G.I.KRAFT

Flameless Heating System

User Manual

CE APPROVED

Thank you for choosing our flameless heating system, before you use it, we strongly recommend you go through the following content for safe and appropriate use.

Contents

Safety Cautions

People who has an artificial heart pacemaker, who has similar electric medical device should avoid using or nearing this device.

For professional use only.

Avoid wearing a ring, other metal jewelries, key, watch or any metal gadget, any cloth that has metal rivets nearing the induction coil, electromagnetic induction may cause high temperature of such metal parts and may lead to skin burn or burning of cloth.

If the heating element has deposition of toxic or become toxic matters due to high temperature, operator must wear anti poison gas mask or equal safety protection.

Electric shock can cause death.

Clear inflammable, explosive matters near the working area before use.

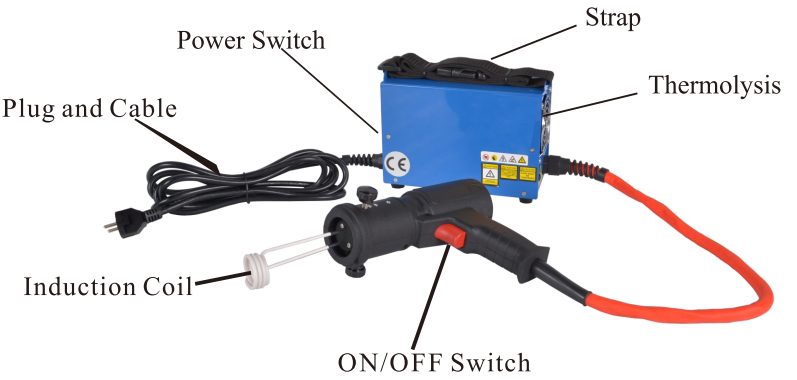
Protection gloves should be wear during use.

Functions

Heating rusted bolt nut, by the purpose of fast and easy remove from machines, cars etc. Using the thermal expansion theory, when the nuts of the bolt is heat, it expands which makes it easy to be removed from rusted bolt.

If you need to use this device to others applications, please contact local dealer for support, any inappropriate operation may cause damage to the device.

Device Description

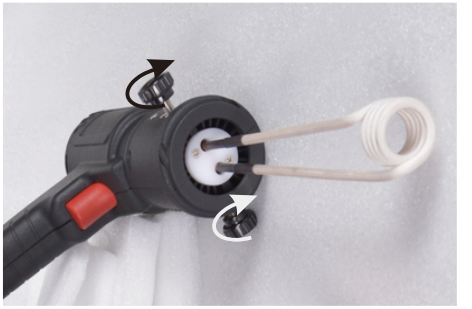


Operation Steps

1.Release the 2 fixing bolts contraclockwise 0.5cm out.

2.Select appropriate size of coil for your work and insert the two ends into the front holes.

3.Twist the bolts clockwise to fix the coil tightly.



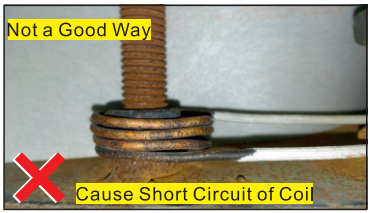
4. Plug in and place the heating element in the center of the coil, then press & hold the red button, the light in front will illuminate in 2-3 seconds.

5. At the same time, the heating elements' temperature raises, when work is done, release the button, and put it in safe storage.

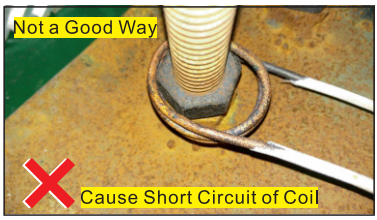
Use Rules

1. This device is built in the over heat protection, it will shut itself off to prevent damage from overheat, you can use it after the temperature drop to normal .
2. Please try not to use it over 5 minutes one time, although the device is built in the over heat protection, however, life spam of the device may be reduced.
3. During use, please place the coil in the center of bolt/heating object, try not to reach or close to large metal part where you don't need to heat), otherwise the working load increases and slow down heating speed of bolt. Please refer to Pic 4.
4. When the white coil insulation is breach, please replace with new insulation pipe, or replace the coil, if you have to use it, please **not** use it in the way of Pic 1, Pic 2.

