Cord Assembly IntelliHeat)	6010-0162-P1
	4	Door Assembly	1119-0141-P1
5	Front Seal	1213-0087-P1	
	Front Seal	1213-0087-P10	
	Front Seal	1213-0087-P25	
6	Rear Seal	1213-0086-P1	
7	Plunger Shaft	1261-0154-P1	
8	Plunger Lock	1500-0063-P1	
9	"C" Clips (3 pieces)	1348-0387-P3	
10	Spring "Long Side"	1221-0136-P1	
11	Spring "Short Side"	1221-0137-P1	
12	Door Lock	1119-0142-P1	
	VisiFilter, Fixed	1309-0020-P1	
	VisiFilter, Replacement	1309-0028-P1	
	Replaceable VisiFilter Elements		
	Package of 10	1309-0027-P10	
	Package of 25	1309-0027-P25	
	Package of 50	1309-0027-P50	
	Tubing, 1370mm (54") Length, black	1342-0015-08-P1	
	Hose Clamps	1321-0085-01-P6	
	Hose Fitting, Female (Quick Disconnect)	1259-0086-P1	
	Hose Fitting, Male (Quick Disconnect)	1259-0087-P1	
	Tubing, Silicon, 2" Length	1342-0001-01-P1	
	Heater Set Screws	1348-0547-P10	
	Button	1500-0064-P1	
	Heat Sleeve Kit	6993-0229-P1	
	Heat Sleeve Clip	1211-0064-P1	
	Glass Flux Solder Trap Kit	6000-0212-P1	
	Z-Baffle (for Glass Chamber)	4010-0115-P2	
	Glass Chamber	1265-0011-P1	
	Sodr-X-Tractor Filters for Glass Chamber		
	Package of 10	1309-0018-P10	
	Package of 50	1309-0018-P50	
	SX Tool Stand	6019-0082-P1	
	Replacement Sponge for New Tool Stand	4021-0013-P3	
	Replacement Brass Tip Cleaner for New Tool Stand	1129-0018-P1	
	Heater MTG Screws	1405-0534-P3	
	Desoldering Tip Cleaning Tool	6993-0200-P1	
	Flux Trap Cubby Kit	6993-0230-P1	
	Tip Tool	1100-0206-P1	

SX-100 / SX-90 Desoldering Tips



Tips Selection:

One of the most important aspects for successful solder removal is the selection of the proper size tip. There are several points to keep in mind.

- 1 The Inside Diameter (I.D.) of the tip must be large enough to fit over the lead, while providing sufficient room so that air and solder can be drawn through the tip.
- 2 The Outside Diameter (O.D.) of the tip must be slightly smaller than the diameter of the pad to prevent tip contact to the board laminate and minimize the possibility of damage.

For the SX-100 / SX-90 - 3/16" Shank Diameter

Tips	Description	Diameter	SX-100/SX-90 P/N*	Endura P/N**	
	Thermo-Drive	0.76mm (0.030") I.D. X 2.03mm (0.080") O.D.	1121-0930-P5	1121-0625-P5	
	Thermo-Drive	1.02mm (0.040") I.D. X 2.29mm (0.090") O.D.	1121-0931-P5	1121-0624-P5	
	Thermo-Drive	1.52mm (0.060") I.D. X 3.05mm (0.120") O.D.	1121-0932-P5	1121-0626-P5	
	Thermo-Drive	2.29mm (0.090") I.D. X 5.1mm (0.200") O.D.	1121-0933-P5	1121-0627-P5	
	Thermo-Drive	4mm (0.16") I.D. X 5.1mm (0.200") O.D.	1121-0951-P5		
 	Thermo-Drive, Flathead	1.27mm (0.050") x 2.28mm (0.090") I.D. x 2.79mm (0.110") x 4.82mm (0.190") O.D.	1121-0934-P5	1121-0821-P5	
	Extended Reach Thermo-Drive	0.78mm (0.030") I.D. X 2.29mm (0.090") O.D.	1121-0935-P5	1121-0628-P5	
	Extended Reach Thermo-Drive	1.02mm (0.040") I.D. X 2.54mm (0.10") O.D.	1121-0936-P5	1121-0629-P5	
	Extended Reach Thermo-Drive	1.52mm (0.060") I.D. X 3.05mm (0.120") O.D.	1121-0937-P5	1121-0630-P5	
	ThermoMax	0.76mm (0.030") I.D. X 1.91mm (0.075") O.D.	1121-0938-P5	1121-0882-P5	
	ThermoMax	1.02mm (0.040") I.D. X 2.20mm (0.085") O.D.	1121-0939-P5	1121-0883-P5	
	ThermoMax	1.52mm (0.060") I.D. X 2.69mm (0.106") O.D.	1121-0940-P5	1121-0884-P5	
		Precision	0.50mm (0.020") I.D. X 1.79mm (0.070") O.D.	1121-0941-P5	1121-0680-P5
		Precision	0.76mm (0.030") I.D. X 2.03mm (0.080") O.D.	1121-0942-P5	1121-0678-P5
Precision		1.02mm (0.040") I.D. X 2.29mm (0.090") O.D.	1121-0943-P5	1121-0679-P5	
Precision		1.52mm (0.060") I.D. X 2.79mm (0.110") O.D.	1121-0944-P5	1121-0690-P5	
Precision		0.635mm (0.025") I.D X 1.39mm (0.055") O.D.	1121-0949-P5		
Precision		0.635mm (0.025") I.D X 1.14mm (0.045") O.D.	1121-0950-P5		
 	Flo-D-Sodr	1.52mm (0.060") I.D. X 4.78mm (0.188") O.D.	1121-0945-P5	1121-0631-P5	
	Flo-D-Sodr, Precision	0.50mm (0.020") I.D. X 1.78mm (0.070") O.D.	1121-0946-P5	1121-0681-P5	
	Flo-D-Sodr, Precision	0.76mm (0.030") I.D. X 2.03mm (0.080") O.D.	1121-0947-P5	1121-0682-P5	
	Flo-D-Sodr, Precision	1.02mm (0.040") I.D. X 2.29mm (0.090") O.D.	1121-0948-P5	1121-0683-P5	

*SX-100//SX-90 tips can only be used with SX-100/SX-90 heaters date code 10-06 or later. **Endura tips should only be used in the SX-70/80.

SX-100 Surface Mount Removal Pik-Tips

Tips	Description	Tip Size A X B	Part Number
	TSOP-32	8.1mm (0.320") x 12.7mm (0.500")	1121-0566-P1
	TSOP-28	8.1mm (0.320") x 19.3mm (0.760")	1121-0567-P1
	TSOP-40	9.9mm (0.390") x 19.3mm (0.760")	1121-0568-P1
	TSOP-56	14.2mm (0.560") x 19.3 mm (0.760")	1121-0569-P1
	TQFP-28	8.2mm (0.322") x 8.23mm (0.3220")	1121-0571-P1
	TQFP-32	8.7mm (0.344") x 8.7mm (0.344")	1121-0572-P1
	TQFP-52	12mm (0.472") x 12mm (0.472")	1121-0573-P1
	TQFP-40	12mm (0.472") x 12mm (0.472")	1121-0574-P1
	TQFP-80	13.2mm (0.520") x 13.2mm (0.520")	1121-0575-P1
	TQFP-80/100	15.3mm (0.604") x 15.3mm (0.604")	1121-0576-P1
	PQFP-80/100	16.8mm (0.660") x 22.9mm (0.900")	1121-0603-P1
	TQFP-144	21.6mm (0.850") x 21.6mm (0.850")	1121-0604-P1
	TQFP-112	22.1mm (0.870") x 22.3mm (0.870")	1121-0605-P1

PS-90 Handpiece

Optional Items and Replacement Parts

PS-90 Universal Soldering Iron



Description	Part Number
PS-90 Handpiece IntelliHeat	6010-0150-P1
PS-90 Handpiece Kit IntelliHeat	6993-0267-P1
PS-90 SensaTemp Soldering Iron Kit	6993-0199-P1
PS-90 SensaTemp Soldering Iron	6010-0131-P1
PS-90N SensaTemp Kit	6993-0275-P1
PS-90N SensaTemp Handpiece	6010-0116-P1
PS-90N IntelliHeat Handpiece	6010-0157-P1
PS-90N IntelliHeat Handpiece Kit	6993-0274-P1
PS-90 Tip & Tool Stand	6019-0081-P1
Tip Tool	1100-0206-P1
Replacement Parts	
PS-90 Heater Assembly (fits PS-80)	6010-0095-P1
PS-90N Heater Assembly	6010-0117-P1
PS-90 Heater Retaining Nut	1410-0122-P5
PS-90 Flared Ring	1500-0074-P5
PS-90 Flat Ring	1500-0076-P5
PS-90 Handpiece (IntelliHeat Version) with Green Comfort Grip	6010-0159-P1
Replacement Sponge for New Tool Stand	4021-0013-P3
Replacement Brass Tip Cleaner for New Tool Stand	1129-0018-P1
PS-90 SensaTemp Kit	6993-0199-P1

Surface Mount Removal Tips for PS-90

Tip (and Application)	Description	Tip Size A x B	Part Number
	SOIC - 8 (JEDEC)	5.05mm x 5.08mm (0.199" x 0.200")	1121-0390-P1
	SOIC - 14 (JEDEC)	5.05mm x 8.99mm (0.199" x 0.354")	1121-0391-P1
	SOIC - 16 (JEDEC)	5.05mm x 10.2mm (0.199" x 0.404")	1121-0392-P1
	SOIC - 28 (EIAJ)	10.6mm x 17.5mm (0.416" x 0.690")	1121-0442-P1
	Flat Blade Tip	A = 7.6mm (0.3")	1121-0512-P1
		A = 10.2mm (0.4")	1121-0514-P1
		A = 12.7mm (0.5")	1121-0473-P1
		A = 17.8mm (0.7")	1121-0416-P1
		A = 20.3mm (0.8")	1121-0497-P1
		A = 25.4mm (1.0")	1121-0448-P1
	Chip Component	3.56mm x 2.03mm (0.14" x 0.08")	1121-0303-P1
	SOT-23	1.6mm x 3.05mm (0.63" x 0.12")	1121-0304-P1
	TSOP-32	19.333mm x 8.1mm (0.76" x 0.32")	1121-0403-P1

PS-90 Single Point Soldering Tips



Tip	Description	Size	Part Number
	Flat Blade	10.2mm (0.040")	1121-0305-P5
	1/16" Chisel	1.60mm (0.063")	1121-0335-P5
	1/32" Conical	0.80mm (0.031")	1121-0336-P5
	1/8" Chisel	3.20mm (0.125")	1121-0337-P5
	1/16" Chisel (MicroFine)	1.60mm (0.063")	1121-0349-P5
	1/64" Conical	0.40mm (0.016")	1121-0357-P5
	3/16" Chisel	4.80mm (0.188")	1121-0358-P5
	1/32" Chisel	0.80mm (0.031")	1121-0359-P5
	3/32" Chisel	2.40mm (0.094")	1121-0360-P5
	1/32" Bent Chisel	0.80mm (0.031")	1121-0361-P5
	1/64" Bent Conical	0.40mm (0.016")	1121-0363-P5
	Flat Blade	6.60mm (0.25")	1121-0402-P1
	Single-Sided Chisel	3.30mm (0.13")	1121-0406-P5
	1/16" Chisel (High Capacity)	1.60mm (0.063")	1121-0414-P5
	Mini-Wave	3.30mm (0.13")	1121-0490-P5
	1/16" Chisel, Long Reach	1.60mm (0.063")	1121-0499-P5
	1/16" Bent Chisel, Long Reach	1.60mm (0.063")	1121-0500-P5
	1/16" Chisel, Thermo-Drive	1.60mm (0.063")	1121-0510-P5
	1/8" Chisel, Thermo-Drive	3.20mm (0.125")	1121-0518-P5
	1/32" Conical, Extended Reach	0.80mm (0.031")	1121-0527-P5
	1/64" Conical, Long Reach	0.40mm (0.016")	1121-0528-P5
	3/32" Chisel, Extended Reach	2.40mm (0.094")	1121-0529-P5
	1/16" Chisel, Extended Reach	1.60mm (0.063")	1121-0533-P5
	Single-Sided Chisel, Fine Pitch	1.50mm (0.06")	1121-0563-P5
	Angled Mini-Wave, Fine Pitch	1.80mm (0.07")	1121-0564-P5
	Angled Mini-Wave	2.40mm (0.09")	1121-0610-P5
	1/64" Sharp Bent Conical	0.40mm (0.016")	1121-0830-P5

TT-65 ThermoTweez Handpiece



TT-65 ThermoTweez/Replacement Parts

Description	Part Number
TT-65 Handpiece SensaTemp	7025-0001-P1
TT-65 Handpiece SensaTemp Kit	6993-0207-P1
TT-65 Handpiece IntelliHeat	6010-0151-P1
TT-65 Handpiece IntelliHeat Kit	6993-0268-P1
Heater Assembly, with Sensor	6010-0082-P1
Heater Assembly, without Sensor	6010-0083-P1
Cushion Grip Kit	6993-0184-P1
Pads for Cushion Grips	1317-0029-P2
Plastic Grip (2 ea.)	1119-0123-P1
Replacement Hinge Kit	6993-0156-P1
TT-65 Tip & Tool Stand	6019-0083-P1
Tip Tool	1100-0206-P1

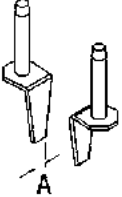

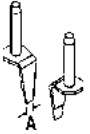
TT-65 ThermoTweez Handpiece Tips

Tip	Description	Tip Size	Part Number
	Narrow-body connectors, and SOIC Components	A=7.6mm (0.3")	1121-0512-P1
		A=10.2mm (0.4")	1121-0514-P1
	SOIC, SOJ, SIMMs Component	A=12.7mm (0.5")	1121-0473-P1
		A=17.8mm (0.7")	1121-0416-P1
		A=20.3mm (0.8")	1121-0497-P1
		A=25.4mm (1.0")	1121-0448-P1

TT-65 ThermoTweez Handpiece Tips



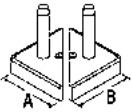


SMT Removal Tips

Tip	Description	Tip Size	Part Number
 <p>Standard Wall: Thickness = 1.3mm (0.050")</p> <p>Application Chip Component </p>	Chip Component	A=0.76mm (0.03")	1121-0398-P1
	Chip Component	A=2.0mm (0.08")	1121-0313-P1
	Chip Component	A=4.1mm (0.16")	1121-0399-P1
	Chip Component Small SOIC	A=6.4mm (0.25")	1121-0401-P1
 <p>Thin-Wall: Thickness = 0.43mm (0.017")</p>	Thin-Walled Chip Component	A=0.76mm (0.03")	1121-0520-P1
	Thin-Walled Chip Component	A=2.0mm (0.08")	1121-0521-P1

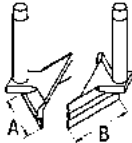

TT-65 ThermoTweez Handpiece Tips



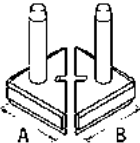

PLCC/PQFP Removal Tips

Tip	Description	Tip Size A x B	Part Number
 <p>Standard Wall: Thickness = 1.3mm (0.050")</p> <p>Application PLCC</p>  <p>The ThermoTweez can also remove leadless components (LCCCs) if sized correctly.</p> <p>PQFP</p> 	PLCC-20	6.86mm x 6.86mm (0.27" X 0.27")	1121-0316-P1
	PLCC-28	9.4mm x 9.4mm (0.37" x 0.37")	1121-0317-P1
	PLCC-32	12.2mm x 9.65mm (0.48" x 0.38")	1121-0352-P1
	PLCC-44, PQFP-84	14.5mm x 14.5mm (0.57" x 0.57")	1121-0318-P1
	PLCC-52, PQFP-100	17.0mm x 17.0mm (0.67" x 0.67")	1121-0319-P1
	PLCC-68, PQFP-132	21.9mm x 21.9mm (0.86" x 0.86")	1121-0320-P1
	PLCC-84, PQFP-160	26.9mm x 26.9mm (1.06" x 1.06")	1121-0321-P1

