

Top Auto s.r.l.
Viale del Lavoro, 40
37030 Colognola ai Colli (VR)
ITALY

Use and maintenance manual

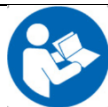


INDUTTORE FIRE F30

Nome commerciale/Commercial name

INDUCTOR-FIRE F30

Modello/Model



Read these use and safety instructions before using the Inductor FIRE F30

:

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Dear Customer,

Thank you for choosing us. We are grateful for the purchase of the INDUCTOR FIRE F30 induction system, a versatile tool that will be of great help to your business for many years. Our service is at your disposal for any problems related to use or maintenance.

1. Introduction

1.1 Terms and symbols used

It is essential to pay close attention to the following pictograms and their meaning as their function is to highlight particular information, such as situations calling for maximum care, practical suggestions or simple information.

See this page if you have any doubts about the meaning of pictograms found during reading.



**WARNING
DANGER**

Any operation in which failure to comply with instructions or tampering with equipment parts can cause serious injury to persons will be highlighted with the WARNING/DANGER symbol.



PROHIBITED

This symbol draws attention to operations that must absolutely be avoided and are therefore forbidden.



OBLIGATION

This symbol refers to the safety regulations to be followed to ensure your safety and the safety of others and to avoid damage to the equipment.



NOTE

This symbol highlights useful information and/or suggestions.

2. General information

2.1 Responsibility

Failure to comply with the instructions in this Use and Maintenance Manual shall exempt the Manufacturer from any liability.

For any data not included or not deductible from the following pages, contact the manufacturer directly.

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Viale dell'Artigianato, 4
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ITALY

In particular, if equipment maintenance is carried out in a manner that does not comply with the instructions given, or in any event in such a way as to affect its integrity or that modify its characteristics, **Top Auto s.r.l.** is considered to be relieved of any liability inherent to the safety of persons and faulty operation of equipment.

2.2 General warranty conditions

The company TOP AUTO S.R.L. guarantees the warranty and repair of products it manufactures and commercialises, in accordance with the conditions listed here below.

Warranty duration and limits

A product remains in warranty for one year from date of purchase. In any case, the warranty period shall not exceed two years from product manufacture date, unless the end customer submits proof of purchase date.

The warranty does not apply to the following cases:

- an external cause (mechanical shock, lightening, sudden changes in voltage)
- damage incurred during transport or storing
- a product installed in a manner that does not comply with manufacturer specifications
- a product containing too much dust in inner parts
- a product exposed to rain or humidity
- a product which has been modified by the client
- deteriorations caused by ill use of equipment
- use of unsuitable accessories or consumables
- natural wear of different parts of equipment

The guarantee does not apply to normal wear of accessories or consumables.

If the equipment is modified or repaired by unauthorised personnel, the warranty shall be void.

Application of the warranty

Return of products to TOP AUTO S.R.L.:

If the reseller declares the malfunctioning of a product, they are required to submit the following information to TOP AUTO S.R.L.:

- product serial number
- a description of the problem with the product
- photo of encountered defects, if possible

The reseller can send defective products to TOP AUTO S.R.L., however they shall bear all shipment costs. The company TOP AUTO S.R.L. does not accept the return of products ex works. Products shall be repaired and resent with a customer's successive order. In case of request for sending in advance of order shipment, transport costs shall be borne by the reseller.

If products are in warranty, spare parts and repair costs shall be borne by TOP AUTO S.R.L. If products are not in warranty, TOP AUTO S.R.L. shall issue a repair quote which the customer then accepts or refuses. For all products in warranty returned for replacement or repair and which do not bear any defect or malfunctioning, a debit document shall be issued for the check carried out on the product.

The warranty does not apply in the case of products resent without being appropriately packaged and thus at risk of damage during shipment. Please take care as hauliers tend not to handle packages with due care!!

Recommendations regarding product transport.

The company TOP AUTO S.R.L. only accepts carriage paid and not ex works returns.

The reseller is exclusively liable for damage caused to a product due to inadequate packaging, even if the package is accepted by our warehouse. Since it is not possible to open each package upon arrival, Top Auto s.r.l. shall accept goods with reservation from haulier if there is visible damage to packaging material.

Recommendations for packaging and transport:

If possible, organise goods on pallets. This is considered the best solution to avoid damage to products during shipment.

If required, that goods are packaged in cardboard using bubble wrap so that packaging absorbs shock that may occur during shipment.

