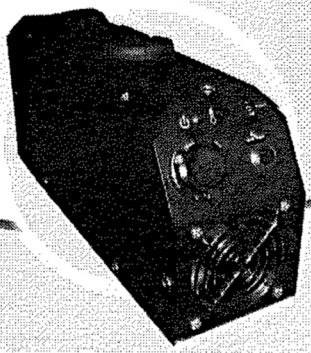
Note

Dear customer, please read the manual before installation, use or servicing of the unit.

INSTRUCTION MANUAL



STORM HEATER

Caution! Read the instruction manual

INSTRUCTION MANUAL FOR MACHINE

IMPORTANT: BEFORE STARTING THE EQUIPMENT, READ THE CONTENTS OF THIS MANUAL, WHICH MUST BE STORED IN A PLACE FAMILIAR TO ALL USERS FOR THE ENTIRE OPERATIVE LIFE-SPAN OF THE MACHINE. THIS EQUIPMENT MUST BE USED SOLELY FOR OPERATIONS.

1 SAFETY PRECAUTIONS

The user must therefore be educated against the hazards, summarized below, deriving from operations. For more detailed information, order the manual.

ELECTRIC SHOCK - May be fatal.
Install and earth the machine according to the applicable regulations.
Do not touch live electrical parts or electrodes with bare skin, gloves or wet clothing.
Isolate yourselves from both the earth and the workpiece.
Make sure your working position is safe.

FIRE AND BURNS
Since it becomes high temperature, let people around you know it is dangerous.
Do not touch heating parts with bare hands.

PACEMAKERS
The magnetic fields created by high currents may affect the operation of pacemakers. Wearers of vital electronic equipment (pacemakers) should consult their physician before beginning any operations.

EXPLOSIONS
Do not operate in the vicinity of containers under pressure, or in the presence of explosive dust, gases or fumes.

ELECTROMAGNETIC COMPATIBILITY
This machine is manufactured in compliance with the instructions contained in the harmonized standard, **and must be used solely for professional purposes in an industrial environment. There may be potential difficulties in ensuring electromagnetic compatibility in non- industrial environments.**
IN CASE OF MALFUNCTIONS, REQUEST ASSISTANCE FROM QUALIFIED PERSONNEL.

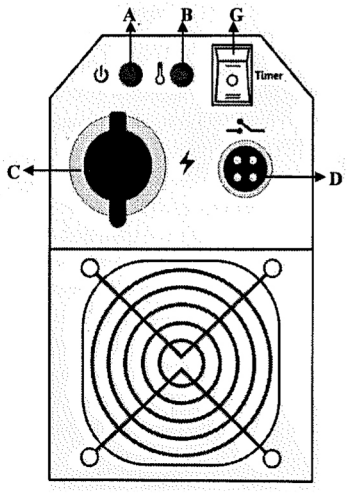
2 GENERAL TECHNICAL DESCRIPTIONS

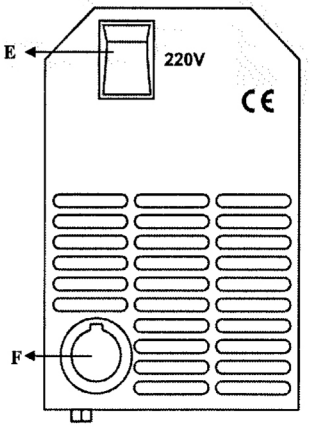
MODEL	STORM HEATER
U_1 / I_1	1Φ / 185~250V / 50 or 60Hz / I_1 MAX 5A
U_2 / I_2 / H_2	16V / 60A / 100KHz
DUTY CYCLE	15%

MODEL: The model of the machine
U1: Input voltage
I1 : Input current
I2 : Output current.
U2: Output voltage
H2: Output frequency
DUTY CYCLE: The duty-cycle is the number of minutes, expressed as a percentage, the machine can operate (arc on) within a ten minute period without overheating. The duty cycle varies according to the output current.

3 DESCRIPTION OF CONTROLS

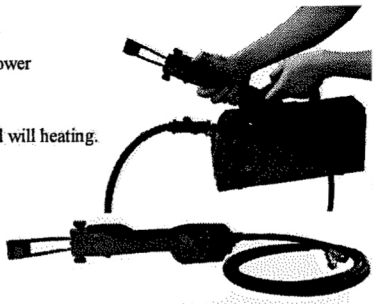
A: Power pilot(green)
B: Over heated pilot(red)
C: Output connector -for torch power
D: Output connector -for torch control
E: Main switch
F: Input power cable (Confirm the power voltage before use)
G: Timer control
Select "—":Trigger on torch, machine will work 1 second, and then stop till to trigger on again.
Select " = " :Trigger on torch, machine will work 1.5 second, and then stop till to trigger on again.
Select "O" : Trigger on torch, machine will be keeping work.