Thin-Walled Surface Mount Removal Tips

Tip	Description	Tip Size A x B	Part Number
 <p>Application</p>  <p>LCCC</p>	Removal Tips for Motorola Pager LCCC Packages and small, Fine-Pitch PQFPs	6.6mm x 6.6mm (0.26" x 0.26")	1121-0417-P1
	Wall thickness = 0.025" (standard height = 0.275")	9.16mm x 8.89mm (0.40" x 0.35")	1121-0425-P1

LCCC Removal Tips

Tip	Description	Tip Size A x B	Part Number
 <p>Application</p>  <p>LCCC</p>	Removal Tips for LCCC Packages and small, Fine-Pitch PQFPs	8.89mm x 6.35mm (0.35" x 0.25")	1121-0452-P1
	Wall thickness = 0.635mm (0.025") (reduced height = 0.2" for high mass boards)	21.6mm x 21.6mm (0.85" x 0.85")	1121-0455-P1

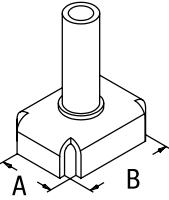
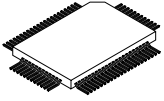
TP-65 ThermoPik Handpiece & Tips



TP-65 ThermoPik/Replacement Parts

Description	Part Number
TP-65 ThermoPik Handpiece SensaTemp	7024-0001-P1
Heater Assembly	6010-0081-P1
Replacement Handle Kit	6993-0140-P1
Vacuum Tube Kit	6993-0189-P1
6 to 8 Pin Adaptor (Allows SensaTemp (black connector) Handpieces to be used on IntelliHeat (blue connector) power sources)	6993-0278-P1
Switch & Cord Assembly	4010-0098-P1
SX Tool Stand	6019-0082-P1
TP-65 Thermo-Pik Kit with Tip & Tool Stand	6993-0205-P1
Tip Tool	1100-0206-P1

TP-65 ThermoPik Tips

Tip	Description	Tip Size A x B	Part Number
 <p>Application Flat Pack</p>  <p>Note: The TP-65 ThermoPik requires an SX Tip & Tool Stand.</p>	FlatPack Tip	16.8mm x 22.9mm (0.66" x 0.90")	1121-0322-002-P1
	PQFP-68 Tip (bumper pack)	15.7mm x 15.7mm (0.62" x 0.62")	1121-0323-P1
	PQFP-64/80 (non-bumper)	15.7mm x 15.7mm (0.62" x 0.62")	1121-0484-P1
	PQFP-84 Tip	18.3mm x 18.3mm (0.72" x 0.72")	1121-0324-P1
	PQFP-100 Tip	20.8mm x 20.8mm (0.82" x 0.82")	1121-0325-P1
	PQFP-132 Tip	25.9mm x 25.9mm (1.02" x 1.02")	1121-0326-P1
	PQFP-144	29.2mm x 29.2mm (1.15" x 1.15")	1121-0456-P1
	PQFP-208	30.0mm x 30.0mm (1.18" x 1.18")	1121-0544-P1
	PQFP-160 Tip	31.0mm x 31.0mm (1.22" x 1.22")	1121-0351-P1
	PQFP-196	36.3mm x 36.3mm (1.43" x 1.43")	1121-0483-P1

TJ-70/85 ThermoJet Handpieces & Tips



TJ-70 ThermoJet/Replacement Parts & Handpiece Tips

Description	Part Number
TJ-70 ThermoJet SensaTemp Handpiece	7023-0002-P1
Heater Assembly	6010-0084-P1
Replacement Handle Kit	6993-0140-P1
Vacuum Tube Kit	6993-0189-P1
6 to 8 Pin Adaptor (Allows SensaTemp (black connector) Handpieces to be used on IntelliHeat (blue connector) power sources)	6993-0278-P1
Switch & Cord Assembly, SensaTemp	6993-0134-P1
Pressure Chamber	1344-0060-P1
SX Tool Stand	6019-0082-P1
TJ 70 SensaTemp Kit	6993-0206-P1
TJ 70 IntelliHeat	7023-0003-P1
TJ 70 IntelliHeat Kit	6993-0292-P1
Tip Tool	1100-0206-P1

Tip	Description	Tip Size A x B	Part Number
	Small, Straight, Single Jet Tip	0.060" I.D.	1121-0366-P1
	Small, Curved, Single Jet Tip	0.060" I.D.	1121-0338-P1
	SOIC Tip (dual-jet)	A = 4.32mm (0.17")	1121-0330-P1
	Flat End Tip	A = 7.11mm (0.28") B = 1.88mm (0.074") A = 6.10mm (0.24") B = 1.88mm (0.074")	1121-0365-P1 1121-0371-P1

TJ-85 ThermoJet/Replacement Parts & Handpiece Tips

Description	Part Number
Heater Retaining Nut	1410-0122-P5
Flared Ring	1500-0074-P5
Heater Assembly	6010-0143-P1
Foot Pedal	6008-0115-P1
TJ-85 Handpiece IntelliHeat	6010-0153-P1
TJ-85 Kit IntelliHeat	6993-0270-P1
TJ-85 Tip & Tool Stand	6019-0081-P1
TJ-85 Handpiece SensaTemp	6010-0142-P1
TJ-85 Handpiece Kit SensaTemp	6993-0247-P1

Tip	Description	Tip Size A x B	Part Number
	Straight Nozzle	0.06" Inner Diameter	1259-0129-P1
	Curved Nozzle	0.06" Inner Diameter, Bent 60 Degrees	1259-0130-P1
	Flat Nozzle	0.24" X 0.074" Inner Flow Dimensions	1259-0131-P1

PACE Tip Kits

Many customers would like to try a variety of different tip shapes and sizes. PACE Tip Kits provide a variety of popular tip shapes and sizes.

PS-90 Soldering Iron Tip Kit

Description	Part Number
Chisel Tip Kit (Includes one of each of the following tips:)	6993-0210
1/8" Chisel	1121-0337
3/16" Chisel	1121-0358
3/32" Chisel	1121-0360
1/32" Bent Chisel	1121-0361
1/16" Chisel	1121-0414
1/16" Thermo-Drive Chisel	1121-0510
1/8" Thermo-Drive Chisel	1121-0518
Extended Reach Single Sided Chisel	1121-0532

Desoldering Tip Kit

Description	Part Number
SX-100/SX-90 Tip Kit (Includes one of each of the following tips:)	6993-0288-P1
Thermo-Drive (0.030"ID)	1121-0930
Thermo-Drive (0.040"ID)	1121-0931
Thermo-Drive (0.060"ID)	1121-0932
Thermo-Drive (0.090"ID)	1121-0933
Precision (0.020"ID)	1121-0941
Precision (0.030"ID)	1121-0942
Precision (0.040"ID)	1121-0943
Flo-D-Sodr (0.060"ID)	1121-0945
Endura Tip Kit, SX-80/SX-100/SX-90 (Includes one of each of the following tips:)	6993-0212
Thermo-Drive (0.040"ID)	1121-0624
Thermo-Drive (0.030"ID)	1121-0625
Thermo-Drive (0.060"ID)	1121-0626
Thermo-Drive (0.090"ID)	1121-0627
Flo-D-Sodr (0.060"ID)	1121-0631
Precision (0.030"ID)	1121-0678
Precision (0.040"ID)	1121-0679
Precision (0.020"ID)	1121-0680


TD-100 Thermo-Drive Soldering Iron

Optional Items and Replacement Parts



TD-100 Replacement Parts

Description	Part Number
TD-100 Handpiece (For Heatwise/Tempwise Systems Only, Red Connector)	6010-0132-P1
TD-100 Tip & Tool Stand Kit (Includes TD-100 and Stand, For Heatwise/Tempwise Systems Only)	6993-0242-P1
TD-100 Handpiece IntelliHeat	6010-0147-P1
TD-100 Handpiece Kit IntelliHeat	6993-0263-P1
TD-100 with Pace Logo	6010-0165-P1
TD-100 with Logo Kit	6993-0295-P1
TD-100 with Logo Kit with Instant Setback Cubby	6993-0296-P1
TD-100 with Kit with Instant Setback Cubby	6993-0281-P1
Replacement O-rings	1213-0090-P5
Replacement Cord Assembly for TD-100 IntelliHeat Handpiece	3008-0296-P1
HeatWise/TempWise Replacement Cord Assembly for TD-100 Handpiece (Red Connector)	3008-0131-P1
IntelliHeat Cleaning Sponge, Tip & Tool Stands (SX, PS, SP)	4021-0008-P3
Soft Grip & Tip & Tool Stand Kit (For New Style Cubby)	6993-0291-P1
Replacement Soft Grips	1119-0161-P5
Replacement Soft Grips, Lead Free	1119-0176-P5
TD-100 Tip & Tool Stand	6019-0079-P1
Replacement Sponge for New Tool Stand	4021-0013-P3
Replacement Brass Tip Cleaner for New Tool Stand	1129-0018-P1
TD-100N Shroud Skirt	1259-0151-P1
Instant Setback Tip & Tool Stand for TD-100 with Standard Insert	6019-0084-P1

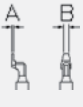
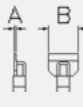
Description	Part Number
 <p>Tip Case – Holds 10 Tips (Tips not included)</p>	1310-0034-P1

WJS 100 Compatible Tips

TD-100 Soldering Tips for the WJS 100

Tip	Description	Tip Size - L	Tip Size - D	Part Number
	1/32" Conical Sharp Extended	12.75mm (0.502")	0.8128mm (0.032")	1128-0001-P1
	1/64" Conical Sharp	9.144mm (0.36")	0.4064mm (0.016")	1128-0002-P1
	1/64" Conical Sharp Bent 30 Degrees	9.144mm (0.36")	0.4064mm (0.016")	1128-0003-P1
	3/64" 30 Degree Chisel	9.906mm (0.39")	1.1938mm (0.047")	1128-0008-P1
	13/64" Extra Large Chisel	7.62mm (0.3")	5.1562mm (0.203")	1128-0010-P1
	1/32" 30 Degree Chisel	9.017mm (0.355")	0.8128mm (0.032")	1128-0012-P1
	3/32" 30 Degree Chisel	9.017mm (0.355")	2.3876mm (0.094")	1128-0013-P1
	1/16" 30 Degree Chisel	9.017mm (0.355")	1.5748mm (0.062")	1128-0019-P1
	MiniWave®	8.255mm (0.325")	2.794mm (0.11")	1128-0032-P1
	0.25" Knife Blade	12.446mm (0.49")	6.35mm (0.25")	1128-0037-P1
	1/8" 30 Degree Chisel	9mm (0.355")	3.2mm (0.125")	1128-0051-P1
	0.063" Chisel Tip	9.017mm (0.355")	1.6mm (0.063")	1128-0052-P1
	0.125" Chisel Tip	9.017mm (0.355")	3.175mm (0.125")	1128-0053-P1
	0.188" Chisel Tip	9.017mm (0.355")	4.775mm (0.188")	1128-0054-P1
	0.250" Chisel Tip	9.017mm (0.355")	6.35mm (0.25")	1128-0055-P1
	0.281" Chisel Tip	9.017mm (0.355")	7.137mm (0.281")	1128-0056-P1
	0.313" Chisel Tip	9.017mm (0.355")	7.95mm (0.313")	1128-0057-P1

MT-100 MiniTweez Soldering Tips for the WJS 100

Tip	Description	Tip Size - L	Tip Size - D	Part Number
	Chip (fig.A)	0.2mm (0.008")	0.2mm (0.008")	1128-1001-P1
	Chip, SOT (fig.B)	0.7mm (0.03")	0.5mm (0.02")	1128-1002-P1
	Chip, SOT (fig.B)	0.7mm (0.03")	1mm (0.04")	1128-1003-P1
	Chip, SOT (fig.B)	0.7mm (0.03")	2mm (0.08")	1128-1004-P1
	SOIC, SOT, TSOPS (fig.C)	0.7 mm (0.03")	6mm (0.24")	1128-1005-P1
	SOIC, SOT, TSOPS (fig.C)	0.7mm (0.03")	8mm (0.31")	1128-1006-P1
	SOIC, SOT, TSOPS (fig.C)	0.7mm (0.03")	10mm (0.39")	1128-1007-P1
	SOIC, SOT, TSOPS (fig.C)	0.7mm (0.03")	13mm (0.51")	1128-1008-P1
	SOIC, SOT, TSOPS (fig.C)	0.7mm (0.03")	18mm (0.74")	1128-1009-P1
	SOIC, SOT, TSOPS (fig.C)	0.7mm (0.03")	28mm (1.09")	1128-1010-P1
	Extended Chip, SOT (fig.B)	0.7mm (0.03")	1mm (0.04")	1128-1011-P1








TD-100 Standard Soldering Tips

TD-100 Standard Soldering Tips

Tip	Description	Tip Size - L	Tip Size - D	Part Number
	1/32" Conical Sharp Extended	13.4mm (0.530")	0.80mm (0.031")	1124-0001-P1
	1/64" Conical Sharp	7.8mm (0.310")	0.40mm (0.016")	1124-0002-P1
	1/64" Conical Sharp Bent 30 Degrees	7.8mm (0.310")	0.40mm (0.016")	1124-0003-P1
	1/64" Conical Sharp Extended	13.5mm (0.535")	0.40mm (0.016")	1124-0004-P1
	13/64" Conical Sharp Extended	4.7mm (0.188")	0.80mm (0.031")	1124-0005-P1
	3/128" Conical	4.6mm (0.184")	0.58mm (0.023")	1124-0006-P1
	1/16" 90 Degree Chisel	10.9mm (0.430")	2.03mm (0.080")	1124-0007-P1
	3/64" 30 Degree Chisel	9.7mm (0.380")	1.20mm (0.047")	1124-0008-P1
	3/64" 30 Degree Bevel	3.6mm (0.140")	1.20mm (0.047")	1124-0009-P1
	13/64" Extra Large Chisel	7.62mm (0.300")	5.15mm (0.203")	1124-0010-P1
	1/64" 60 Degree Bevel	14.7mm (0.580")	0.40mm (0.016")	1124-0011-P1
	1/32" 30 Degree Chisel	9.1mm (0.360")	0.80mm (0.031")	1124-0012-P1
	3/32" 30 Degree Chisel	9.9mm (0.390")	2.40mm (0.094")	1124-0013-P1
	5/64" 60 Degree Chisel	4.7mm (0.185")	2.00mm (0.078")	1124-0014-P1
	1/64" Conical, Sharp, Bent 30 Degrees, Extended	15.1mm (0.595")	0.40mm (0.016")	1124-0015-P1
	3/64" Chisel Bent 30 Degrees	11.7mm (0.460")	1.20mm (0.047")	1124-0016-P1
	1/16" 60 Degree Chisel	15.8mm (0.620")	1.60mm (0.063")	1124-0017-P1
	1/32" Conical Sharp Extended	16.7mm (0.660")	0.80mm (0.031")	1124-0018-P1
	1/16" 30 Degree Chisel	9.9mm (0.390")	1.60mm (0.063")	1124-0019-P1
	1/8" 90 Degree Chisel	4.8mm (0.190")	3.20mm (0.125")	1124-0020-P1
	3/128" Conical Sharp Bent 30 Degrees	14.4mm (0.570")	0.58mm (0.023")	1124-0021-P1
	1/16" Conical Sharp	9.9mm (0.390")	1.60mm (0.063")	1124-0022-P1

