

# IR BGA Rework Station T862++

## User Manual



TAIAN PUHUI ELECTRIC TECHNOLOGY CO., LTD

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## 1、 Features

- 1) Use of infrared welding technology which is developed independently.
- 2) Use of an infrared heat lamp. Heat is easy to pierce and distribute evenly, which overcome disadvantage (burn out elements) of traditional welding machines.
- 3) Easy operation. You just need one-day training and you can operate it skillfully.
- 4) No need for unsolder tools. IRDA Welder T-862++ can unsolder all the elements between 15 and 35mm.
- 5) This machine has 600W hot-melt system. Its preheating area is 120x120mm.
- 6) Infrared heating without heated air flowing. No impact on circumjacent small elements. It is suitable for all of the elements, especially Micro BGA elements.
- 7) Processor controlled set-point regulated temperatures with thermocouple; Integrated and adjustable Infrared (IR) eye protection.
- 8) The T-862++ also contains a temperature controlled soldering iron.
- 9) factory provided video

**Technical parameter**

Working Voltage	AC220V/50Hz AC110V/60Hz
Output power	800W
Infra-red lamp body temperature adjustable	100°C-350°C
Preheating dish temperature adjustable	60°C-200°C

**Components**

Description	Quantity	Illustration
T-862++ Chassis	1	
PCB Board holder	1	
936 Searing-iron	1	
936 searing-iron rack	1	
Lamp Body and Lens(D=28mm)	1	
Lens(D=38mm)	1	
Lens(D=48mm)	1	
Eye protection(IR Filter)	1	
Cell guide	1	
Focus holder	1	
Focus holder control knob	1	
Fasten nut for focus holder	1	
Steady ring	1	
Fasten nut for steady ring	1	
Power Cable (110VAC or 200VAC)	1	
5mm Fuse, 10A 250VAC (Spare)	1	
CD User Manual w/Video	1	



(D=28mm)



(D=38mm)

