

SERVICE MANUAL FOR INSTALLER TECHNICIAN



PIZZA OVEN mod. HELIOS

Code: OMxx.xxxxx



OEM ALI GROUP S.r.l sole shareholder

Viale Lombardia, 33 Bozzolo (MN) - Italy

Tel. +39 0376 910511 – Fax +39 0376 920754

info@oemali.com – www.oemali.com

FOREWORD

All rights reserved. No part of this publication may be reproduced, distributed, translated into any language or transmitted by any electronic or mechanical means, including photocopying, recording or any other storage and retrieval system, for other purposes other than your exclusive personal use, without prior written authorisation of the Manufacturer.

This manual is reserved exclusively for the manufacturer's technical assistance service.

This manual contains the main adjustment, data setting and repair operations that may occur on the oven in question. Should you encounter other problems, we recommend you contact the OEM technical assistance service.

EDITOR'S NOTE

This documentation is specifically intended for installer technicians; therefore, some information that is easily deductible from reading texts and examining drawings may not have been further specified.

The Editor is by no means liable for any information and data provided in this manual: all information included herein has been supplied, controlled and approved by the Manufacturer during review.

The Publisher is in no way responsible for the consequences of any mishandled operations carried out by the user.

Edition: 03/2022

Version: 1.0

COPYRIGHT

Table of Contents

1 IDENTIFICATION	6
1.1 Manufacturer identification	6
1.2 Symbols used in manual	6
1.3 General warnings.....	7
1.4 Personal protective equipment.....	9
2 MAINTENANCE INSTRUCTIONS	10
2.1 Maintenance operation map.....	11
2.2 Baking surface refractory stone removal	13
2.3 Side plates disassembly	14
2.4 Covering plates disassembly.....	15
2.5 Control panel disassembly.....	17
2.6 Board replacement	19
2.7 Power board components replacement.....	21
2.8 Baking surface rotation gear motor replacement	22
2.9 Baking surface rotation bearing replacement.....	25
2.10 Gas spring replacement.....	27
2.11 Door disassembly.....	30
2.12 Door glass disassembly.....	32
2.13 Lamp and lamp holder disassembly	33
2.14 Temperature probe disassembly.....	34
2.15 Safety thermostat disassembly	36
2.16 Upper heaters disassembly	38
2.17 Lower heaters disassembly	40
2.18 Aluminium tray disassembly.....	43
2.19 R.H. and L.H. refractory stones disassembly	44
2.20 Side/rear refractory stones disassembly	46
2.21 Display board programming	48
3 ANNEXES	50
3.1 HELIOS OVEN DIAGRAM	50



PAGE INTENTIONALLY LEFT BLANK

1 IDENTIFICATION

1.1 Manufacturer identification

Manufacturer	OEM ALI GROUP S.r.l. sole shareholder
Address	Viale Lombardia, 33 Bozzolo (MN) - Italy Tel. +39 0376 910511 – Fax +39 0376 920754 info@oemali.com - www.oemali.com

1.2 Symbols used in manual

SYMBOL	DEFINITION
	Symbol used to identify important warnings for the safety of the operator and/or machine.
	Symbol used to identify information of particular importance within the manual. The information also concerns the safety of staff involved in using the machine.

1.3 General warnings



IMPORTANT!

Before programming and/or replacing parts, the technician must have carefully read this manual and possess in-depth knowledge of both technical specifications and controls.



IMPORTANT!

It is recommended to have the technician undergo a training period regarding the operating procedures to be followed for repairs and/or programming.



DANGER!

In case of installation or removal of device parts, only means of lifting & handling being suitable for both weight and geometric characteristics of the part to be lifted/handled shall be utilized.



CAUTION!

Only authorized as well as trained personnel may start, adjust and/or repair the machine. Refer to this manual for any operations that may be required.



DANGER!

Before performing machine maintenance and before removing any protection, make sure the cutout switch is on "OFF" (O), in order to disconnect the electrical power supply during the operation.



DANGER!

In case of repairs to be done on the main switch or in the main switch area, turn off the power of the electrical line.



CAUTION!

Any inspection and maintenance works requiring the removal of the safety protections are made under the responsibility of the technician. Therefore it is recommended that the above mentioned works are done by authorized and skilled personnel only.



CAUTION!

Make sure that all safety devices (barriers, protections, casing, micro-switches, etc.) have not been tampered and are perfectly working. Otherwise they must be set up.



IMPORTANT!

In order to avoid personal risks, only suitable tools should be used, in accordance with the local safety regulations.



DANGER!

Do not tamper with the electric and pneumatic system or any other mechanism for any reason.



CAUTION!

Do not leave the machine unattended with guards removed.



CAUTION!

Wear approved safety clothing as per the law in force



CAUTION!

In case of work to be done in a position that cannot be reached from the ground, use safe ladders or lifting devices only, in conformity with the local safety regulations.



CAUTION!

In case of repairs near or under the machine, make sure that there are no parts that can operate; and/or unstable parts by their nature placed on the machine or in its vicinity.



CAUTION!

Do not use your hands or other tools to stop any moving parts.



CAUTION!

Do not use matches, lighters or free flames near the machine.



IMPORTANT!

Pay the utmost attention to the **WARNING** labels on the **DEVICE** whenever you are about to operate on it or in its vicinity.



CAUTION!

It is not recommended to carry out repairs when the machine is running; proceed with the utmost caution if operating with the machine running and powered.



CAUTION!

The manufacturer declines all responsibility for any injury or damage to persons or things arising from inobservance of the safety regulations and the instructions contained in this manual.



IMPORTANT!

These safety regulations integrate or complement the local safety regulations in force.



CAUTION!

NEVER make hasty or makeshift repairs that may compromise the smooth running of the machine and the safety of the operator.








CAUTION!

Any electrical or mechanical tampering of the machine relieves the manufacturer of any liability and renders the technician himself solely responsible to the competent bodies for accident prevention.

1.4 Personal protective equipment

When performing assembly, maintenance and/or adjustments near the machine, you must strictly comply with the general accident-prevention standards. Therefore, it is important to always use Personal Protective Equipment (P.P.E.) required for each individual operation.

Below is the full list of personal protective equipment (P.P.E.) that may be required for the different procedures:

SYMBOL	DESCRIPTION
	Obligation to use protective or insulating gloves. Indicates a requirement for personnel to wear protective or insulating gloves.
	Obligation to use protective goggles. Indicates a requirement for personnel to wear safety goggles.
	Obligation to use safety shoes. Indicates a requirement for personnel to use work-safety footwear to protect their feet.
	Obligation to wear a face mask. This indicates the requirement for personnel to wear a mask to protect the respiratory tract. During occasional operations with the release of large amounts of dust, wear EU approved dust masks, minimum FP1 or preferably FP2. Type 3M 8710 or 3M 9900 respirators approved according to the American National Institute.
	Compulsory use of protective clothing. Indicates a requirement for personnel to wear the specific protective clothing.

2 MAINTENANCE INSTRUCTIONS



IMPORTANT!

The instructions provided below are carried out according to the methods and times following machine commissioning.

Any initiative for purposes other than those specifically mentioned above shall be considered improper.

The manufacture shall not be liable for damages or personal injury resulting therefrom.



IMPORTANT!

The following instructions must be carried out only and exclusively by specialised maintenance engineers.

If the specified kind of personnel is not employed or a different number of employees is used, the manufacturer shall not be liable for any damage caused to the machine.



