



CELETTE®



RAPID SPOT MINI

ORIGINAL MANUAL

PRODUCT REF NO: CEL.1 1245-C-02

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FOREWORD:

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 welding operations.

1. SAFETY PRECAUTIONS:

Protect yourself and others from injury - read, follow, and save these important safety precautions and operating instructions.

1.1 SYMBOL USAGE:



DANGER! Indicates a hazardous situation which, if not avoided, will result in death or serious injury. The possible hazards are shown in the adjoining symbols or explained in the text.



Indicates a hazardous situation which, if not avoided, could result in death or serious injury. The possible hazards are shown in the adjoining symbols or explained in the text.

Notice: Indicates statements not related to personal injury.
Indicates special instructions.



This group of symbols mean WARNING! WATCH OUT! ELECTRIC SHOCK, MOVING PARTS, and HOT PARTS hazard. Consult symbols and related instructions below for necessary actions to avoid the hazards.

1.2 OPERATION HAZARDS:

- ▶▶ The symbols shown below are used throughout this manual to call attention to and identify possible hazards. When you see the symbol, watch out, and follow the related instructions to avoid the hazard. The safety information to avoid the hazard. The safety information given below is only a summary of the more complete safety information found in the safety standards listed in section below. Read and follow all safety standards.
- ▶▶ Only qualified persons should install, operate, maintain, and repair this equipment. A qualified person is defined as one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated ability to solve or resolve problems relating to the subject matter, the work, or the project and has received safety training to recognize and avoid the hazards involved.
- ▶▶ During operation, keep everybody, especially children away.

SPOT WELDING CAN CAUSE FIRE OR EXPLOSION:

- ▶▶ Sparks can fly off from the welding arc. The flying sparks, hot workpiece, and hot equipment can cause fires and burns. Accidental contact of electrode to metal objects can cause sparks, explosion, overheating, or fire. Check and be sure the area is safe before doing any welding.
- ▶▶ Remove all flammables within 35 ft (10.7 m) of the weld. If this is not possible, tightly cover them with approved covers.
- ▶▶ Do not spot weld where flying sparks can strike flammable material.
- ▶▶ Protect yourself and others from flying sparks and hot metal.
- ▶▶ Be alert that welding sparks can easily go through small cracks and openings to adjacent areas.
- ▶▶ Watch for fire, and keep a fire extinguisher nearby.



- ▶▶ Do not weld on containers that have held combustibles, or on closed containers such as tanks, drums, or pipes unless they are properly prepared according to AWS F4.1 and AWS A6.0 (see Safety Standards).
- ▶▶ Do not weld where the atmosphere can contain flammable dust, gas, or liquid vapors (such as gasoline).
- ▶▶ Remove any combustibles, such as a butane lighter or matches, from your person before doing any welding.
- ▶▶ After completion of work, inspect area to ensure it is free of sparks, glowing embers, and flames.
- ▶▶ Do not exceed the equipment rated capacity.
- ▶▶ Use only correct fuses or circuit breakers. Do not oversize or bypass them.
- ▶▶ For hot work and have a fire watcher and extinguisher nearby.
- ▶▶ Wear body protection made from durable, flame-resistant material (leather, heavy cotton, wool). Body protection includes oil-free clothing such as leather gloves, heavy shirt, cuffless trousers, high shoes, and a cap.

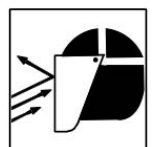
ELECTRIC SHOCK CAN KILL:

- ▶▶ Touching live electrical parts can cause fatal shocks or severe burns. The input power circuit and machine internal circuits are also live when power is on. Incorrectly installed or improperly grounded equipment is a hazard.
- ▶▶ Do not touch live electrical parts.
- ▶▶ Wear dry, hole-free insulating gloves and body protection.
- ▶▶ Additional safety precautions are required when any of the following electrically hazardous conditions are present: in damp locations or while wearing wet clothing; on metal structures such as floors, gratings, or scaffolds; when in cramped positions such as sitting, kneeling, or lying; or when there is a high risk of unavoidable or accidental contact with the workpiece or ground. And, do not work alone!
- ▶▶ Disconnect input power before installing or servicing this equipment.
- ▶▶ Properly install, ground, and operate this equipment according to this manual and national, state, and local codes.
- ▶▶ Always verify the supply ground - check and be sure that input power cord ground wire is properly connected to ground terminal in disconnect box or that cord plug is connected to a properly grounded receptacle outlet.
- ▶▶ When making input connections, attach the grounding conductor first - double-check connections.
- ▶▶ Keep cords dry, free of oil and grease, and protected from hot metal and sparks.
- ▶▶ Frequently inspect input power cord and ground conductor for damage or bare wiring - replace immediately if damaged - bare wiring can kill.
- ▶▶ Turn off all equipment when not in use.
- ▶▶ For water-cooled equipment, check and repair or replace any leaking hoses or fittings.
- ▶▶ Do not use any electrical equipment if you are wet or in a wet area.
- ▶▶ Use only well-maintained equipment. Repair or replace damaged parts at once.
- ▶▶ Wear a safety harness if working above floor level.
- ▶▶ Keep all panels, covers, and guards securely in place.