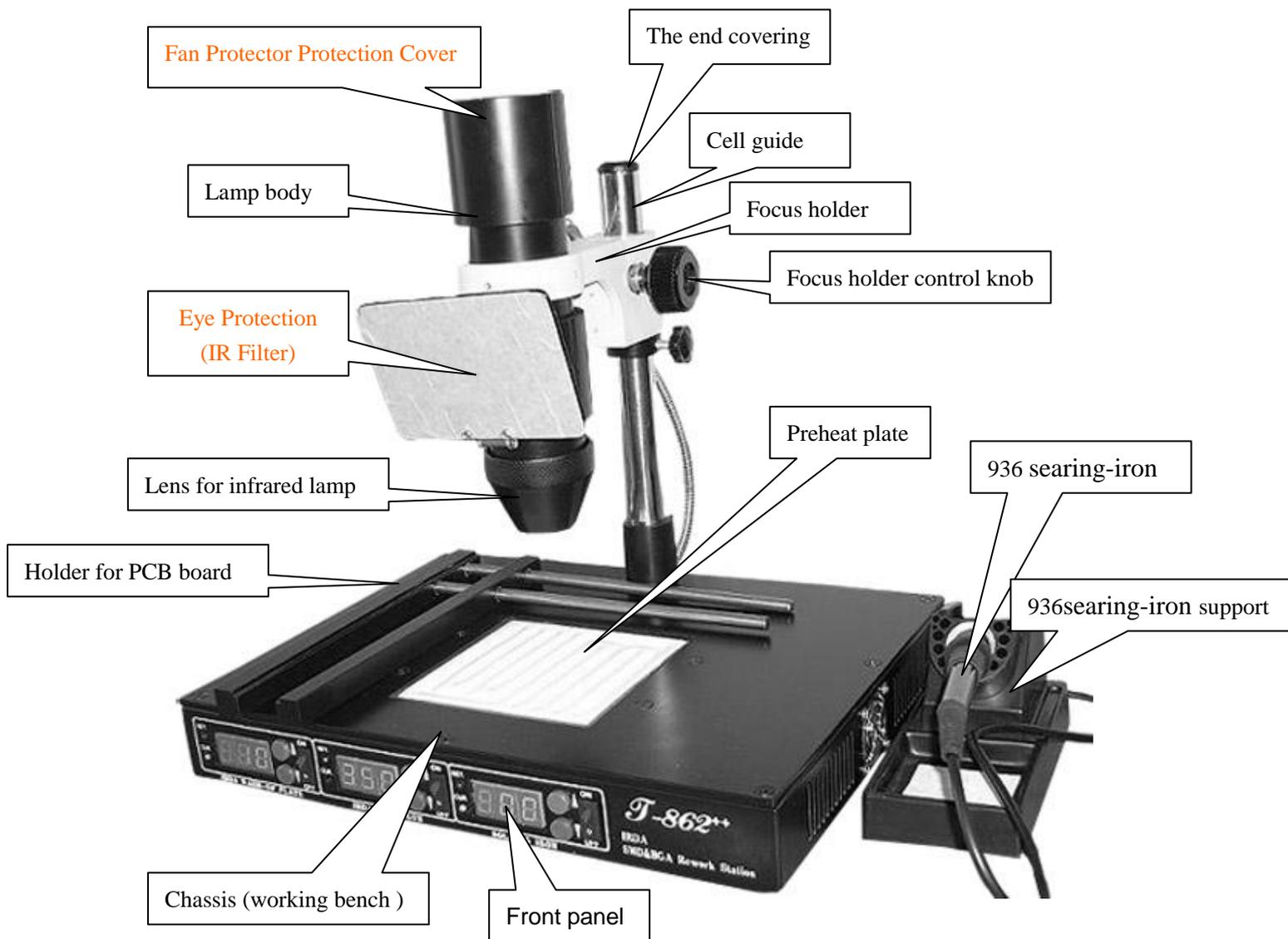


(D=48mm)