TD-100 Standard Soldering Tips

TD-100 Soldering Tips

Tip	Description	Tip Size - L	Tip Size - D	Part Number
	1/8" 90 Degree Chisel Extended	8.6mm (0.340")	3.20mm (0.125")	1124-0023-P1
	1/16" 30 Degree Bevel	9.9mm (0.390")	1.60mm (0.063")	1124-0024-P1
	1/16" Conical Sharp Extended	12.1mm (0.478")	1.60mm (0.063")	1124-0025-P1
	1/16" Chisel Bent 30 Degrees	9.7mm (0.385")	1.60mm (0.063")	1124-0026-P1
	3/128" Conical Sharp	15.2mm (0.600")	0.58mm (0.023")	1124-0027-P1
	3/64" Chisel, Bent 30 Degrees, Extended	15.2mm (0.600")	0.91mm (0.36")	1124-0028-P1
	1/32" 30 Degree Bevel	9.1mm (0.360")	1.91mm (0.75")	1124-0029-P1
	1/32" Conical Sharp	9.9mm (0.390")	0.80mm (0.031")	1124-0030-P1
	Heat Staking	N/A	4.04mm (0.159")	1124-0031-P1
	MiniWave	N/A	3.05mm (0.120")	1124-0032-P1
	Angled MiniWave	N/A	3.05mm (0.120")	1124-0033-P1
	Single Sided Chisel	N/A	3.05mm (0.120")	1124-0034-P1
	Angled MiniWave	N/A	2.11mm (0.083")	1124-0035-P1
	1/128" Conical	N/A	0.20mm (0.008")	1124-0036-P1
	1/4 Flat Blade	N/A	4.57mm (0.180")	1124-0037-P1
	Single Sided Chisel, Fine Pitch	N/A	1.5mm (0.06")	1124-0038-P1
	Angled MiniWave, Fine Pitch	N/A	1.6mm (0.064")	1124-0039-P1
	MicroFine Single Sided Chisel	N/A	0.9mm (0.035")	1124-0040-P1
	MicroFine Single Sided Chisel	N/A	1.1mm (0.045")	1124-0041-P1
	MicroFine Conical	N/A	0.25mm (0.01")	1124-0042-P1
	MicroFine Bent Conical	N/A	0.76mm (0.03")	1124-0043-P1
	MicroFine Bent Conical	N/A	0.5mm (0.02")	1124-0044-P1
	Angled Micro-Wave	N/A	1.1mm (0.045")	1124-0045-P1
	Micro-Wave	N/A	1.1mm (0.045")	1124-0046-P1
	Angled Chisel	8.4mm (0.33")	1.33mm (0.051")	1124-0047-P1
	Single Sided Chisel	17.00mm (0.693")	4.55mm (0.178")	1124-0048-P1
	MiniWave, Special Tip			1124-0049-P1
	1/128" Conical, Special HA Tip			1124-0050-P1
	0.157" Chisel Tip	3.9mm (0.157")	0.5mm (0.02")	1124-0051-P1
	1/16" Chisel Tip with K type Thermo-couple welded to tip			7021-0008-P1





















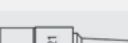
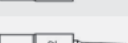

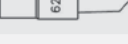
TD-100 Surface Mount Removal Tips












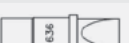
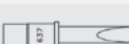



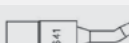
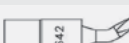






Tip Specifications

Tip - Chip/SOT Removal	Component Type	Size - A	Size - B	Part Number
	Chip 0402 Angle (fig. A)	2.2mm (.085")	-	1124-0518-P1
	Chip 0201 Angle (fig. A)	0.5mm (.02")	-	1124-0533-P1
	Chip 1808 (fig. B)	5.0mm (.195")	-	1124-0520-P1
	Chip 0402 (fig. C)	1.0mm (.40")	-	1124-0521-P1
	Chip 0201 (fig. C)	0.5mm (0.2")	-	1124-0534-P1
	SOT 23 (fig. D)	1.8mm (.070")	-	1124-0522-P1
	SOT 89 (fig. E)	2.8mm (.110")	-	1124-0523-P1
	Chip 1206 (fig. F)	3.6mm (.142")	-	1124-0524-P1
	Chip 0805 (fig. G)	2.4mm (.095")	-	1124-0525-P1
Tip - SOIC/SOP/TSOP Removal	Component Type	Size - A	Size - B	Part Number
	SOIC 14/16	5.2mm (.205")	10.5mm (.415")	1124-0504-P1
	SOIC 20	9.6mm (.377")	13.6mm (.535")	1124-0505-P1
	SOP 28	10.8mm (.426")	18.6mm (.734")	1124-0506-P1
	SOP 40	11.9mm (.467")	25.7mm (1.011")	1124-0507-P1
	SOP 44	13.1mm (.516")	28.4mm (1.120")	1124-0508-P1
	TSOP 56	18.8mm (.739")	14.1mm (.557")	1124-0509-P1
	TSOP 28	12.0mm (.471")	8.5mm (.333")	1124-0510-P1
	SOIC 8	5.1mm (.202")	4.65mm (.183")	1124-0519-P1
	TSOP 40	18.8mm (.740")	10.4mm (.410")	1124-0526-P1
Tip - SOIC/SOP/TSOP Removal	Component Type	Size - A	Size - B	Part Number
	PLCC 28 Socket	9.3mm (.365")	9.3mm (.365")	1124-0511-P1
	PLCC 32	14.2mm (.561")	11.7mm (.459")	1124-0512-P1
	PLCC 44	16.8mm (.622")	16.8mm (.622")	1124-0513-P1
	QFP 144	20.6mm (.810")	20.6mm (.810")	1124-0514-P1
	PLCC 28	11.8mm (.465")	11.8mm (.465")	1124-0515-P1
	QFP 100/128	22.0mm (.865")	16.0mm (.628")	1124-0516-P1
	PLCC 18	7.6mm (.300")	12.8mm (.505")	1124-0528-P1
	TQFP 80	12.5mm (.491")	12.5mm (.491")	1124-0529-P1
	PLCC 52	19.4mm (.762")	19.4mm (.762")	1124-0530-P1
	QFP 100	26.6mm (1.048")	26.6mm (1.048")	1124-0531-P1
	VQFP 100	15.5mm (.610")	15.5mm (.610")	1124-0535-P1
	TQFP 64	15.3mm (.602")	15.3mm (.602")	1124-0537-P1
	TQFP 64	11mm (.433")	11mm (.433")	1124-0539-P1
Tip - SOIC/SOP/TSOP Removal	Component Type	Size - A	Size - B	Part Number
	Blade	6mm (.236")	-	1124-0536-P1
	Blade	10.8mm (.425")	-	1124-0501-P1
	Blade	16.0mm (.630")	-	1124-0502-P1
	Blade	21.2mm (.835")	-	1124-0503-P1
	Blade	25.0mm (.984")	-	1124-0532-P1

TD-100 Diamond Series Extended Life Soldering Tips

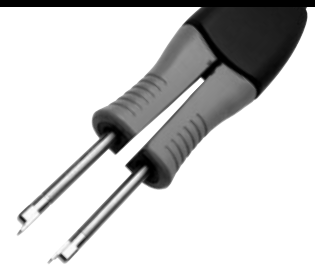
Tip Specifications

Profile	Description	Part Number
	.016 Conical	1126-0601-P1
	.039 Conical	1126-0602-P1
	.055 Conical, Blunt	1126-0603-P1
	.031 Conical, Blunt	1126-0604-P1
	.016 Conical, Long	1126-0605-P1
	.016 Conical	1126-0606-P1
	.016 Conical, Extended	1126-0607-P1
	.024 Conical	1126-0608-P1
	.039 Conical	1126-0609-P1
	.031 Conical	1126-0610-P1
	.047 Conical	1126-0611-P1
	.016 Conical Bent	1126-0612-P1
	.016 Conical, Blunt, Bent	1126-0613-P1
	.016 Conical, Blunt	1126-0614-P1
	.016 Conical Extended, Bent	1126-0615-P1
	.157 Bevel, 45 Degree Tinned on face only	1126-0616-P1
	.078 Bevel, 60 Degree	1126-0617-P1
	.118 Bevel, 60 Degree	1126-0618-P1
	.157 Bevel, 45 Degree, Tinned on edge / face	1126-0619-P1
	.039 Bevel, 60 Degree, Extended	1126-0620-P1
	.039 Bevel, 45 Degree, Tinned on edge / face	1126-0621-P1
	.078 Bevel, 45 Degree, Tinned on edge / face	1126-0622-P1
	.118 Bevel, 45 Degree, Tinned on edge / face	1126-0623-P1
	.039 Bevel, 45 Degree	1126-0624-P1

Profile	Description	Part Number
	.06 Wide, Bevel 60 Degrees, .12x.06 Oval Face	1126-0625-P1
	.07 Bevel, 60 Degree	1126-0626-P1
	.078 Bevel, 45 Degree	1126-0627-P1
	.13 Bevel, 60 Degree	1126-0628-P1
	.118 Bevel, 45 Degree	1126-0629-P1
	.023 Bevel, Special	1126-0630-P1
	.031 Chisel Standard	1126-0631-P1
	.047 Chisel Standard	1126-0632-P1
	.062 Chisel Standard	1126-0633-P1
	.094 Chisel Standard	1126-0634-P1
	.157 Chisel Standard	1126-0635-P1
	.205 Chisel Standard	1126-0636-P1
	.157 Chisel Long Reach	1126-0637-P1
	.205 Chisel Long Reach	1126-0638-P1
	.078 Chisel Blunt	1126-0639-P1
	.125 Chisel Blunt	1126-0640-P1
	.055 Chisel, Bent 30 Degrees	1126-0641-P1
	.062 Chisel, Bent 30 Degrees	1126-0642-P1
	.055 Chisel, Bent, Extended	1126-0643-P1
	.185 Knife, 45 Degree	1126-0644-P1
	.181 Knife, 45 Degree	1126-0645-P1
	.185 Knife, 45 Degree, Blunt	1126-0646-P1
	.118 Knife, 45 Degree	1126-0647-P1
	Single Sided Chisel .08 Wide	1126-0648-P1

*Drawings are representative of tips actual shape. Actual tips may differ somewhat, other than front end geometry.

MT-100 & TP-100 Handpiece & Tips



MT-100 / TP-100

Description	Part Number
MT-100 HeatWise/TempWise (Red Connector) Handpiece	6010-0140-P1
MT-100 HeatWise/TempWiseTip (Red Connector) & Tool Stand Kit (Includes MT-100 and Stand)	6993-0243-P1
MT-100 Handpiece IntelliHeat	6010-0148-P1
MT-100 Handpiece Kit IntelliHeat	6993-0264-P1
TP-100 Handpiece IntelliHeat	6010-0158-P1
TP-100 Handpiece Kit IntelliHeat	6993-0280-P1
Cleaning Sponge, Tip & Tool Stands (SX, PS, SP)	4021-0008-P3
MT-100 & TP-100 Tip & Tool Stand	6019-0080-P1
Soft Grip	1119-0165-P2
Replacement Green Comfort Grips for MT-100, pack of 2	1119-0177-P2

MT-100 Surface Mount Removal Tips

Tip	Component Type	Dimension A	Dimension B	Part Number
 (fig.A)	Chip (fig.A)	0.2mm (0.008")	0.2mm (0.008")	1124-1001-P1
	Chip, SOT (fig.B)	0.7mm (0.03")	0.5mm (0.02")	1124-1002-P1
	Chip, SOT (fig.B)	0.7mm (0.03")	1mm (0.04")	1124-1003-P1
 (fig.B)	Chip, SOT (fig.B)	0.7mm (0.03")	2mm (0.08")	1124-1004-P1
	SOIC, SOT, TSOPS (fig.C)	0.7 mm (0.03")	6mm (0.24")	1124-1005-P1
	SOIC, SOT, TSOPS (fig.C)	0.7mm (0.03")	8mm (0.31")	1124-1006-P1
 (fig.C)	SOIC, SOT, TSOPS (fig.C)	0.7mm (0.03")	10mm (0.39")	1124-1007-P1
	SOIC, SOT, TSOPS (fig.C)	0.7mm (0.03")	13mm (0.51")	1124-1008-P1
	SOIC, SOT, TSOPS (fig.C)	0.7mm (0.03")	18mm (0.74")	1124-1009-P1
	SOIC, SOT, TSOPS (fig.C)	0.7mm (0.03")	28mm (1.09")	1124-1010-P1
	Extended Chip, SOT (fig.B)	0.7mm (0.03")	1mm (0.04")	1124-1011-P1

TP-100 Surface Mount Removal Tips


Tip	Type	Lead Count	Size A	Size B	Height	Footprint	Part Number
	LQFP / TQFP	80	12mm (0.472")	12mm (0.472")	1.4mm	2.0mm	1124-2001-P1
	LQFP / TQFP	64, 80, 100, 120, 128, 168	14mm (0.551")	14mm (0.551")	1.4mm	2.0mm	1124-2002-P1
	LQFP / TQFP	128, 144, 160, 176	20mm (0.788")	20mm (0.788")	1.4mm	2.0mm	1124-2003-P1
	LQFP / TQFP	176, 216	24mm (0.945")	24mm (0.945")	1.4mm	2.0mm	1124-2004-P1
	LQFP / TQFP	208, 256	28mm (1.10")	28mm (1.10")	1.4mm	2.0mm	1124-2005-P1
	QFP	52, 64, 80, 100	14mm (0.551")	14mm (0.551")	2.7mm	3.2mm	1124-2006-P1
	QFP	52, 64, 80, 100	14mm (0.551")	14mm (0.551")	2.7mm	3.9mm	1124-2007-P1
	QFP	64, 80, 100, 128	14mm (0.551")	20mm (0.788")	2.7mm	3.2mm	1124-2008-P1
	QFP	64, 80, 100, 128	14mm (0.551")	20mm (0.788")	2.7mm	3.9mm	1124-2009-P1
	QFP	120, 128, 144, 160, 208	28mm (1.10")	28mm (1.10")	3.4mm	2.6/3.2mm	1124-2010-P1
	QFP	160	28mm (1.10")	28mm (1.10")	3.4mm	3.9mm	1124-2011-P1

SMR Pulse Heat Handpieces


Optional Items and Replacement Parts



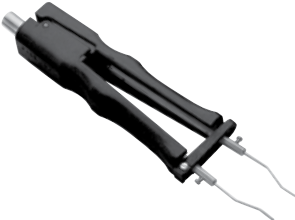
LF-15 LapFlo Pulse Heat Handpiece/Replacement Parts

Handpiece	Description	Size	Part Number
	TLF-15 LapFlo Pulse Heat Handpiece (Static Dissipative)		7013-0004-02-P1
	LF-1 Single Point SMD Soldering Tip	0.031" R outside, 0.015" R inside	6000-0008-P1
	ThermoPart Coating Removal Tip	0.078" R outside, 0.039" R inside	6000-0009-P1
	LF-2 Multip Point SMD Soldering Tip	0.27" Wide	1121-0298-P1
	LF-3 Multip Point SMD Soldering Tip	0.54"	1121-0299-P1
	LF-4 Multip Point SMD Soldering Tip	0.44"	1121-0300-P1
	Universal Power Cord		7000-0023-P1


CT-15 ConducTweez Pulse Heat Handpiece/Replacement Parts

Handpiece	Description	Size	Part Number
	CT-15 ConducTweez Pulse Heat Handpiece (Static Dissipative)		7020-0001-P1
	Guide Block Kit		6993-0105-P1
	CT-1 Chip Component Tip	0.08" Chisel	1121-0286-P1
	CT-2 14, 16 Lead SOIC Tip	0.6" Wide	1121-0271-P1
	CT-3 20 Lead SOIC Tip	0.67" Wide	1121-0270-P1
	CT-4 24, 28 Lead SOIC Tip	0.9" Wide	1121-0293-P1
	CT-5 SOT Tip	0.24"	1121-0269-P1
	CT-6 Rounded End Auxiliary Heating Tip	0.03125" Radius	1121-0004-P2
	Universal Power Cord		7000-0023-P1
	Tip Mounting Screw		1405-0182-P5

