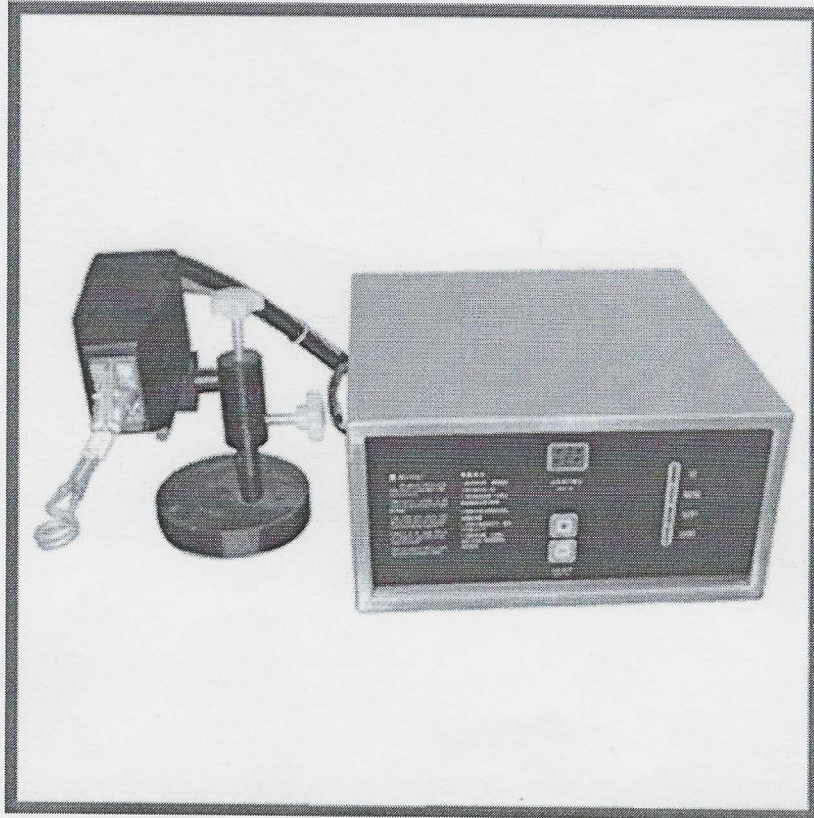
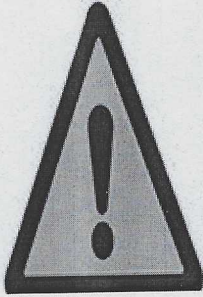


Ultrahigh Frequency Induction Heating Machine

Instruction Manual

TDG-03KW



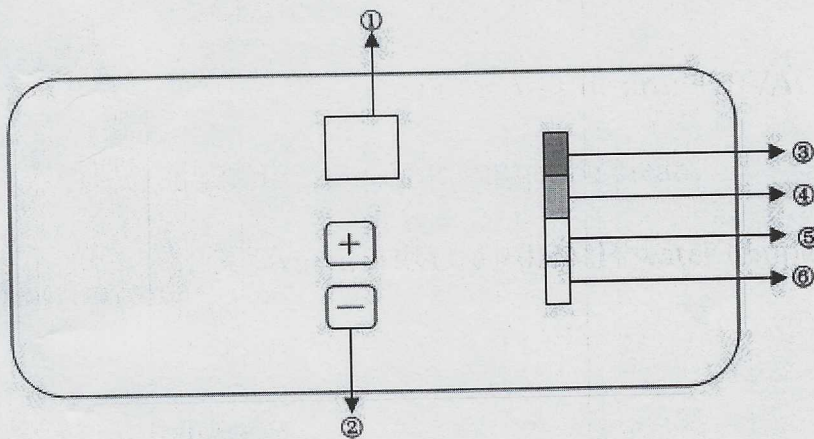


Cautious

1. Machine input power desire: 220VAC
2. Cooling water must be clean
3. Water pressure $>0.2\text{MP}$, water temperature $<40^{\circ}\text{C}$