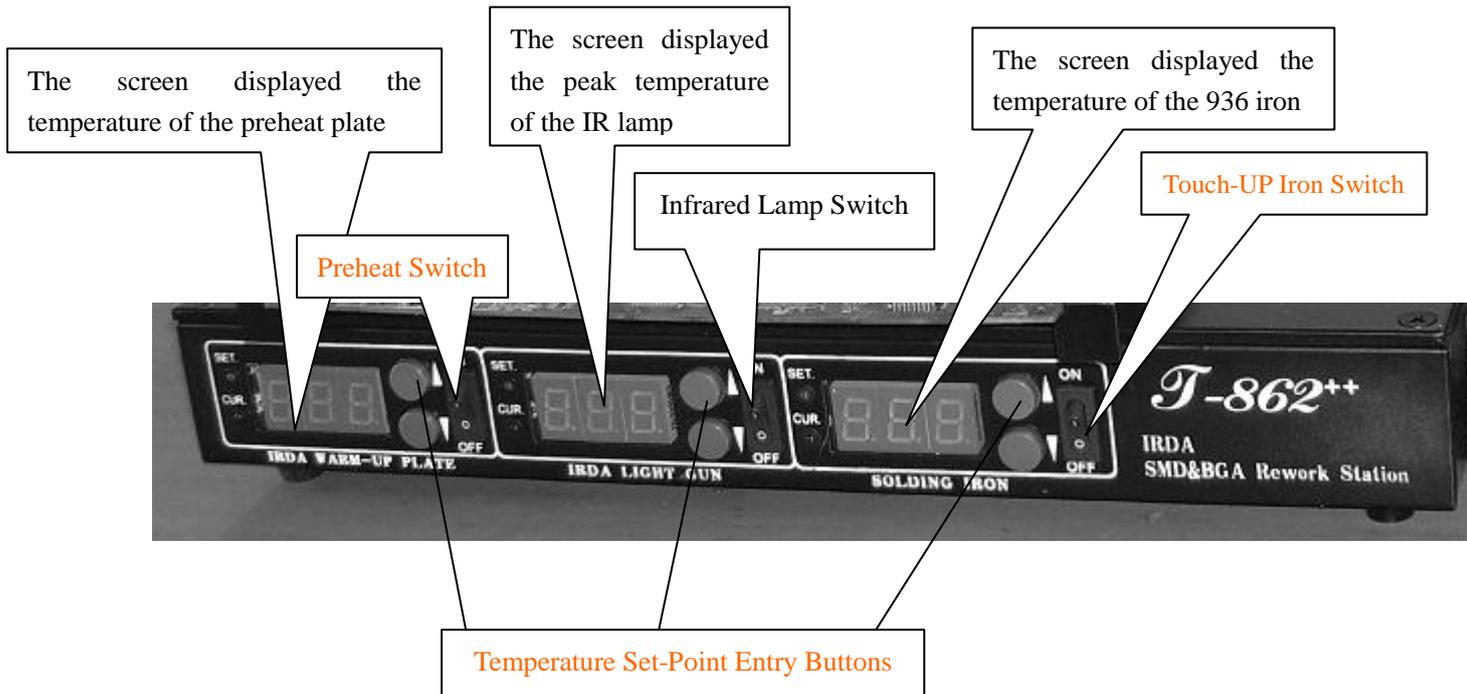
**[Shipped On Lamp Body]**

## T-862++ illustrated explaining

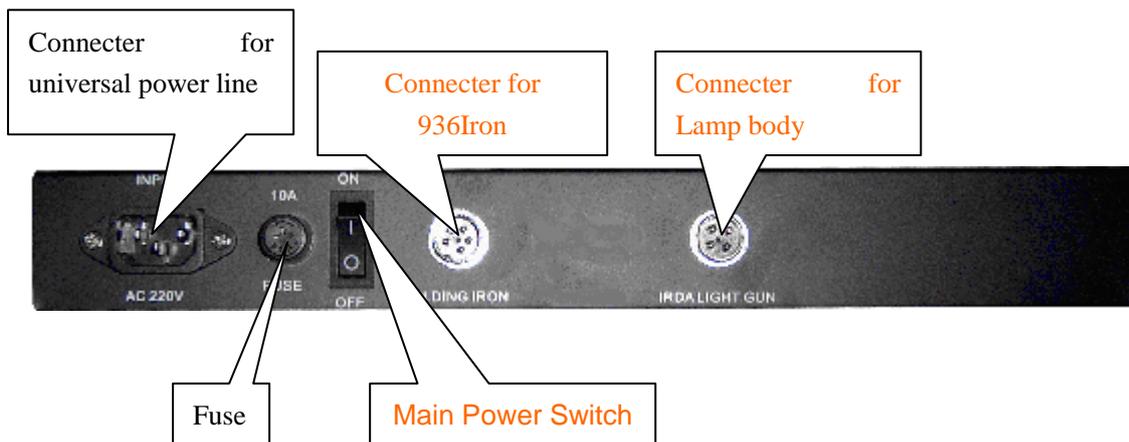