TW-15 ResisTweez Pulse Heat Handpiece/Replacement Parts

Handpiece	Description	Size	Part Number
	TW-15 ResisTweez Pulse Heat Handpiece (Static Dissipative)		7009-0005-P1
	Guide Block Kit		6993-0105-P1
	RT 1 18 Pin PLCC ThermoBond Tip	Rectangle 0.422" x 0.282"	1121-0294-P1
	RT 2 20 Pin PLCC ThermoBond Tip	Square 0.35"	1121-0295-P1
	RT 4 44 Pin PLCC ThermoBond Tip	Square 0.65"	1121-0297-P1
	RT 5 Tapered Flat End Resistance Tips	Taper to 0.015"	1121-0301-P1
	RT 7 Flat End Resistance Tips	0.11" Wide	1121-0006-P1
	Universal Power Cord		7000-0023-P1
	Tip Mounting Screw		1405-0182-P5

TS-15 StripTweez Pulse Heat Handpiece/Replacement Parts

Handpiece	Description	Part Number
	TS-15 StripTweez Pulse Heat Handpiece (Static Dissipative)	7012-0002-P1
	Thermal Stripper Tips	1121-0003-P1
	24 Gauge through 18 Gauge Tips	1121-0960-P1
	18 Gauge Tip	1121-0961-P1
	20 Gauge Tip	1121-0962-P1
	22 Gauge Tip	1121-0963-P1
	24 Gauge Tip	1121-0964-P1
	Universal Power Cord	7000-0023-P1
	Guide Block Kit	6993-0105-P1
	Tip Mounting Screw	1405-0106-P5

Handpieces



MicroChine Miniature Machining Handpiece/Replacement Parts

Description	Part Number
MC-65 MicroChine Handpiece	7026-0001-P1
Deluxe Tool Kit (optional)	6005-0013-P1
Probe Brake Patch Cord (PRC 2000 Systems Only)	1332-0159
Collet Nut	4005-0012
Collet 2.39mm (0.094") Diameter - Standard Collet	4005-0014

MicroChine Miniature Machining Handpiece/Replacement Parts

Tip	Item	Description	Part Number
	2	Mandrel with Screw Top	1115-0001-P10
	4	Drill, 0.79mm (1/32")	1112-0031-P10
	4	Drill, 1.19mm (3/64")	1112-0032-P10
	4	Drill, 1.59mm (1/16")	1112-0033-P10
	4	Drill, 1.98mm (5/64")	1112-0034-P10
	4	Drill, 2.39mm (3/32")	1112-0035-P10
	5	Ball Mill, 0.40mm (1/64")	1112-0001-P10
	5	Ball Mill, 0.78mm (0.03")	1112-0010-P10
	5	Ball Mill, 0.79mm (1/32")	1112-0002-P10
	5	Ball Mill, 1.19mm (3/64")	1112-0003-P10
	5	Ball Mill, 1.59mm (1/16")	1112-0004-P10
	5	Ball Mill, 2.38mm (3/32")	1112-0005-P10
	5	Ball Mill, 3.18mm (1/8")	1112-0006-P10
	5	Ball Mill, 3.97mm (5/32")	1112-0007-P10
	5	Ball Mill, 4.75mm (3/16")	1112-0008-P10
	5	Ball Mill, 6.35mm (1/4")	1112-0009-P10
	6	Saw, 2.38mm (3/32"), Mounted	1112-0061-P10
	8	Abrasive Wheel 7/8, RED	1129-0001-P10




Pik-Vac Handpiece & Replacement Parts


Description	Part Number
PV-65 Pik-Vac Vacuum Wand	7027-0001-P1
HP-65 HandiPik (self-contained component handling wand)	7028-0001-P1
Kit (1 Small Vacuum Cup, 1 Medium Vacuum Cup, 1 Large Vacuum Cup and 3 Vacuum Needles)	6993-0154-P1

Support Products

PM 200 Process Monitor

	Description	Part Number
	PM 200 Process Monitor (Dual Voltage)	8007-0464-P1
	Replacement Sensor pack of 10	1285-0046-P1

Tip Temperature Monitor

	Description	Part Number
	Tip Temperature Monitor (switches from °C to °F)	8001-0087-P1
	Replacement Sensor pack of 10	1285-0046-P1

Pre-heaters



ST 400 and ST 450 Replacement Parts

Description	Part Number
Power Cord, 115V	1332-0094-P1
Power Cord, 230V	1332-0093-P1
Fuse, 7 Amp, 125V, Time Lag	1159-0274-P5
Fuse, 3.15 Amp, 250V, Time Lag	1159-0221-P5
Fuse, 1.25 Amp, 250V, Time Lag	1159-0251-P5
Fuse, 0.63 Amp, 250V, Time Lag	1159-0252-P5
PCB ST 400 / 400E	6020-0193-P1
PCB ST 450 / 450E	6020-0198-P1
ST 400 Replacement Heater (Domestic)	3018-0128-P1
ST 400 Replacement Heater (Export)	3018-0129-P1
ST 450 Replacement Heater (Domestic)	6000-0291-P1
ST 450 Replacement Heater (Export)	6000-0292-P1
ST 450 Focus Nozzle 1.5" Square	4058-0001-P1
ST 450 Focus Nozzle 3.0" Square	4058-0002-P1
ST 450 Focus Nozzle 4.5" Square	4058-0003-P1
ST 450E Retrofit Kit	6993-0301



ST 1600 Replacement Parts

Item	Description	Voltage	Part Number
Bottom Heater	ASSY, Heater Box, ST 1600	120V	6000-0422-P1
	ASSY, Heater Box, ST 1600	230V	6000-0423-P1
Printed Circuit Boards	PCB, Control, ST 1600		6020-0222-P1
Chassis Fan Assembly	Fan, 60HZ 10 WATTS	115V	6000-0216-P1
	Fan, 60HZ 12 WATTS	230V	6000-0217-P1
Low Voltage Fuse	Fuse, 0.5 Amp S.B.		1159-0248-P5
	Fuse, 0.5 Amp, Time Lag, IEC, P5		1159-0213-P5
Main Chassis Fuse	Fuse, 15 Amp, Slo Blo, IR1000, DOM	250V	1159-0279-P5
	Fuse, 7 Amp, Time Lag, IR1000, EXP	250V	1159-0278-P5
Thermocouple Probe 6"	PCB, IR 100 / ST 1600		7021-0009-P1
Thermocouple Probe 12"	PCB, IR 100 / ST 1600		7021-0010-P1

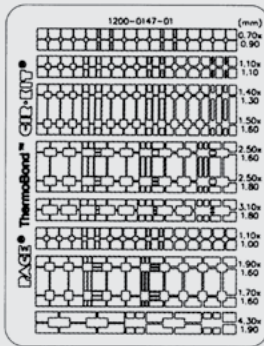
Support Products

ThermoBond Cir-Kits

Description	Part Number
ThermoBond Cir-Kit, Surface Mount Version	6993-0176
Complete Consisting of:	
ThermoBond Frames (solder plated on one side):	ThermoBond Cir-Kit Frames pictured on page 31
Chip Resistor/Capacitor	1200-0147-01-P1
Inductors, MELFs, Tantalum Capacitors	1200-0148-01-P1
SOTs	1200-0149-01-P1
SOICs, TSOPs	1200-0150-01-P1
PLCCs, LCCCs, SOJs, Ceramic QFPs, Basic Cir-Kit Material and Dry Film Adhesive for Custom Shaping/Cutting	1200-0151-01-P1
PQFPs	1200-0152-01-P1
Other Accessories:	
Abrasive Stick, 1 piece	1129-0014-P10
Kapton Tape, 12.7mm (0.5") x 76.2mm (3.0"), 10 pieces	1289-0016-01-P25
Provis Kit (for cutting and scraping)	7016-0003-P1
ThermoBond Tips	ThermoBond Tips Part Numbers on page 34
ThermoBond Cir-Kit, Thru-Hole Version	6993-0179
Complete Consisting of:	
ThermoBond Frames (solder plated on one side):	ThermoBond Cir-Kit Frames pictured on pages 32-33
Straight Run	1200-0158-01-P1
Fine Traces	1200-0159-01-P1
Variety Frame	1200-0160-01-P1
Track Pad	1200-0161-01-P1
DIP Pad	1200-0163-01-P1
Lap/Trace Frames (solder plated on both sides):	ThermoBond Cir-Kit Frames pictured on page 37
Straight Run	1200-0164-03-P1
Fine Traces	1200-0165-03-P1
Other Accessories:	
Eyelets and Funnelets	Eyelets and Funnelets Part Numbers on page 40
Abrasive Stick, 1 piece	1129-0014-P10
Kapton Tape, 12.7mm (0.5") x 76.2mm (3.0"), 10 pieces	1289-0016-01-P25
Upper Setting Tool	6000-0051-P1
Setting Tool Guide	6000-0054-P1
Lower Setting Tool, Funnelet	1132-0017-P1
Support Tool Base	1321-0054-P1
Provis Kit (for cutting and scraping)	7016-0003-P1
ThermoBond Tips	ThermoBond Tips Part Numbers on page 34

Support Products

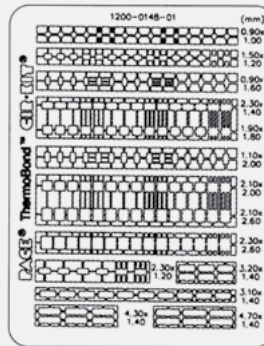
ThermoBond Cir-Kit Frames



ROW	# OF PARTS	NOM. SIZE (mm)	SIZE ± .001 (IN)
1	15	0.7 x 0.9	.028 x .035
2	15	1.10 x 1.10	.043 x .043
3	15	1.40 x 1.30	.055 x .051
4	15	1.50 x 1.60	.059 x .063
5	10	2.50 x 1.60	.098 x .063
6	10	2.50 x 1.80	.098 x .071
7	10	3.10 x 1.80	.122 x .071
8	15	1.10 x 1.00	.043 x .039
9	10	1.90 x 1.60	.075 x .063
10	10	1.70 x 1.60	.067 x .075
11	5	4.30 x 1.90	.169 x .075

1200-0147-01-P1

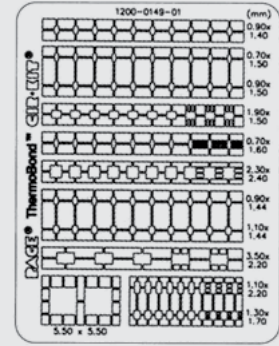
Chip Resistor / Capacitor



ROW	# OF PARTS	NOM. SIZE (mm)	SIZE ± .001 (IN)
1	15	0.9 x 1.0	.035 x .039
2	15	1.50 x 1.20	.059 x .047
3	15	0.9 x 1.60	.035 x .063
4	15	2.30 x 1.40	.091 x .055
5	15	1.90 x 1.80	.075 x .071
6	15	1.10 x 2.00	.043 x .079
7	15	2.10 x 2.00	.083 x .079
8	15	2.10 x 2.60	.083 x .102
9	15	2.30 x 2.60	.091 x .102
10	6	2.30 x 1.20	.091 x .047
10	6	3.20 x 1.40	.126 x .055
11	10	3.10 x 1.40	.122 x .055
12	6	4.30 x 1.40	.169 x .055
12	6	4.70 x 1.40	.185 x .055

1200-0148-01-P1

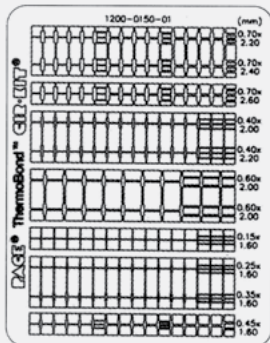
Inductors, MELFS, Tantalum Capacitors



ROW	# OF PARTS	NOM. SIZE (mm)	SIZE ± .001 (IN)
1	10	0.9 x 1.40	.035 x .055
2	10	0.7 x 1.50	.028 x .059
3	10	0.9 x 1.50	.035 x .059
4	10	1.90 x 1.50	.075 x .059
5	10	0.7 x 1.60	.028 x .063
6	10	2.30 x 2.40	.091 x .094
7	10	0.9 x 1.44	.035 x .057
8	10	1.10 x 1.44	.043 x .057
9	5	3.50 x 2.20	.130 x .007
10	2	5.50 x 5.50	.217 x .217
11	10	1.10 x 2.20	.043 x .087
12	10	1.30 x 1.70	.051 x .067

1200-0149-01-P1

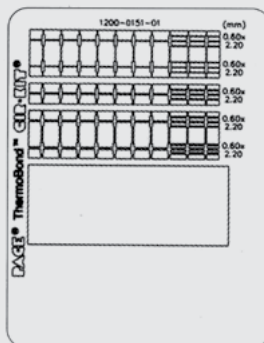
SOTs



ROW	# OF PARTS	NOM. SIZE (mm)	SIZE ± .001 (IN)
1	15	0.7 x 2.20	.028 x .087
2	15	0.7 x 2.40	.028 x .094
3	15	0.7 x 2.60	.028 x .102
4	15	0.4 x 2.00	.016 x .079
5	15	0.4 x 2.20	.016 x .087
6	10	0.6 x 2.00	.027 x .079
7	10	0.6 x 2.00	.024 x .079
8	15	0.15 x 1.60	.006 x .063
9	15	0.25 x 1.60	.010 x .063
10	15	0.35 x 1.60	.014 x .063
11	15	0.45 x 1.60	.018 x .063

1200-0150-01-P1

SOICs, TSOPs

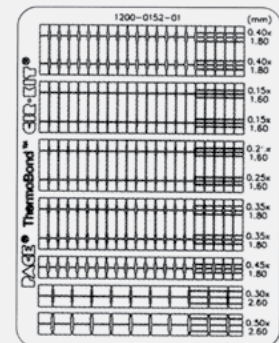


ROW	# OF PARTS	NOM. SIZE (mm)	SIZE ± .001 (IN)
1	10	0.6 x 2.20	.024 x .087
2	10	0.6 x 2.20	.024 x .087
3	10	0.6 x 2.20	.024 x .087
4	10	0.6 x 2.20	.024 x .087
5	10	0.6 x 2.20	.024 x .087
6	1	42.0 x 16.3	1.65 x .642
7	1	42.0 x 16.3	1.65 x .642

Row 6 is just adhesive only

1200-0151-01-P1

PLCCs, LCCCs, Ceramic QFPs



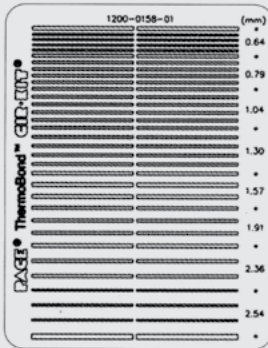
ROW	# OF PARTS	NOM. SIZE (mm)	SIZE ± .001 (IN)
1	20	0.4 x 1.80	0.16 x .071
2	20	0.4 x 1.80	0.16 x .071
3	20	0.15 x 1.60	.006 x .063
4	20	0.15 x 1.60	.006 x .063
5	20	0.25 x 1.60	.010 x .063
6	20	0.25 x 1.60	.010 x .063
7	20	0.35 x 1.80	.014 x .071
8	20	0.35 x 1.80	.014 x .071
9	20	0.45 x 1.80	.018 x .071
10	10	0.30 x 2.60	.012 x .102
11	10	0.50 x 2.60	.020 x .102

