

Part No. 8732

LASER[®]

Heat Inductor 18KW

Instructions



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Introduction

An 18kW, liquid-cooled heat inductor designed to allow the user to heat larger metal masses. Ideal for heating larger bolts, fixings, steel pins and bearings as found on heavy goods vehicles and on industrial assemblies. Can be used to help straighten bent HGV chassis, and modify beam axles to ensure correct alignment.

Features a user-friendly colour touch-control panel, electronic safety protection system and heating temperature-level setting and timer. Long inductor cable (4.25m). Self-contained liquid cooling system.

This induction heater creates a high-intensity flameless heat to provide a quick and simple method of loosening seized or corroded metal components such as nuts and bolts, track rod ends and exhausts etc. The flameless technology and zero set up times assure a speedy job and excellent results. The heat inductor only heats ferrous metal objects; it will not burn or melt plastic or paint, unless the metal substrate is brought up to a sufficient temperature to damage these materials. The unit is very safe to use when following the safety precautions (see section Safety Precautions).

400V, 3 phase, 50Hz power required.

Specifications

Rated power:	18kW
Rated voltage:	400V
Power supply voltage frequency:	50-60Hz
Plug amperage:	32A
Heater frequency:	15-30kHz
Insulation class:	IP21
Coolant tank capacity:	20 litres
Power supply cable length:	8m
Inductor cable length:	4.25m
Weight:	130kg
Dimensions:	550x560x1009h mm

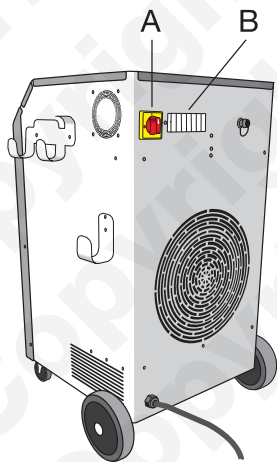
Safety Precautions



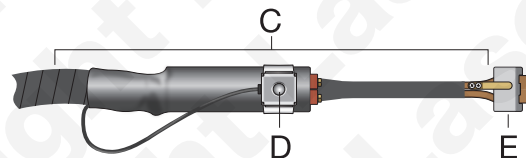
Safety Precautions

- Always read and understand these instructions carefully before using the tool.
- Always wear eye protection and heat resistant gloves when using the heat inductor.
- Fumes and smoke from hot/burning adhesives are toxic. Wear a dual filter (dust and fume) respirator mask.
- Do not operate the heat inductor if you have a cardiac pacemaker or any other kind of electronic or surgical implant. The heat inductor will interfere with the operation of cardiac pacemakers and other implanted electronic medical devices, and can cause dangerous heating of any metal items in your body, for example, artificial joints, and bone screws and braces.
- The machine has been designed to minimise the risks due to electromagnetic fields. Additional risks exist however, and the operator must keep a minimum safety distance of 30 cm between the heat inductor and the operator's head or chest.
- Anyone who has a cardiac pacemaker or any other kind of electronic or surgical implant must stay at least 6 meters away from an operating heat inductor.
- Do not operate the heat inductor while wearing any metallic items such as jewellery, rings, watches, chains, identification tags, medals, belt buckles, body piercing hardware, etc. The heat inductor can heat these metallic objects very quickly and cause serious burns or even ignite clothing.
- Remove all loose coins, metallic tokens, keys, chains, pocket knives, miniature tools, or any other metallic object in or on your clothing before operating the heat inductor. Do not replace these items until you are finished using the heat inductor. The heat inductor can heat these metallic objects very quickly and cause serious burns or even ignite clothing.
- Do not wear clothing that is made with metallic pocket rivets, waist buttons, pocket buttons, and zippers when operating the heat inductor. The heat inductor can heat such metallic items very quickly and cause serious burns or even ignite clothing.
- Risk of burns: Overheated components can cause serious burns. Do not touch hot objects with bare hands. Wait for the objects and equipment to cool down before touching/removing.
- Do not use the heat inductor within 10 cm of any airbag component. The heat created from the heat inductor can ignite the air bag, causing it to explode without warning. Refer to the vehicle's service manual for precise airbag location before operating.
- Do not use the heat inductor in the rain, moist conditions, or let it get wet.
- Leave the inductor unit to cool down for at least 20 minutes before handling and/or storage.
- Take care with the inductor head / flow concentrator (E in Figure 2). The ferrite construction can be brittle and easily damaged.
- Before use, inspect the unit and power leads for wear or damage. Do not use if power lead or plug is damaged.
- Always maintain the heat inductor in good condition, keeping it clean and dust-free. Never use water, solvents or aggressive cleaning products. Store in a dry, secure area.
- No liability is accepted for incorrect use of this product — do not use the product for tasks it is not designed for. Use the product correctly and with care. Failure to do so may cause damage and/or personal injury and will invalidate the warranty.