### (1)The whole machine



### (2)Front Panel

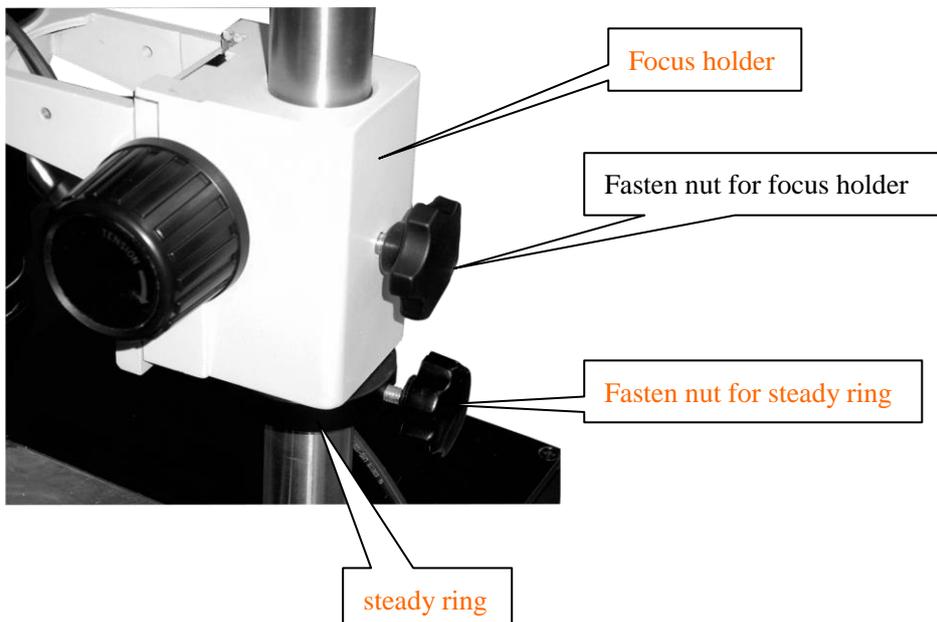
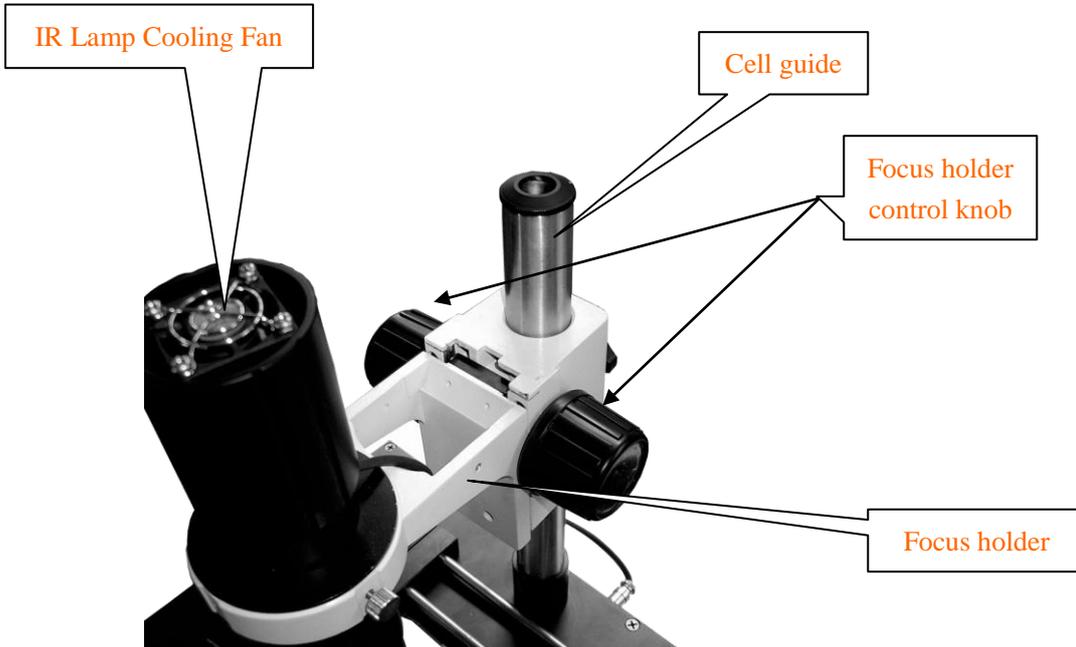