Place packaged product in very thick cardboard and ensure that all sides are wrapped in bubble wrap or other material that can ensure protection of products as much as possible during shipment.

2.3 Machine identification

An identification plate is attached to the machine, on which CE marking is contained as well as:

- Name and address of manufacturer
- Year of manufacturing
- Model
- Type of machine
- Weight
- Voltage

This information must be cited whenever requesting technical assistance or replacement parts.

2.4 Technical data

Induction heater type:	Inductor 3.5KW Mod.: FIRE F30
Rated power	3.5 Kw
Rated voltage:	230 V
Frequency	50/60 Hz
Heater frequency	20-26 kHz
Insulation Class	I
Liquid cooling	L 2
Network cable	2 m
Inductor cable	2 m

2.5 Overall dimensions and weight

weight	Kg. 20
height	350 mm
width	250 mm
depth	450 mm

3. Specifications for machine use

3.1 General safety warnings

- The machine has been constructed according to standard. Its durability and reliability will be more effective if used and maintained correctly.



- Machine use should only be entrusted to adult, suitably trained personnel in full compliance with current regulations and the instructions contained in the manual.
- Carefully comply with instructions and obligation and hazard signs on the machine.
- Before performing any maintenance operations, cut off the machine electrically to prevent accidental start-up.
- In case of damage or breakage of connecting pipes or electrical wires, promptly intervene to replace them.
- If equipment is leaking liquids, immediately eliminate the leak.
- Do not leave equipment exposed to weathering.
- Do not leave equipment unattended in the presence of children.
- As soon as it has been decided that equipment will no longer be used, render it inoperative by performing all disposal practices in accordance with regulations.

3.2 Intended conditions of use

This machine should only be used for the purpose for which it was expressly designed, that is: **to generate heat inside ferrous materials**.

Any other use not expressly covered in this manual is strictly prohibited as considered improper and therefore dangerous. The machine operates semi-automatically and requires the presence of an operator.



The operator has the direct responsibility for compliance with all safety standards not only where he is concerned but also for any persons who may be exposed to machine risks.

Therefore, carefully read this manual before performing any operations on the machine as it contains instructions and procedures for correct and safe operation. Please keep this manual for further reference.

4. Design characteristics

The parts that make up the **INDUCTOR FIRE F30** can be summarised as follows:

- 1) Ignition switch
- 2) Control panel
- 3) Inductor
- 4) Circuit board

4.1 Warning plates and signs

Signs containing warnings and obligations with which the operator must comply for his own safety and security are present on-board the machine.



4.2 List of protections

The machine is safe when used correctly. However, it is advisable to use maximum caution as heated materials can burn upon contact even a long time after inducer passage.

Even though it is constantly cooled, the flow concentrator (ferrite) may heat up due to contact with red-hot parts and consequently cause burns.

The machine is equipped with thermal and electrical overload protections. If the inductor protector is activated, simply press the RESET button to re-start the machine and wait for the activation cycle (approx. 10 seconds) to be completed.

5. Residual risks



The machine has been designed to ensure maximum safety. However, the operator can become burned inadvertently.

The machine should not be used close to particularly sensitive or dangerous materials, explosives, compressed gases, flammable liquids, or electro-medical equipment.

Installation must be such as to allow easy access to all its parts. The minimum space around its perimeter must guarantee its use and maintenance without any problems or risks for the operator.



Use of this machine while wearing metallic objects is not permitted as they will overheat near the inductor.



Use of this machine by pace-maker wearers or wearers of any bio-mechanical equipment is not permitted.



Noise and vibrations

The machine produces a sound pressure level for continuous use of less than 60dB (A).
The machine does not generate significant vibrations that may result in a hazard.

Demolition and disposal

Some materials with which the machine has been built can be recycled. Said recycling should be performed in accordance with relevant local regulations.

Unpacking and installation

The machine is supplied ready for use.

Before operating, remove all packing material and place the product carefully in a suitable place (even ground, dry and ventilated location).

Connection

The mains voltage and frequency must correspond to data on the identification plate. The machine is delivered complete with electrical connections, so simply insert the plug into a suitable power outlet.



Connect the plug only if the power outlet is equipped with a cut-out switch.

6. Machine use

Switch on the machine using the main switch fig. 1.



fig. 1

Wait approximately 10 seconds before pressing the activation button (fig. 5).