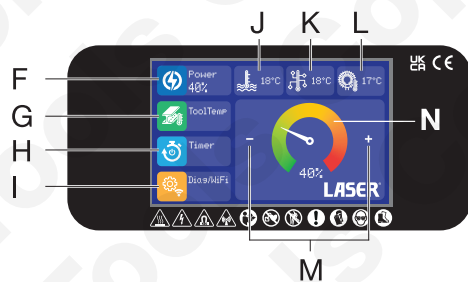
Introduction



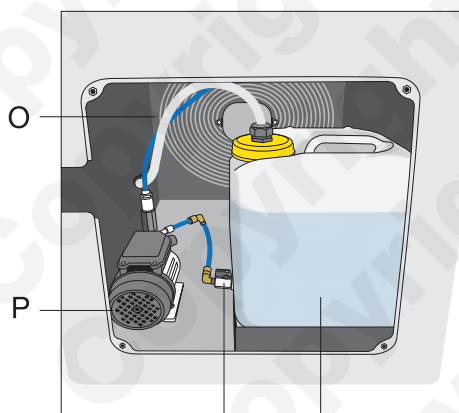
A	Main ON/OFF switch
B	Fuse holder block



C	Inductor unit hand piece
D	Heating start button
E	Inductor head / flow concentrator (ferrite)



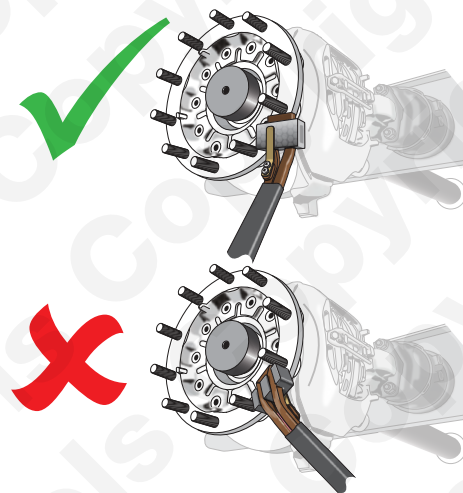
F	Power output display
G	Laser temperature setting button
H	Timer button
I	Diagnostic & WiFi button
J	Coolant temperature display
K	Electronic temperature display
L	Transformer temperature display
M	Power level adjustment buttons
N	Power level signal bar



O	Coolant Radiator
P	Pump
Q	Reservoir tap valve
R	Coolant (antifreeze) reservoir tank

Operation

- Always read and understand these instructions carefully before using the tool.
- Read and understand the Safety Precautions section on these instructions.
- Connect unit to 400V, 3 phase, 50Hz power supply.
- Turn the main power switch (A in Figure 1) to ON position. Wait for a few seconds as the machine powers up and self-tests.
- Refer to Figure 3: Use the + and – power level adjustment buttons (M) to select the desired power level. The level is indicated on both the power output display (F) and the power level signal bar (N).
- Place the inductor head (E in Figure 2) onto the part or component to be heated. Press the heating start button (D) to start the heating operation. Note: the inductor head must be placed in the correct orientation on the component (not upside-down). Refer to Figure 5.