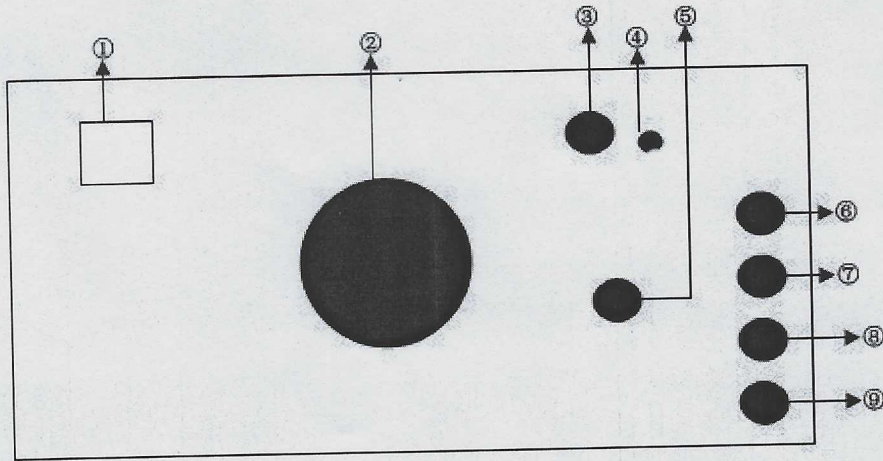
1. System Structure

(1) Front Panel



- ①.power adjustment display ; ②.power adjustment ; ③.working indicator light ;
④.frequency capture light ; ⑤.water pressure alarm light ; ⑥.water temperature
alarm light

(2) Back Panel

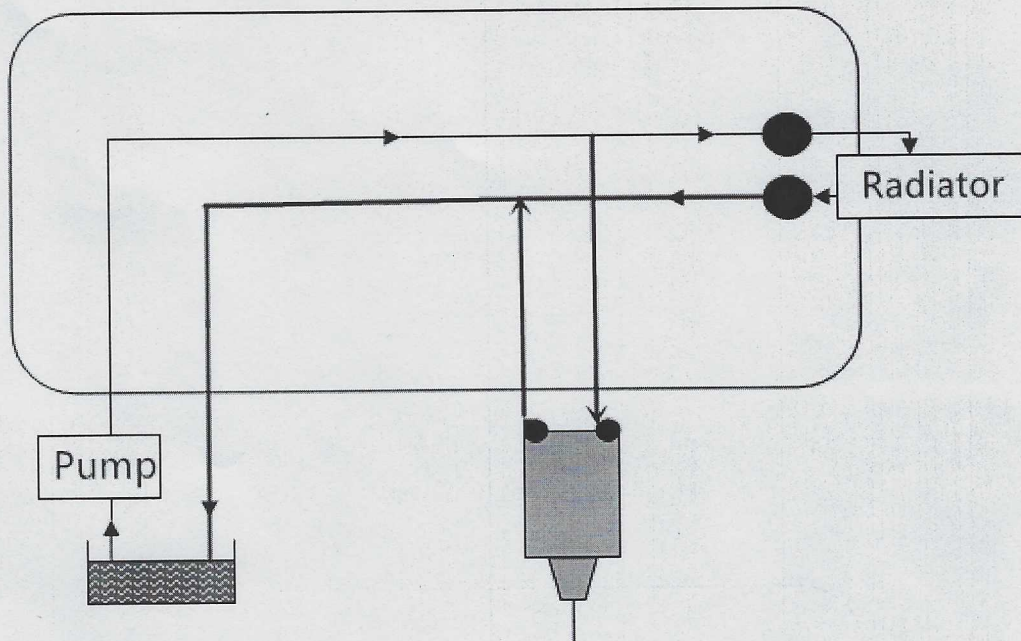


- ①.power switch; ②.electric fan; ③.power input 220VAC; ④.foot pedal;
 ⑤.output; ⑥.machine water in; ⑦.induction coil water in; ⑧.induction coil
 water out; ⑨.machine water out

(3) Cooling Water Installation

Check carefully for machine water in and water out connection , install strictly as installation introduction. Please only power on after confirm installation no mistake, in case of destroy the machine!

