# BESOLDERING GUN OPERATION MANUAL MODEL TP-100/ TP-100AS





## WARNING

Before using the desoldering gun, read the Operation Manual. Failure to follow the safety precautions and instructions in this manual could result in serious injury and property damage.

### **KEEP THIS MANUAL FOR FUTURE REFERENCE**

TAIYO ELECTRIC IND.CO.,LTD.

## 1. SAFETY

Warnings, Cautions and Illustrations contained in this manual are to assure the safe and proper use of the desoldering station to protect the operator's property against damage. Read all instruction and understand them completely before reading this manual.



## WARNING

Failure to obey a safety warning could result in death or serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.



## CAUTION

Failure to obey a safety warning may result in minor or moderate injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

### NOTE

Advises you of information or instructions vital to the operation or maintenance of the desoldering station.

## 2. RULES FOR SAFE OPERATION

### 1. DON'T USE IN DANGEROUS ENVIRONMENTS.

Don't use desoldering gun in damp or wet locations or expose it to rain, including outside. Never use it in an explosive atmosphere. Normal sparking of the motor and heat from heater could ignite fumes. Keep the work area well lit.

### 2. KEEP CHILDREN AND BYSTANDERS AWAY FROM THE DESOLDERING GUN

Do not let bystanders contact the desoldering gun. All bystanders should be kept a safe distance from the work area. The desoldering gun is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the desoldering gun.

### 3. PROPERLY STORE THE DESOLDERING GUN WHEN NOT IN USE

When not in use, the desoldering gun should be stored in a dry and high or locked-up place in carrying case provided -out of the reach of children.

### 4. USE FOR THE RIGHT JOB

Your desoldering gun is an electrical tool used to remove solder in order to free components from printed circuit boards. Do not use the desoldering gun for any purpose not intended—for example—The desoldering gun should never be used for vacuuming up water or similar liquids.

## 5. CONNECT TO A CORRECT AC POWER SUPPLY ENVIRONMENTS.

The input voltage is listed on the Name label of your desoldering gun. Do not operate this desoldering gun on direct current (DC).

### 6. CONCERNING THE NOZZLE TIP

Do not use your desoldering gun without the nozzle tip or the heater will b e damaged . After unplugging, cool the nozzle tip in natural air. Never use any other method to cool it down. —for example— Water should never be poured or sprinkled on the nozzle tip it down.

#### 7. POWER CABLE REPLACEMENT

If the power cable is damaged then the desoldering gun should be returned to the distributor for replacement.

#### 8. STAND

Use the stand included with the desoldering gun to hold it while plugged in to prevent serious burns or fires. Or use a proper soldering iron stand (recommended model : **ST-76** or **ST-77**).

## TP-100AS



## WARNING

THE TP-100AS is the anti static model. Be sure to properly ground the desoldering gun using a grounded receptacle to prevent electrical shocks and anti static. If it is not properly grounded electrical shocks occur. As the desoldering gun uses conductive materials, please be careful not to touch any electrical power source or serious injury will result.

## **3. SPECIFICATIONS**

MODEL	RX-822AS	
Input voltage	220-240V AC (50/60Hz)	
Power Consumption	70–75W	
Temperature setting range	250-450 ° C	
Temperature control system	Sensor feed back (ON OFF control)	
Insulation resistance	Over 100MΩ	
Vacuum pump system	Diaphragm system	
Vacuum degree reached	-0.08MPa ( -600mmHg ) representative value	
Weight	Approx. 470g	
Dimensions	225 x 170mm	

## 4. UNPACKING

- Desoldering Gun
- Cleaning Pin
- Filter Set
- Carrying Case
- Operation Manual
- Protective Tube
- Stand



## 5. OPERATION

- Rotate the temperature control screw to set the nozzle tip temperature using a Phillips screwdriver. The nozzle tip temperature is preset at approximately 380°C at the factory.
- 2. Set the stand in the carrying case. The stand will fit in the direction shown in the illustration only.a
- Put the desoldering gun in the case on the stand. Allow your desoldering gun to warm up for five minutes after pluggingin.





### WARNING

Never touch the nozzle tip, heater barrel and spacer that generate very high temperatures. Failure to do so will result in possible serious personal injury.

### NOTE

Some smoke will be produced during initial operation, but it will soon stop. There should be no smoke produced after the initial operation.





### WARNING

Unplug the desoldering gun if there is a burning smell, the heater overheats or the plastic parts deform. Do not use it again and return it to the goot distributor for service. Using such a desoldering gun could result in a fire and possible serious injury or damage.

5

power cord in the case and close the cover. WARNING To avoid serious burns, never touch the protection tube surface just after

storage. It will become hot and stay

that may for 30 minutes.

Be sure to hold the coil part of cleaning pin when you clean inside the



cleaning pin 3 or 4 times. Then pull the trigger once. This will extend the nozzle life. After that, unplug your desoldering gun.