4 INSTALLATION

1. Connect the torch to machine.
2. Connect power supply to the machine. (Please confirm the power voltage, wrong power voltage will damage the machine.)
3. Install torch head to the torch.
4. Turn on the machine, and trigger on the torch. The torch head will heating.



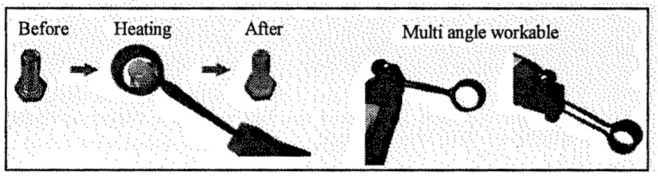
Patented Multi-function Torch

5 APPLICATION

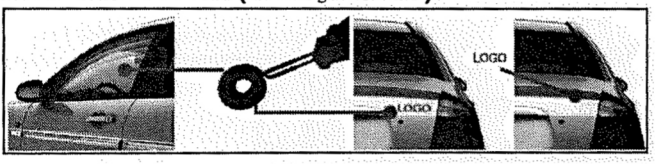
1. Patented PFC power source, wide voltage range:
   110V machine Vin range: 85~135V
   220V machine Vin range: 185~250V
2. Small body, light weight, good efficiency:
   10A breaker available, 110V workable, no need industrial type breaker
3. Advanced 100kHz induction heating frequency:
   According to the skin effect theory, higher induction frequency can reduce the heat affected zone, make the heat more concentrated.
4. Patented heating torch, can be used for glass /stickers / screw / nut.

For remove screw & nut

Note:After heating,the strength of screw & nut will be reduce.Please don't use the screw & nut again.If Any losses caused by the improper operation, has nothing to do with the manufacturer.

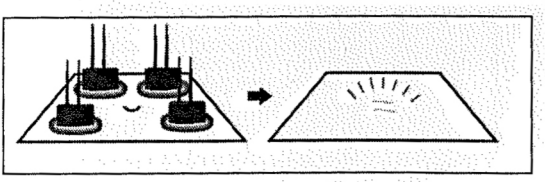


Multi-function torch head (used for glass /stickers)



HOT SPOT

Use special dent repair torch head,  induction heating will make the dent expansion. Suggest to use timer control mode, heating time is 1 sec. Please don't heating repeatedly to the same working point. It may damage car body paint cause by over heat.



6 NOTES OR PREVENTIVE MEASURES

1. Operation Environment

1) The machine can perform in environment where conditions are dry with a dampness lever of max 90%.
2) Ambient temperature is between -10 to 40 degrees centigrade.
3) Avoid welding in sunshine or drippings.
4) Do not use the machine in environment where condition is polluted with conductive dust on the air or corrosiveness gas on the air.
5) Avoid gas welding in the environment of strong airflow.

2. Safety norms

The welding machine has installed protection circuit of over voltage and current and heat. When voltage and output current and temperature of machine are exceeding the rate standard, welding machine will stop working automatically. Because that will be damage to welding machine, user must pay attention as following.

1) **The working area is adequately ventilated!**

The welding machine is powerful machine, when it is being operated, it generated by high currents, and natural wind will not satisfy machine cool demands. So there is a fan in inter-machine to cool down machine. Make sure the intake is not in block or covered, it is 0.3 meter from welding machine to objects of environment. User should make sure the working area is adequately ventilated. It is important for the performance and the longevity of the machine.

2) **Do not over load!**

The operator should remember to watch the max duty current (Response to the selected duty cycle).

Keep welding current is not exceed max duty cycle current.

Over-load current will damage and burn up machine.

3) **No over voltage!**

Power voltage can be found in diagram of main technical data. Automatic compensation circuit of voltage will assure that welding current keep in allowable arrangement. If power voltage is exceeding allowance arrangement limited, it is damaged to components of machine. The operator should understand the situation and take preventive measures.

4) There is a grounding screw behind welding machine, there is grounding marker on it Mantle must be grounded reliable with cable which section is over 6 square millimeter I order to prevent from static electricity and leaking.

