DIC HIGH-PERFORMANCE DESOLDERING TOOL

MODEL

SC-7000Z

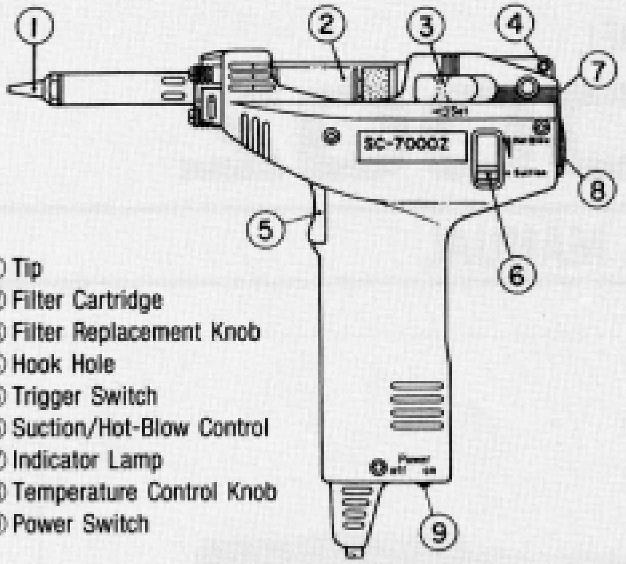
OPERATION MANUAL

DEN-ON INSTRUMENTS CO.,LTD.

TOKYO JAPAN

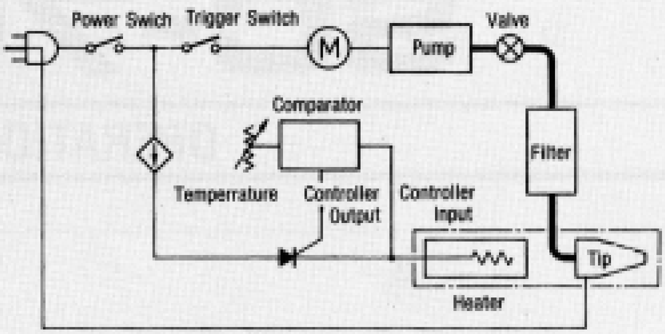
Thank you for your purchase of the DIC SC-7000Z high-performance desoldering tool as one of your service instruments. We hope that the use of our quality product will give you satisfaction for years to come.To get the maximum performance, please note the following instructions before operating the tool. This basic technical sheet will help you to better understand the features, advantage, and maintenance necessary to keep the tool functioning efficient.

Major controls and features



① Tip
② Filter Cartridge
③ Filter Replacement Knob
④ Hook Hole
⑤ Trigger Switch
⑥ Suction/Hot-Blow Control
⑦ Indicator Lamp
⑧ Temperature Control Knob
⑨ Power Switch

SC-7000Z Block Diagram



USAGE

1. Plug the power cord into an electrical outlet. Then set the power switch located on the bottom of handgrip to "ON"position and it will warm up in a few minutes.
   NOTE;
   a) When SC-7000Z is opereated for the first time, fumes may develop in the area of the heater holder. But this is normal because it is caused by the protective coating .
   b) Check that the filter cartridge is in a proper position and direction.

2. Set the temperature control knob to suit the application. For standard suction procedures, it is advisable to choose a position between 380°C and 420°C. When working on multilayer P.C.B, the most satisfactory results will be obtained at temperatures ranging fron 430°C to approx. 450°C

3. To remove the solder around any lead-wire of a given components, simply place and insert the bore of the suction tip over the wire-end, and at the solder melting, gentily pull the vacuum trigger switch to allow the pump to suck the melting solder away.

4. The removed solder will gradually accumulate in the filter cartridge and should be removed with tweezers from time to time.

5. When the white felt in the filter cartridge becomes dirty, the suction effect of the system will decrease. It is recommended that the filter cartridge be changed when one-fourth or one-halt of the filter shows a build up of impurities.