This delay is necessary to allow coolant to enter completely into circulation.

Operation can begin once the power LEDs remain steady on.

If LEDs are flashing on buttons 1-2-3, press the reset button (4) in fig. 2 repeatedly 4-5 times and wait a few seconds. Contact customer support if the problem persists.

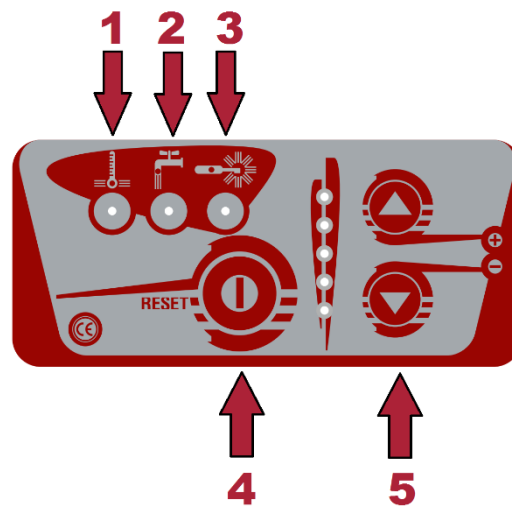


fig. 2

Adjust power as needed using the display (see button 5).

Button 1 cooling system temperature level indicator

Button 2 pump malfunction indicator

Button 3 manipulator malfunction indicator

Button 4 machine reset

Position the inductor (fig. 4) on the part to be heated as in fig. 3



fig. 3



fig. 4

Power by pressing the button on the handle fig. 5, move the inductor as necessary.



Fig. 5

After use, turn off the pump and fans using the main switch, to allow the entire set to cool down.

7. Replacing the flow concentrator

In the event of flow concentrator (ferrite) wear



Unscrew the back tab to remove the concentrator. Thoroughly clean the copper part and change the concentrator, re-tightening the brass tab to lock it in.



8. Replacing the inductor



Inductor replacement should be performed only by authorised personnel and only after cutting off power to the machine.



Wear protective gloves during maintenance and/or repairs.
Electrically isolate the machine by disconnecting it from the mains.
When replacing the inductor, verify that there are no significant liquid leaks from the manipulator. If there are any significant leaks, top up liquid in the corresponding tank.

Tightening should not exceed 7N when fastening the inductor. Tighten using a suitable torque wrench.



Inductor replacement should be performed only by authorised personnel and only after cutting off power to the machine.

Do not start up the machine unless all protections have been installed.

9. Maintenance

9.1 General recommendations

- Machine maintenance must be carried out by qualified, authorised personnel who are aware of its operating procedures.
- Never perform any cleaning, lubrication or maintenance with the machine running.
- Before any maintenance work, set the main switch to "0" to cut off power, unplug it from the mains to prevent electrical shock or other hazards resulting from mishandling.
- Never wear rings, watches, jewellery, loose or dangling clothing such as ties, torn garments, scarves, unbuttoned jackets or jackets that zip open that can get tangled during work.
- It is instead advisable to use suitable clothes for accident prevention, for example: non-slip shoes, anti-noise headphones, goggles, appropriate gloves, etc.
- Never use gasoline or flammable solvents to clean the machine. Use water and, if necessary, commercial non-toxic solvents.
- After operations have been completed, always refit any protections that were removed before re-starting the machine.

9.2 Preventive maintenance

Meticulous inspections carried out regularly are necessary in order to detect and eliminate faults quickly before they can cause any major damage.



Any time you need to use the **INDUCTOR FIRE F30**, first check the efficiency of safety devices, the conditions of connections and if there are any anomalies by performing some no-load tests and on ferrous scrap material. Check daily for wear and legibility of warning signs.

9.3 Routine maintenance



Machine operating safety can only be guaranteed if repairs are performed using only original or however approved replacement parts and if maintenance instructions are followed correctly.

At the end of each use, with the electrical system deactivated, proceed with a general cleaning of the machine, quickly removing dust or dirt deposits in general as this could reduce ventilation and alter machine function and durability.

Before each use, verify the functionality of control devices, safety devices and the conditions of electrical connecting cables.



Perform periodic visual inspections on the inductor to verify that there are no liquid leaks and on ventilation inlets to make sure that they are free.

9.4 Special maintenance

Contact the manufacturer or an authorised dealer whenever there are any breakages requiring the removal of machine parts.