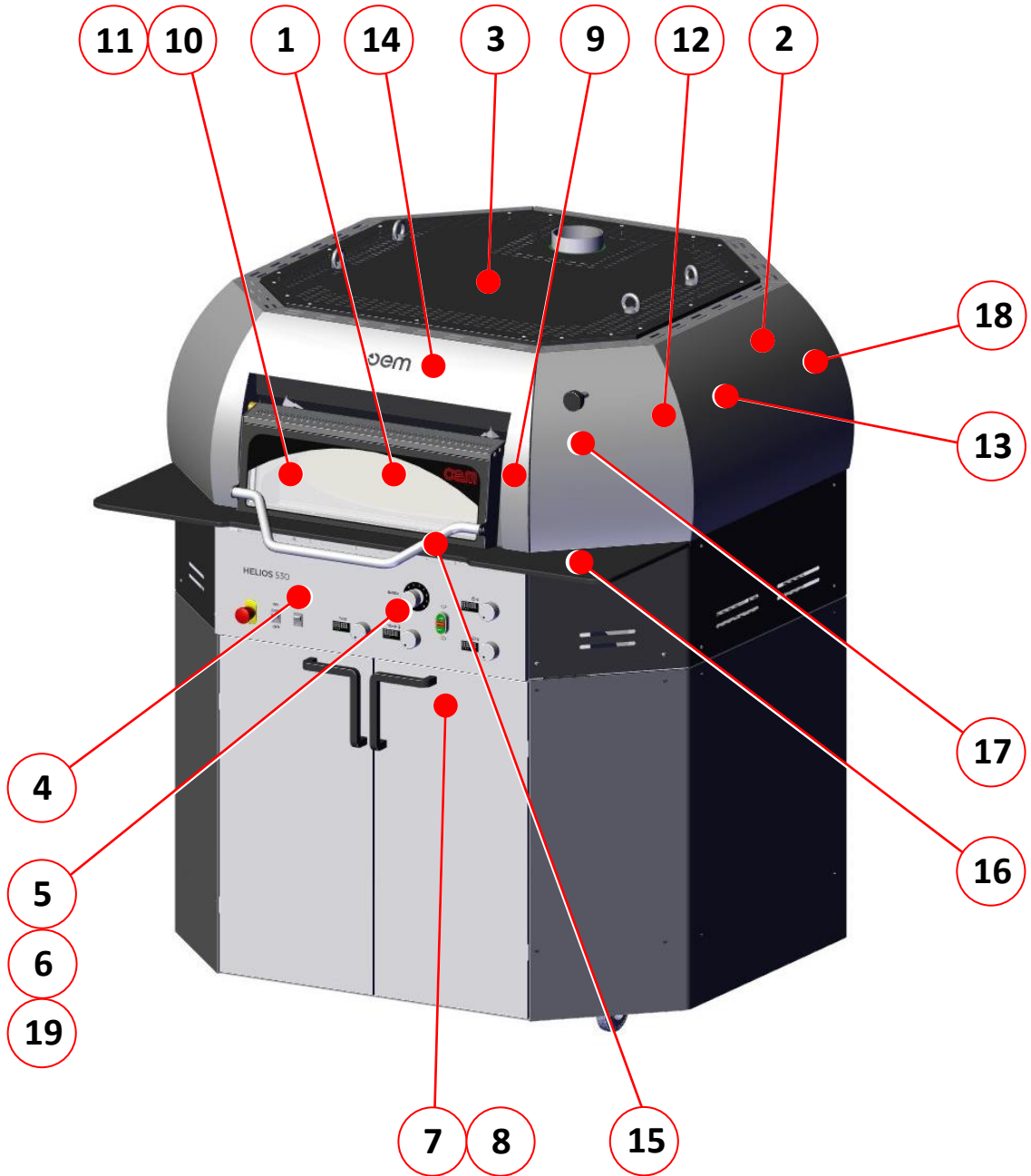
IMPORTANT!

Wear the necessary personal protective equipment.

2.1 Maintenance operation map

The positioning of the components subject to special maintenance is provided below.

STEP	MAINTENANCE ACTION
1	BAKING SURFACE REFRACTORY STONE REMOVAL
2	SIDE PLATES DISASSEMBLY
3	COVERING PLATES DISASSEMBLY
4	CONTROL PANEL DISASSEMBLY
5	BOARD REPLACEMENT
6	POWER BOARD COMPONENTS REPLACEMENT
7	BAKING SURFACE ROTATION GEAR MOTOR REPLACEMENT
8	BAKING SURFACE ROTATION BEARING REPLACEMENT
9	GAS SPRING REPLACEMENT
10	DOOR DISASSEMBLY
11	DOOR GLASS DISASSEMBLY
12	LAMP AND LAMP HOLDER DISASSEMBLY
13	TEMPERATURE PROBE DISASSEMBLY
14	UPPER HEATERS DISASSEMBLY
15	LOWER HEATERS DISASSEMBLY
16	ALUMINIUM TRAY REPLACEMENT
17	R.H. and L.H. REFRACTORY STONES DISASSEMBLY
18	SIDE/REAR REFRACTORY STONES DISASSEMBLY
19	BOARD PROGRAMMING



2.2 Baking surface refractory stone removal

BAKING SURFACE REFRACTORY STONE REMOVAL

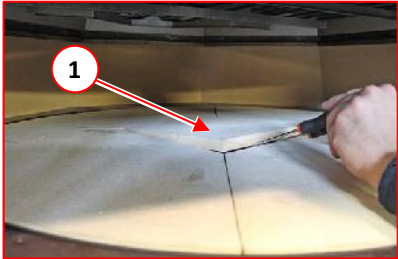

PERSONAL
PROTECTIVE EQUIPMENT



EQUIPMENT
REQUIRED

A – Flat-blade screwdriver

To perform the operations properly proceed as follows:

STEP	ACTION	PICTURE
1	Using two screwdrivers, lift and remove the centre stone (pos.1).	
2	Rotate the refractory tray until a rounded stone is positioned at the access door.	
3	Rotate the refractory tray and remove the remaining stones.	

2.3 Side plates disassembly

SIDE PLATES DISASSEMBLY

PERSONAL
PROTECTIVE EQUIPMENT



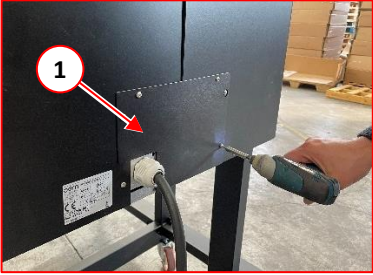


CAUTION!

The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

A – Phillips/flat-blade screwdriver
B – Screwdriver

To perform the operations properly do as follows:

STEP	ACTION	PICTURE
1	Unscrew the rear cover screws (pos.1).	
2	Unscrew the screws from the side plates on both sides of the oven (pos.2).	
3	Side plates disassembly.	

2.4 Covering plates disassembly

COVERING PLATES DISASSEMBLY

PERSONAL
PROTECTIVE EQUIPMENT



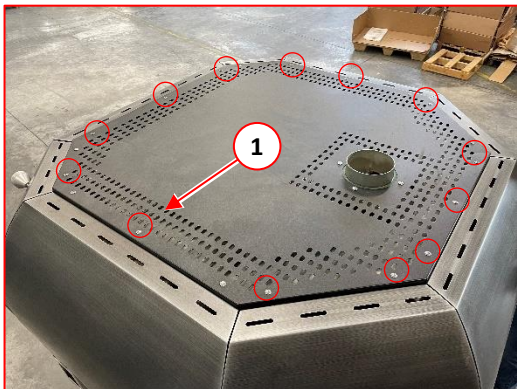
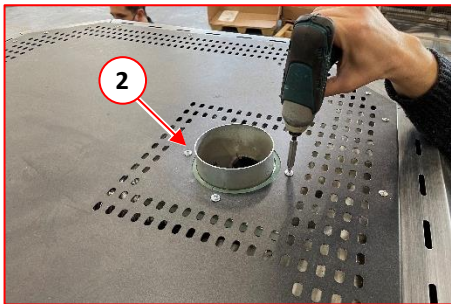
CAUTION!


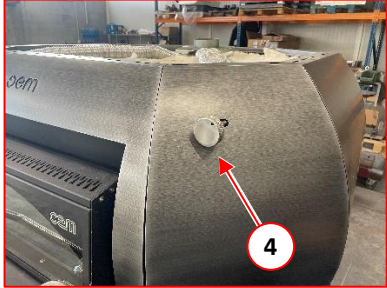
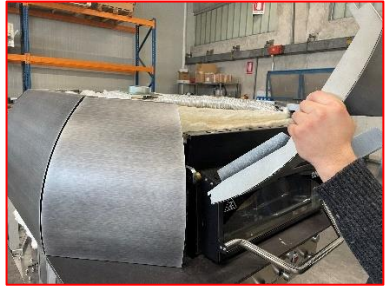
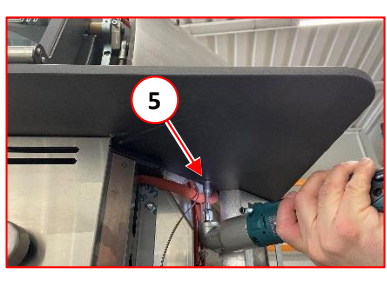
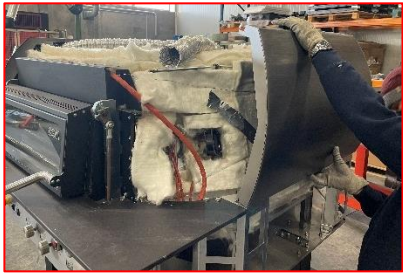

The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

- A – Phillips/flat-blade screwdriver
- B – Screwdriver
- C – Spanners

To perform the operations properly do as follows:

STEP	ACTION	PICTURE
1	Follow the procedure to remove the side plates (see par. 2.3 "Side plates disassembly").	
2	Unscrew the covering perimeter screws (pos.1).	
3	Unscrew the screws near the smoke outlet (pos.2).	