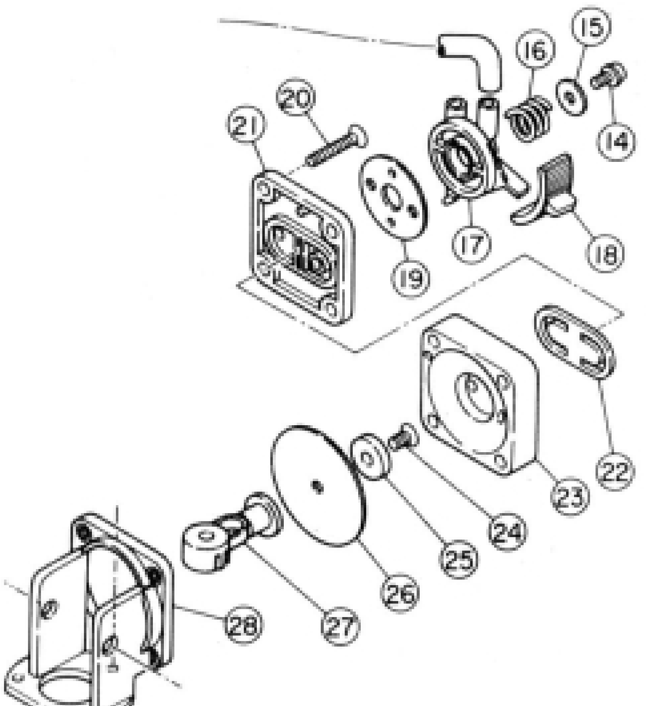
6. If the bore of the suction tip becomes clogged with flux and/or solder and causes a decrease in suction performance, it will be necessary to clear the channel, using the cleaning pin set.
   NOTE; The instrument is delivered with a cleaning pin set composed of 3 different diameter pins to be used accoring to the suction tip sizes. Each cleaning pin has a long and a short size. Use the short pin first, then followed by the long pin.

7. After a working session, clear the bore of any flux and/or solder residuals, then, set the operating mode lever to the hot-blow position to clean the tip completely. Your tool will now be ready to proceed with your next job.

8. The indicator lamp⑦ will go on when the heater is on. As the temperature of the tip is higher, so it will be early deteriorated. Lower the temperature when it is in the waiting situation.

PARTS REPLACEMENT AND MAINTENANCE

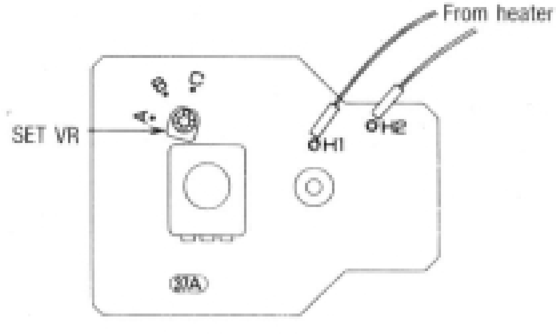
1. **Filter cartridge replacement**
   When solder material has accumulated in the filter cartridge after a long period of operetion, please remove it with tweezers. When one-fourth or one-half of the felt portion has been discolored by dirt, please replace the filter cartridge and filters with new ones.
   NOTE: When replacing the filter cartridge, be sure to clean adjacent area to prevent the air leakage.
   Removal and/or replacement procedure
   Pull the filter releasing/fixing knob inward (release position). Push the cartridge assembly in direction of mark "◁" and remove it. Place the new cartridge with the sign 'FRONT' upwards into location and bring back the releasing/fixing knob to the 'FIX' position.
   Make sure that the knob is properly locked after the replacement.
2. **Suction Tip and SMD Hot Air Nozzle Replacement**
   To remove the tip or SMD hot blow nozzle, unscrew it counterclockwise by a wrench on the nut-cut face. Do not overtighten when mounting it again.
3. **Cleaning and Replacement of Sheet-Valve, Gasket or Diaphragm**
   After long operation, the suction pump parts, such as sheet valve, gasket and/or diaphragm shall need cleaning or replacement.