1200-0152-01-P1

PQFPs

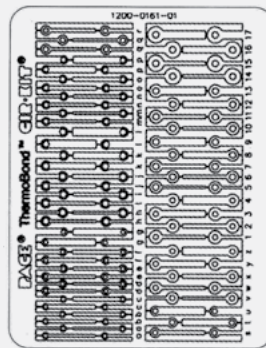
Support Products

ThermoBond Cir-Kit Frames



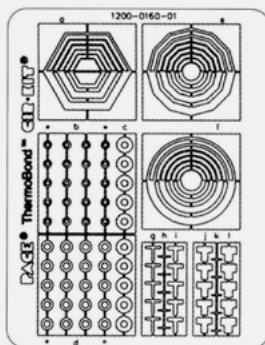
ROW	# OF TRACES	TRACE WIDTH NOM. (mm)	TRACE WIDTH ± .001 (IN)
1	5	0.64	0.025
2	5	0.79	0.031
3	5	1.04	0.041
4	5	1.3	0.051
5	3	1.57	0.062
6	3	1.91	0.075
7	3	2.36	0.093
8	3	2.54	0.1

1200-0158-01-P1
Straight Run



1200-0161-01-P1
Track Pad

SEC.	# OF TRACES & PADS	TRACK WIDTH ± .001 (IN)	TRACK WIDTH (mm) NOM.	PAD SIZE LD. ± .001 (IN)	PAD SIZE LD. (mm) NOM.	PAD SIZE O.D. ± .001 (IN)	PAD SIZE O.D. (mm) NOM.
A	4	0.02	0.51	0.033	0.084	0.05	1.27
B	4	0.025	0.64	0.033	0.084	0.05	1.27
C	4	0.031	0.79	0.033	0.084	0.05	1.27
D	4	0.02	0.51	0.033	0.084	0.062	1.57
E	4	0.025	0.64	0.033	0.084	0.062	1.57
F	4	0.031	0.79	0.033	0.084	0.062	1.57
G	4	0.05	1.27	0.033	0.084	0.062	1.57
H	4	0.02	0.51	0.049	1.24	0.075	1.91
I	4	0.025	0.64	0.049	1.24	0.075	1.91
J	4	0.031	0.79	0.049	1.24	0.075	1.91
K	4	0.05	1.27	0.049	1.24	0.075	1.91
L	4	0.062	1.57	0.049	1.24	0.075	1.91
M	4	0.02	0.51	0.04	1.02	0.062	1.57
N	4	0.025	0.64	0.04	1.02	0.062	1.57
O	4	0.031	0.79	0.04	1.02	0.062	1.57
P	4	0.05	1.27	0.04	1.02	0.062	1.57
Q	4	0.02	0.51	0.04	1.02	0.075	1.91
R	2	0.025	0.64	0.04	1.02	0.075	1.91
S	2	0.031	0.79	0.04	1.02	0.075	1.91
T	2	0.05	1.27	0.04	1.02	0.075	1.91
U	2	0.062	1.57	0.04	1.02	0.075	1.91
V	2	0.02	0.51	0.04	1.02	0.093	2.36
W	2	0.025	0.64	0.04	1.02	0.093	2.36
X	2	0.031	0.79	0.04	1.02	0.093	2.36
Y	2	0.05	1.27	0.04	1.02	0.093	2.36
Z	2	0.062	1.57	0.04	1.02	0.093	2.36
1	2	0.025	0.64	0.04	1.02	0.1	2.54
2	2	0.031	0.79	0.04	1.02	0.1	2.54
3	2	0.05	1.27	0.04	1.02	0.1	2.54
4	2	0.062	1.57	0.04	1.02	0.1	2.54
5	2	0.02	0.51	0.049	1.24	0.062	1.57
6	2	0.025	0.64	0.049	1.24	0.093	2.36
7	2	0.031	0.79	0.049	1.24	0.093	2.36
8	2	0.05	1.27	0.049	1.24	0.093	2.36
9	2	0.062	1.57	0.049	1.24	0.093	2.36
10	2	0.025	0.64	0.049	1.24	0.1	2.54
11	2	0.031	0.79	0.049	1.24	0.1	2.54
12	2	0.05	1.27	0.049	1.24	0.1	2.54
13	2	0.062	1.57	0.049	1.24	0.1	2.54
14	2	0.025	0.64	0.049	1.24	0.125	3.18
15	2	0.031	0.79	0.049	1.24	0.125	3.18
16	2	0.05	1.27	0.049	1.24	0.125	3.18
17	2	0.062	1.57	0.049	1.24	0.125	3.18



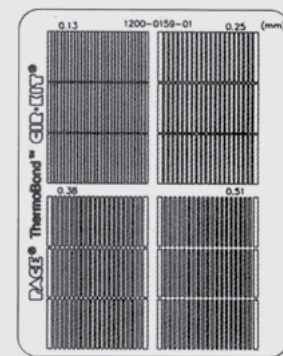
SEC.	# OF TRACES	TRACK WIDTH ± .001 (IN)	TRACK WIDTH (mm) NOM.
F	2	0.005	0.13
	3	0.01	0.25
	2	0.02	0.51
	2	0.031	0.79
	1	0.05	0.127
1	0.062	0.158	

1200-0160-01-P1
Variety Frame

SEC.	# OF TRACES	TRACK WIDTH ± .001 (IN)	TRACK WIDTH (mm) NOM.
A	3	0.005	0.13
	2	0.01	0.25
	1	0.02	0.51
	1	0.031	0.79
	1	0.05	0.127
	1	0.062	0.158
E	2	0.005	0.13
	3	0.01	0.25
	2	0.02	0.51
	2	0.031	0.79
	1	0.05	0.127
1	0.062	0.158	

SEC.	# OF TRACES	TRACK WIDTH ± .001 (IN)	TRACK WIDTH (mm) NOM.
G	5	0.02	0.51
H	5	0.01	0.25
I	5	0.031	0.79
J	5	0.05	1.27
K	5	0.01	0.25
L	5	0.062	1.58

SEC.	# OF TRACES	ID ± .001 (IN)	ID (mm) NOM.	OD ± .001 (IN)	OD (mm) NOM.
B	20	0.031	0.79	0.062	0.158
C	20	0.051	0.13	0.125	3.18
D	10	0.051	0.13	0.093	2.36

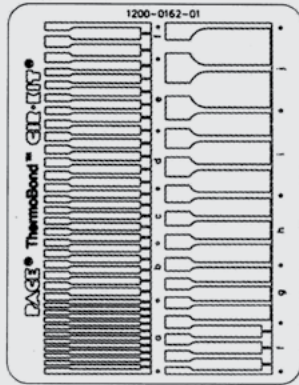


SEC.	# OF TRACES	TRACE WIDTH NOM. (mm)	TRACE WIDTH ± .001 (IN)
1	29	0.127	0.005
2	20	0.381	0.015
3	20	0.254	0.01
4	20	0.508	0.02

1200-0159-01-P1
Fine Traces

Support Products

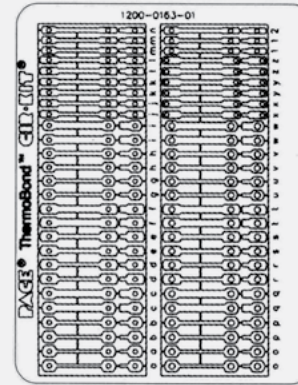
ThermoBond Cir-Kit Frames



SEC.	# OF PADS	WIDTH OF PAD ± .001(IN)	WIDTH OF PAD (mm) NOML.	WIDTH OF TRACK ± .001(IN)	WIDTH OF TRACK (mm) NOML.
A	10	0.031	0.79	0.02	0.51
B	5	0.051	1.3	0.025	0.64
C	5	0.051	1.3	0.031	0.79
D	5	0.062	1.57	0.031	0.79
E	5	0.062	1.57	0.041	1.04
F	5	0.08	2.03	0.041	1.04
G	3	0.1	2.54	0.051	1.3
H	3	0.125	3.18	0.062	1.57
I	3	0.156	3.96	0.062	1.57
J	2	0.25	6.35	0.093	2.36

1200-0162-02-P1

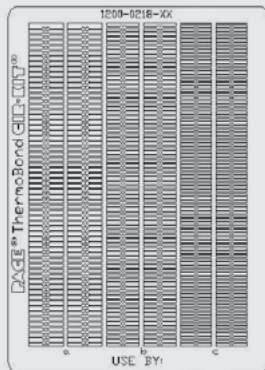
Edge Connector (Gold Plated)



SEC.	# OF PADS	TRACK WIDTH ± .001(IN)	TRACK WIDTH (mm) NOML.	PAD SIZE I.D. ± .001(IN)	PAD SIZE I.D. (mm) NOML.	PAD SIZE O.D. ± .001(IN)	PAD SIZE O.D. (mm) NOML.	PAD WIDTH ± .001(IN)	PAD WIDTH (mm) NOML.
A	6	0.02	0.51	0.031	0.79	0.1	0.254	0.08	2.03
B	6	0.025	0.64	0.031	0.79	0.1	0.254	0.08	2.03
C	6	0.05	1.27	0.031	0.79	0.1	0.254	0.08	2.03
D	6	0.025	0.64	0.031	0.79	0.125	3.18	0.07	1.78
E	6	0.031	0.79	0.031	0.79	0.125	3.18	0.07	1.78
F	6	0.05	1.27	0.031	0.79	0.125	3.18	0.07	1.78
G	6	0.025	0.64	0.031	0.79	0.09	2.29	0.07	1.78
H	6	0.031	0.79	0.031	0.79	0.09	2.29	0.07	1.78
I	6	0.05	1.27	0.031	0.79	0.09	2.29	0.07	1.78
J	6	0.025	0.64	0.031	0.79	0.125	3.18	0.05	1.27
K	6	0.031	0.79	0.031	0.79	0.125	3.18	0.05	1.27
L	6	0.031	0.79	0.031	0.79	0.125	3.18	0.05	1.27
M	6	0.025	0.64	0.031	0.79	0.125	3.18	0.041	1.04
N	3	0.031	0.79	0.031	0.79	0.125	3.18	0.041	1.04
O	6	0.02	0.51	0.041	1.04	0.1	2.54	0.08	2.03
P	6	0.025	0.64	0.041	1.04	0.1	2.54	0.08	2.03
Q	6	0.05	1.27	0.041	1.04	0.1	2.54	0.08	2.03
R	6	0.025	0.64	0.041	1.04	0.125	3.18	0.07	1.78
S	6	0.031	0.79	0.041	1.04	0.125	3.18	0.07	1.78
T	6	0.05	1.27	0.041	1.04	0.125	3.18	0.07	1.78
U	6	0.025	0.64	0.041	1.04	0.09	2.29	0.07	1.78
V	6	0.031	0.79	0.041	1.04	0.09	2.29	0.07	1.78
W	6	0.05	1.27	0.041	1.04	0.09	2.29	0.07	1.78
X	6	0.025	0.64	0.031	0.79	0.125	3.18	0.05	1.27
Y	6	0.031	0.79	0.031	0.79	0.125	3.18	0.05	1.27
Z	6	0.031	0.79	0.031	0.79	0.125	3.18	0.05	1.27
1	6	0.025	0.64	0.031	0.79	0.125	3.18	0.041	1.04
2	3	0.031	0.79	0.031	0.79	0.125	3.18	0.041	1.04

1200-0163-01-P1

Dip Pad



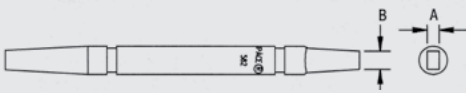

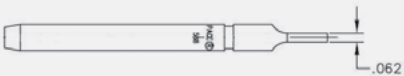
SEC.	PAD SIZE DIA ± .001(IN)	PAD SIZE DIA (mm) NOML.	WIDTH OF TRACK ± .001(IN)	WIDTH OF TRACK (mm) NOML.
A	0.03	0.76	0.008	0.2
B	0.023	0.58	0.008	0.2
C	0.017	0.43	0.008	0.2

1200-0218-01-P1


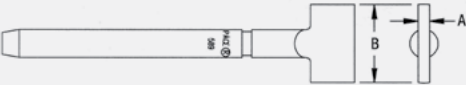
BGA Variety

ThermoBond Tips

Double Sided Tips

Tip	Description	Part Number
	3.2mm (0.125") Diameter & 2mm x 3mm (0.08" x 0.12") Rectangle (A x B)	1121-0582-P1
	Combo Tip End A: (0.184" x 0.96") End B: (0.105" x 0.31")	1121-0583-P1
	0.025" x 0.200"	1121-0587-P1
	0.062" x 0.200"	1121-0588-P1

Single Sided Tips

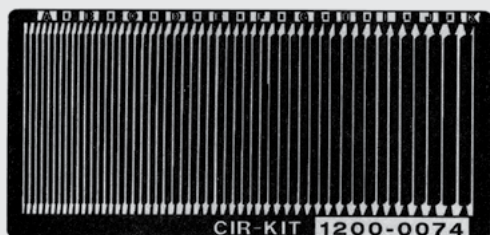
Tip	Description	Part Number
	0.79mm x 12.7mm (0.031" x 0.5") Rectangle (A x B)	1121-0586-P1
	1.9mm x 13.46mm (0.075" x 0.53") Rectangle (A x B)	1121-0589-P1

Support Products

Cir-Kit Replacement Parts

Description	Part Number
Setting Tool Assembly, Upper Setting Tool	6000-0051-P1
Setting Tool Guide	6000-0054-P1
Support Tool Base	1321-0054-P1
Edge Connector Clamp Assembly	6000-0130-P1
Kapton Tape, 12.7mm (0.5") x 76.2mm (3.0") 25 pieces	1289-0016-01-P25

Non-ThermoBond Cir-Kits Frames

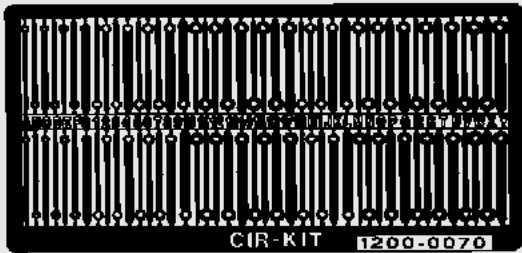


Straight Run Frame
1200-0074-P1

RUN TABULATION CHART		
RUN DESIGNATIONS	RUN WIDTH	# OF RUNS
A	0.015	9
B	0.02	6
C	0.025	6
D	0.031	6
E	0.041	6
F	0.051	6
G	0.062	6
H	0.075	4
J	0.093	3
K	0.1	4

Support Products

Non-ThermoBond Cir-Kits Frames



Track Pad Frame, (Selector Type)

1200-0070-P1

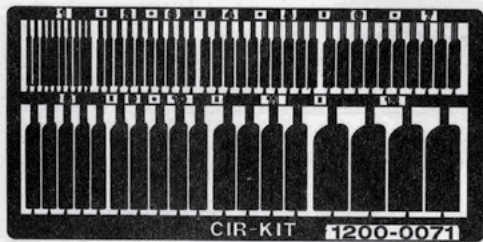
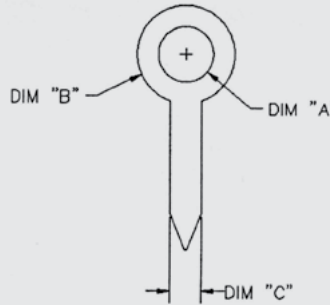
Track Pad Frame, choice of two of each letter option on the above frame

B, G, (letter size)

1200-0011_

An example would be 1200-0011B. This would be a frame containing pad B only.