### Rear Panel



### (3) Infrared Lamp

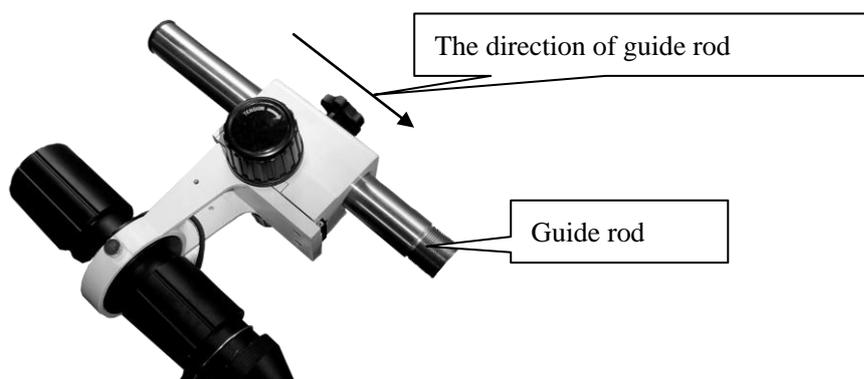
(Focus holder and others)



# Installation

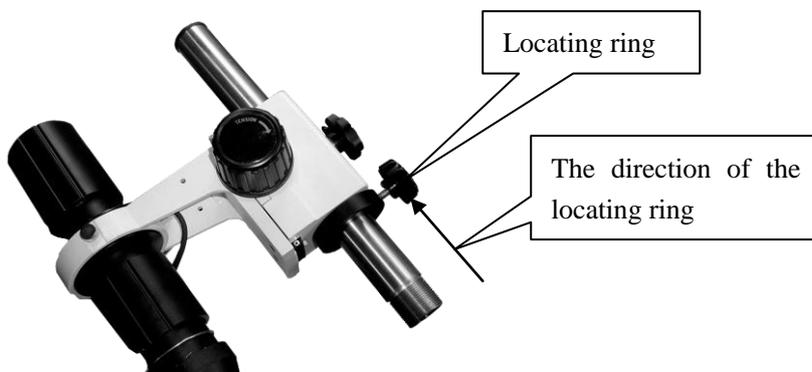
1. Install the guide rod. Loosen the pinch nut of focusing support; put the guide rod in according to the direction of arrow icon pointing.

**Note:** The Infrared Head, Body Mounting and Focus Assembly will be installed in the T-862 chassis later.



2. Inventory all Items, confirm no parts are missing. If parts are missing call 0086 538 6138575

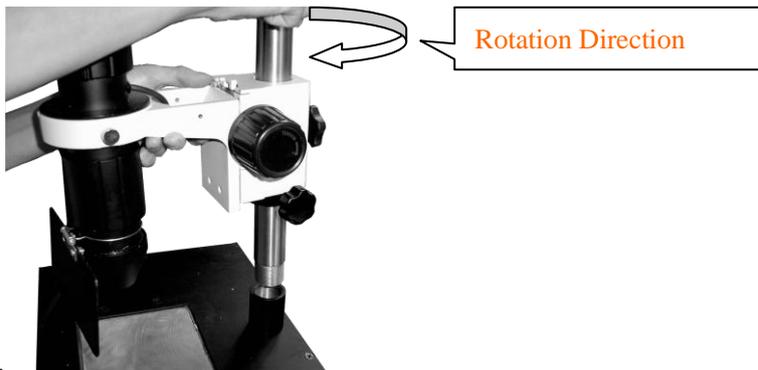
3. Put the locating ring in. Loosen the pinch nut of locating ring; put the locating ring in according to the arrow icon pointing and fasten the nut to the appropriate height.



4. Machine Assembled

- Loosen the pinch nut of focusing support.

- Pick up focusing support; make the guide rod aim at the corresponding nut on the base, then rotate the guide rod.
- Fasten the focusing support by rotating pinch nut of it.
- Rip off the protective film of the filter.