FLYING SPARKS CAN INJURE:

- ▶▶ Very often sparks fly off from the joint area.
- ▶▶ Wear approved face shield or safety goggles with side shields.
- ▶▶ Wear body protection made from durable, flame-resistant material (leather, heavy cotton, wool). Body protection includes oil-free clothing such as leather gloves, heavy shirt, cuffless trousers, high shoes, and a cap.
- ▶▶ Protect others in nearby areas by using approved flame-resistant or noncombustible fire curtains or shields. Have all nearby persons wear safety glasses with side shields.



HOT PARTS CAN BURN:

- ▶▶ Do not touch hot parts bare handed.
- ▶▶ Allow cooling period before working on equipment.
- ▶▶ To handle hot parts, use proper tools and/or wear heavy, insulated welding gloves and clothing to prevent burns.

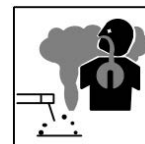


SIGNIFICANT DC VOLTAGE EXISTS AFTER REMOVAL OF INPUT POWER ON INVERTERS:

- ▶▶ Turn Off inverter, disconnect input power, and discharge input capacitors according to instructions in Maintenance Section before touching any parts.

FUMES AND GASES CAN BE HAZARDOUS:

- ▶▶ Welding produces fumes and gases. Breathing these fumes and gases can be hazardous to your health.
- ▶▶ Keep your head out of the fumes. Do not breathe the fumes.
- ▶▶ Ventilate the work area and/or use local forced ventilation at the arc to remove welding fumes and gases. The recommended way to determine adequate ventilation is to sample for the composition and quantity of fumes and gases to which personnel are exposed.
- ▶▶ If ventilation is poor, wear an approved air-supplied respirator.
- ▶▶ Read and understand the Safety Data Sheets (SDSs) and the manufacturer's instructions for adhesives, coatings, cleaners, consumables, coolants, degreasers, fluxes, and metals.
- ▶▶ Work in a confined space only if it is well ventilated, or while wearing an air-supplied respirator. Always have a trained watchperson nearby. Welding fumes and gases can displace air and lower the oxygen level causing injury or death. Be sure the breathing air is safe.
- ▶▶ Do not weld in locations near degreasing, cleaning, or spraying operations. The heat and rays of the arc can react with vapors to form highly toxic and irritating gases.
- ▶▶ Do not weld on coated metals, such as galvanized, lead, or cadmium plated steel, unless the coating is removed from the weld area, the area is well ventilated, and while wearing an air-supplied respirator. The coatings and any metals containing these elements can give off toxic fumes if welded.



1.3 ADDITIONAL SYMBOLS FOR INSTALLATION, OPERATION, AND MAINTENANCE:

FIRE OR EXPLOSION HAZARD:

- ▶▶ Do not install or place unit on, over, or near combustible surfaces.
- ▶▶ Do not install or operate unit near flammables.
- ▶▶ Do not overload building wiring - be sure power supply system is properly sized, rated, and protected to handle this unit.



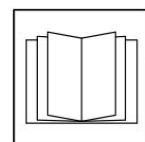
FALLING EQUIPMENT CAN INJURY:

- ▶▶ Use correct procedures and equipment of adequate capacity to lift and support unit.
- ▶▶ Follow the guidelines in the Applications Manual for the Revised NIOSH Lifting Equation (Publication No. 94-110) when manually lifting heavy parts or equipment.
- ▶▶ Secure unit during transport so it cannot tip or fall.



READ INSTRUCTIONS:

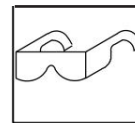
- ▶▶ Read and follow all labels and the Owner's Manual carefully before installing, operating, or servicing unit. Read the safety information at the beginning of the manual and in each section.



- ▶▶ Use only genuine replacement parts from the manufacturer.
- ▶▶ Perform installation, maintenance, and service according to the Owner's Manuals, industry standards, and national, state, and local codes.

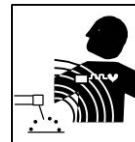
FLYING METAL OR DIRT CAN INJURE EYES:

- ▶▶ Wear approved safety glasses with side shields or wear face shield.



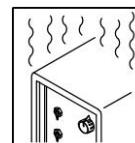
ELECTRIC AND MAGNETIC FIELDS (EMF) CAN AFFECT IMPLANTED MEDICAL DEVICES:

- ▶▶ Wearers of Pacemakers and other Implanted Medical Devices should keep away.
- ▶▶ Implanted Medical Device wearers should consult their doctor and the device manufacturer before going near arc welding, spot welding, gouging, plasma arc cutting, or induction heating operations.