STEP	ACTION	PICTURE
4	Remove the cover (pos.3).	
5	Unscrew the chimney opening knob (pos.4).	
6	Remove the front centre panel above the door.	
7	Unscrew the lower fixing screws of the panels (pos.5).	
8	Remove the plates proceeding anti-clockwise.	
		
5	Follow the procedure in reverse for reassembly.	

2.5 Control panel disassembly

CONTROL PANEL DISASSEMBLY

PERSONAL
PROTECTIVE EQUIPMENT




CAUTION!

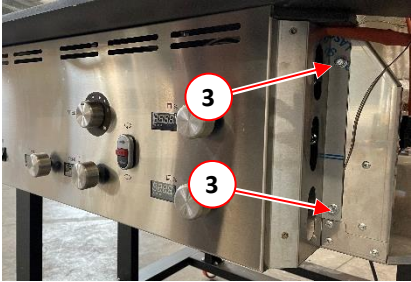
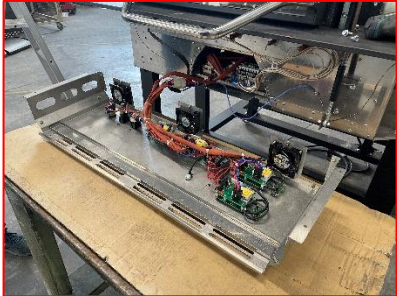
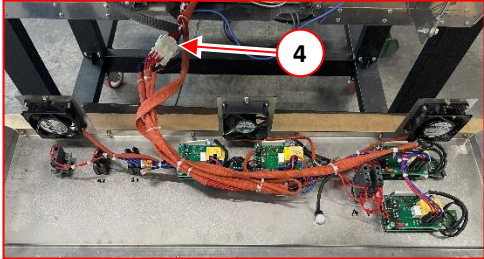
The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

- A – Phillips/flat-blade screwdriver
- B – Screwdriver
- C – Spanners/hex head and ratchet

To perform the operations properly proceed as follows:

STEP	ACTION	PICTURE
1	Unscrew 2 fixing screws (pos.1) of the side plates adjacent to the control panel and unscrew 2 screws also from the opposite side.	
	 <p>IMPORTANT! Prepare a support surface for the disassembled control panel.</p>	
2	Unscrew 2 screws fixing the control panel on the L.H. side (pos.2).	

STEP	ACTION	PICTURE
3	Unscrew 2 screws fixing the control panel on the R.H. side (pos.3).	
4	Place the control panel on the prepared surface.	
5	Disconnect the electrical connections (pos.4).	
6	Follow the procedure in reverse for reassembly.	

2.6 Board replacement

BOARD REPLACEMENT

PERSONAL
PROTECTIVE EQUIPMENT



CAUTION!

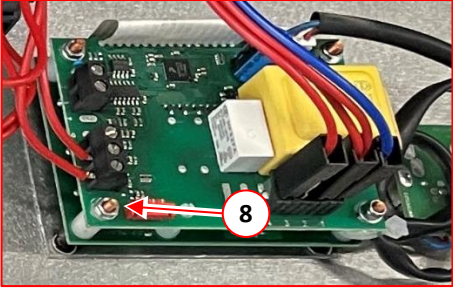

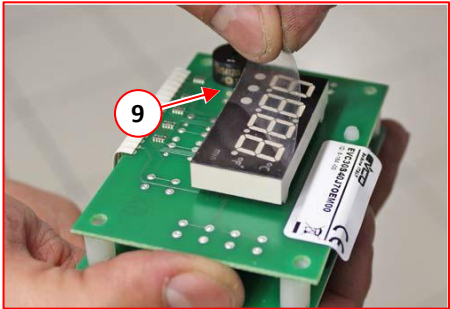
The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

- A – Phillips/flat-blade screwdriver
- B – Screwdriver
- C – Spanners/hex head and ratchet

To perform the operations properly proceed as follows:

STEP	ACTION	PICTURE
1	Follow the procedure to remove the side plates (see par. 2.3 "Side plates disassembly").	
2	Placing the boards on the control panel: <ul style="list-style-type: none"> • ceiling power board (pos.1); • ceiling bedplate board (pos.2); • temperature board (pos.3); • timer board (pos.4). 	
3	Proceed as follows to replace a board: <ul style="list-style-type: none"> • disconnect the faston (pos.5); • the connector (pos.6); • no.2 cables (pos.7). 	

STEP	ACTION	PICTURE
4	Loosen 4 nuts and remove the board.	
	<p>IMPORTANT! Pay particular attention to nuts, washers and spacers, they must be repositioned in the same sequence.</p>	
5	<p>Remove the protective film (pos.9) from the new board and mount it following the procedure in reverse. For the electrical connection, refer to the wiring diagram (see CHAP 3: Attachments).</p>	



IMPORTANT!
To program the board see par. 2.21 "Display board programming".

2.7 Power board components replacement

POWER BOARD COMPONENTS REPLACEMENT

PERSONAL
PROTECTIVE EQUIPMENT



CAUTION!

The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

- A – Phillips/flat-blade screwdriver
- B – Screwdriver
- C – Spanners/hex head and ratchet

To perform the operations properly proceed as follows:

STEP	ACTION	PICTURE
1	To access the gas spring, disassemble: <ul style="list-style-type: none"> • Side plates (see par. 2.3 "Side plates disassembly"); • control panel (see par. 2.5 "Control panel disassembly"); 	
2	Unscrew 2 screws (pos.1) and remove the board support plate.	
	<p>CAUTION! Pay attention not to pull the connecting cables of the heaters.</p>	

2.8 Baking surface rotation gear motor replacement

BAKING SURFACE ROTATION GEAR MOTOR REPLACEMENT

PERSONAL
PROTECTIVE EQUIPMENT



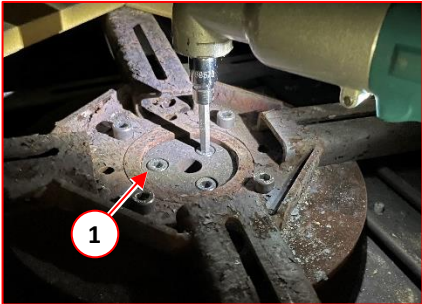

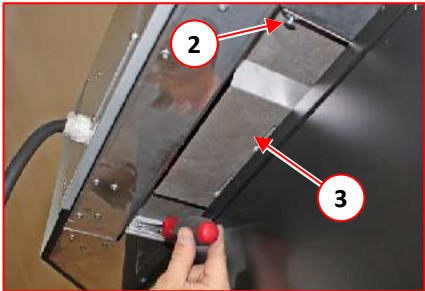
CAUTION!

