

MEGA HEATER

Instruction Manual

Art no. MH1500



EN

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Preface

Thank you for using our quality product. This product is an induction heating tool for Automotive and Industrial field. To get the best result of it, kindly read this manual carefully before putting it into operation. It uses high frequency magnetic fields to heat up metal objects.

A. Safety

General safety

-  ● Read and well understand all instructions to avoid electric shock, fire and/or serious personal injury.
 - Keep your workspace clean and well illuminated. Cluttered and dark areas can cause accidents.
 - Keep children and bystanders away while operating this power tool. Distractions may cause to lose control over the heater.
-  ● Work indoors and keep the area well ventilated and dry. Outdoors use only when no rain is expected and there is no water or moisture. Be sure that the ventilation fans are blowing air from the inside to the outside.
 - When using the heater, always keep a fully charged fire extinguisher ready on hand.
-  **Warning!** The magnetic fields created by high currents may affect the operation of pacemakers. Wearers of vital electronic equipment of those who have metallic surgical implant should consult their Doctors before using this tool.
-  ● **DO NOT** use the induction heater within 10 centimeters of any airbag component. The heat generated by the induction heater can ignite the air bag propellant, causing it to explode without warming. Before operating, check the vehicles service manual for precise airbag location.
 - **DO NOT** overreach, always keep proper footing and balance. Proper footing and balance enable better control of the induction heater, also in unexpected situations.
-  ● Always wear safety goggles while using the induction heater. Fumes and smoke from hot/burning adhesives are toxic. Wear a dual filter respirator mask (dust and fume) which has been safety approved. These masks and replaceable filters are readily available at major hardware stores. Disposable paper masks are inadequate !
-  ● Wear heat-resistant gloves when using the induction heater. The induction heater heats metal very quickly. You can burn your hands and fingers when trying to remove parts from hot metal surfaces.
 - Make sure that the power unit has enough air supply for cooling. Assure that the vents of the induction heater power unit are clean and free of dust and debris allowing the power unit to have an unimpeded flow of cooling air.
 - **DO NOT** leave the induction heater unattended when it is on. Do not attempt to repair or service the induction heater. There are no user-serviceable parts inside except for replacing the heating coil attachment.

- **Warning! DO NOT** touch the heating coil by hand before the equipment and the coil are not completely cooled off after electrification and heating. Coils with high temperature should be removed from the equipment by means of tools. After the hot coil is removed from the equipment, keep it in a safe place.