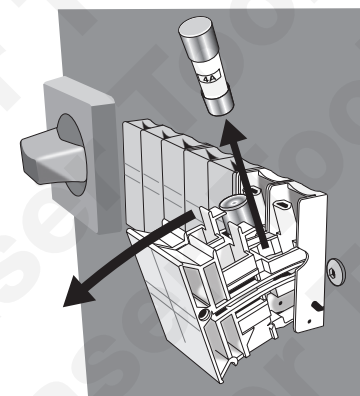
Operation

SIEMENS 3NW7 033	SIEMENS 3NW7 023	SIEMENS 3NW7 023
32A ~690V	32A ~690V	32A ~690V
10x38 2P 3.0W	10x38 2P 3.0W	10x38 2P 3.0W

Fuse Ratings:

Only use fuse(s) rated at 32A (cylindrical fuse link, 10 x 38 mm, 32A, AC: 400V) for the 3-phase system fuses and 4A (cylindrical fuse link, 10 x 38 mm, 4A, AC: 400V) for the auxiliary system fuses. (Spare fuses can be stored in fuse holder.)

Fuse Replacement:



Safety Precautions

Maintenance:



- Maintenance on the Laser Tools 8732 heat inductor must be carried out by qualified, authorised personnel, who are aware of its operating features.
- Never perform and cleaning or maintenance with the machine running.
- Before and maintenance work, ensure the machine is switched OFF (main ON/OFF switch (A) in Figure 1), and unplug from the main 3-phase supply.
- Wear appropriate PPE (personal protection equipment) when working on the machine.
- Never use flammable or aggressive solvents to clean the machine.
- Before each use of the machine, verify the functionality of control devices, safety devices and the condition of the electrical connecting cables, etc.

Coolant replacement:

After a working period of about 12 months, it is recommended to replace the antifreeze coolant to increase the service life of the machine components and ensure a more efficient duty cycle. Use a universal antifreeze either pre-mixed or mixed 50:50.

1. Switch off machine (main ON/OFF switch (A) in Figure 1).
2. Remove front access panel (refer to Figure 4).
3. Close the coolant tap valve (Q) at the bottom of the coolant (antifreeze) reservoir tank (R).
4. Place an absorbent cloth under the tap valve and coolant hose to catch any fluid escaping when the hose is disconnected.
5. Release the coolant hose coupling from the bottom of the tank.
6. Release the coolant hose from the pump outlet (top) by pressing the ring.
7. Clean the system by applying compressed air to the coolant hose released from the top of the pump.
8. Re-connect the hose to the pump outlet (top).
9. Unscrew the hose clamp nut over the coolant tank cap.
10. Remove the coolant tank cap together with meshed hose.
11. Remove the coolant tank, empty and clean.
12. Refit the coolant tank and reconnect the hose coupling at the bottom of the tank.
13. Open the coolant tap valve (Q) at the bottom of the coolant tank.
14. Fill with approximately 20 litres of fresh antifreeze coolant.
15. Replace the coolant tank cap and reconnect the top reservoir tank hose.
16. Start the machine and wait a few seconds for the circuit supply in the inductor to charge and the coolant to circulate.

Safety Precautions

Troubleshooting:

If (at any time), when the machine is started and a hydraulic circuit error is indicated on the user control display panel:

1. Remove front access panel (refer to Figure 4).
2. Confirm pump is running and coolant is flowing.
3. If the pump is not running, switch off machine (main ON/OFF switch (A) in Figure 1).
4. Insert a large screwdriver into the circular hole in the front centre of the pump (P) to engage the slot in the end of the pump shaft, then turn to free-off the pump.

Replacing the inductor head / flow concentrator:

The inductor head / flow concentrator is regarded as a consumable. (Available from Laser Tools Service Department: part number 62108.)

Remove the screws securing the brass tab and remove the inductor head / flow concentrator.

- Carefully clean the copper frame then fit a new inductor head / flow concentrator.
- Secure by refitting the brass tab and tightening the screws.

Our products are designed to be used correctly and with care for the purpose for which they are intended. No liability is accepted by the Tool Connection for incorrect use of any of our products, and the Tool Connection cannot be held responsible for any damage to personnel, property or equipment when using the tools. Incorrect use will also invalidate the warranty.

If applicable, the applications database and any instructional information provided has been designed to offer general guidance for a particular tool's use and while all attention is given to the accuracy of the data no project should be attempted without referring first to the manufacturer's technical documentation (workshop or instruction manual) or the use of a recognised authority such as Autodata.

It is our policy to continually improve our products and thus we reserve the right to alter specifications and components without prior notice. It is the responsibility of the user to ensure the suitability of the tools and information prior to their use.



Safety First. Be Protected.



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