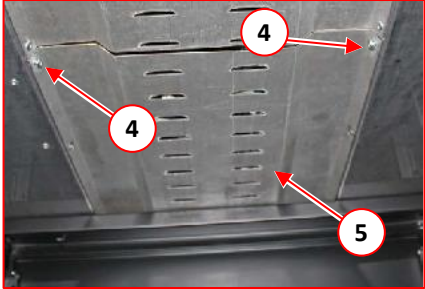


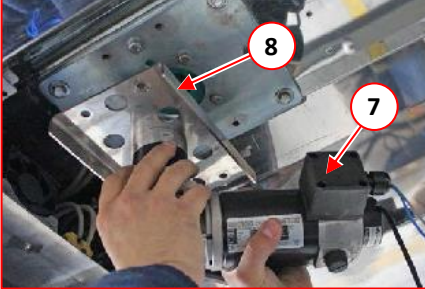
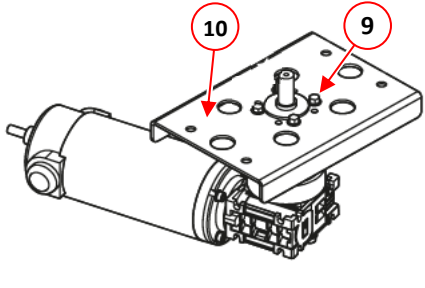
The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

- A – Phillips/flat-blade screwdriver
- B – Screwdriver
- C – Spanners/hex head and ratchet

To perform the operations properly proceed as follows:

STEP	ACTION	PICTURE
1	Remove the central refractory stone from the baking surface (see par. 2.2 "Baking surface refractory stone removal").	
2	Unscrew 3 screws (pos.1) placed on the top of the transmission shaft.	
 <p>IMPORTANT! After removing the screws, check the integrity of the M8 thread.</p>		
3	Unscrew 2 fixing screws (pos.2) of the lower plate (pos.3).	

STEP	ACTION	PICTURE
4	Under the oven, unscrew the 4 screws (pos.4) of the plate (pos.5) and 2 rear screws.	
5	Remove the plate.	
6	Unscrew 4 screws (pos.6) (in the image 2 screws are placed behind the motor).	
7	Remove the gear motor (pos.7) and the support plate (pos.8).	
8	Unscrew the four screws (pos.9) and remove the plate (pos.10).	

STEP	ACTION	PICTURE
9	Disconnect the motor from the power board referring to the wiring diagram (see CHAP 3: Attachments).	
10	Follow the procedure in reverse for reassembly.	

2.9 Baking surface rotation bearing replacement

BAKING SURFACE ROTATION BEARING REPLACEMENT

PERSONAL
PROTECTIVE EQUIPMENT



CAUTION!

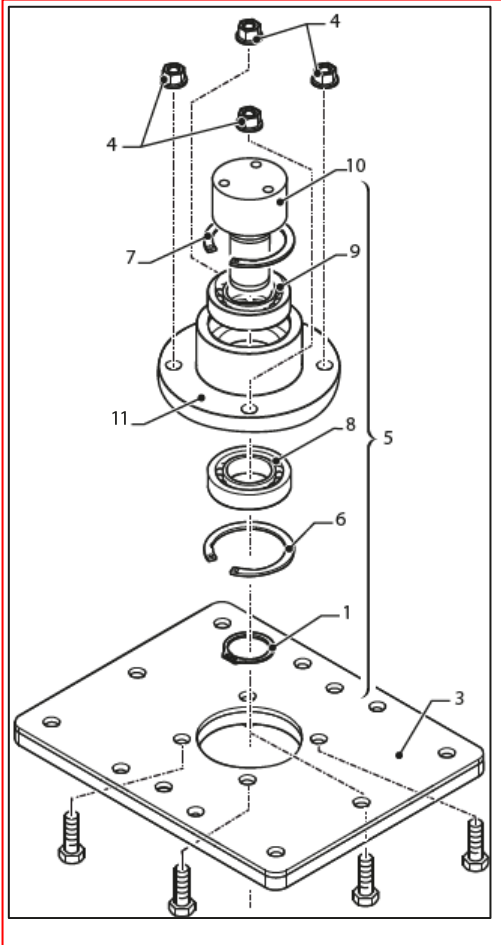
The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

- A – Phillips/flat-blade screwdriver
- B – Screwdriver
- C – Spanners/hex head and ratchet
- D – Scotch-Brite sponge
- E - Lubricant

To perform the operations properly proceed as follows:

STEP	ACTION	PICTURE
1	Remove the central refractory stone from the baking surface (see par. 2.2 "Baking surface refractory stone removal").	
2	Remove the gear motor (see par. 2.8 "Baking surface rotation gear motor replacement").	
3	Unscrew 8 perimeter screws (pos.1) of the plate.	

STEP	ACTION	PICTURE
4	Unscrew the nuts (pos.4) and remove the complete bearing support (pos.5).	 <p>The diagram shows an exploded view of a mechanical assembly. At the bottom is a square plate (3) with eight screws (2) around its perimeter. A central shaft (10) passes through the plate. A seeger (1) is positioned on the shaft. Above the seeger is a bearing support (5) which consists of two bearings (8 and 9) and a central shaft (10). A seeger (6-7) is shown above the bearings. Three nuts (4) are shown being removed from the top of the shaft. The plate (3) has a central hole (1) and eight screws (2) around its perimeter. The shaft (10) has a seeger (1) and a bearing support (5) on it. The bearing support (5) consists of two bearings (8 and 9) and a central shaft (10). A seeger (6-7) is shown above the bearings. Three nuts (4) are shown being removed from the top of the shaft.</p>
5	Remove the seeger (pos.6-7) and remove the bearings (pos.8-9).	
6	Reassemble the bearings (pos.8-9) after heating the support (pos.11) at 200°C. NOTE: the bearings must be placed without forcing insertion.	
7	Once the support has cooled, insert the seegers (pos.6-7).	
8	Clean the shaft (pos.10) from any encrustations using a Scotch-Brite sponge and lubricate before insertion.	
9	Reassemble the support (pos.5) by centring it on the plate (pos.3).	
10	Insert the support (pos.5) into the shaft (pos.10) avoiding forcing in the bearing infeed.	
11	Reposition the seeger (pos.1) and tighten the 8 perimeter screws (pos.2) that fasten the plate.	

2.10 Gas spring replacement

GAS SPRING REPLACEMENT

PERSONAL
PROTECTIVE EQUIPMENT



CAUTION!


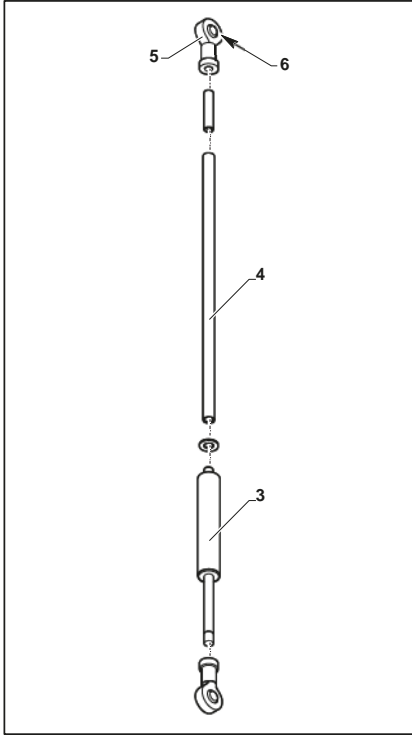
The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

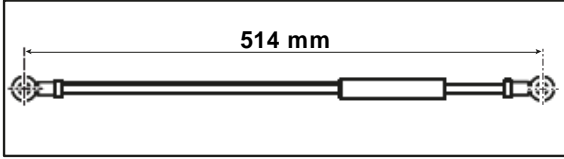
NECESSARY
EQUIPMENT

- A – Phillips/flat-blade screwdriver
- B – Screwdriver
- C – Spanners/hex head and ratchet
- D - Loctite 270

To perform the operations properly proceed as follows:

STEP	ACTION	PICTURE
1	To access the gas spring, disassemble: <ul style="list-style-type: none"> • front plate; • R.H. side plate; • control panel (see par. 2.3 "Side plates disassembly" - par. 2.4 "Covering plates disassembly" - par. 2.5 "Control panel disassembly").	
2	Unscrew 2 screws (pos.1) securing the gas spring (pos.2).	

STEP	ACTION	PICTURE
3	Lift the door while keeping it raised, and remove the swivel head eyelet from the door.	
4	After removing the gas spring, lower the door.	
5	Unscrew the spring (pos.3) from the extension rod (pos.4).	
6	Apply Loctite 270 on the thread of the new spring and screw it on the extension rod.	