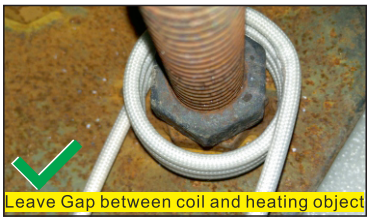
(Breach of insulation pipe may lead to short circuit of induction coil, thus may cause irreversible damage to the heater)



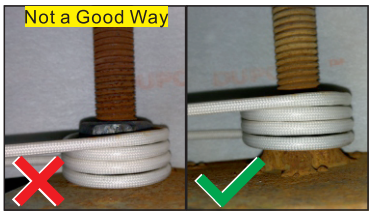
Pic1



Pic2



Pic3



Pic4

5. Do not block the vent holes during working, otherwise cooling ability decreases, and cause overheat to the device very soon.
6. Please don't put this device in fridge, near the air conditioner vent, this may cause condense water inside of the device and may damage the board.
7. Please don't bend the power cord sharply, no matter in using or storage.
8. Please don't open the device by yourself .

Bolt Heating Parameters

Coil Diameter(mm)	21	28	30
Bolt Diameter	Up to 11mm	Up to 18mm	Up to 20mm

Notice: The diameter of the coil must minimum 10mm larger than the bolt

Based on the ⌀22mm bolt, room temperature 25°C

Heating time: Continues up to 6 minutes. (From normal temperature to protection switch-off temperature);

Heating capacity reference: Heating 10 bolts from 25°Cto 300°C.

Recommend heating temperature and duration are as follows

Bolt Diameter()	Temperature	Heating Time
Φ10-22mm	300°C, 572℉	20-25 s
Φ23-28mm	300°C, 572℉	25-30 s
Φ29-36mm	300°C, 572℉	30-40 s
Φ37-40mm	300°C, 572℉	45-50 s

Recommended Heating Temperature : 200-700°C.

Note:

1. Visible dark red color on mild steel is around 550 °C, however, the bolt is already lose after about 10-20 seconds, at this moment, bolt is black.
2. Temperature on metal surface is 50-60 °C lower than its' inside.
3. Temperature over 550 °C may lead to over heating to the nut, directly affect mechanical properties, so recommend not heating it to red.

Iron Temperature and Color Reference

Temperature ℃	400	500	550	600	650	700	750	800	850	900	950	1000
Color												

Trouble Shoot

Items	Solutions
No response after pressing "ON" button, no indication light on, no fan working, no increasing heat of heating object.	1. Check if the plug is broken; 2. If plug is firmly plugged in; 3. If the switch on the socket is on; 4. Or the fuse in the plug (British type) is damaged;
Indication light is on, cooling fan is on, slow heating speed;	1. If using large coil for small diameter bolt, difference is more than 20-30mm. 2. If the front coil is breach or off, and the turns of coil attached to each other. 3. Please place the heating object in the middle of coil, the bolt vicinity metal will consume a part of heating power.
Heating duration did not last for 1 minute before shutting off.	1. Check if the insulation is breach and the coil has contact with bolt and lead to short circuit. 2. If the heating bolt is surrounded by metal object, which will increase the load of the device. please clean the surrounding metal or concentrate power to the bolt. 3. After device recover to normal function, heat still remain in the device, please wait longer time to cool the device.
It is in Normal condttion if	1. After press button, it takes 2-3 seconds to start working; 2. When working, it gives off slight buzz sound

Parameters

Voltage: 230V AC 50Hz;
Rated Power: 1500W (Note: Working power changes as the heating element size changes)

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