10. Components and spare parts

This section contains a list of the components of this machine. Its contents may be used for the technical identification of spare parts as it lists them in detail and provides descriptive and recognition data.

For rapid delivery of spare parts, please quote the following when ordering:

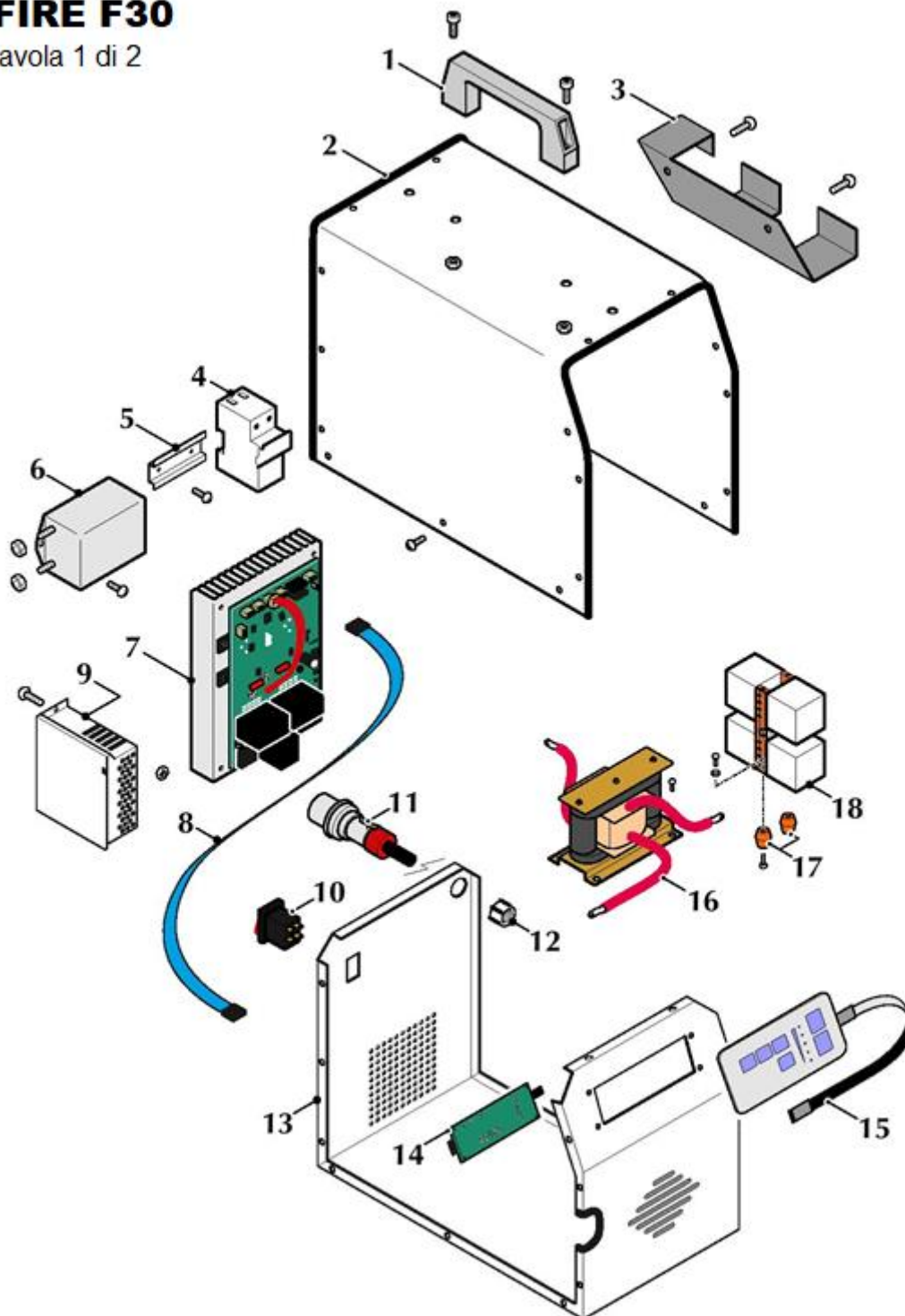
1. Machine code
2. Position number
3. Code number (design or commercial)
4. Name of part
5. Quantity
6. Serial number and year of manufacturing