STEP	ACTION	PICTURE
7	<p>Check the following assembly diagram:</p> <ul style="list-style-type: none">• new gas spring + extension rod = L=514 mm <p>To bring the unit to size, act on the upper swivel head (pos.5)</p>	
8	<p>Follow the procedure in reverse for reassembly.</p>	

2.11 Door disassembly

DOOR DISASSEMBLY

PERSONAL
PROTECTIVE EQUIPMENT



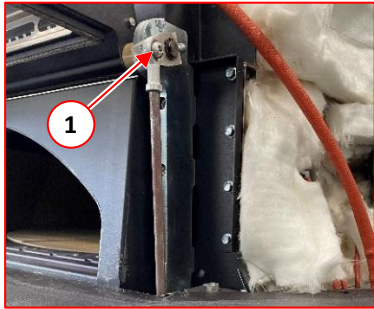
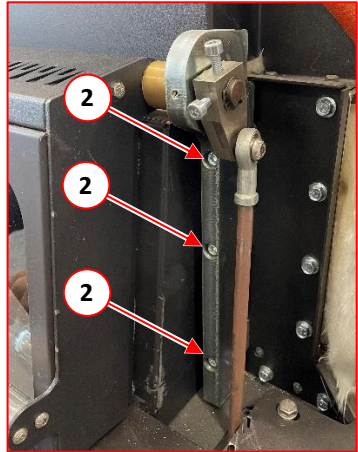
CAUTION!


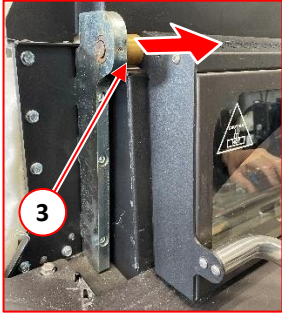
The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

- A – Phillips/flat-blade screwdriver
- B – Screwdriver
- C – Hex head screw

To perform the operations properly proceed as follows:

STEP	ACTION	PICTURE
1	To access the gas spring, disassemble: <ul style="list-style-type: none"> • front plate; • R.H. and L.H. side plate; (see par. 2.3 "Side plates disassembly" - par. 2.4 "Covering plates disassembly").	
2	Unscrew the upper fixing screw (pos.1) of the gas spring.	
3	Unscrew 3 screws (pos.2) securing the R.H. column.	

STEP	ACTION	PICTURE
	 CAUTION! Properly support the door after removing the support column.	
4	Remove the door pin (pos.3) from the L.H. column and remove the door.	
4	Follow the procedure in reverse for reassembly.	

2.12 Door glass disassembly

DOOR GLASS DISASSEMBLY

PERSONAL
PROTECTIVE EQUIPMENT



CAUTION!

The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

A – Phillips/flat-blade screwdriver
B – Screwdriver

To perform the operations properly proceed as follows:

STEP	ACTION
1	Disassemble the oven door (see par. 2.11 "Door disassembly").
2	Unscrew the screws (pos.1) and remove the handle (pos.2).
3	Unscrew the screws (3) and remove the plate (pos.4).
4	Unscrew the screws (pos.5) remove the frame (pos.6) to access the glass (pos.10).

IMPORTANT!
Check the correct positioning of the gaskets when installing the glass.

2.13 Lamp and lamp holder disassembly

LAMP AND LAMP HOLDER DISASSEMBLY

PERSONAL
PROTECTIVE EQUIPMENT



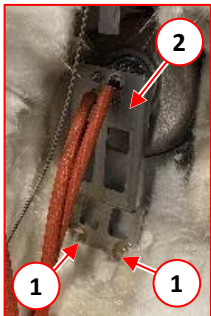
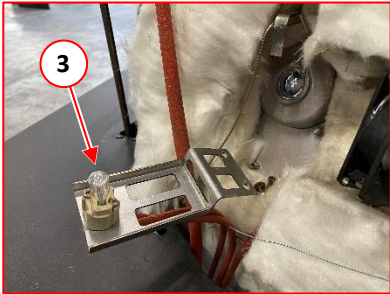

CAUTION!

The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

- A – Phillips/flat-blade screwdriver
- B – Screwdriver
- C – Spanners

To perform the operations properly proceed as follows:

STEP	ACTION	PICTURE
1	Remove the following components to access the lamp holder: <ul style="list-style-type: none"> • front plate; • R.H. or L.H. side plate (depending on the lamp to be accessed). (see par. 2.3 "Side plates disassembly" - par. 2.4 "Covering plates disassembly").	
2	Unscrew the screws (pos.1) of the support (pos.2)	
3	Replace the light (pos.3) and proceed with reassembly by following the procedure in reverse. NOTE Halogen lamp, do not touch directly with your fingers.	
	 IMPORTANT! After screwing the support, press lightly to check that the light is not in contact with the internal glass of the oven.	

2.14 Temperature probe disassembly

TEMPERATURE PROBE DISASSEMBLY

PERSONAL
PROTECTIVE EQUIPMENT



CAUTION!


The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

- A – Phillips/flat-blade screwdriver
- B – Screwdriver
- C – Spanners

To perform the operations properly proceed as follows:

STEP	ACTION	PICTURE
1	Disassemble the following components to access the temperature probe access area: <ul style="list-style-type: none"> • front plate; • R.H. side plate. (see par. 2.3 "Side plates disassembly" - par. 2.4 "Covering plates disassembly").	
2	Move the locking tab and remove the probe (pos.1).	
3	Disconnect the probe wiring.	

STEP	ACTION	PICTURE
4	Insert the probe making sure that it protrudes internally by a distance not exceeding 5 mm.	
5	Connect the probe wiring.	
6	Follow the procedure in reverse for reassembly.	

2.15 Safety thermostat disassembly

SAFETY THERMOSTAT DISASSEMBLY

PERSONAL
PROTECTIVE EQUIPMENT



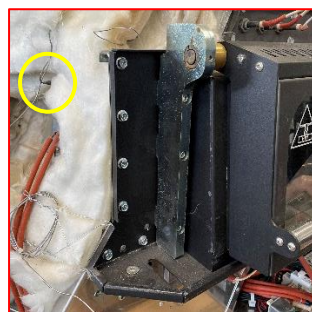
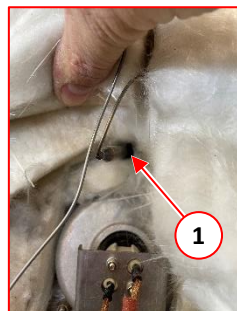
CAUTION!

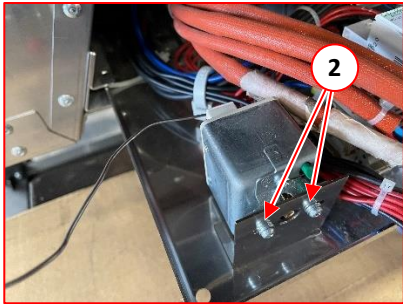
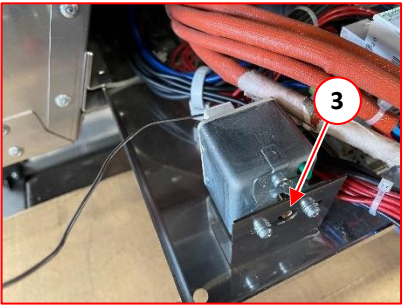

The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

- A – Phillips/flat-blade screwdriver
- B – Screwdriver
- C – Spanners

To perform the operations properly proceed as follows:

STEP	ACTION	PICTURE
1	Disassemble the following components to access the temperature probe access area: <ul style="list-style-type: none"> • front plate; • L.H. side plate. (see par. 2.3 "Side plates disassembly" - par. 2.4 "Covering plates disassembly").	
2	The thermostat is located next to the door, above the L.H. lamp holder.	
2	Remove the thermostat (pos.1)	

STEP	ACTION	PICTURE
3	Unscrew the body fixing screws (pos.2) and replace the thermostat.	
4	Screw the new thermostat to the holder.	
5	Check that the thermostat setting is at maximum: <ul style="list-style-type: none"> fully turn the central screw clockwise (pos.3). 	
6	Insert the thermostat making sure that it protrudes internally by a distance of approximately 10 mm (pos3).	
7	Follow the procedure in reverse for reassembly.	