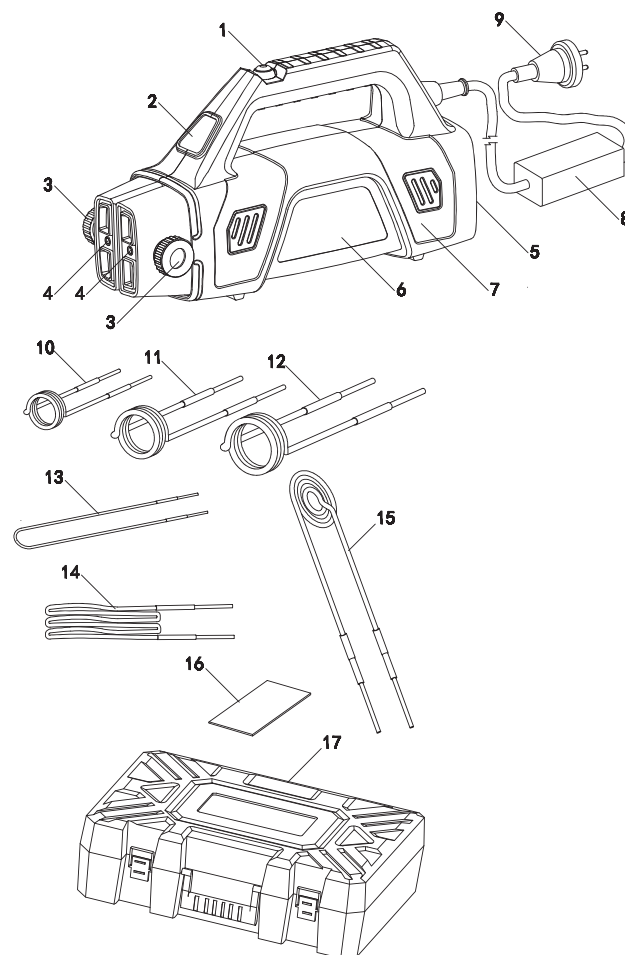
Electrical safety

- ⚠ Before plugging in the induction heater, make sure that the outlet voltage supplied is compatible with the voltage marked on the nameplate within 10%. An outlet voltage incompatible with that specified on the nameplate can result in serious hazards and damage to the induction heater.
- **DO NOT** use the induction heater in the rain, moisture and do not immerse it in water. Exposing the induction heater to water or other liquids may cause an electrical shock.
- Disconnect power supply cord of the induction heater from the outlet before changing any of the applicators.
- **DO NOT** twist or bend electrical cord sharply as it could damage the internal wiring.
- **DO NOT** abuse the electrical cord. Never use the cord to carry the induction heater. Keep the cord away from heat, oil, sharp edges and/or moving parts.
- **DO NOT** use the induction heater if the cord is damaged. Cords cannot be repaired. Damaged cords can create electric shocks.
- Unplug the induction heater from the power supply outlet when not in use.
- **DO NOT** connect two or more extension cords in series with each other. If needed, use only one extension cord with the correct specifications to work with power tools. Fully unwrap extension cords. Tightly wrapped extension cords can overheat and cause fire.
- ⚠ **Warning! DO NOT** attempt to heat aerosol cans, paint cans, or any pressurized containers used for storing fuels, compressed gases, and liquids. The heat generated by the induction heater can cause exploding these containers and igniting their contents.
- Warning! DO NOT** use any heating coil if the insulation has breached as it will spark when contacting with a vehicle. This will be a fire hazard especially when working on or near gas lines and/or gas tanks.

Tool safety – Built-in Design

- LED illumination: When press on the heating switch, the LED light is automatically turned on. It will be always illuminated during the working period.
- The LED light will blink as a warning and power will be cut off. You can release the power switch and press it again to start the power, subject to the heater is not overheated, this is another built-in protection for this tool.
- **DO NOT** block the cooling fan. The fan is always running when you plug in the induction heater. It is always cooling the induction heater to avoid overheating.

B. Main unit and accessories



Main unit:

1. Heating switch
2. LED light
3. Locking knobs for heating coil
4. Heating coil insertion port
5. Cooling fan
6. Label
7. Housing
8. Filter
9. Power plug

Standard Accessories:

10. Φ20mm tubular heating coil
11. Φ26mm tubular heating coil
12. Φ32mm tubular heating coil
13. U-shape heating coil
14. Bearing heating coil
15. Flat heating coil
16. Instruction manual
17. Storage box

C. Technical data

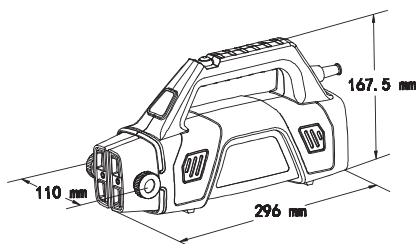
I. Working condition

1. Input voltage: AC-230-240V (50-60HZ)
2. Input current: 10A (capacity)
3. Maximum power: 1500 W

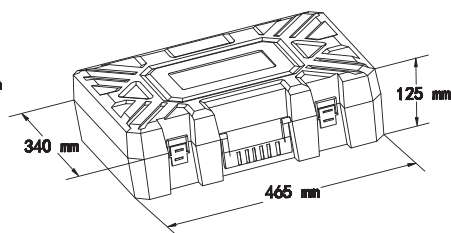
II. Scope of use

1. Ambient temperature: - 20 ~ 60° C.
2. Relative humidity: < 95% RH
3. Atmospheric pressure: 0.1Bar~0.86 Bar

III. Dimension and weight



Net weight: 2.4 kgs



Net weight : 4.9 kgs.
(Full set with tool & accessories)