OVERUSE CAN CAUSE OVERHEATING:

- ▶▶ Allow cooling period; follow rated duty cycle.
- ▶▶ Reduce duty cycle before starting to weld again.



1.4 EMF INFORMATION:

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:

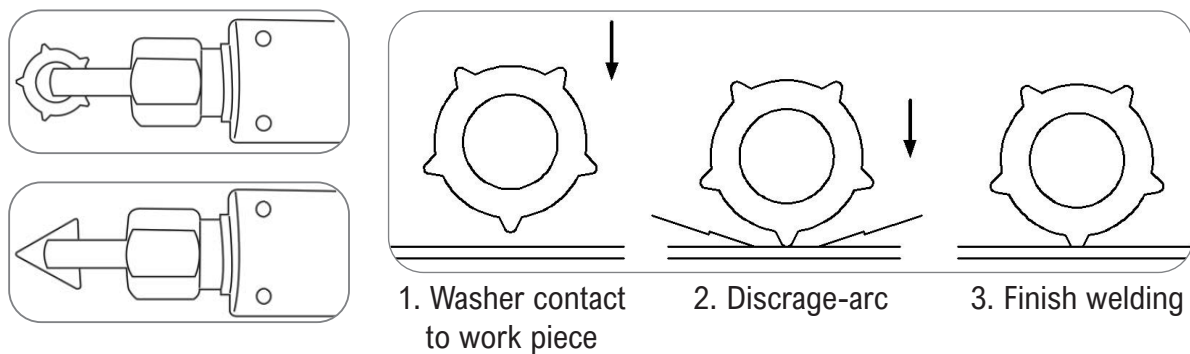
Model	SN
CE ENXXXXXX	
1~50/60Hz	Input
Output max current	
Duty cycle	

- MODEL:** The model of the machine
- SN** Machine Serial Number which must appear on requests or inquiries concerning the machine
- CE, EN** International standards

3. MATTERS NEED ATTENTION:

1. Input power is AC220 \geq 15A.
2. Turn “off “ the switch, the machine is not use.
3. Make sure to turn “off” the switch while connecting (or) dis-connecting the cable to the AC supply.
4. The machine maintenance and repair must turn “off “ the switch after 5 minutes.
5. The stud clamp is inside the stud welding torch. The inside diameter of stud clamp must suitable the stud screw. Do not use worn stud clamp.
6. Stud welding may cause welding arc and metal spatter, protect yourself with appropriate safety garments and goggles.
7. Make sure there are no flammable materials near the work area.