2.16 Upper heaters disassembly

UPPER HEATERS DISASSEMBLY

PERSONAL
PROTECTIVE EQUIPMENT



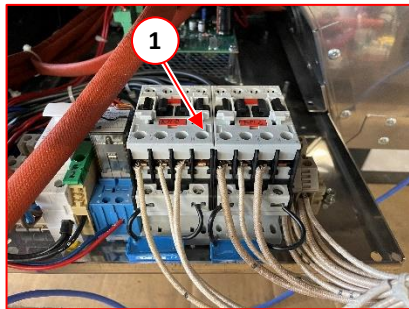
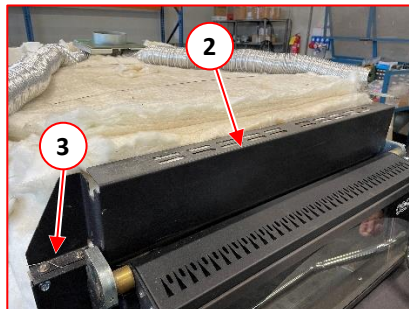
CAUTION!

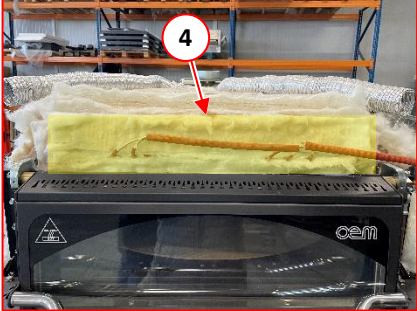

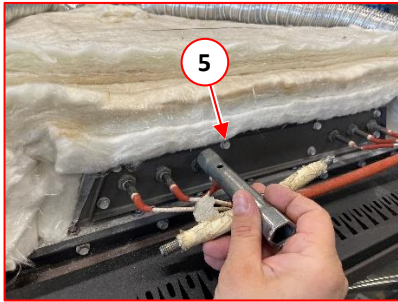
The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

- A – Phillips/flat-blade screwdriver
- B – Screwdriver
- C – Spanners

To perform the operations properly proceed as follows:

STEP	ACTION	PICTURE
1	Remove the following components to access the heaters: <ul style="list-style-type: none"> • control panel (see par. 2.5 "Control panel disassembly"); • R.H. and L.H. side plates covering (see par. 2.3 "Side plates disassembly" - par. 2.4 "Covering plates disassembly"). 	
2	Disconnect the contactor wiring (pos.1) (see wiring diagram).	
3	Unscrew 4 screws (pos.3) and remove the above-inlet protection (pos.2).	

STEP	ACTION	PICTURE
4	Remove insulation (pos.4).	
5	Remove the protective sheaths and remove the plastic clamps.	
6	Unscrew and remove 6 nuts fixing the heaters.	
7	Unscrew 8 M6 screws and remove the heater support plate (pos.5).	
8	Heater removal sequence: <ol style="list-style-type: none"> 1. central heater; 2. L.H. side heater; 3. R.H. side heater. 	
9	Heater insertion sequence: <ol style="list-style-type: none"> 1. side heaters; 2. central heater. 	
10	Follow the procedure in reverse for reassembly.	

2.17 Lower heaters disassembly

LOWER HEATERS DISASSEMBLY

PERSONAL
PROTECTIVE EQUIPMENT



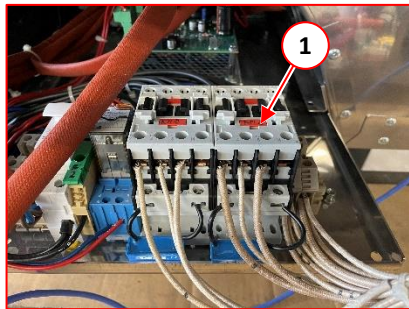
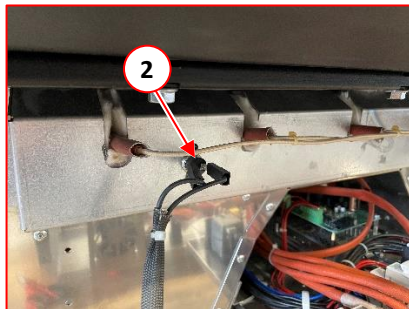
CAUTION!

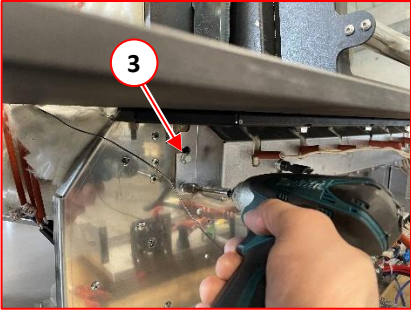
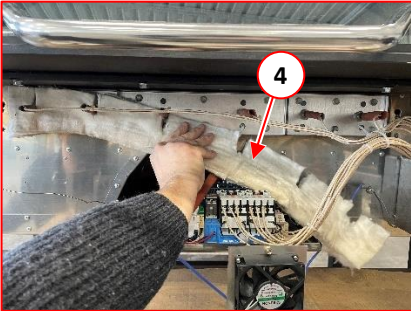

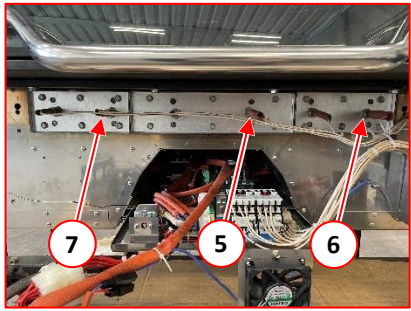
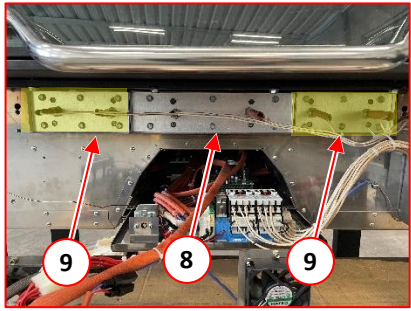
The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

- A – Phillips/flat-blade screwdriver
- B – Screwdriver
- C – Spanners

To perform the operations properly proceed as follows:

STEP	ACTION	PICTURE
1	Remove the following components to access the heaters: <ul style="list-style-type: none"> • control panel (see par. 2.5 "Control panel disassembly"); • R.H. and L.H. side plates covering (see par. 2.3 "Side plates disassembly"). 	
2	Disconnect the contactor wiring (pos.1) (see wiring diagram).	
3	Disconnect the temperature probe bulb (pos.2).	

STEP	ACTION	PICTURE
4	Unscrew 4 screws and remove the heater covering plate (pos.3).	
5	Remove the insulation (pos.4).	
6	Remove the sheaths and remove the plastic clamps from the heater cables.	
7	Loosen and remove the fixing nuts: <ul style="list-style-type: none"> • central heater (pos.5); • R.H. (pos.6) or L.H. (pos.7) heater, depending on the heater to be replaced. 	
8	Unscrew fixing screws: <ul style="list-style-type: none"> • central plate (pos.8); • plate of heater to be replaced (pos.9). 	

STEP	ACTION	PICTURE
9	Heater removal sequence: <ol style="list-style-type: none">1. central heater;2. L.H. or R.H. side heater.	
10	Heater insertion sequence: <ol style="list-style-type: none">1. side heaters;2. central heater.	
11	Follow the procedure in reverse for reassembly.	

2.18 Aluminium tray disassembly

ALUMINIUM TRAY DISASSEMBLY

PERSONAL
PROTECTIVE EQUIPMENT



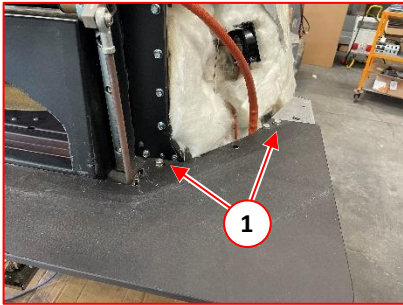
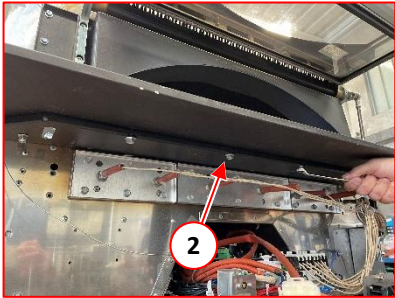

CAUTION!