5-b After finishing the operation, insert and pull out the



pull the trigger for desoldering.

WARNING

NOTE

or flux.

- you would clean a soldering iron tip.

- 5. Remove any solder scraps on the nozzle tip with a heat
- resistant sponge moistened with water the same way as
- 5-a When the nozzle becomes blocked during operation,

- use the cleaning pin to remove the collected solder and/



Do not pull the trigger for more than 1 second. Wait at least 9 seconds before pulling the trigger

There is a yellow sticker on the grip of the desoldering gun which states 'PUSH AFTER 2 MIN'. This is to inform the user

NOT to pull on the trigger for at least 2 minutes after first

plugging in. The motor (pump) rotates at a high pace when

in the motor overheating.







Push after 2min

Erst nach 2 min. betätigen.

Carregar após 2 minutos.

Appuyer apres 2 min

Non premere prima di 2 minutt.

## 6. MAINTENANCE



### WARNING

Before doing maintenance, unplug the desoldering gun and allow the nozzle tip to cool down.



### CAUTION

When doing maintenance use only genuine goot replacement parts. The use of any other parts may create a hazard or cause damage to the desoldering gun.

### 6-1. CARTRIDGE, FILTER AND STEEL WOOL REPLACEMENT AND CLEANING

### Proceed as follows when replacement is required

- 1. Pull back the slide knob and remove the cartridge.
- 2. Remove the collected solder in cartridge frequently.
- Remove the filter and/or steel wool inside the cartridge by pushing it out from either end using a screwdriver or similar tool and replace them. To remove the rear filter inside the rear adapter use a pair of tweezers or similar tool and replace it.

### NOTE

Do not use your desoldering gun without filter and rear filter. Failure to do so will result in reducing the pump life.





Tweezers

### 6-2. NOZZLE TIP REPLACEMENT

Your desoldering gun has a nozzle tip that can be replaced. The oxidation of the collected solder inside the nozzle tip will cause blockage. When the collected solder inside the nozzle tip cannot be removed using the cleaning pin, it has to be replaced.

- 1. Turn the nozzle tip using a wrench (11mm) counterclockwise and remove it.
- Screw in the new nozzle tip clockwise by hand. Use a wrench (11mm) to tighten it. Do not over tighten or it may break.



### 6-3. 3 HOUSING CLEANING

Do not at any time allow gasoline, petroleum based products, penetrating oils, etc. to come in contact with the plastic parts. They contain chemicals that can damage, weaken, or destroy plastic.

## 7.TROUBLESHOOTING GUIDE

### PROCEED AS FOLLOWS WHEN TROUBLE OCCURS

- 1. Check that there is voltage in the outlet and the circuit breaker is not tripped.
- 2. Check that the power cable is not damaged. If it is damaged, do not use your desoldering gun and return it to the distributor for service.
- 3. If 1.and 2. above are OK, follow the flow chart below to find the cause of the trouble to correct it quickly.



- 4. If any plastic part is deformed or burnt smell is noticed, unplug your desoldering gun immediately and return to the distributor for service.
- If your desoldering gun was dropped, check the above carefully. If there is a problem, do not use it and return to the distributor for service.not use it and contact your nearest distributor for service.

## 7.TROUBLESHOOTING GUIDE

#### NOZZLE TIP



#### NOZZLE

Part No.	Hole Diameter	Remarks	
TP-100N-08	ø0.8mm	Standard type	
TP-100N-10	ø1.0mm	Included with desoldering gun	
TP-100N-15	ø1.5mm	Standard type	
TP-100N-25	ø2.5mm	Standard type	
TP-100N-S8	ø0.8mm	Slim type	
TP-100N-S1	ø1.0mm	Slim type	
TP-100N-S5	ø1.5mm	Slim type	

#### FILTER AND CARTRIDGE

Part No.	Remarks
TP-100F	Felt A, B and steel wool (each 3pcs.)
TP-100K	Felt A, B, steel wool and Cartridge
TP-100FT	Felt A,B (each 3pcs.)
TP-100UL	Steel Wool (3pcs.)

#### CLEANING PIN



## Cleaning with the pin vice and drill extends nozzle life. (Option)

Drill		
		630.80 M
Part No.	Diameter	
TP-100DB-07	φ 0.7mm	for 0.8mm nozzle
TP-100DB-09	φ 0.9mm	for 1.0mm nozzle
TP-100DB-14	φ 1.4mm	for 1.5mm nozzle
TP-100DB-24	φ 2.4mm	for 2.5mm nozzle
	Drill Part No. TP-100DB-07 TP-100DB-09 TP-100DB-14 TP-100DB-24	Drill   Part No. Diameter   TP-100DB-07 φ 0.7mm   TP-100DB-09 φ 0.9mm   TP-100DB-14 φ 1.4mm   TP-100DB-24 φ 2.4mm



Customer service Contact your nearest distributor

#### Website: www.goot.co.jp E-mail: info@goot.co.jp