IRDA-WELDER User Manual

Model: T862++

CATALOGUE

Features

➢ **Unlike Air Re-Work systems, The T-862++ uses an Infrared source and optics to target heat to individual components without dislodging other SMT parts by way of eddies air currents.**

➢ **Infrared soldering technology with independent exploration capabilities via three (3) focus lenses which are included with the package.**

➢ **Technician focused infrared heat is easy to target most component removal/replacement and re-work.**

➢ **The Workstation has a 120 X120mm a 650W controlled Pre-heating System.**

➢ **Infrared heat source bulbs are long-lived, in-expensive and easily replaced.**

➢ **Processor controlled set-point regulated temperatures with thermocouple feed-back.**

➢ **Integrated and adjustable Infrared (IR) eye protection.**

➢ **Can suitable for the entire component, especially Micro BGA component.**

➢ **The T-862++ system also contains a temperature controlled touch-up iron and stand.**

➢ **Extra soldering tools are not necessary to solder/unsolder and re-work Surface Mount Technology (SMT) components 15-35cm in size**

➢ **Training is illustrated in factory provided video.**

Technical parameter

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

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	

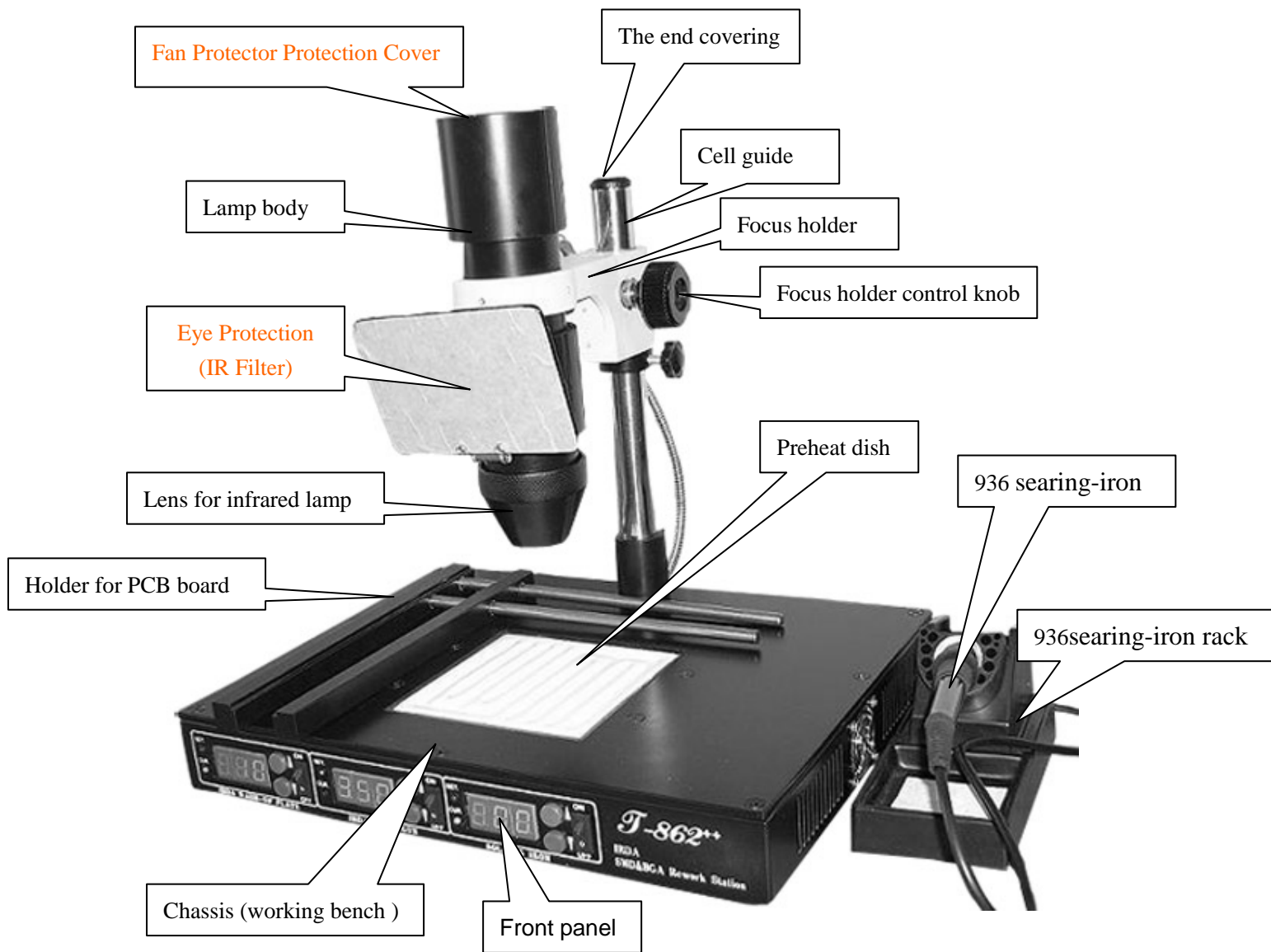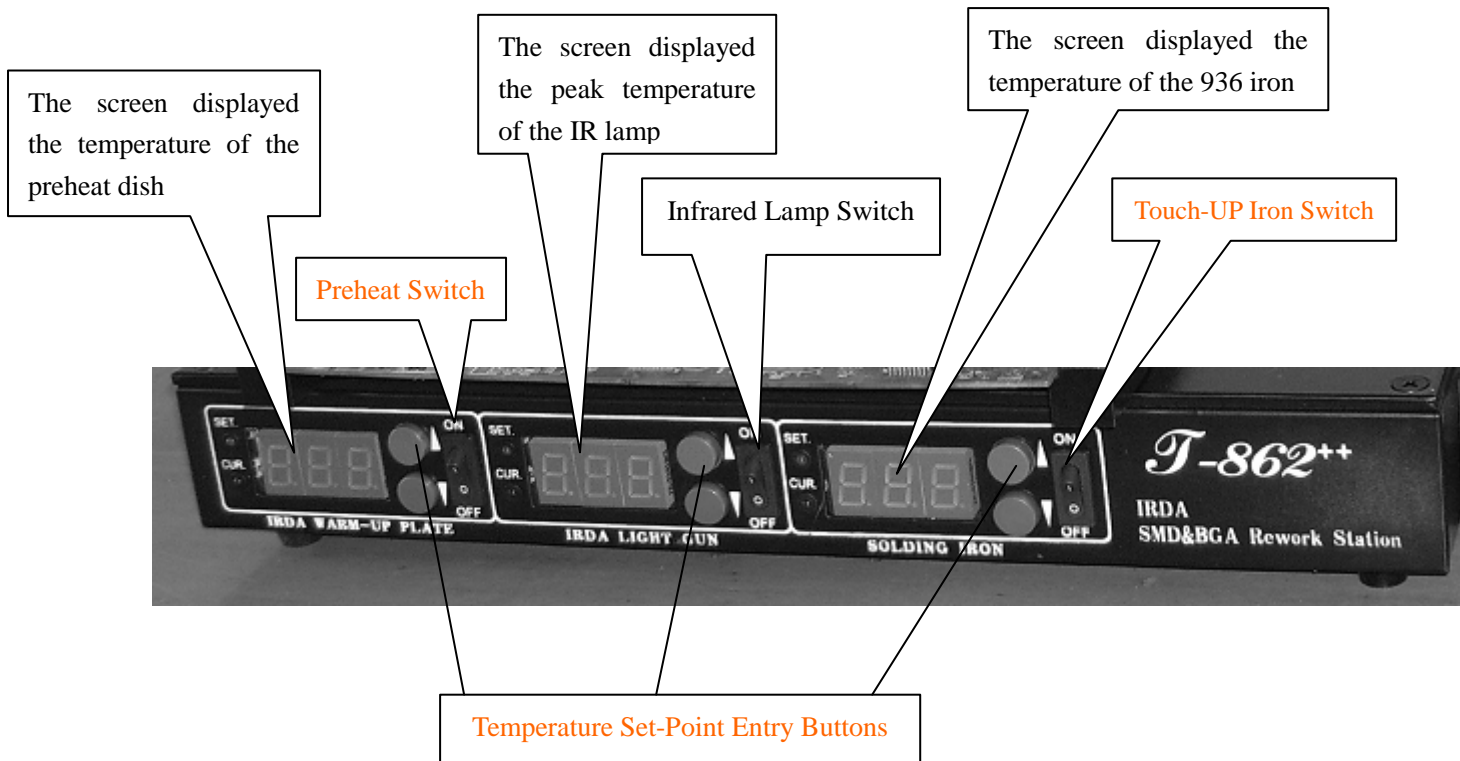(D=28mm)   (D=38mm)   (D=48mm)
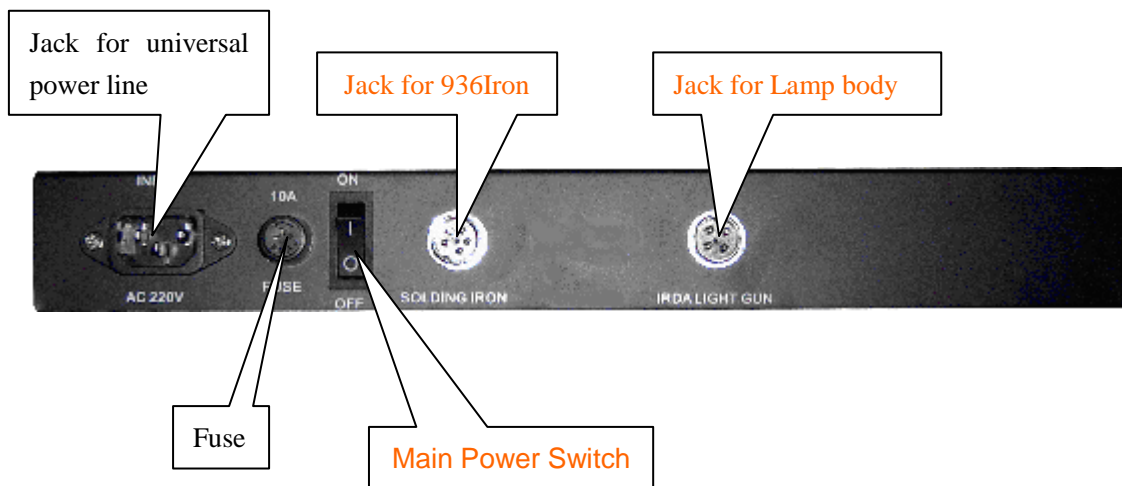
[Shipped On Lamp Body]