PAD TABULATION CHART							
PAD DESIGNATION	"A"	"B"	"C"	PAD DESIGNATION	"A"	"B"	"C"
B	0.033	0.051	0.025	1	0.041	0.062	0.02
G	0.033	0.062	0.051	2	0.041	0.062	0.025
				3	0.041	0.062	0.031
				4	0.041	0.062	0.051
				5	0.041	0.075	0.02
				6	0.041	0.075	0.025
				7	0.041	0.075	0.031
				8	0.041	0.075	0.051
				9	0.041	0.075	0.062
				10	0.041	0.093	0.02
				11	0.041	0.093	0.025
				12	0.041	0.093	0.031
				13	0.041	0.093	0.051
				14	0.041	0.093	0.062
				15	0.041	0.1	0.025
				16	0.041	0.1	0.031
				17	0.041	0.1	0.051
				18	0.041	0.1	0.062



Edge Connector

Frame 1200-0071-P1

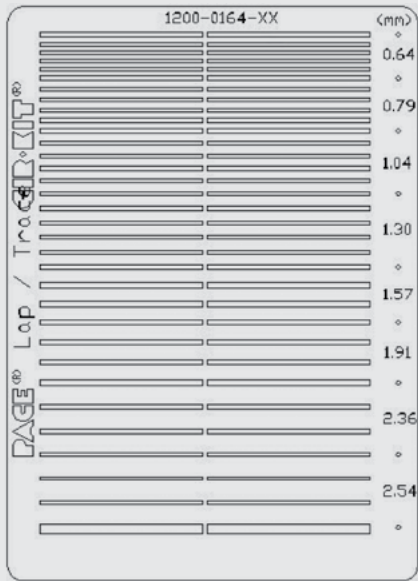
EDGE CONNECTOR TABULATION CHART			
CONNECTOR DESIGNATION	"A" WIDTH	"B" WIDTH	# OF CONNECTORS
1	0.031	0.02	10
2	0.051	0.025	5
3	0.051	0.031	5
4	0.062	0.031	5
5	0.062	0.041	5
6	0.08	0.041	5
7	0.08	0.041	5
8	0.1	0.051	5
9	0.125	0.051	2
10	0.125	0.062	3
11	0.156	0.062	4
12	0.25	0.093	4



*These Frames do not have a dry-film adhesive backing. NOTE: Dimensions are ± 0.003 "

Support Products

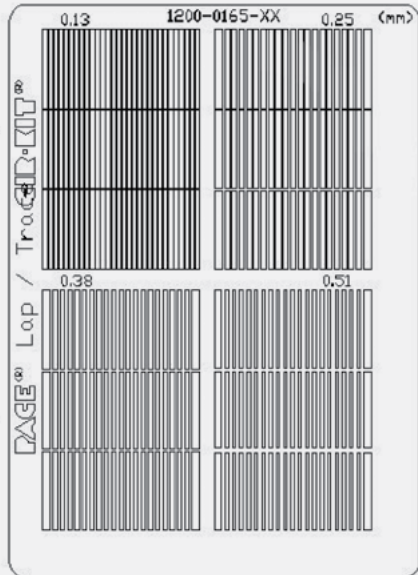
Non-ThermoBond Cir-Kits Frames



SEC.	# OF TRACES	TRACE WIDTH NOM. (mm)	TRACE WIDTH ± .001 (IN)
1	29	0.127	0.005
2	20	0.381	0.015
3	20	0.254	0.01
4	20	0.508	0.02

Lap / Trace (Straight)

1200-0164-03-P1



ROW	# OF TRACES	TRACE WIDTH NOM. (mm)	TRACE WIDTH ± .001 (IN)
1	5	0.64	0.025
2	5	0.79	0.031
3	5	1.04	0.041
4	5	1.3	0.051
5	3	1.57	0.062
6	3	1.91	0.075
7	3	2.36	0.093
8	3	2.54	0.1

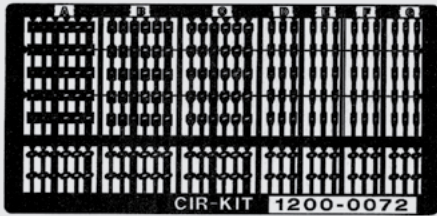
Lap / Trace (Fine)

1200-0165-03-P1

*These Frames do not have a dry-film adhesive backing.

Support Products

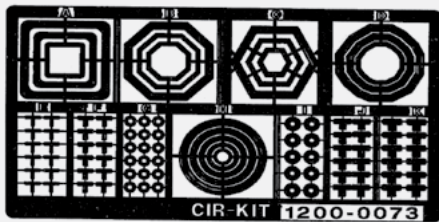
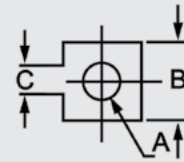
Non-ThermoBond Cir-Kits Frames



Dip Pad Frame

1200-0072-P1

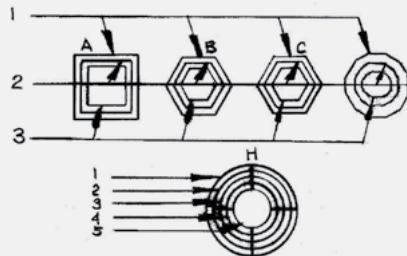
FRAME DESIGNATION	"A" WIDTH	"B" Width		"B" WIDTH
		RECT. PADS	ROUND PADS	
		A1	0.031	
A2	0.031	0.08	0.07	0.025
A3	0.031	0.08	0.07	0.05
A4	0.041	0.08	0.07	0.02
A5	0.041	0.08	0.07	0.025
A6	0.041	0.08	0.07	0.05
B1	0.031	0.07	0.07	0.025
B2	0.031	0.07	0.07	0.031
B3	0.031	0.07	0.07	0.05
B4	0.041	0.07	0.07	0.025
B5	0.041	0.07	0.07	0.031
B6	0.041	0.07	0.07	0.05
C1	0.031	0.07	0.07	0.025
C2	0.031	0.07	0.07	0.031
C3	0.031	0.07	0.07	0.05
C4	0.041	0.07	0.07	0.025
C5	0.041	0.07	0.07	0.031
C6	0.041	0.07	0.07	0.05
D1	0.041	0.05	0.062	0.025
D2	0.031	0.05	0.062	0.031
D3	0.031	0.05	0.062	0.031
E1	0.031	0.05	0.062	0.025
E2	0.031	0.05	0.062	0.031
E3	0.031	0.05	0.062	0.031
F1	0.031	0.05	0.062	0.02
F2	0.031	0.05	0.062	0.031
F3	0.031	0.05	0.062	0.031
G1	0.031	0.041	0.062	0.025
G2	0.031	0.041	0.062	0.031
G3	0.031	0.041	0.062	0.031



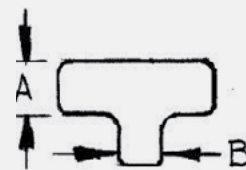
Dip Pad Frame

1200-0073-P1

FRAME DESIGNATION	Track Width				
	1	2	3	4	5
A	0.062	0.051	0.031		
B	0.062	0.051	0.031		
C	0.062	0.051	0.031		
D	0.062	0.051	0.031		
H	0.062	0.051	0.031	0.031	0.02



FRAME DESIGNATION	"A" WIDTH	"B" WIDTH	# OF T'S
E	0.02	0.02	12
F	0.061	0.031	12
K	0.051	0.051	12
L	0.062	0.062	12



FRAME DESIGNATION	"A" WIDTH	"B" WIDTH	# OF PADS
G	0.051	0.093	18
J	0.051	0.125	10



*These Frames do not have a dry-film adhesive backing.

Support Products

Non-ThermoBond Cir-Kits

Description	Part Number
Cir-Kit, Basic Version (A Selection for Mixed Technology Repairs)	6993-0037
Complete Consisting of:	
Track Pad Frame (Selector Type)	1200-0070-P1
Straight Run Frame	1200-0074-P1
Other Accessories:	
Eyelets and Funnelets (qty of 25 each in kits)	1347-0007-P100
	1347-0009-P100
	1347-0010-P100
	1347-0013-P100
	1347-0016-P100
	1347-0051-P100
	1347-0053-P100
Setting Tool Assembly, Upper Setting Tool	6000-0051-P1
Support Tool, Lower Setting Tool	1132-0017-P1
Support Tool Base	1321-0054-P1
Cir-Kit, Advanced Version	6993-0077
Complete Consisting of:	
Cir-Kit Frames	
Track Pad Frame (Selector Type)	1200-0070-P1
Straight Run Frame	1200-0074-P1
Dip Pad Frame	1200-0072-P1
Variety Frame (Angles, T's, Pads)	1200-0073-P1
Other Accessories:	
Eyelets and Funnelets (qty of 25 each in kits)	1347-0013-P100
	1347-0016-P100
	1347-0007-P100
	1347-0009-P100
	1347-0010-P100
	1347-0051-P100
	1347-0053-P100
Abrasive Stick	1129-0014-P10
Setting Tool Assembly, Upper Setting Tool	6000-0051-P1
Setting Tool Guide	6000-0054-P1
Support Tool, Lower Setting Tool	1132-0017-P1
Support Tool Base	1321-0054-P1

Support Products

Non-ThermoBond Cir-Kits and Stencils

Description	Part Number
Cir-Kit, Master Version	6993-0082
Complete Consisting of:	
Cir-Kit Frames	
Track Pad Frame (Selector Type)	1200-0070-P1
Straight Run Frame	1200-0074-P1
Dip Pad Frame	1200-0072-P1
Variety Frame (Angles, T's, Pads)	1200-0073-P1
Edge Connector Frame	1200-0071-P1
Small Traces Frame	1200-0118
Other Accessories:	
Eyelets and Funnelets (qty of 25 each in kits)	1347-0013-P100
	1347-0016-P100
	1347-0007-P100
	1347-0009-P100
	1347-0010-P100
	1347-0051-P100
	1347-0053-P100
Adhesive Kit	1239-0011
Abrasive Stick	1129-0014-P10
Edge Connector Clamp Assembly	6000-0130-P1
Setting Tool Assembly, Upper Setting Tool	6000-0051-P1
Setting Tool Guide	6000-0054-P1
Support Tool, Lower Setting Tool	1132-0017-P1
Support Tool Base	1321-0054-P1

Support Products

Stenciling Kits - Requires Stencil Bracket Kit (Part Number 6993-0248-P1, See Page 50)

Optional Stencil	Part Number
Leaded Component Stencil	1001-0001-P1
Stencil, BGA 8, 1.67mm x 1.82	1002-0008-P1
Stencil, BGA 10, 1.82mm x 2.17	1002-0010-P1
Stencil, QFN 8, 3.25mm SQ	1003-0008-P1
Stencil, QFN 16, 3mm SQ	1003-0016-P1
Stencil, QFN 16, 4mm SQ	1004-0016-P1
Stencil, QFN 20, 4mm SQ	1004-0020-P1
Stencil, QFN 24, 4mm SQ	1004-0024-P1
Stencil, QFN 28, 4mm SQ	1004-0028-P1
Stencil, QFN-1 24, 4mm SQ	1004-1024-P1
Stencil, QFN-2 24, 4mm SQ	1004-2024-P1
Stencil, QFN-3 24, 4mm SQ	1004-3024-P1
Stencil, QFN 24, 5mm x 4mm	1005-0024-P1
Stencil, QFN-1 32, 5mm SQ	1005-0032-P1
Stencil, QFN-2 32, 5mm SQ	1005-2032-P1
Stencil, QFN 28, 6mm SQ	1006-0028-P1
Stencil, QFN 5, 6mm SQ	1006-0032-P1
Stencil, QFN 40, 6mm SQ	1006-0040-P1
Stencil, BGA 48, 6mm x 8	1006-0048-P1
Stencil, BGA 114, 5.5mm x 16	1006-0114-P1
Stencil, BGA 48, 6mm x 8	1006-2048-P1
Stencil, BGA 44, 7mm SQ	1007-0044-P1
Stencil, QFN 48, 7mm SQ	1007-0048-P1
Stencil, BGA 49, 7mm SQ	1007-0049-P1
Stencil, BGA 113, 7mm SQ	1007-0113-P1
Stencil, QFN 44, 7mm SQ	1007-1044-P1
Stencil, QFN 32, 7mm SQ	1007-2032-P1
Stencil, BGA 44, 7mm SQ	1007-2044-P1
Stencil, QFN 48, 7mm SQ	1007-2048-P1
Stencil, BGA 48, 8mm x 10	1008-0048-P1
Stencil, BGA 64, 8mm SQ	1008-0064-P1
Stencil, QFN 44, 9mm SQ	1009-0044-P1
Stencil, BGA 8-54, 9mm SQ	1009-0054-P1
Stencil, QFN 56, 9mm SQ	1009-0056-P1
Stencil, BGA 63, 9mm SQ	1009-0063-P1
Stencil, QFN 64, 9mm SQ	1009-0064-P1
Stencil, QFN-2 64, 9mm SQ	1009-2064-P1
Stencil, QFN 64, 10mm SQ	1010-0064-P1
Stencil, BGA 120, 26.7mm x 10.7	1010-0120-P1
Stencil, BGA 128, 10mm SQ	1010-0128-P1
Stencil, BGA 151, 10mm SQ	1010-0151-P1
Stencil, BGA 22, 11.4mm x 5.1	1011-0022-P1
Stencil, BGA 28, 6.4mm x 11	1011-0028-P1
Stencil, BGA 56, 9mm x 11	1011-0056-P1
Stencil, BGA 69, 11mm x 8	1011-0069-P1
Stencil, BGA 72, 11mm SQ	1011-0072-P1
Stencil, BGA 88, 11mm x 8	1011-0088-P1
Stencil, BGA 100, 11mm SQ	1011-0100-P1
Stencil, BGA 100, 11mm SQ	1011-2100-P1

Optional Stencil	Part Number
Stencil, PLCC 28	1012-0028-P1
Stencil, BGA 60, 12mm x 8	1012-0060-P1
Stencil, BGA 64, 12mm x 18	1012-0064-P1
Stencil, BGA 80, 12mm x 18	1012-0080-P1
Stencil, BGA 144, 12mm SQ	1012-0144-P1
Stencil, BGA 160, 12mm SQ	1012-0160-P1
Stencil, BGA 169, 12mm SQ	1012-0169-P1
Stencil, BGA 179, 12mm SQ	1012-0179-P1
Stencil, FBGA 144, 12mm	1012-2144-P1
Stencil, BGA 179, 12mm SQ	1012-2179-P1
Stencil, BGA 64, 13x10mm	1013-0064-P1
Stencil, BGA 144, 13mm SQ	1013-0144-P1
Stencil, BGA 54, 14mm x 8	1014-0054-P1
Stencil, BGA 63, 14mm x 8	1014-0063-P1
Stencil, BGA 119, 14mm x 22	1014-0119-P1
Stencil, BGA 148, 15mm SQ	1015-0148-P1
Stencil, BGA 156, 15mm SQ	1015-0156-P1
Stencil, BGA 160, 15mm SQ	1015-0160-P1
Stencil, BGA 165, 15mm x 13	1015-0165-P1
Stencil, BGA 176, 15mm SQ	1015-0176-P1
Stencil, BGA 196, 15mm SQ	1015-0196-P1
Stencil, BGA 216, 15mm SQ	1015-0216-P1
Stencil, BGA 60, 16mm x 8	1016-0060-P1
Stencil, BGA 209, 16mm SQ	1016-0209-P1
Stencil, BGA 208, 17mm SQ	1017-0208-P1
Stencil, BGA 225, 17mm SQ	1017-0225-P1
Stencil, BGA 256, 17mm SQ	1017-0256-P1
Stencil, BGA 52, 19mm SQ	1019-0052-P1
Stencil, BGA 163, 19mm SQ	1019-0163-P1
Stencil, BGA 225, 19mm SQ	1019-0225-P1
Stencil, BGA 276, 19mm SQ	1019-0276-P1
Stencil, BGA 289, 19mm SQ	1019-0289-P1
Stencil, BGA 156, 21mm SQ	1021-0156-P1
Stencil, BGA 255, 21mm SQ	1021-0255-P1
Stencil, BGA 292, 21mm SQ	1021-0292-P1
Stencil, BGA 24, 20.95mm x 24.7	1021-0303-P1
Stencil, BGA 169, 23mm SQ	1023-0169-P1
Stencil, BGA 192, 23mm SQ	1023-0192-P1
Stencil, BGA 208, 23mm SQ	1023-0208-P1
Stencil, BGA 241, 23mm SQ	1023-0241-P1
Stencil, BGA 256, 23mm SQ	1023-0256-P1
Stencil, BGA 288, 23mm SQ	1023-0288-P1
Stencil, BGA 324, 23mm SQ	1023-0324-P1
Stencil, BGA 360, 23mm SQ	1023-0360-P1
Stencil, BGA 440, 23mm SQ	1023-0440-P1
Stencil, BGA 484, 23mm SQ	1023-0484-P1
Stencil, BGA 241, 24mm SQ	1024-0241-P1
Stencil, BGA 357, 25mm SQ	1025-0357-P1
Stencil, BGA 360, 25mm SQ	1025-0360-P1
Stencil, BGA 413, 25mm SQ	1025-0413-P1
Stencil, BGA 552, 25mm x 25	1025-0552-P1