3.1 SPOT WELDING:

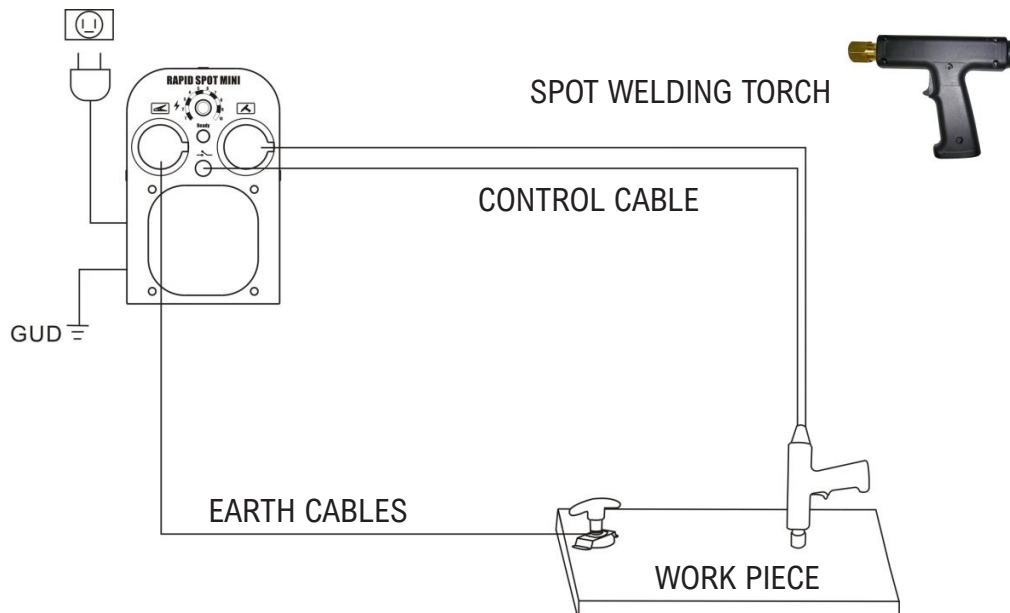


3.2 STUD WELDING MODE CABLE CONNECTION:

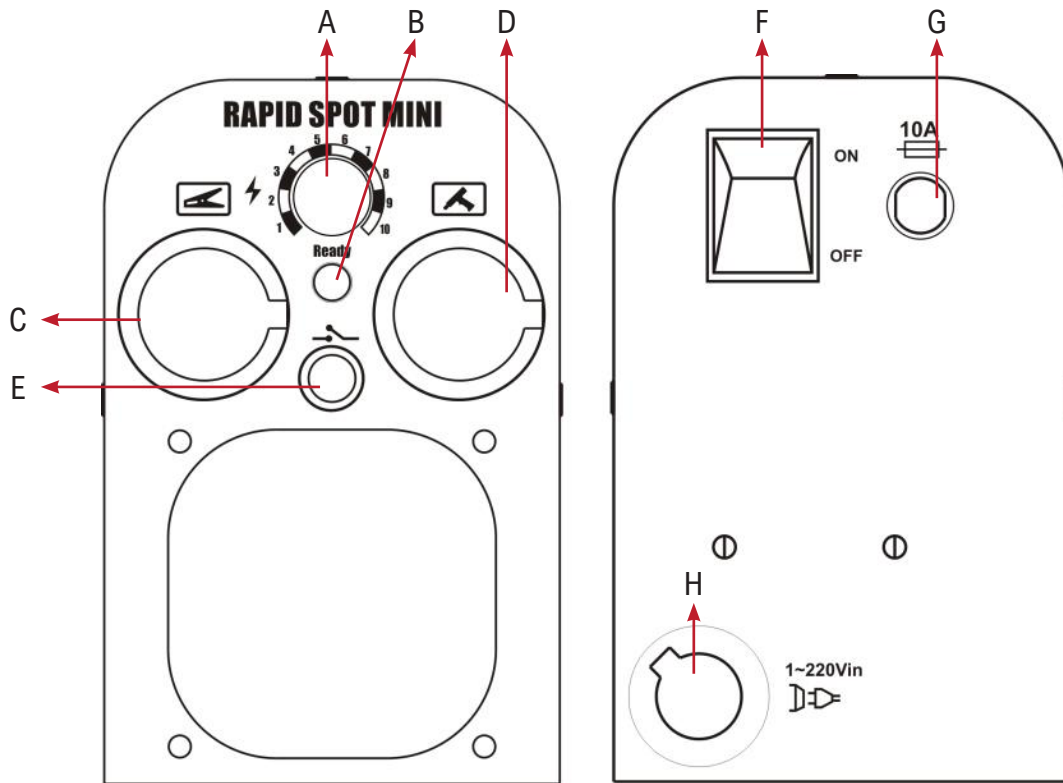
NOTE:

1. The torch cable and earth use the euro-type quick connector. Please push the plug to the end of the socket, torch cable to “Torch” socket, earth cable to “EARTH” socket, and turn right, they will connect well.
2. The input cable and control cable connectors have screw. Please lock the screw to fixed the connector.
3. The earth cable must use clamp to fix on the base metal.
4. All cables must be kept straight. If the cables are winded, it will interfere with the stud welding.

FOR SPOT WELDING:



3.3 CONTROLS ON GENERATOR FRONT PANEL:



- A. Output power adjustment for stud welding
- B. Connection indicator
- C. Socket for work clamp
- D. Socket for torch
- E. Control socket for torch
- F. Power switch
- G. Fuse
- H. Input power cable (Confirm the power voltage before use)

3.4 OPERATING PROCESS FOR STUD WELDING:

NOTE: Protect your eyes and your body when stud welding. Please operate the machine as follow.