The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

- A – Phillips/flat-blade screwdriver
- B – Screwdriver
- C – Spanners

To perform the operations properly proceed as follows:

STEP	ACTION	PICTURE
1	Remove the following components to access the tray fixing: <ul style="list-style-type: none"> • R.H. and L.H. side plates covering (see par. 2.3 "Side plates disassembly"). • control panel (see par. 2.5 "Control panel disassembly"). 	
2	Unscrew 6 side screws placed on the sides of the tray (pos.1).	
3	Unscrew 4 screws placed below the tray (pos.2).	
	 <p>CAUTION! Unscrew the fixing screws and hold the tray to prevent it from falling.</p>	

2.19 R.H. and L.H. refractory stones disassembly

R.H. AND L.H. REFRACTORY STONES DISASSEMBLY

PERSONAL
PROTECTIVE EQUIPMENT



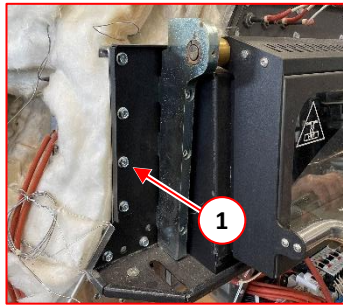
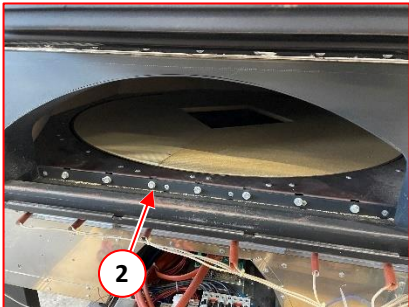
CAUTION!

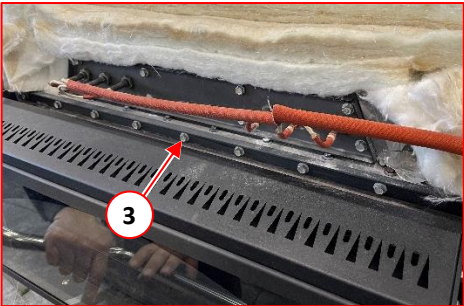

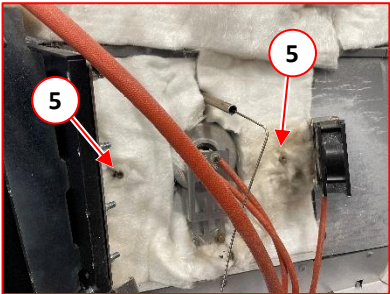
The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

- A – Phillips/flat-blade screwdriver
- B – Screwdriver
- C – Spanners

To perform the operations properly proceed as follows:

STEP	ACTION	PICTURE
1	Disassemble the following components to remove the refractory stones: <ul style="list-style-type: none"> • R.H. and L.H. side plates covering (see par. 2.3 "Side plates disassembly"). • disassemble the door (see par. 2.11 "Door disassembly"). • disassemble the aluminium tray (see par. 2.18 "Aluminium tray disassembly"). 	
2	Unscrew the inlet reduction plate fixing screws (pos.1) on both sides of the oven.	
3	Unscrew the screws located in the oven inlet (pos.2).	

STEP	ACTION	PICTURE
4	Unscrew the screws located above the oven inlet (pos.3).	
5	Unscrew the antenna glass holder fixing screws (pos.4) of the stone to be disassembled.	
6	Manually unscrew 2 screws (pos.5) on the sides of the light antenna (behind the stone to be removed).	
7	Remove the stone from inside the oven.	
8	Follow the procedure in reverse for reassembly.	



IMPORTANT!

To avoid possible breakage, always manually screw the fixing screws of the stones (always 2 for each stone).

2.20 Side/rear refractory stones disassembly

SIDE/REAR REFRACTORY STONES DISASSEMBLY

PERSONAL
PROTECTIVE EQUIPMENT





CAUTION!

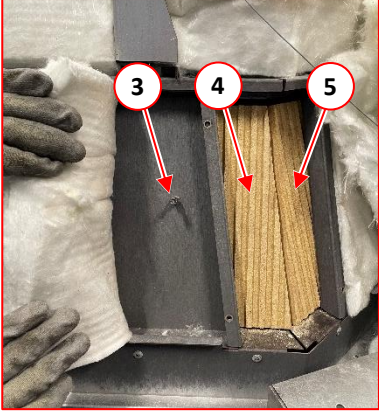
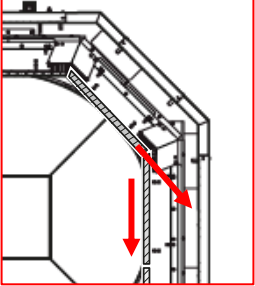
The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

-

To perform the operations properly proceed as follows:

STEP	ACTION	PICTURE
1	Disassemble the following components to remove the refractory stones: <ul style="list-style-type: none"> R.H. and L.H. side plates covering (see par. 2.3 "Side plates disassembly"). 	
2	Unscrew the fixing screws of the angular plate (pos.1).	
3	Remove the insulation between the stone and the angular bar (pos.2).	

STEP	ACTION	PICTURE
4	Remove the insulation and manually unscrew the fixing screws (pos.3) of the adjacent stones (pos.4-5).	
5	Push the edge of a stone to create the space for extraction.	
6	Insert the stone and follow the procedure in reverse for reassembly.	



IMPORTANT!

To avoid possible breakage, always manually screw the fixing screws of the stones (always 2 for each stone).

2.21 Display board programming

DISPLAY BOARD PROGRAMMING

PERSONAL
PROTECTIVE EQUIPMENT



CAUTION!

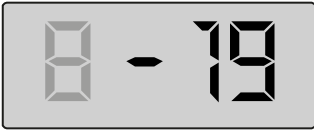


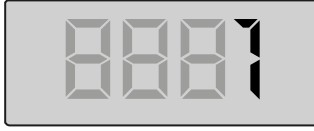
The extraordinary maintenance operations described in this manual must be carried out with the machine switched off and with all the moving parts at standstill.

NECESSARY
EQUIPMENT

-

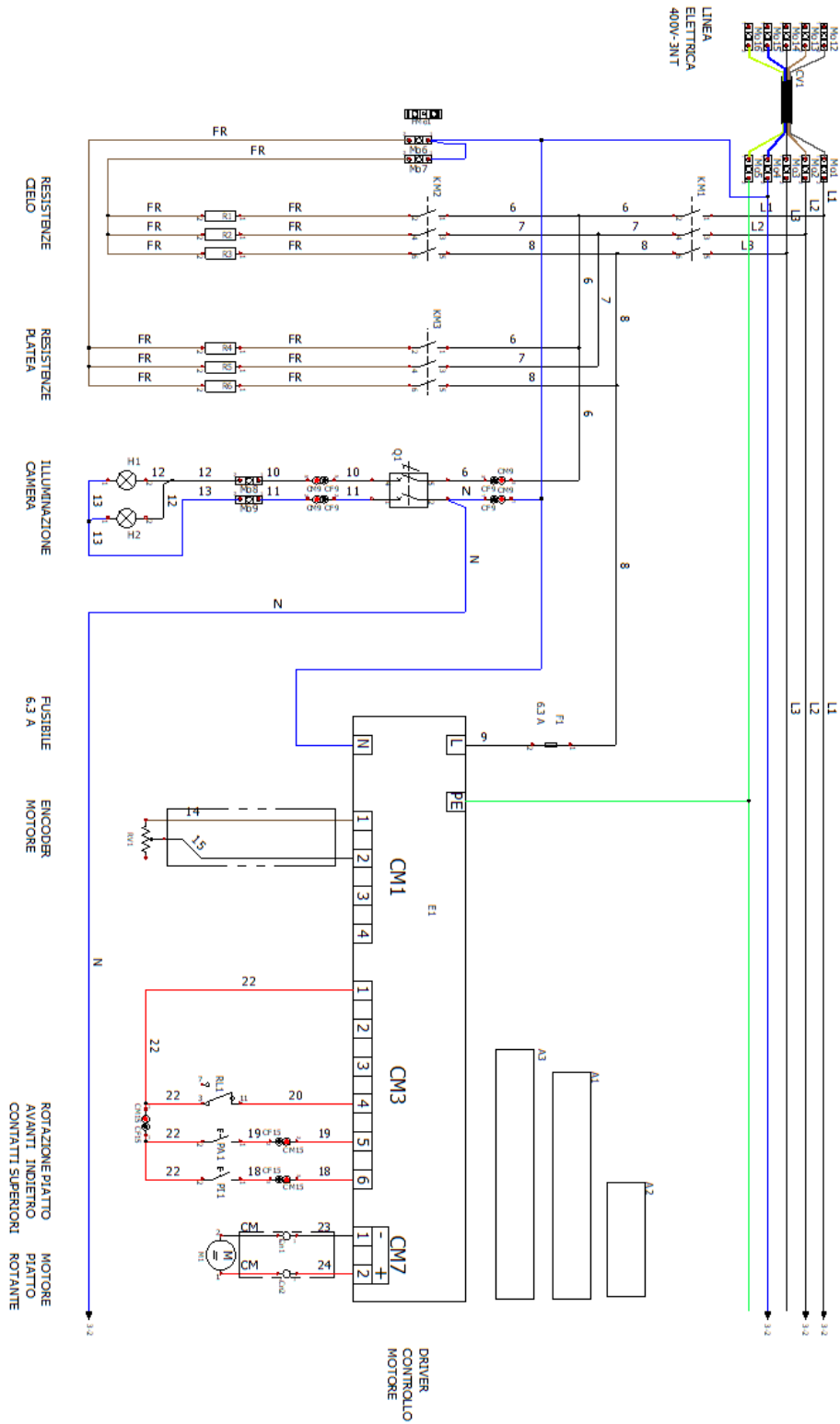
To perform the operations properly proceed as follows:

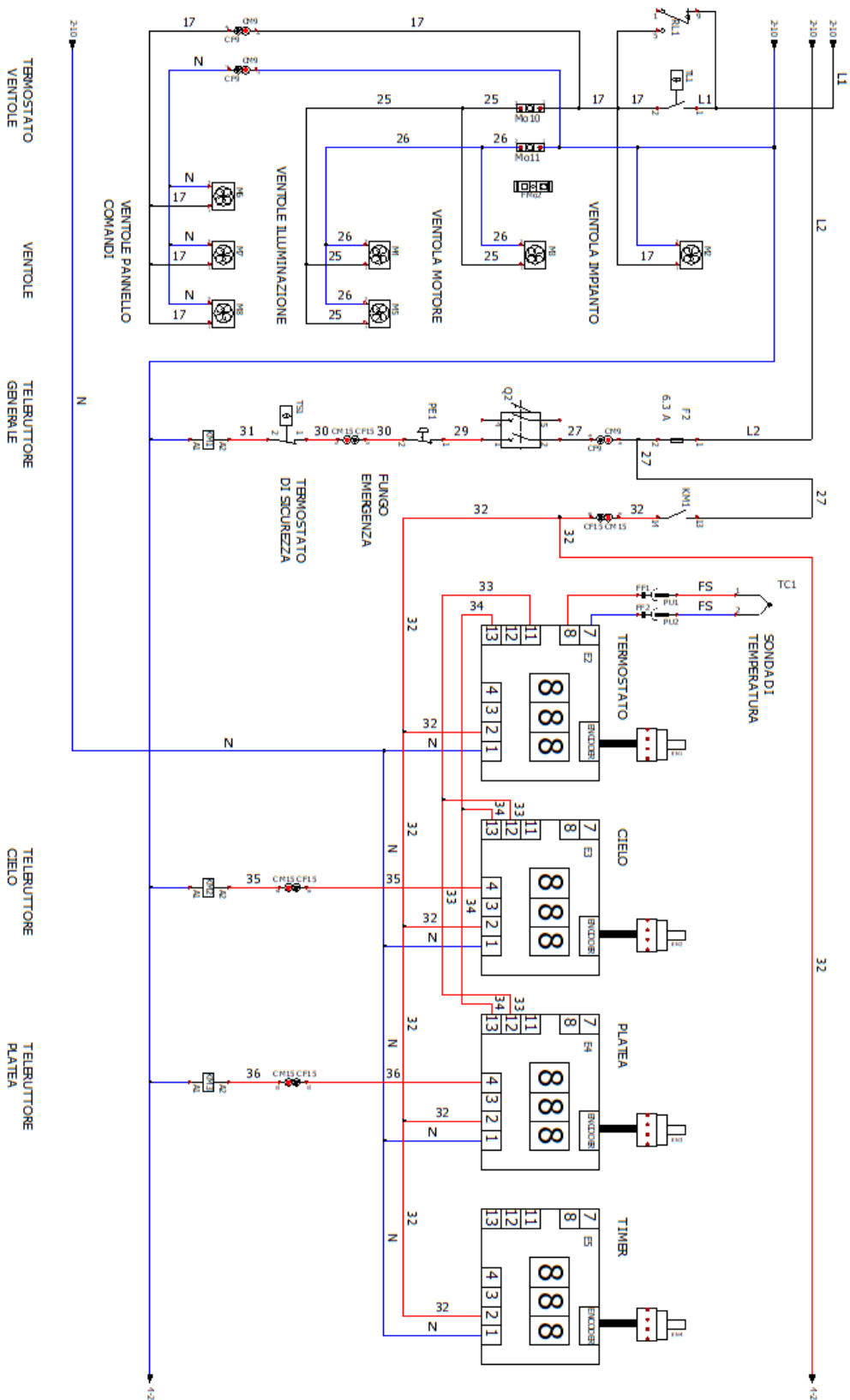
STEP	ACTION	PICTURE
1	Turn on the oven and press the knob of the board that has been replaced. Example: replacement of board in highlighted position (pos.1).	
2	Press the knob (pos.1) for at least four seconds and the display will show: <ul style="list-style-type: none"> • "point" 	
3	Press the knob (pos.1) for at least four seconds and the display will show: <ul style="list-style-type: none"> • "PA" 	
4	Press the knob (pos. 1) and the display will show: <ul style="list-style-type: none"> • "0" 	

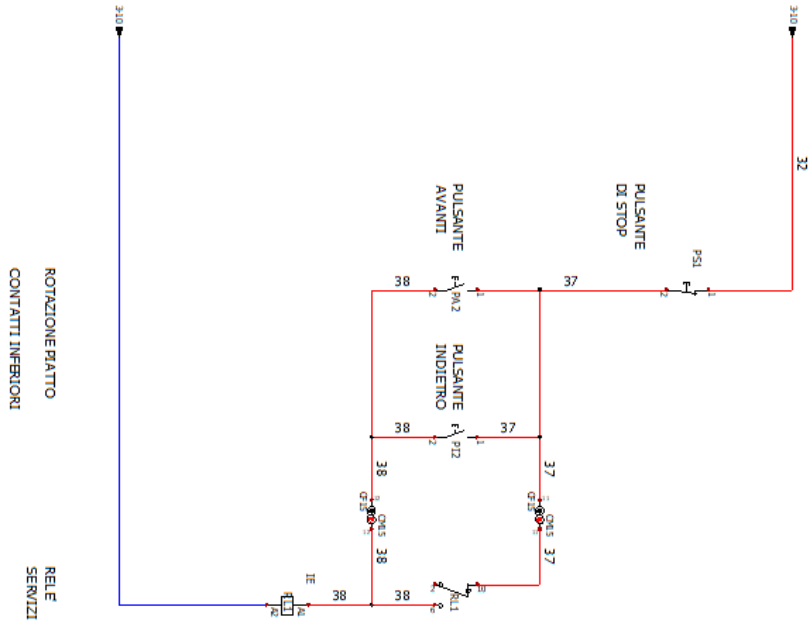
STEP	ACTION	PICTURE
5	Turn the knob anticlockwise and set "-19" on the display to enter the programming step.	
6	Press the knob (pos.1) for at least four seconds and the display will show: <ul style="list-style-type: none"> "P00" 	
7	Turn the knob clockwise and set "P02" on the display.	
8	Press the knob (pos.1) and the display will show "1". Turn the knob and set: <ul style="list-style-type: none"> 0 = if the thermostat board has been replaced; 1 = if the ceiling heater power board has been replaced; 2 = if the bedplate heater power board has been replaced. 	
9	Press the knob (pos.1) for four seconds to confirm the data set and exit the programming step.	

3 ANNEXES

3.1 HELIOS OVEN DIAGRAM







ROTAZIONE PIATTO
CONTATTI INFERIORI

RELE
SERVIZI