Optional Stencil	Part Number
Stencil, NGA 225, 27mm SQ	1027-0225-P1
Stencil, BGA 256, 27mm SQ	1027-0256-P1
Stencil, BGA 272, 27mm SQ	1027-0272-P1
Stencil, BGA 292, 27mm SQ	1027-0292-P1
Stencil, BGA 316, 27mm SQ	1027-0316-P1
Stencil, BGA 324, 27mm SQ	1027-0324-P1
Stencil, BGA 328, 27mm SQ	1027-0328-P1
Stencil, BGA 336, 27mm SQ	1027-0336-P1
Stencil, BGA 352, 27mm SQ	1027-0352-P1
Stencil, BGA 388, 27mm SQ	1027-0388-P1
Stencil, BGA 452, 27mm SQ	1027-0452-P1
Stencil, BGA 496, 27mm SQ	1027-0496-P1
Stencil, BGA 672, 27mm SQ	1027-0672-P1
Stencil, BGA 676, 27mm SQ	1027-0676-P1
Stencil, BGA 483, 29mm SQ	1029-0483-P1
Stencil, BGA 780, 29mm SQ	1029-0780-P1
Stencil, BGA 304, 31mm SQ	1031-0304-P1
Stencil, BGA 316, 31mm SQ	1031-0316-P1
Stencil, BGA 329, 31mm SQ	1031-0329-P1
Stencil, BGA 360, 31mm SQ	1031-0360-P1
Stencil, BGA 421, 31mm SQ	1031-0421-P1
Stencil, BGA 896, 31mm SQ	1031-0896-P1
Stencil, BGA 900, 31mm SQ	1031-0900-P1
Stencil, BGA 474, 32.5mm x 25	1032-0474-P1
Stencil, BGA 624, 32mm SQ	1032-0624-P1
Stencil, BGA 937, 32.5mm SQ	1032-0937-P1
Stencil, BGA 503, 35mm SQ	1033-0503-P1
Stencil, BGA 313, 27mm SQ	1035-0313-P1
Stencil, BGA 352, 35mm SQ	1035-0352-P1
Stencil, BGA 356, 35mm SQ	1035-0356-P1
Stencil, BGA 388, 35mm SQ	1035-0388-P1
Stencil, BGA 420, 35mm SQ	1035-0420-P1
Stencil, BGA 456, 35mm SQ	1035-0456-P1
Stencil, BGA 480, 35mm SQ	1035-0480-P1
Stencil, BGA 544, 35mm SQ	1035-0544-P1
Stencil, BGA 580, 35mm SQ	1035-0580-P1
Stencil, BGA 724, 35mm SQ	1035-0724-P1
Stencil, BGA 1152, 35mm SQ	1035-1152-P1
Stencil, BGA 480, 37mm SQ	1037-0480-P1
Stencil, BGA 593, 37mm SQ	1037-0593-P1
Stencil, BGA 480, 37.5mm SQ	1038-0480-P1
Stencil, BGA 432, 40mm SQ	1040-0432-P1
Stencil, BGA 503, 40mm SQ	1040-0503-P1
Stencil, BGA 520, 40mm SQ	1040-0520-P1
Stencil, BGA 596, 40mm SQ	1040-0596-P1
Stencil, BGA 600, 40mm SQ	1040-0600-P1
Stencil, BGA 680, 40mm SQ	1040-0680-P1
Stencil, BGA 560, 42.5mm SQ	1042-0560-P1
Stencil, BGA 824, 42.5mm x 32.5	1042-0824-P1
Stencil, BGA 731, 45mm SQ	1045-0731-P1

Accessories

Training Kits & Aids

	Description	Part Number
Soldering	Terminal Soldering Kit	6030-0062
	Soldering Skill Evaluation Kit	6030-0001
	Mix Technology Training Board Kit	6020-0229
	BGA Advanced Package Technology Training Board Kit	6020-0230
Repair	Repair Skills Development Kit	6030-0229
	Multilayer Training Kit	6993-0104-P1
	Flex-Circuit Training Kit	6993-0103
Student Guides	High Reliability Interconnection Technology	5050-0082-P1
	Rework and Repair for Electronics	6031-2100-P1
	Multilayer and Flexible Circuit Repair	6031-2103-P1
Replacement Parts	Turret Terminals	1205-0012-P100
	Hook Terminals	1205-0048-P100
	Connector Pins	1205-0014-P100

PACE BGA Rework Systems

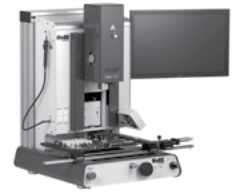


TF 1700 Optional Items and Replacement Parts

Description	Part Number
Fuse Holder 5 x 20mm	1161-0008-P1
Micro-Positioner	1251-0117-P1
Panel Mount Fitting (vacuum)	1259-0135-P1
Low Pressure Pump	1334-0021-P1
Nitrogen Solenoid	1336-0047-P1
Flowmeter (Manual)	1348-0613-P1
Diaphragm Pump (vacuum) TF 1700 Only	6000-0311-P1
Blower Pump (230 volt)	1360-0320-P1
Blower Pump (120 volt)	1360-0368-P1
Air Flow Sensor	3008-0138-P1
Laser Pointer	6000-0239-P1
Suction Cup (includes 3)	6993-0202-P1
Pre Heater (120 volt) TF 1700	6000-0335-P1
Pre Heater (230 volt) TF 1700	6000-0336-P1
TF 1700 Top Heater 230v with Front Theta Control	6000-0344-P1
TF 1700 Top Heater 120v with Front Theta Control	6000-0343-P1
Nitrogen Solenoid TF 1700	6000-0313-P1
Air Flow Sensor (Systems with Theta adjustment on front)	3008-0280-P1
Auto Control Flow Meter (Systems with Theta adjustment on front)	1198-0019-P1
PV-65 Pik Vac Vacuum Wand	7027-0001-P1
Optical Alignment Kit	4018-0100-P1
Small Vacuum Pik (TF 1700 / TF 2700 only)	1121-0927-P1
Odd Shaped Board Holder Kit	6000-0244-P1
K-Type Thermocouple Pk2	1340-0174-P1
Hex Key Set	6016-0033
Stencil Platform Assembly	6000-0247-P1
Flux Tray Assembly	6000-0245-P1
Cable, RS232	3008-0175-P1
Tool, Nozzle/Chip Assy	1100-0231-P1
PCB Support	6000-0297-P1
Hot Grip Removal Pad	1100-0307-P1
Stencil, Component, Leads	1001-0001-P1
Centering Clamp Assembly	6000-0285-P1

*If current Theta is top-mounted, 6993-0297-P1 must be purchased with replacement heater.

PACE BGA Rework Systems



TF 1700 Optional Items and Replacement Parts

Item	Description	Voltage	Part Number
	TF 1700, PCB, main (up to Serial #40618)	Both	6020-0205-P1
	TF 1700, PCB, main (beyond Serial #40618)	Both	6020-0218-P1
Printed Circuit Boards	High volt, PCB, TF 3000 / 2500 (up to Serial #40618)	Both	6020-0155-P1
	High volt, PCB, TF 3000 / 2500 (beyond Serial #40618)	Both	6020-0219-P1
	TF white led board	Both	6020-0206-P1
	PCB, sensor TF	Both	6020-0157-P1
Vacuum Pumps (Heater pick "Z" Force & pick vacuum)	Vacuum pump, TF1700 / 2700	Both	6000-0311-P1
Flow Pump (Blower)	TF air pump assembly, domestic	115V	1336-0045-P1
	TF air pump assembly, export	230V	1336-0046-P1
Vacuum Picks	TF vacuum pick kit - 7 sizes A07	Both	6993-0276-P1
Computer Video Cable	Video cable, cronus card A06	Both	3008-0277-P1
Computer Video Card	Frame grabber card	Both	6020-0178-P1
Rs 232 Cable (Serial Cable)	Cable, RS232		3008-0175-P1
Heater Head Motor	Assembly, Heater head motor	Both	1334-0041-P1
Communcations Bracket	Assembly, COMM bracket	Both	6000-0302-P1
Heater Head Cover	Assembly, TF Heater head cover	Both	6000-0350-P1
Board Cooling Fan	Assembly, board cooling fan	Both	6000-0255-P1
Camera Drive Motor	Assembly, Camera, drive motor	Both	6000-0310-P1
Computer System (Please let PACE know which system)	Computer, XR/LS config	Both	6000-0234-P1
Air Flow Meter	TF air flow meter	Both	1198-0020-P1
Fish Pump Assembly	TF pik-vacuum assembly	Both	1336-0049-P1
PCB, Sensor TF			6020-0157-P1
PCB, Blue LED Assy			6020-0159-P1
Red LED PCB			6020-0184-P1
Optics Prism, TF 1700			6000-0249-P1
TF White LED Board			6020-0206-P1
TF Heater Upgrade Kit			6993-0297-P1
Valve, Proportional			1263-0036-P1
Cable, USB-A/USB-B Male 6"			3008-0295-P1
Fuse, .5 Amp S.B.			1159-0248-P5
Fuse .5 Amp, Time Lag, IEC			1159-0213-P5
Circuit Breaker 15A			1157-0097-P1
Circuit Breaker, Export			1157-0096-P1

PACE BGA Rework Systems



TF 2700 Optional Items and Replacement Parts

Description	Part Number
Fuse, 0.5 Amp, Slo Blo (230 volt)	1159-0213-P5
Fuse Holder 5 x 20mm	1161-0008-P1
Micro-Positioner	1251-0117-P1
Panel Mount Fitting (vacuum)	1259-0135-P1
Low Pressure Pump	1334-0021-P1
Nitrogen Solenoid TF 2500	1336-0047-P1
Nitrogen Solenoid TF 2700	6000-0313-P1
Diaphragm Pump (vacuum) TF 2700 Only	6000-0311-P1
Blower Pump (230 volt)	1360-0320-P1
Blower Pump (120 volt)	1360-0368-P1
Air Flow Sensor	3008-0138-P1
Laser Pointer	6000-0239-P1
Board Cooling Fan	6000-0255-P1
Pre-heater Assembly (120 volt) TF 2700	1336-0071-P1
Pre-heater Assembly (230 volt) TF 2700	1336-0072-P1
High Voltage PCB (TF 2700)	6020-0155-P1
PCB Main TF 2700	6020-0182-P1
Heater Cover for Top-Mounted Theta Control (Converts to front-mounted)*	6993-0297-P1
TF 2700 Top Heater 230v with Front Theta Control	6000-0346-P1
TF 2700 Top Heater 120v with Front Theta Control	6000-0345-P1
Air Flow Sensor (Systems with Theta adjustment on front)	3008-0280-P1
Heater Upgrade Kit (Converts top-mounted Theta to front-mounted)*	6993-0297-P1
PCB, Sensor TF	6020-0157-P1
PCB, Main Control	6020-0182-P1
TF White LED Board	6020-0206-P1
Assembly, PCB TF / IR Control	6020-0218-P1
Vacuum Pump TF 1700 / TF 2700	6000-0311-P1
TF Air Pump Assembly, Export	1336-0046-P1
S Video Cable, Cronus Card	3008-0277-P1
Frame Grabber Card	6020-0178-P1
Assembly, Heater Head Motor Drive	1336-0067-P1
Assembly, TF Heater Head Cover	6000-0350-P1
TF Heater Upgrade Kit	6993-0297
Assembly, Camera Drive Motor	6000-0310-P1
TF Pik-Vacuum Assembly	1336-0049-P1
Valve, Proportional	1263-0036-P1
Cable, USB-A/USB-B, male 6"	3008-0295-P1
Fuse, .5 Amp S.B.	1159-0248-P5
Breaker, 20 Amp, 250V	1157-0110-P1
Breaker, 10 Amp, 250V	1157-0111-P1

*If current Theta adjustment is top-mounted, 6993-0297-P1 must be purchased with replacement heater assembly.

PACE BGA Rework Systems



TF 2700 Optional Items and Replacement Parts

Description	Part Number
Auxilliary Pre-Heater Therna Couple PCB	6020-0181-P1
Aux Pre Heater Control PCB	6020-0180-P1
Odd Shaped Board Holder Kit	6000-0244-P1
K-Type Thermocouple Pk2	1340-0174-P1
Optical Alignment Kit	4018-0100-P1
Hex Key Set	6016-0033
Stencil Platform Assembly	6007-0247-P1
Pik-Vac Wand	7027-0001-P1
Flux Tray Assembly	6000-0245 -P1
Cable, RS232	3008-0175-P1
Vacuum Pick Kit TF 2700	6993-0276 -P1
Small Vacuum Pik (TF 1700 / TF 2700 only)	1121-0927-P1
Tool, Nozzle / Chip Assy	1100-0231-P1
PCB Support	6000-0298-P1
Hot Grip Removal Pad	1100-0307-P1
Stencil, Component, Leads	1001-0001-P1
Centering Clamp Assembly	6000-0285-P1
PACE Mouse Mat	1100-0100-P1
Leg, Board Holder	1348-0700-01

PACE BGA Rework Systems



IR 1000 Optional Items and Replacement Parts

Item	Description	Voltage	Part Number
Top Heater	Kit, HTR Replacement, IR 1000	115V	6993-0302-P1
	Kit, HTR Replacement, IR 1000	230V	6993-0303-P1
Bottom Heater	Assy, Preheater, IR 1000, DOM	115V	6000-0400-P1
	Assy, IR 3000, PreHeater, EXP	230V	6000-0401-P1
Fan & Laser Assembly	Assembly, Fan Box, IR 1000	Both	6993-0304-P1
Printed Circuit Board	Main Control PC Board, IR 1000	Both	6020-0221-P1
Fan, Base Assembly	Fan, 115VAC, 60Hz 10 Watts	115V	6000-0216-P1
	Fan, 230VAC 60Hz 12 Watts	230V	6000-0217-P1
Vacuum Pump	Assembly, Flow Pump	Both	1336-0081-P1
Replacement Vacuum Pick Kit			6000-0379-P1
Fish Pump Assembly	Assembly, Pump, 21V	Both	1336-0078-P1
Thermocouple Probe	Thermocouple Probe, PCB, IR 1000, 6"	Both	7021-0009-P1
Low Voltage Fuse	Fuse, .5 Amp S.B.		1159-0248-P5
	Fuse, 0.5 Amp, Time Lag, IEC, P5		1159-0213-P5
Main Chassis Fuse	Fuse, 15 Amp, Slo Blo, IR1000, DOM	250V	1159-0279-P5
	Fuse, 7 Amp, Time Lag, IR1000, EXP	250V	1159-0278-P5

PACE BGA Rework Systems



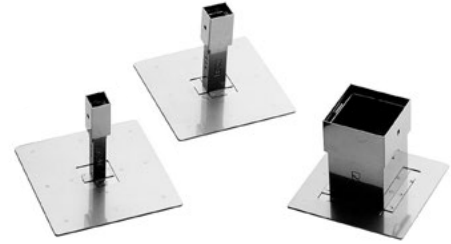
IR 3000 Optional Items and Replacement Parts

Item	Description	Voltage	Part Number
Top Heater	Heater IR 3000	115V	6000-0351-P1
	Heater IR 3000	230V	6000-0352-P1
Bottom Side Heater (Lower Heater)	Assy, Pre-heater, IR 3000, DOM	115V	6000-0362-P1
	Assy, IR 3000, Pre-heater, EXP	230V	6000-0364-P1
Printed Circuit Boards	Assy, PCB, TF/IR Control	Both	6020-0218-P1
	High Voltage PCB, TF/IR	Both	6020-0219-P1
	TF White LED Board	Both	6020-0206-P1
	PCB, Sensor TF	Both	6020-0157-P1
Vacuum Pumps (Heater Pick "Z" Force & Pick Vacuum)	Vacuum Pump, TF 1700/2700	Both	6000-0311-P1
Vacuum Picks	IR Vacuum Pick Kit, 6 Sizes	Both	6993-0290-P1
Computer Video Cable	Cable, Video, External, IR 3000	Both	3008-0292-P1
Computer Video Card	FRAME GRABBER Card	Both	6020-0178-P1
USB Cable	Cable, USB-A / USB-B, Male, 6'	Both	3008-0295-P1
Heater Head Motor	Assembly, Heater Head Motor	Both	1334-0041-P1
Heater Head Cover	Assy, Heater Head Cover, IR 3000, DOM	115V	6000-0360-01
	Assy, Heater Head Cover, IR 3000, EXP	230V	6000-0360-02
Board Cooling Fan	Assembly, Board Cooling Fan	Both	6000-0255-P1
Camera Drive Motor	Assembly, Camera Drive Motor	Both	6000-0310-P1
Fish Pump Assembly	TF Pik-Vacuum Assembly	Both	1336-0049-P1

ThermoFlo BGA Nozzles

(for use with TF 1700 & TF 2700)

Listed below are standard nozzles available from PACE. Custom nozzles can be designed and manufactured for special or non-standard applications. Contact PACE for more information.