5) If welding time is exceeded duty cycle limited, welding machine will stop working for protection. Because machine is overheated, temperature control switch is on "ON" position and the indicator light is red. In this situation, you don't have to pull the plug, in order to let the fan cool the machine. When the indicator light is off, and the temperature goes down to the standard range, it can weld again.

6) If the user has some metal parts, (such as: ring, necklace, artificial limb, joint prosthesis, artificial organs) please don't let the metal parts close to the induction heater torch or torch head, to avoid damage by induction heating.

7 MAINTENANCE

CAUTION: Before Maintenance and checking, power must be turned off, and before Opening the housing, make sure the power plug is pulled off.

1、Remove dust by dry and clean compressed air regularly, if welding machine is operating in environment where is polluted with smokes and pollution air, the machine need remove dust everyday.

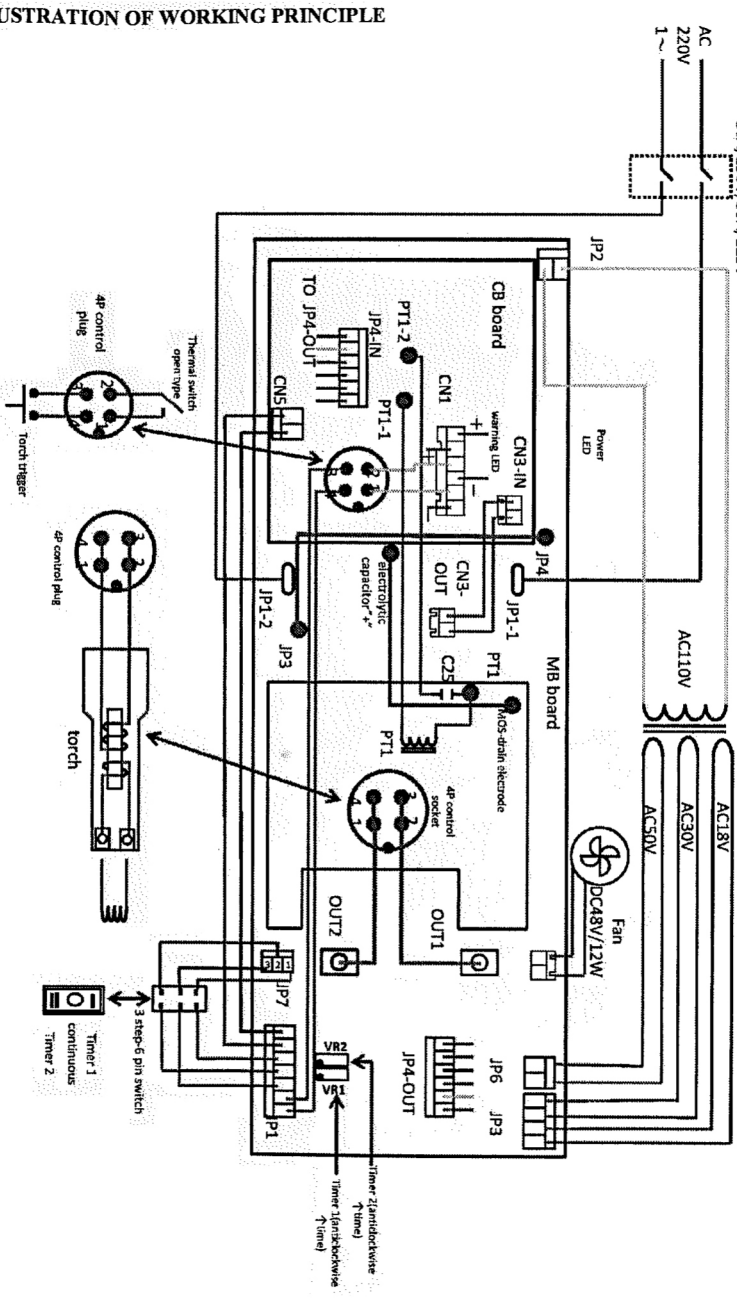
2、Pressure of compressed air must be inside the reasonable arrangement in order to prevent damaging to small components of inter-machine.