T-862++ Illustrated explaining

(1)The whole machine

Fan Protector Protection Cover

The end covering

Cell guide

Lamp body

Focus holder

Focus holder control knob

Eye Protection
(IR Filter)

Lens for infrared lamp

Preheat dish

936 searing-iron

936searing-iron rack

Holder for PCB board

T-862++

IRDA
SMD&BGA Rework Station

Chassis (working bench)

Front panel

(2)Front Panel

The screen displayed the temperature of the preheat dish

The screen displayed the peak temperature of the IR lamp

The screen displayed the temperature of the 936 iron

Preheat Switch

Infrared Lamp Switch

Touch-UP Iron Switch

Temperature Set-Point Entry Buttons

Rear Panel

Jack for universal power line

Jack for 936Iron

Jack for Lamp body

Fuse

Main Power Switch

(3)Infrared Lamp

(Focus holder and others)

IR Lamp Cooling Fan

Cell guide

Focus holder control knob

Focus holder

Focus holder

Fasten nut for focus holder

Fasten nut for steady ring
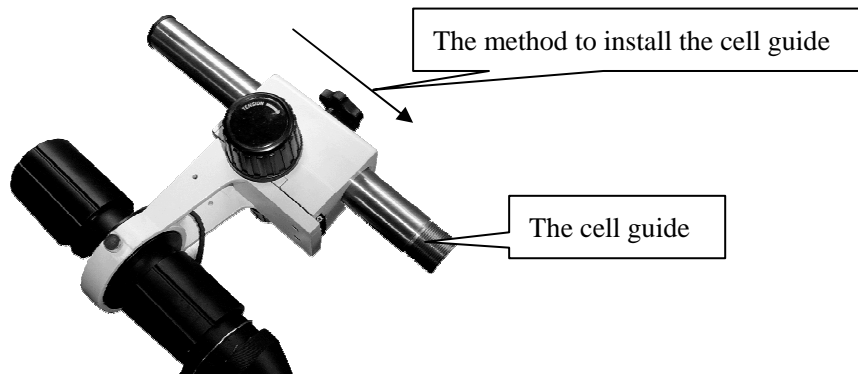
steady ring
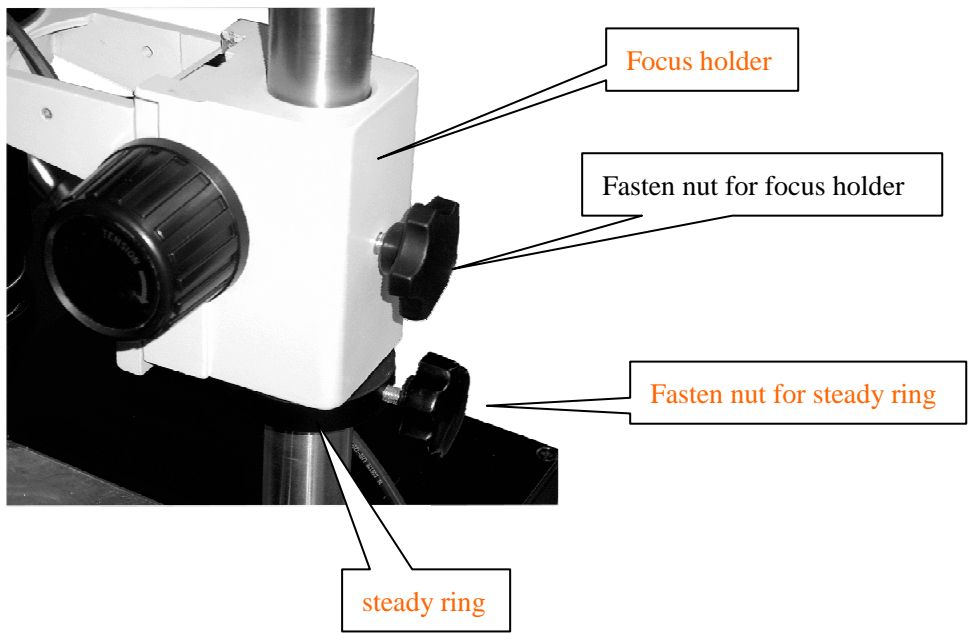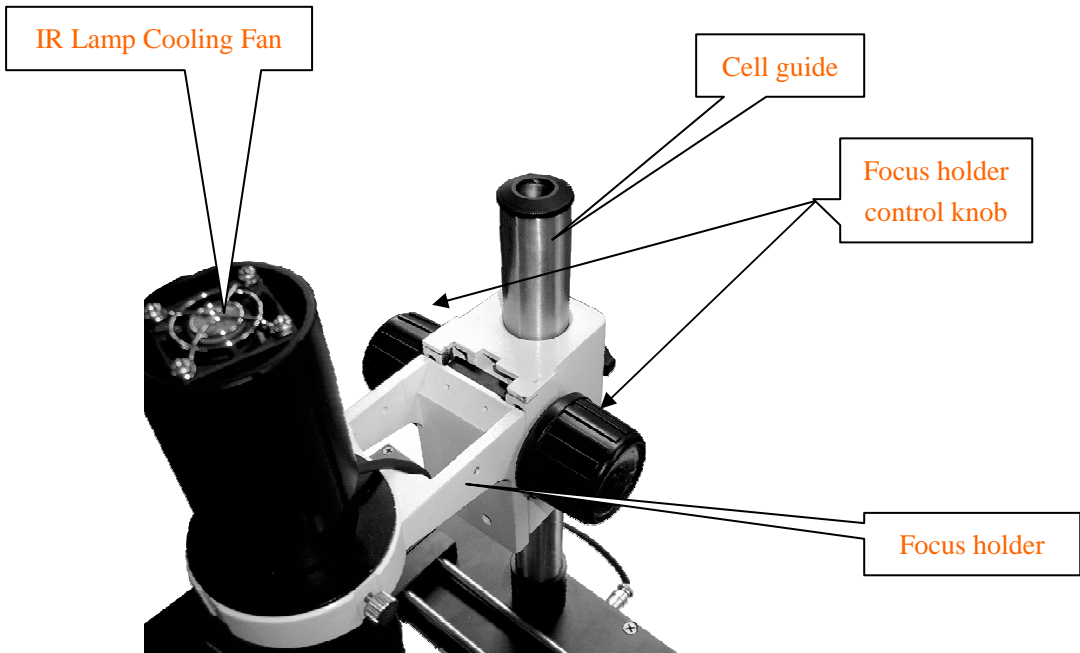
Infrared Work Station Unpacking and Assembly

1.Unpack and remove the T-862++ two (2) major assemblies and minor components from the styrofoam packaging material and set aside.