Power desire: 220VAC



Notices

Because of the impurity in cooling water may cause water poor circulation or even completely jam, which makes induction coil heated and burn up. So as to machine alarms for high temperature and water shortage, and stop work automatically. If so, please refer to water circulation drawing, smooth the above ports then use again.

2. Operation

- a) Connect with AC220V input voltage and make sure ground connection, use air switch to connect.
- b) Install cooling system well according to cooling water installation drawing.(confirm water in and water out right connection)
- c) Put on air switch on the back panel. In case of influence the electric system, the machine enter delay startup stage. After four seconds,

machine start and buzz one second. Then adjust the power according to heating requirements, tread on foot pedal and start working.

- d) After working finish, put off power switch firstly and then cooling water pump.

3. Induction Coil Making & Adjustment

(1) Induction Coil Making

1. Recommend to use double laps, using single lap if special.
2. The induction coil length is from 80mm to 120mm, 100mm is the best.
3. The best diameter of copper tube is 9mm, normally range from 6mm to 13mm
4. The distance between two parallel copper tube is 7mm.
5. The distance between two copper tube is as small as possible, but never connect for fear of short circuit.

(2) Induction Coil Adjustment

Because machine output power depend on series resonance, the inductive head inherent frequency change along with the distance between two copper tube. When the unfit frequency beyond the automatically capture range, the machine output ability will go poor even stop.

So if changing the length of induction coil is not available in the working process, try to adjust the two copper tube distance.

4. Technical Parameters

Model	JLCG-3KW
Welding Speed	1 second/pc
Input power desire	Single phase 220V 50/60HZ
Max oscillate power	3KW
Max input current	16A
Oscillate frequency	0.5-1.1MHZ
Cooling water desire	>0.5MPa 2-6L/Min
Duty cycle	100% 40°C
Dimensions(L*W*H)	420*370*180mm
Net weight	15kg

5. Fault Phenomenon & Solution

Fault	Cause	Solution
No power display (display screen off)	1.no power input	1.check power circuit
	2.power switch broken	2.change new power switch
Tread foot pedal, but light ③④ no bright, no power output	Foot pedal no touch well or broken	Check or change new foot pedal
Water temperature light ⑤ in and alarm	<ol style="list-style-type: none"> 1. water switch no put on 2. water pipe diameter too small to provide suitable pressure. 3. filter unit jam by impurity. 4. pump head not enough 5. pump abrasion and aging, impeller gap decrease the water supply pressure. 6. The diameter of pump water in, water out and main water pipe is 	<ol style="list-style-type: none"> 1. check water supply 2. check if the water pipe diameter is more than 2.2mm. 3. clean the filter unit 4. choose pump head more than 55 meters 5. change new pump 6. Check if the water pipe of water in, water out

	<p>too small.</p> <p>7. Connect to much machine with one circulation system</p> <p>8. water in and water out connect wrong, lead bad heat dissipatin.</p>	<p>and main pipe diameter is too small</p> <p>7. Increase the circulation system and down the machine connected.</p> <p>8. Connect the water in and water out well according to the water flow direction: water in→ radiator→induction coil→ water out</p>
Temperature light ⑥ on and alarm	<p>1. water in and water out connect wrong</p> <p>2. Machine have automatic protection found, when water temperatur higher than 40°C, machine stop automatic and restart after several minutes.</p>	<p>1. Connect the water in and water out well according to the water flow direction: water in→ radiator→induction coil→ water out</p> <p>2. (1) Better cooling system ability, keep water temperature less than 40°C; (2) Bigger water pool; (3) clean the filter system</p>