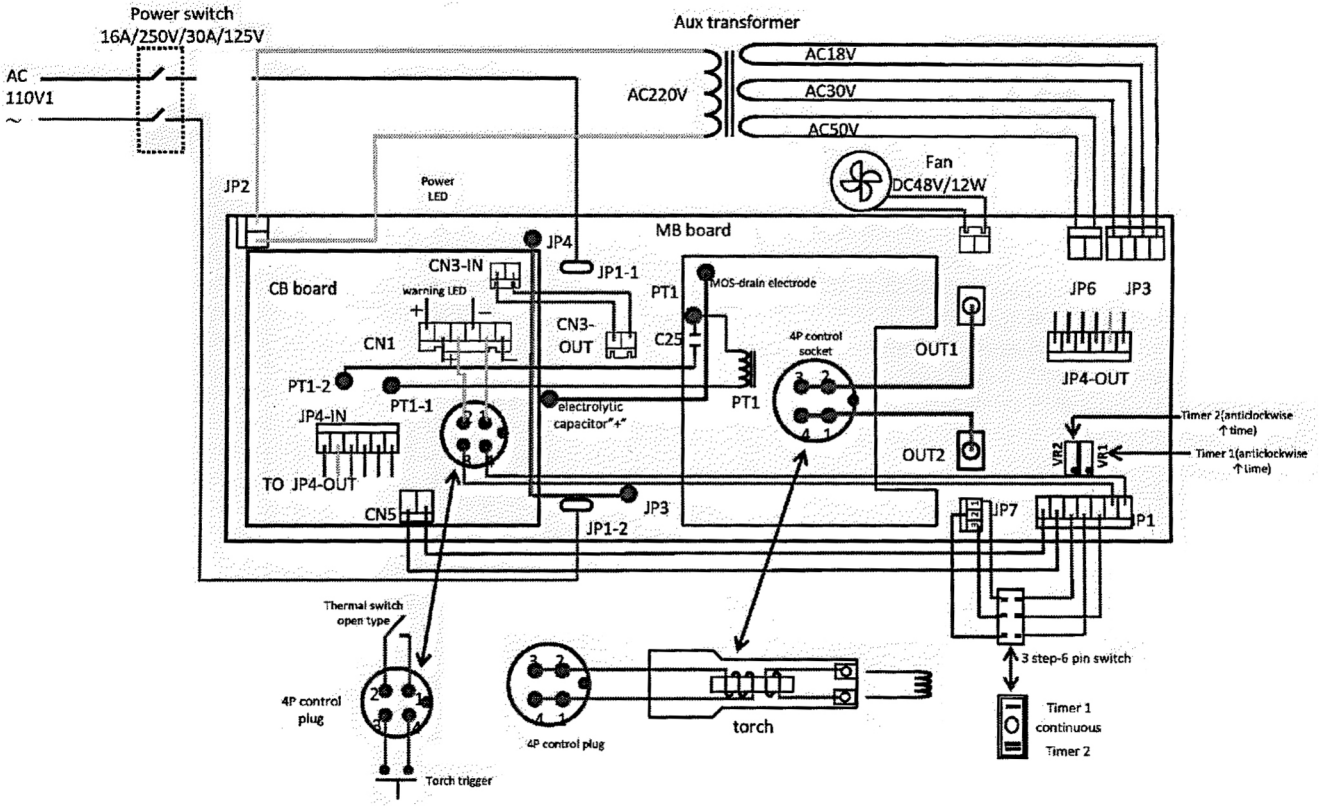
3、Check inter circuit of welding machine regularly and make sure the cable Circuit is connected correctly and connectors are connected tightly (especially insert connector and components). If scale and loose are found, please give a good polish to them, then connect them again tightly.

4、Avoid water and steam enter into inter-machine, if them enter into machine, please dry inter-machine then check insulation of machine.

5、If welding machine will not be operated long time, it must be put into packing box and store in dry environment.

8 LLUSTRATION OF WORKING PRINCIPLE





110V version

9 .ILLUSTRATION OF EXPLODED

No.	Code	Description	No.	Code	Description
1	EY17202X0201B1	bottom panel	12	KE055005	power switch
2	EY17202Q0302 B1	front panel	13	XE073100	power cable
3	JG071401	socket for control	16	EY17202S0401B1	top case
4	JG071441	socket for control	17	SC084010	handle
5	DL092301	LED(green)	18	SG081100	plastic foot
6	DL092300	LED(red)	19	QT073000	heating torch
7	MF094300	fan	26	WD093942	coil
8	MF094310	fan net	21	WD094000	coil
9	VT095000	aux transformer	28	WD094002	coil
10	ED095010/ ED095020	radiator	29	WD094022	coil
11	PM092140	MB board	24	WD094040-1	coil
	PM092100	CB board	25	KE082010	selection switch