ThermoFlo Nozzle Chart

Maximum Component Size	Nozzle Dimensions	Nozzle P/N
5mm (0.197") x 5mm (0.197")	8mm (0.31") x 8mm (0.31")	4038-7001
6mm (0.24") x 8mm (0.31")	9mm (0.35") x 11mm (0.43")	4038-7002
8.2mm (0.32") x 12.7mm (0.50")	11.1mm (0.44") x 15.6mm (0.61")	4038-7003
9mm (0.35") x 9mm (0.35")	12mm (0.47") x 12mm (0.47")	4038-7004
10mm (0.39") x 10mm (0.39")	13mm (0.51") x 13mm (0.51")	4038-7005
13mm (0.51") x 13mm (0.51")	16mm (0.63") x 16mm (0.63")	4038-7006
15mm (0.59") x 15mm (0.59")	18mm (0.71") x 18mm (0.71")	4038-7007
17mm (0.67") x 17mm (0.67")	20mm (0.79") x 20mm (0.79")	4038-7008
23mm (0.90") x 23mm (0.90")	26mm (1.02") x 26mm (1.02")	4038-7009
27mm (1.06") x 27mm (1.06")	30mm (1.18") x 30mm (1.18")	4038-7010
35mm (1.37") x 35mm (1.37")	38mm (1.5") x 38mm (1.5")	4038-7011
44.5mm (1.75") x 44.5mm (1.75")	47.5mm (1.87") x 47.5mm (1.87")	4038-7012
LQFP 22mm (0.87") x 22mm (0.87")	22mm (0.87") x 22mm (0.87")	4038-7013*
LQFP 16mm (0.63") x 16mm (0.63")	16mm (0.63") x 16mm (0.63")	4038-7014*
LQFP 30mm (1.18") x 30mm (1.18")	30mm (1.18") x 30mm (1.18")	4038-7015*
LQFP 9mm (0.35") x 9mm (0.35")	9mm (0.35") x 9mm (0.35")	4038-7016*
LQFP 12mm (0.47") x 12mm (0.47")	12mm (0.47") x 12mm (0.47")	4038-7017*
LQFP 26mm (1.02") x 26mm (1.02")	26mm (1.02") x 26mm (1.02")	4038-7018*
LQFP 16mm (0.63") x 22mm (0.87")	16mm (0.63") x 22mm (0.87")	4038-7019*
LQFP 14mm (0.55") x 14mm (0.55")	14mm (0.55") x 14mm (0.55")	4038-7020*
14mm (0.55") x 22mm (0.87")	17mm (0.67") x 25mm (0.99")	4038-7021
50mm (1.97") x 50mm (1.97")	53mm (2.1") x 53mm (2.1")	4038-7022
60mm (0.75") x 60mm (0.75")	63mm (2.5") x 63mm (2.5")	4038-7023
40mm (1.57") x 40mm (1.57")	43mm (1.7") x 43mm (1.7")	4038-7024
25mm (0.98") x 25mm (0.98")	28mm (1.1") x 28mm (1.1")	4038-7025
19mm (0.75") x 19mm (0.75")	22mm (0.87") x 22mm (0.87")	4038-7026
16.1mm (0.64") x 8mm (0.31")	18.2mm (0.72") x 9.9mm (0.39")	4038-7027
33mm (1.29") x 33mm (1.29")	36mm (1.42") x 36mm (1.42")	4038-7028
21mm (0.83") x 25mm (0.98")	23mm (0.91") x 27mm (1.06")	4038-7029
29mm (1.14") x 29mm (1.14")	32mm (1.26") x 32mm (1.26")	4038-7030
31mm (1.22") x 31mm (1.22")	34mm (1.33") x 34mm (1.33")	4038-7031
42mm (1.65") x 42mm (1.65")	45mm (1.77") x 45mm (1.77")	4038-7032
Connector, 16mm (0.63") x 13mm (0.51")	16mm (0.63") x 13mm (0.51")	4038-7033*
Connector, 27mm (1.06") x 13mm (0.51")	27mm (1.06") x 13mm (0.51")	4038-7034*
Connector, 30mm (1.18") x 12mm (0.47")	30mm (1.18") x 12mm (0.47")	4038-7035*
Connector, 19mm (0.75") x 8mm (0.31")	19mm (0.75") x 8mm (0.31")	4038-7036*
55mm (2.17") x 16.5mm (0.65")	58mm (2.28") x 19.4mm (0.76")	4038-7037
30mm (1.18") x 17mm (0.68")	30mm (1.18") x 17mm (0.68")	4038-7038*


* Nozzles have baffles/shielding inside.

Maximum Component Size	Nozzle Dimensions	Nozzle P/N
13mm (0.51") x 10mm (0.40")	16mm (0.63") x 13mm (0.51")	4038-7039
7.3mm (0.29") x 7mm (0.27")	10mm (0.40") x 9.9mm (0.39")	4038-7040
8mm (0.32") x 8mm (0.32")	11mm (0.43") x 11mm (0.43")	4038-7041
6mm (0.24") x 6mm (0.24")	9mm (0.35") x 9mm (0.35")	4038-7042
44mm (1.73") x 44mm (1.73")	47mm (1.85") x 47mm (1.85")	4038-7043
30mm (1.18") x 30mm (1.18")	33mm (1.3") x 33mm (1.3")	4038-7044
43mm (1.7") x 43mm (1.7")	46mm (1.81") x 46mm (1.81")	4038-7045
46mm (1.81") x 46mm (1.81")	49mm (1.93") x 49mm (1.93")	4038-7046
41mm (1.61") x 41mm (1.61")	43mm (1.7") x 43mm (1.7")	4038-7047
28mm (1.1") x 28mm (1.1")	31mm (1.22") x 31mm (1.22")	4038-7048
48mm (1.89") x 48mm (1.89")	51mm (2") x 51mm (2")	4038-7049
11.4mm (0.45") x 5.1mm (0.20")	14.4mm (0.56") x 8mm (0.32")	4038-7050
32.5mm (1.28") x 23mm (0.90")	35.5mm (1.40") x 26mm (1.02")	4038-7051
17mm (0.67") x 11mm (0.43")	20mm (0.79") x 14mm (0.55")	4038-7052
32mm (1.26") x 17mm (0.67")	35mm (1.37") x 20mm (0.79")	4038-7053
42.5mm (1.67") x 32.5mm (1.27")	45.5mm (1.80") x 35.5mm (1.39")	4038-7054
5.2mm (0.20") x 5.2mm (0.20")	8.1mm (0.32") x 8.1mm (0.32")	4038-7055
25mm (0.98") x 32.5mm (1.28")	27.8mm (1.10") x 35.4mm (1.39")	4038-7056
22mm (0.86") x 22mm (0.86")	25mm (0.98") x 25mm (0.98")	4038-7057
20mm (0.79") x 8mm (0.31")	23mm (0.90") x 11mm (0.43")	4038-7058
28.5mm (1.12") x 17mm (0.67")	31.5mm (1.12") x 20mm (0.79")	4038-7059
21mm (0.83") x 12.75mm (0.50")	24mm (0.94") x 15.75mm (0.62")	4038-7060
20mm (0.79") x 20mm (0.79")	23mm (0.90") x 23mm (0.90")	4038-7061
15.6mm (0.61") x 5.1mm (0.20")	18.6mm (0.73") x 8.1mm (0.31")	4038-7062
15.34mm (0.60") x 12.7mm (0.50")	18.34mm (0.72") x 15.7mm (0.61")	4038-7063
44mm (1.73") x 33mm (1.29")	47mm (1.85") x 36mm (1.41")	4038-7064
40.1mm (1.58") x 26.8mm x (1.05")	40.1mm (1.58") x 26.8mm x (1.05")	4038-7066*
75mm (2.96") x 75mm (2.96")	78mm (3.07") x 78mm (3.07")	4038-7069
14mm (0.55") x 10mm (0.39")	16.9mm (0.66") x 13mm (0.51")	4038-7070
37mm (1.46") x 37mm (1.46")	40mm (1.57") x 40mm (1.57")	4038-7071
17mm (0.67") x 23mm (0.91")	19.9mm (0.78") x 26mm (1.02")	4038-7072
16mm (0.63") x 22mm (0.87")	19mm (0.74") x 25mm (0.98")	4038-7074
14.5mm (0.571") x 14.5mm (0.571")	17.3mm (0.685") x 17.3mm (0.685")	4038-7075
8mm (0.32") x 9mm (0.35")	11mm (0.43") x 12mm (0.47")	4038-7081
61mm (2.40") x 41mm (1.61")	64mm (2.52") x 44mm (1.73")	4038-7082
54mm (2.13") x 17mm (0.67")	57mm (2.24") x 20mm (0.78")	4038-7083
13mm (0.51") x 15mm (0.59")	16mm (0.63") x 18mm (0.71")	4038-7084
7mm (0.28") x 6mm (.24")	10mm (0.39") x 9mm (0.35")	4038-7085
9mm (0.35") x 7.5mm (0.30")	12mm (0.47") x 10mm (0.41")	4038-7086
11mm (0.43") x 10mm (0.39")	14mm (0.55") x 13mm (0.51")	4038-7087
14mm (0.55") x 11mm (0.44")	17mm (0.67") x 14mm (0.55")	4038-7088
12mm (0.472") x 12mm (0.472")	14.9mm (0.586") x 14.9mm (0.586")	4038-7089
9mm (0.35") x 6mm (0.24")	12mm (0.47") x 9mm (0.35")	4038-7090
Micro Nozzle Kit	1mm to 8mm square	6993-0244-P1

* Nozzles have baffles/shielding inside.

PACE Accessories

Stenciling Products

	Description	Part Number
	<p>Stencil Bracket Kit</p> <p>Applies solder paste to component, reducing the difficulty and mess associated with PCB stenciling.</p> <p>The Stencil Bracket Kits do not include stencils. Stencils are purchased separately as required by solder ball count geometry on component packages. Both the Stencil Bracket Kit and a stencil are required to apply solder paste to the component. The Stencil Bracket Kits may be used on any of our currently sold stencils.</p>	6993-0248-P1

Fume Extraction Systems



Replacement Parts

Description	Part Number	
Arm-Evac 50 Pre-Filter	8883-0125-P5	
Arm-Evac 50 Economy Filter	8883-0300-P5	
Arm-Evac 50 General Purpose Filter	8883-0280-P1	
Arm-Evac 50 CleanRoom Filter	8883-0290-P1	
Arm-Evac 50 Adhesive Filter	8883-0295-P1	
Arm-Evac 105 Pre-Filter	8883-0111-P5	
Arm-Evac 105 High Capacity Pre-Filter	8883-0938-P10	
Arm-Evac 105 Economy Filter	8883-0871-P1	
Arm-Evac 105 General Purpose Filter	8883-0901-P1	
Arm-Evac 105 CleanRoom Filter	8883-0921-P1	
Arm-Evac 105 High Capacity Filter	8883-0936-P1	
Arm-Evac 105 Adhesive Filter	8883-0951-P1	
Arm-Evac 200 / 250 Pre-Filter	8883-0111-P5	
Arm-Evac 200 / 250 High Capacity Pre-Filter	8883-0938-P10	
Arm-Evac 200 / 250 Economy Filter	8883-0871-P1	
Arm-Evac 200 / 250 General Purpose Filter	8883-0931-P1	
Arm-Evac 200 / 250 CleanRoom Filter	8883-0921-P1	
Arm-Evac 200 / 250 High Capacity Filter	8883-0936-P1	
Arm-Evac 200 / 250 Adhesive Filter	8883-0951-P1	
Arm-Evac 500 Pre-Filter	8883-0145-P5	
Arm-Evac 500 General Purpose Filter	8883-0955-P1	
Arm-Evac 500 CleanRoom Filter	8883-0965-P1	
Arm-Evac 500 Carbon Filter	8883-0956-P1	
Arm-Evac 50 120v & 230v Replacement Fuse	1159-0221-P5	
Arm-Evac 105/200/250/500 120v Replacement Fuse	1159-0280-02-P5	
Arm-Evac 105/200/250/500 230v Replacement Fuse	1159-0280-01-P5	
Motor and Capacitor	Arm-Evac 50	8884-0200-P1
	Arm-Evac 105	6000-0410-P1
	Arm-Evac 105E	6000-0409-P1
	Arm-Evac 200	6000-0408-P1
	Arm-Evac 200E	6000-0407-P1
	Arm-Evac 250	6000-0402-P1
	Arm-Evac 250E	6000-0403-P1
	Arm-Evac 500	6000-0416-P1
Arm-Evac 500E	6000-0417-P1	
Fume Main PCB	Arm-Evac 250	8884-2550-P1
	Arm-Evac 500	8884-2575-P1

Solutions and systems for soldering, rework and repair of electronics

A Worldwide Commitment

With offices worldwide, PACE is a recognized world leader in the development of solutions for the assembly and repair of highly advanced electronics. Our expertise extends back to the dawn of the modern electronics industry. In 1958, PACE introduced training programs for the repair of printed wire assemblies and soon after, revolutionized the industry by creating the first self-contained vacuum desoldering system.

Today, PACE continues to provide innovative solutions, products and training for the rework, repair and inspection of printed circuit assemblies. Our unique capabilities and evolving vision have provided universal solutions for thru-hole and surface mount assembly and rework problems for the most advanced electronics.

Additionally, PACE manufactures Fume Extraction Systems to reduce exposure to harmful particulates and gases created from hand soldering operations. PACE Fume Extraction Systems effectively remove these contaminants from the worker's breathing zone thereby reducing or eliminating health risks and improving productivity.

Our strong commitment and history of achievement has resulted in an unparalleled range of Assembly, Repair and Fume Extraction solutions to meet your needs whether working to ISO-9001, industrial, military or your own internal specifications. Whatever the challenge, PACE stands ready to help you set a new standard.

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PACE products meet or exceed all applicable military or civilian EOS/ESD, temperature stability and other specifications, including MIL-STD-2000, ANSI/J-STD001, IPC 7711, IPC 7721 and IPC-A-610.

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