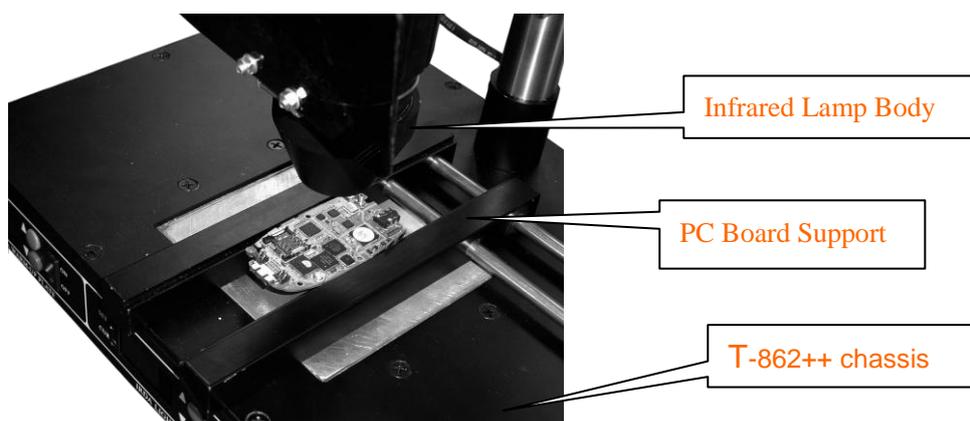
#### 5. Connecting the wire of the lamp body.

Get the adapter of connecting wire plug in the socket of infrared lamp connecting wire.

Rotate set screw clockwise.

#### 6. Attach IR Eye protective filter with the supplied screw and nut.

# T-862++ Operation



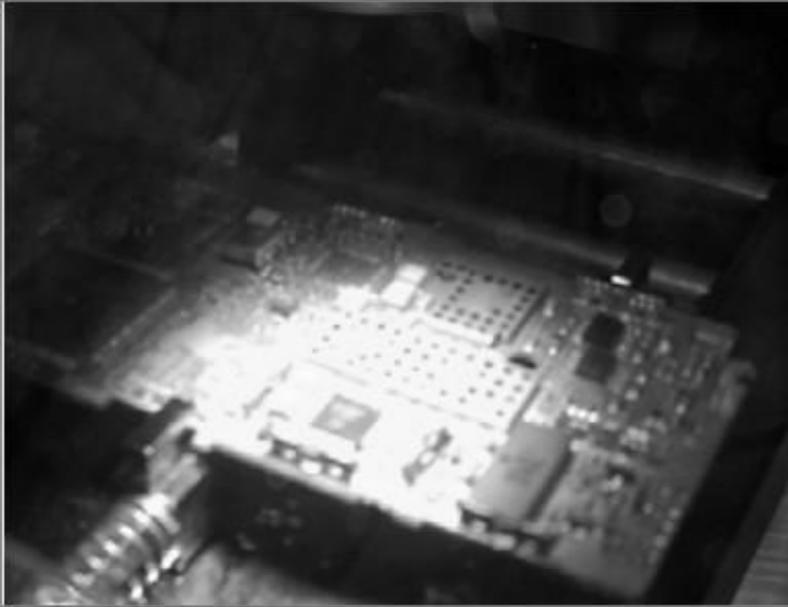
## 1. Starting

- 1) Inspect the infrared lamp body, temperature sensor and power line and see if they are in good connection.
- 2) Turn on the power switch, then use self-checking first (The previous setting value demonstrated on the keyboard display monitor after you turn on the machine).
- 3) Put PCB on the corresponding notch in PCB support, and adjust the pinch nuts of locating ring and focusing support, then adjust the height of infrared lamp body, the ideal height between lamp and the unsoldering article is 20-30mm.
- 4) Locate, choose and attach the appropriate lens, The usable of the lenses diameter are 28mm, 38mm, 48mm.