3.4.1 PREPARATION FOR OPERATION:

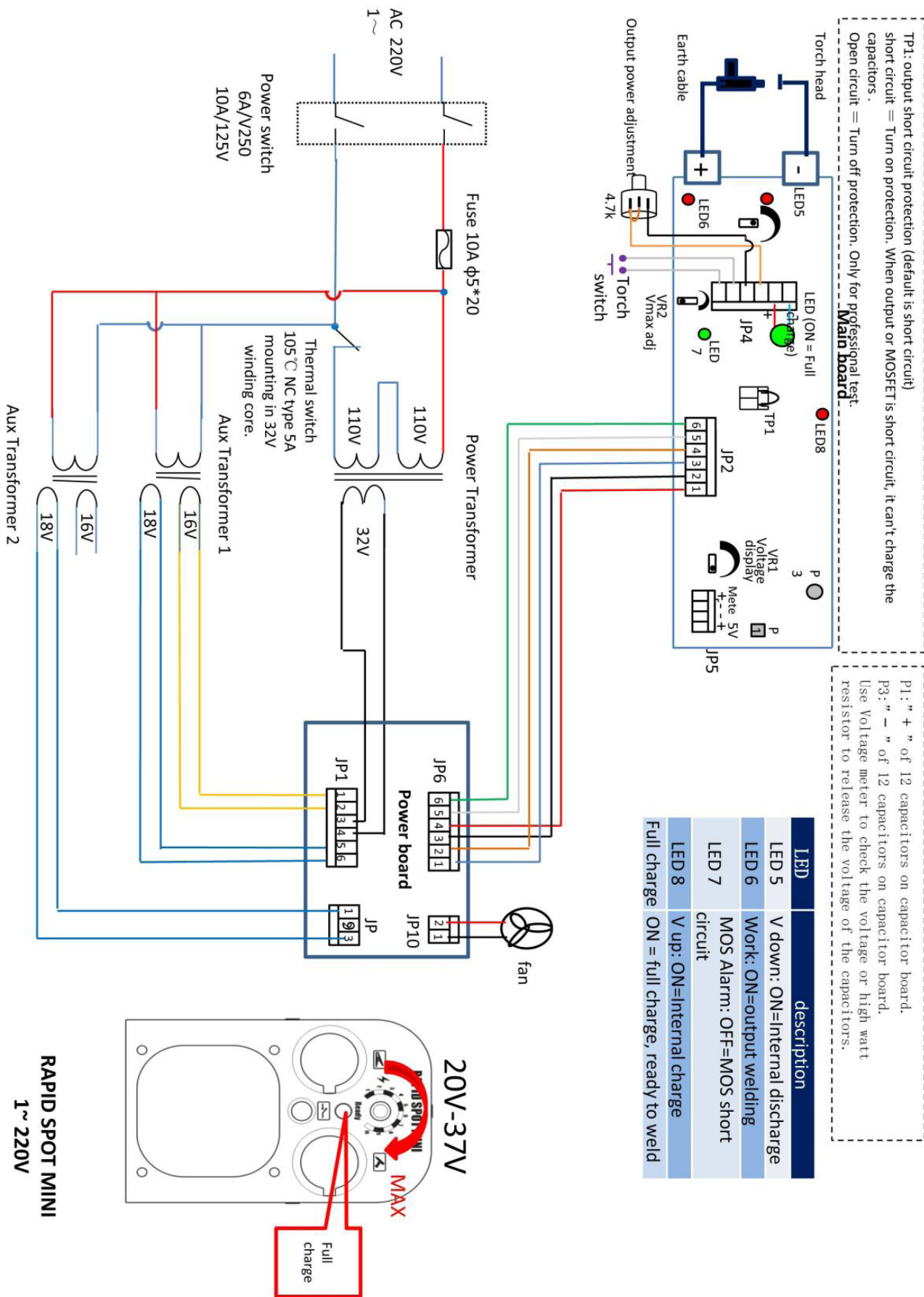
1. Keep the work piece free of dirt ,oil, paint and rust.
2. If the base metal is thin, it will dent at pressure. It must add a base plate, when stud welding.
3. Select suitable stud welding torch, according as material, diameter, length of the stud screw.
4. Make sure the diameter of the clamp is correct and the length of the gag lever post is correct. Install the screw clamp and gag lever post in the torch.
5. Make sure all the cables connect to the machine and workpiece. Connect input cable and turn on.

4. TROUBLE SHOOTING:

No power	<ol style="list-style-type: none">1. Check the source power2. Check the input cable3. Check the main switch4. Please contact to the manufacturer
No weld	<ol style="list-style-type: none">1. Check the output cable for torch & earth2. Check the connection for torch & earth3. Check power fuse4. Check transformer, maybe over heat5. Please contact to the manufacturer
Fan is not working	<ol style="list-style-type: none">1. Check the power of fan2. Check the fan, maybe something stuck in the fan3. Please contact to the manufacturer

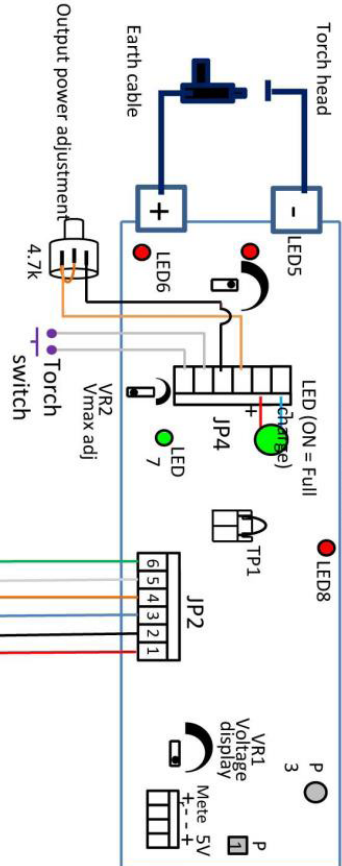
5. WIRE DRAWING:

5.1 WIRE DRAWING FOR RAPID SPOT MINI 220V:



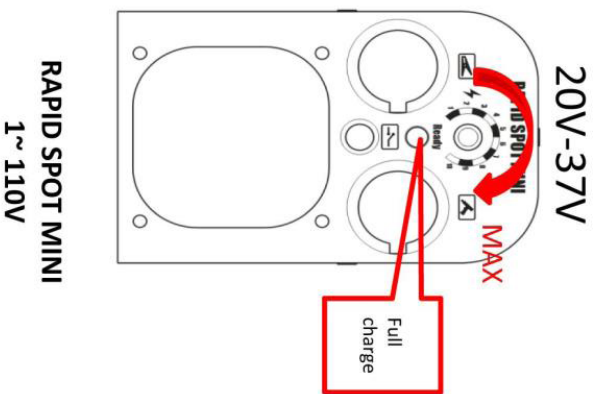
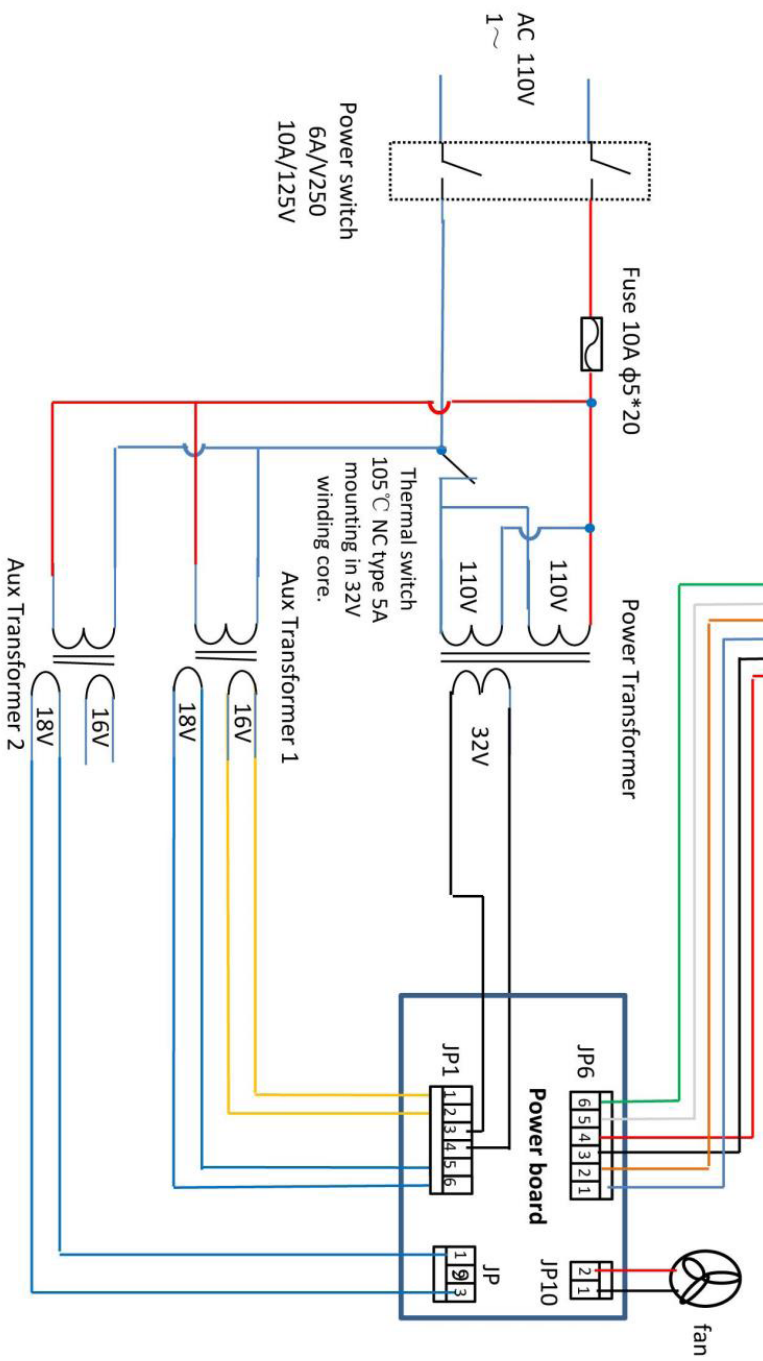
5.2 WIRE DRAWING FOR RAPID SPOT MINI 110V:

TP1: output short circuit protection (default is short circuit)
 short circuit = Turn on protection. When output or MOSFET is short circuit, it can't charge the capacitors.
 Open circuit = Turn off protection. Only for professional test.