Tab. 1 Sheet metal components

Tab. 2 Hydraulic components

FIRE F30

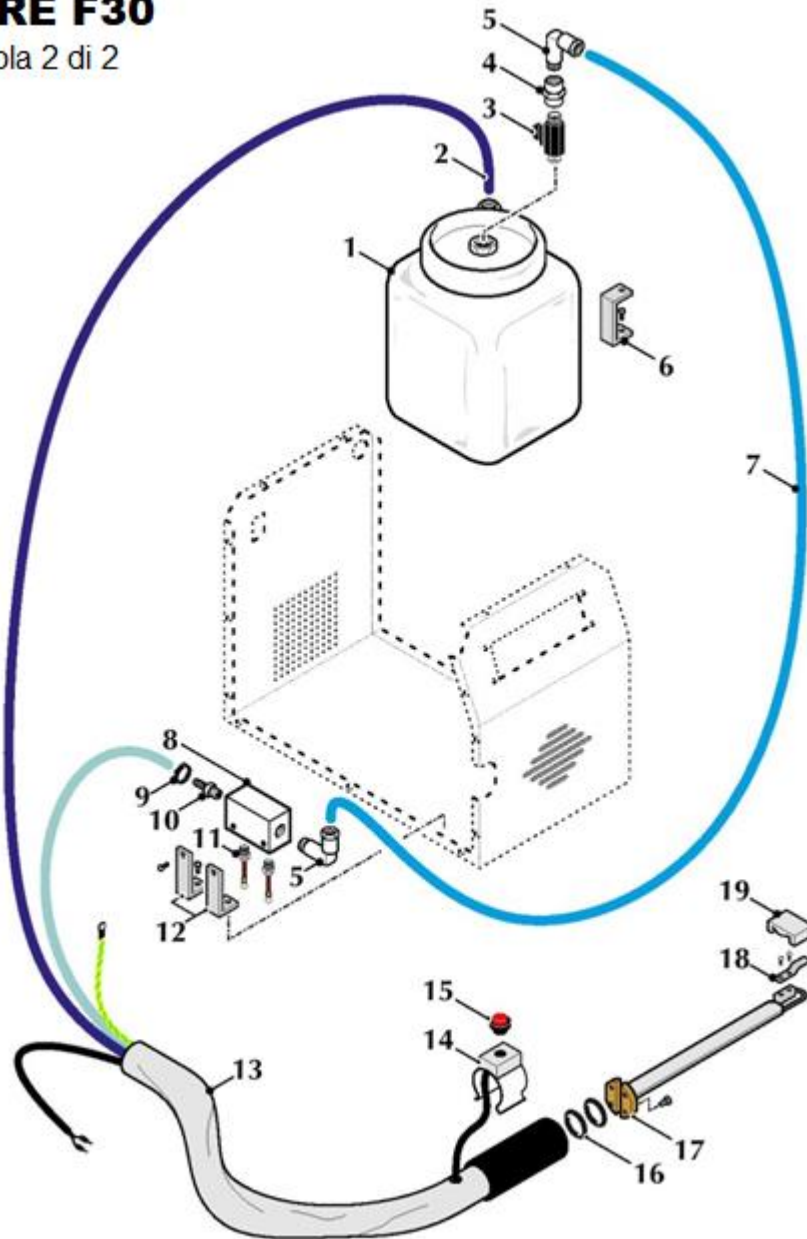
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Tab. 2 Hydraulic components

FIRE F30

tavola 2 di 2



CE DECLARATION OF CONFORMITY

(in accordance with Machinery Directive 2006/42/EC and subsequent amendments, Annex II /A)

The Manufacturer

TOP AUTO S.R.L.

Viale del Lavoro, 40

37030 Colognola ai Colli (VR)

ITALY

Declares that the machine

INDUCTOR FIRE F30

Commercial name

INDUCTOR-FIRE F30

Model

Ser. Nr

Serial

Year of manufacturing 2020

High performance induction heating equipment

Commercial name

Complies with the Directives

Machinery Directive 2006/42/EC

Directive 2013/35/EU Exposure to electromagnetic fields

EMC Directive 2014/30/EU

RoHS Directive 2011/65/EU

EC Directive 2012/19/EU

References of entity authorised to compile the technical file

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Post code 37030

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City Colognola ai Colli, Italy

Colognola ai Colli, _____

Changes that affect the technical specifications and the compliant use specified in the instructions manual shall invalidate this Declaration of Conformity!