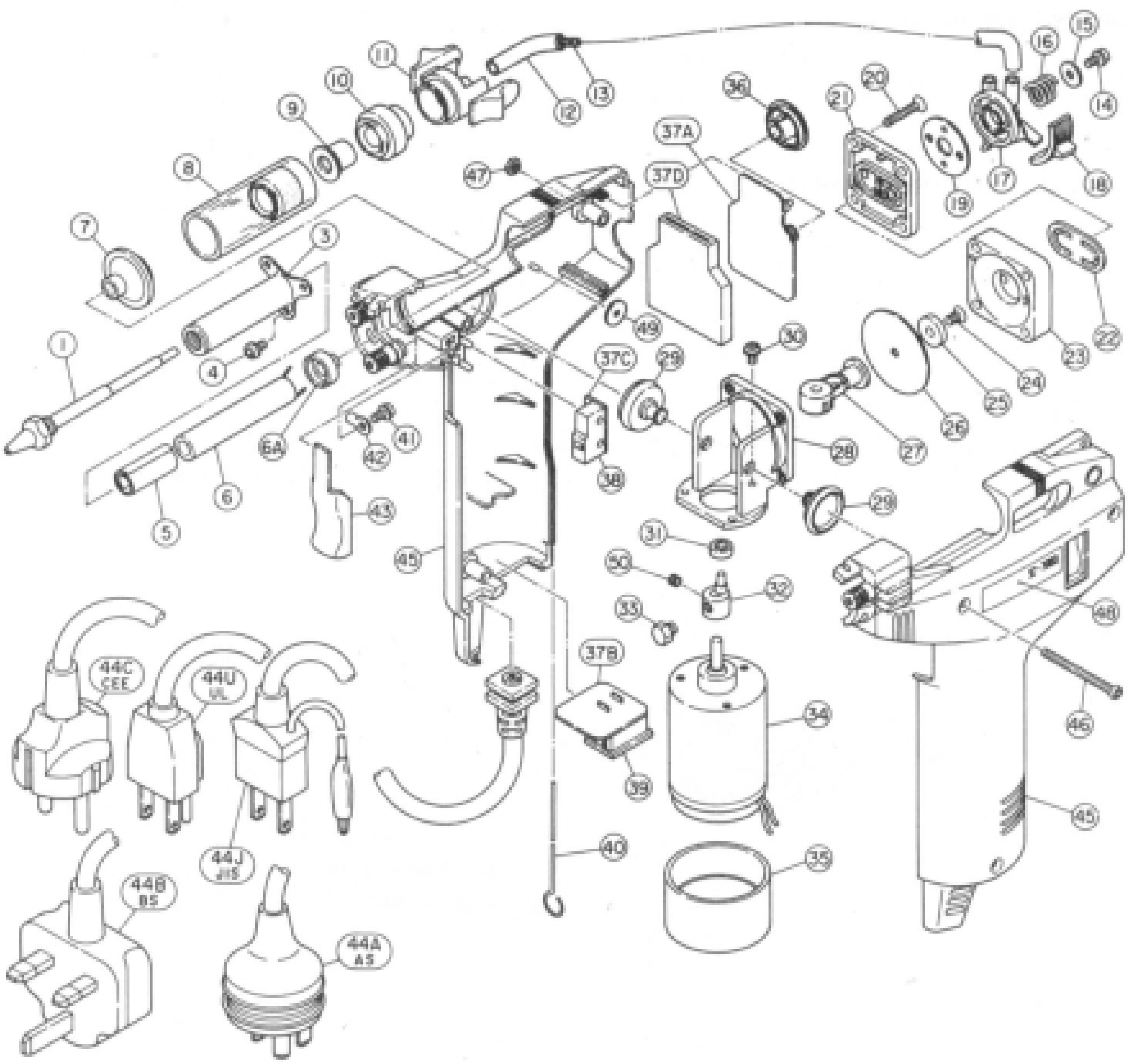
Suction Pump Disassembly for Cleaning and Replacement
Loosen and remove three screws on the body housing.
Also, remove the fixing screw located in the base of the heater holder. Open the side of the body housing carrying the sticker. Take the pump unit out of the body.
For cleaning and replacement of gasket (19) and sheet-valve (22), remove the attached screws (14) and (20) respectively. For diaphragm (26) cleaning and replacement, remove the attached screws (20) and (24).

4. **Heater Replacement**
   Remove the tip or SMD hot blow nozzle. Open the body housing in the same procedures as described on paragraph 3.
   Disconnect the heater circuit plugs from the PCB (37A). Take the heater out of the body housing.
   After replacement of the heater, adjust the variable resistor according to the table below.

Heater Wires Color Code	VR Position
Black	A
Red	B
White	C



SCHEMATIC



SPARE PARTS LIST

Please refer the tip to the back cover.

Drawing No.	Order No.	Description	Remarks
3	70-03-00	Heater holder	
6	70-06-00	Heater with insulation tube	100-120 VAC Model
	70-06-50	Heater with insulation tube	220-240 VAC Model
7	50-07-00	Pipe setter (F)	
8	70-08-00	Fiiter cartridge	One set order consists of 5 pcs. of filter cartridge and 5 pcs.of filter-B
		Filter S (⑨ in SCHEMATIC)	
19	70-19-00	Gasket	
22	70-22-00	Sheet-Valve	
26	70-26-00	Diaphragm	