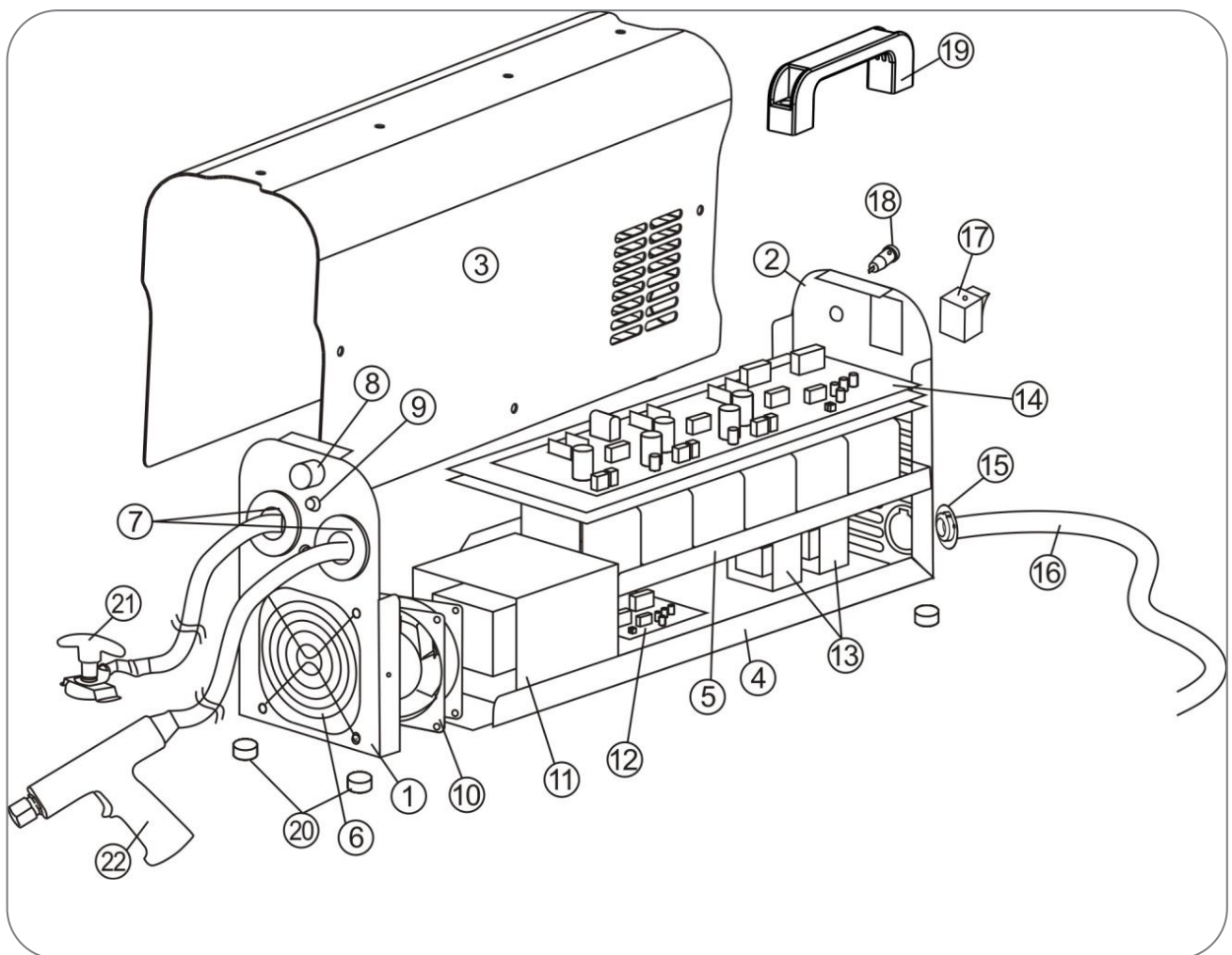
P1: " + " of 12 capacitors on capacitor board.
 P3: " - " of 12 capacitors on capacitor board.
 Use Voltage meter to check the voltage or high watt resistor to release the voltage of the capacitors.

LED	description
LED 5	V down: ON=Internal discharge
LED 6	Work: ON=output welding
LED 7	MOS Alarm: OFF=MOS short circuit
LED 8	V up: ON=Internal charge
Full charge ON = full charge, ready to weld	