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.Install the cell guide. Loosen the "fasten nut of the focus holder" first, then install the cell guide as follows:

The method to install the cell guide

The cell guide

4.Install the steady ring. Loosen the "fasten nut for steady ring" first, installed the steady ring as follows, then fasten the nut.

Steady ring

The direction to fasten the steady ring
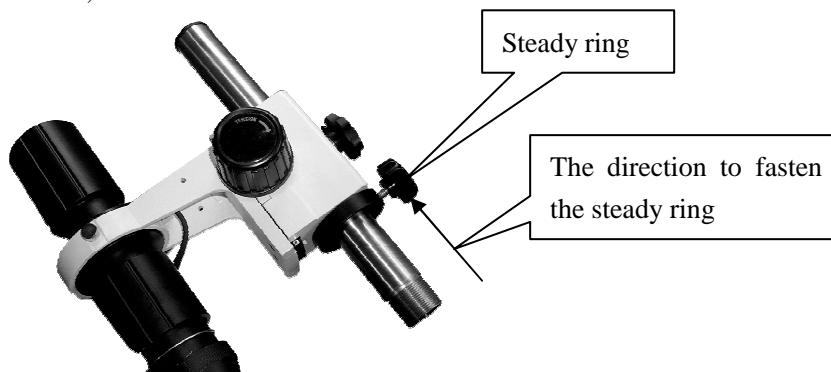
5.Assemble wholly.

    ☐ Relax the "fasten nut of focus holder"

    ☐ Install the "cell guide" on the relevant nut, screw the "cell guide" on the nut as follows.

    ☐ Rotation the "fasten nut of focus holder" to fix the "focus holder".

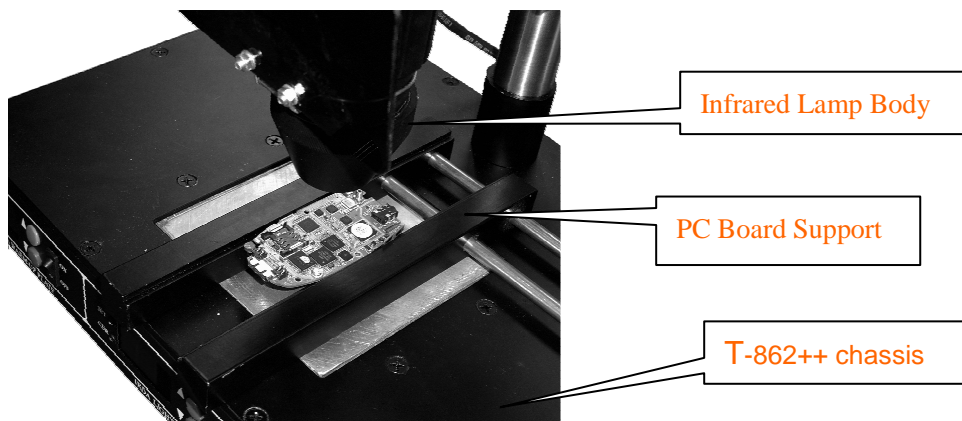   ☐ Rip off the protective film of the filter.

Direction of Rotation
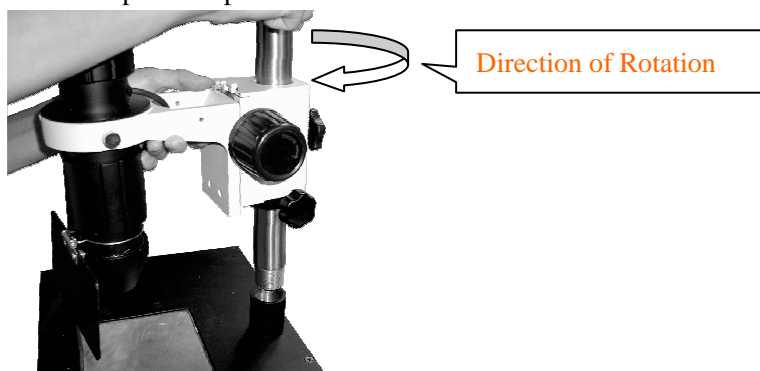
6.Connect the IR-Lamp body and the 936-Iron with the chassis.

　　①Insert the pin into the relevant jack.

　　②Rotate rightward to fix it.

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

T-862++ Operation

1. 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℃, 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℃, 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℃ (Attention: you should turn on the pre-heat dish first, and set-up the temperature about
150-200℃,wait 3-5minutes to allow the temperature steady on the set-up temperature),and
choose the lens which D=48mmto avoid destroying other places, and keep the lamp body direct
light. You should control the time carefully to avoid burning the chips.