- (1) When the area of the chips is below 15mm\*15mm, please choose the IR-lamp temperature about 160-240°C, and choose the lens which D=28mm to avoid destroying other places, usually it will take you about 20-40seconds.
- (2) When the area of the chips is between 15mm\*15mm and 30mm\*30mm, please choose the IR-lamp temperature about 240-320°C, and choose the lens which D=38mm to avoid destroying other places, usually it will take you about 30-60seconds.
- (3) When the area of the chips is above 30mm\*30mm, please choose the IR-lamp temperature 350°C Attention: you should turn on the pre-heat dish first, and set-up the temperature about 150-200°C, wait 3-5minutes to allow the temperature steady on the set-up temperature), and choose the lens which D=48mm to avoid destroying other places, and keep the lamp body direct light. You should control the time carefully to avoid burning the chips.
- 5) Adjust the focus. The minimum focal diameter of infrared lamp body is 15mm; the maximum is above 30mm, adjust them according to different chips. Usually, the ideal height between lamp and the chip is 20-30mm. Adjust the focusing knob by the size of the chip. Ideally, the bright spot should cover the whole chip.
- 6) Turn on the two switches on the front panel for the pre heating plate and the infrared lamp.

## 2. Unsoldering operation

Adjust temperature, make the center of the infrared lamp aim at the unsoldered chip.



Once the tin is sufficiently melted, remove the chip.

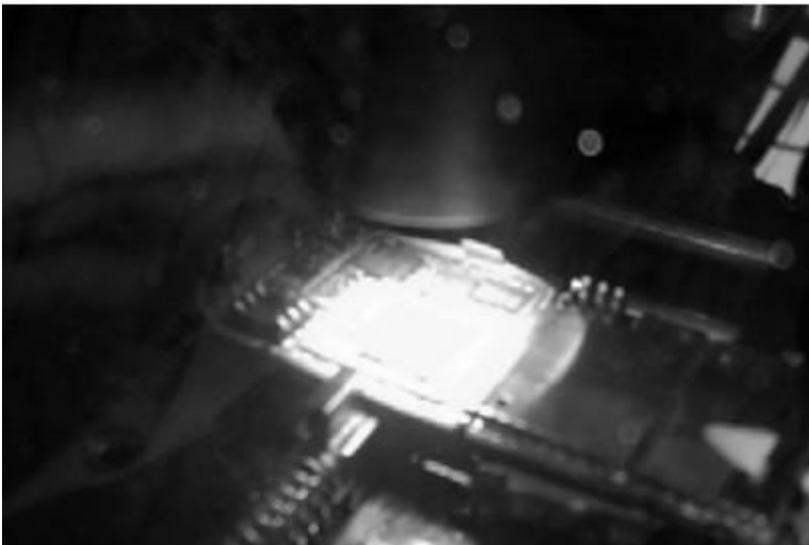


## 3. Soldering operation

① Clean up the welding plate with a brush.



② Put the tin ball and spread soldering flux (not too thick, only a thin layer of it) on the soldering plate.



③ Put the chip in the accurate place after the solvent volatilizes out of soldering flux, heat the tin ball until it melts and solder the chip.



#### **4. Using the lead-free soldering iron**

Switch on the power, set the temperature that you need, turn on the

It can be used separately, But be sure it must be connect with the chassis.

If the component is too small, you needn't use the IR-lamp, the 936 searing-iron is enough.

Open the switch of the 936 searing-iron, set-up the temperature, then use it as you want.

#### **Caution!**

1. Do not cut the power off right after the work finished. You need to wait until the fan cools down the lamp body.
2. Keep the lamp body clean and the ventilation opening free of any obstructions.
3. The guide rod and the focusing support should be spread with lubricant

regularly.

4. Pull out the power plug if you don't use it for a long term.
5. Be careful of operating under high temperature conditions.

### **Warranty statement**

**Reminder: These machines are very heavy, between 8 to 15 kilograms and are not designed to be shipped on airplanes, but in containers that do not move. We are not the shipping company, the airplane crew, the customs agent or the carrier in your country and therefore take no responsibility for damage caused in transit.**

### **Corollary:**

**When our machines leave QC, they are tested, 100% new and in perfect condition. These machines consist of modules. Should you receive a faulty or damaged module, we will be happy to replace it.**

**However, we will not replace the complete machine; this is not covered by our warranty.**

**PUHUI is responsible to give proper guidance of the use and installation of the machine; if you don't follow these, it will void the warranty.**