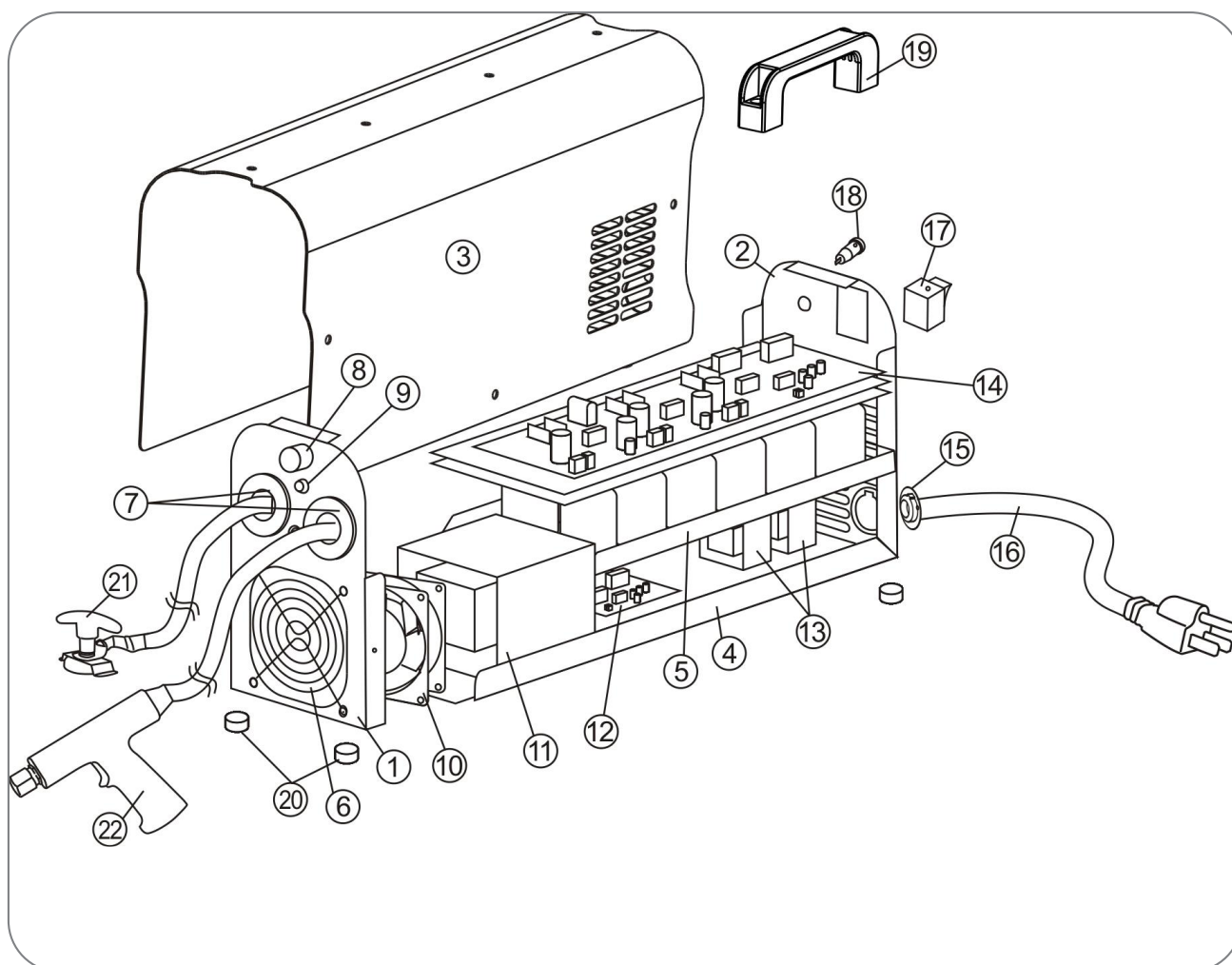
6. RAPID SPOT MINI 1PH/220V EUROPE/INDIA:

No.	Code	Description	No.	Code	Description
1	EY11245-CQ0101B1	Front panel	12	PD072402	Power board
2	EY11245-CH0101B1	Back panel	13	VC100630	Power transformer
3	EY11245-CS0101R16	Top cover	14	PD072501	Main control board
4	EY11245-CX0101B1	Bottom panel	15	SE064000	Cable holder
5	EY11245-CZ0101+	Inside baffle	16	XE071000-2E	Power cord
6	MF094310	Fan net	17	KE055005	Main switch
7	SE063905	Cable holder	18	DG063002-E	Fuse holder
8	SE055110	Knob		DG084020	Fuse 10A
	RA061000	Potentiometer	19	SC091120	Handle
9	DL092301	Green lamp	20	SG081100	Foot pad
10	MF094400	Fan	21	JD055043	Earth clamp
11	VM096200	Main transformer	22	QM081016	Euro type torch



7. RAPID SPOT MINI 1PH/110V USA:

No.	Code	Description	No.	Code	Description
1	EY11245-CQ0101B1	Front panel	12	PD072402	Power board
2	EY11245-CH0101B1	Back panel	13	VC100630	Power transformer
3	EY11245-CS0101R16	Top cover	14	PD072501	Main control board
4	EY11245-CX0101B1	Bottom panel	15	SE064000	Cable holder
5	EY11245-CZ0101+	Inside baffle	16	XJ082030-2C	Power cord UL
6	MF094310	Fan net	17	KE055005	Main switch
7	SE063905	Cable holder	18	DG063002-E	Fuse holder
8	SE055110	Knob		DG084020	Fuse 10A
	RA061000	Potentiometer	19	SC091120	Handle
9	DL092301	Green lamp	20	SG081100	Foot pad
10	MF094400	Fan	21	JD055043	Earth clamp
11	VM096200	Main transformer	22	QM081016	Euro type torch



THANK YOU!!!
FOR PURCHASING OUR PRODUCT



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