Warning:

The light system will shoot straightly. Please pay more attention to yourself control time to
avoid burning out.

2. Open the machine

(1) Check if the connection wire of the lamp body and the 936-Iron is ok.

(2) Locate and attach the power cable to the rear of the re-work station

(3) Confirm all front panel rocker switches are off.

(4) Place the rear AC Power Switch in the ON Position.

(5) Allow the T-862++ Power-On-Self-Test (POST) to complete.

(6) Temperature set-points will display last value used.

(7) Place the target PC Board on the slip-rack and orient to close proximity of estimated
position of focused Infrared light,

(8) Adjust the T-862++ Infrared light system height, allow 20-30mm from lens end to PC board
target component.

(9) Turn on the two switches. They control warm-up plate and light system.

3. PC Board Component Removal and Replacement.

(1)Put the PCB board onto the holder

(2)Turn on the switch of the pre-heat dish, and set-up the temperature

(3)Turn on the switch of the IR-Lamp, Regulate the temperature (the temperature must be warm enough to allow the solder to be liquefied), focus the Infrared light on the chip to be removed.
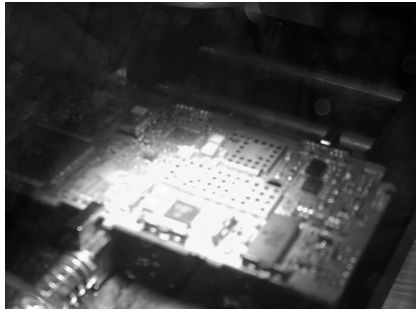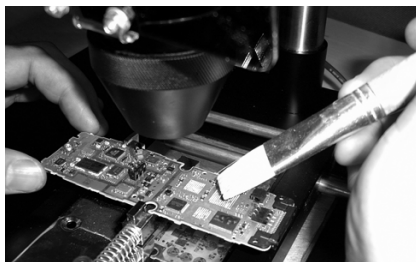

(4)Once the solder liquefied and melted, use tweezers to remove the chip。


4. Soldering a chip.

(1) Clean the target pad with the brush

(2) Then put the solder ball and a flat of solder flux on the target pad

(3) Turn on the switch of the pre-heat dish, and set-up the temperature

(4)Turn on the switch of the IR-Lamp, Regulate the temperature (the temperature must be warm enough to allow the solder to be liquefied), focus the Infrared light on the chip to be solder
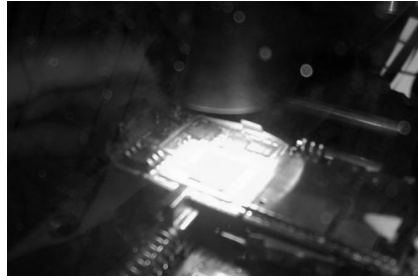
(5) Wait to allow the Infrared lamp to heat the solder flux to work as the solder balls on the target chip pad reaches liquid temperature. Use tweezers or a vacuum device to place the chip target position. Once the solder liquefies, the chip will be sold automatically.
After cooling the chip, pick up the PCB board, check if it is ok. If not, re-operate.
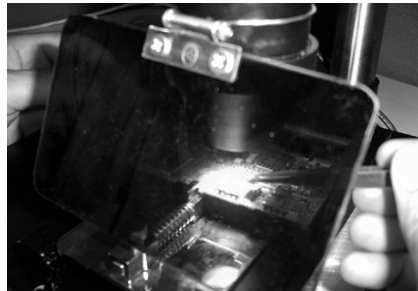
5. The use of the 936 searing-iron

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.

Maintenance:

- ✓ At all times – Insure the light body cooling fan is unobstructed and clean.

- ✓ Use a little machine oil. Lubricate the focus holder and cell guide to inhibit rusting, keep them ease to operate.

Warning!

The T-862++ System creates temperatures in excess of high degrees via Infrared Light. Wear appropriate eye protection or any device within **the T-862++** when using it**. After use, do not cut the power immediately, confirm the light body is cool-to-touch, Turn off the power switch, then place the system in airiness & safety storage.

Do NOT use this system or any associated device in an environment conducive to fire or electrical overload.

Disconnect the AC Power Plug when not in use.

When using, it is of high temperature, Do NOT allow **children** or the **un-trained** to touch **the T-862++.**