D. Operation instruction

Insert one of the heating coils (10, 11, 12, 13, 14 or 15) into the heating coil insertion port (4) and tighten the locking knobs on both sides to ensure the coil is locked and fixed. Ensure that the power plug (9) is connected to an ordinary 220-240 Volt, 50-60 Hz AC outlet. The fan (5) starts to work after the heater is power plug is connected to the main. Place the heating coil to the required position on the workpiece to be heated, press the heating switch (1) down and the LED indicator lamp (2) will be switched on and the heater starts to work. Thus, the heating coil generates a high frequency alternating magnetic field. Through the principle of electromagnetic induction, the magnetic field passes through the metal, and the conductive surface (e.g. frozen nuts) generates a skin effect current, which converts the electronic energy into heat energy. The heating switch (1) is the device for opening and closing the energy field. When the heated workpiece meets the disassembly requirements, the heating switch (1) is released, the LED light (2) goes off and the heater stops working. Place the heater in a secure place, keep the fan (5) .

Warning: Please select and install the heating coil in strict accordance with the operating principles and procedures before it can be energized. After the heater power plug (9) is connected, the heating coil insertion port and the heating coil never may directly be touched at any part of the human body. After the power plug (9) is unplugged, assure that the heating coil will be touched only when it is completely cooled down.

E. Preparations for operation

Before operating the heater, please read carefully and well understand all safety warnings and precautions in this manual.

Use a stable output power supply.

Use of Generators and Inverters:

1. Generators: Some portable generators, especially low-cost ones with power of 4 kW or less, are unregulated and may generate voltages exceeding 260 V, which can damage the equipment and invalidate the guarantee.
2. Inverters, DC to DC converter operation: Use only 3 kW or larger sinusoidal inverters

Evaluate the maximum size of the heated object, select the appropriate heating coil, insert it into the heater and ensure that the coil is fixed and locked, switch it on and observe whether the fan is running.

F. Use of the tubular heating coil

Function: The tubular heating coils (10, 11, 12) are used to heat nuts, fasteners, caulking removal, frozen door hinges, exhaust manifold bolts, truck bed bolts, sensors (O2) etc.

Note: The service life of the tubular heating coils can be prolonged by heating the workpiece enough to disassemble without excessive heating. **During the heating process, the heating coils should not touch the workpiece and the heated object ,Maintain a gap of 3 ~ 4mm.** If the temperature of the workpiece is too high, the insulation layer of the heating coils may be burned out. Loosening frozen, rusty, corroded screws and nuts:

Step 1: Follow the instructions of § E for preparations.

Step 2: Press the heating switch to start the heater.

Step 3: Place the related tubing coil around the nut, initially for few seconds only, pull it back and try to remove the nut with a wrench or a socket. If it is still tightened, apply the tubing coil for another few seconds and then try to unscrew again with the wrench/socket. Usually, there is no reason to heat a screw/nut up to a red-hot condition in order to remove the corrosion from the bolt.

G. Use of the U-shape heating coil

Function: The U-shape heating coil (13) can perform any work of other coils and can be customized to remove and repair dents.

Step 1: Follow the instructions of § E for preparations.

Step 2: Bent the coil in the way that it looks like the drawing on the right. **Note that the coil winding should not exceed 4 turns.**



Step 3: Place the heating coil 12 to 25 mm above a dent and move the heating coil in small circular motions by gradually approaching it to dent but move the heating coil around the outside of the crown of the dent. In case that the dent shrinks, pull the heating coil back quickly and cool the dent with a damp rag. If the dent sucks in, then you are heating the crown, or you are not far enough from the outside of the crown of the dent.