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Instruction Manual

“AUTOMATIC LABORATORY MORTAR MIXER”

Product Code

E094 / E094T / E095

Do not attempt to operate this equipment before reading

and comprehending the manual in all its parts

Users

MACHINE MANUFACTURERS | DRAUGHTSMEN | OPERATORS | MAINTENANCE WORKERS | ANY OTHERS

REV.	DESCRIPTION	MANAGED	APPROVED	PRODUCT CODE	PAGES	ISSUE DATE
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LIST OF ELECTRIC DIAGRAMS E094

EEC CONFORMITY DECLARATION (FOR EEC COUNTRIES ONLY)

CHAPTER 1 GENERAL INFORMATION

1.1 GENERAL FEATURES

- **THIS MANUAL IS ADDRESSED TO** the carrier, the installer, the user, the maintenance operator, the scrapping operator.
- Please read it carefully because it informs you about the operating of the machine in safety conditions.
- This manual has to be considered a part of the product and concerns only the machine it is delivered with.
- Keep the manual in order during the whole life of the appliance to consult it for any needs.
- In case of sale, the manual and its enclosures should be given together with the machine.
- The manufacturer assumes no liability for any damages caused by a misuse of the machine.
- The manufacturer has the right to modify this technical literature as well as the machines this refers to without any previous notice.
- Messages meaning:

ATTENTION	This warning refers to all those procedures that have to be carefully followed to avoid any damage to the machine.

DANGER	This warning refers to all those procedures that could present some risks for the operator if not carefully followed.

1.2 IDENTIFICATION

MANUFACTURER IDENTIFICATION: See the cover page.
MACHINE IDENTIFICATION: See the plate on the machine where complete identification data as well as electric features are to be found.

1.3 APPLICATIONS

The laboratory Mixer E094 and E095 has been developed for the automatic mixing of the cement pastes and mortar. This process will result in the preparation of the specimens for flexure, compression tests in perfect compliance with the EN 196/1 specifications.

This appliance has to be used only for the aim it has been projected and manufactured for.
Any other use of the machine is not permitted.

ATTENTION	The instructions given in this operating manual are only made for the right use of the appliance. To carry out the test in the right way, the user must refer to the specific standards in force for the test itself.

1.4 STRUCTURE AND OPERATING OF THE MACHINE

The appliance is mainly formed by two parts (see enclosure **A** for further details):

- **THE MIXER** (**B**) is made by a metal sheet frame (**B9/C9**) and by a lower basement of aluminium; a bowl (**B14**) is fixed at the bottom, while the electric disposals for the machine control as well as the motor (**B4/C4**) are located at the top. A special lever (**B7/C7**) allows fixing the bowl to the frame. The electric motor activates the beater (**B1/C1**), which mixes the mortar.

- **THE CONTROL PANEL** (**C**) allows controlling the various mixer functions.

For further information please contact the Agent or the Manufacturer.

CHAPTER 2 SAFETY INFORMATION

2.1 GENERAL SAFETY STANDARDS

- **The use, lifting, installation, maintenance and scrapping of the machine are allowed only to qualified staff.** Qualified staffs are composed by people who are authorised by the safety responsible to do any activities due to their experience and acknowledgement of the operating of the machine and of the standards, rules and actions.
  The user must be carefully taught about the operating of the machine to avoid any misuse of it and about the safety devices, which the machine could be eventually equipped with. The safety devices will have to be kept always assembled and to be daily checked.
  The manufacturer offers training and assumes no liability for any damages due to a misuse of the machine by an unskilled staff.
- The manufacturer recommends following carefully the instructions and procedures of the operating manual and the safety standards concerning the safety devices and the general rules of the work environment.
- Verify the accordance of the machine to the standards in force in the State where the machine has to be installed.
- The operating manual must be carefully read by the safety responsible, by the operators and maintenance engineers. It must always be kept near the machine in order to be able to read it any times it will be necessary.
- Any tampering or modifications of the machine (electric, mechanical etc.) that are not allowed by a written agreement of the manufacturer must be considered as not permitted and the manufacturer will not accept to be charged for any damages.
- The removal or the tampering of the safety devices will be an infringement to the EEC Safety Standards. The manufacturer assumes no liability for any damages.
- The machine has to be installed in places safe from fire and explosions.
- We do recommend using only original spare parts and accessories; on the contrary the manufacturer assumes no liability.
- Be careful that any dangerous situations won't happen during the working; stop immediately the machine in the event that it will not work properly and ask the manufacturer or the Authorised Service Staff of the dealer at once.

The manufacturer assumes no liability for any damages to people, things and animals caused by the non-compliance of the above instructions.

2.2 SAFETY DEVICES

MEANING: Safety devices are all the safety measures, which consist of the use of specific technical equipment (guards, cages etc.) to protect the operator from any danger that couldn't be avoided during the planning.

- **FIX AND MOVABLE SAFETY DEVICES**

The Mixer is supplied in two versions:

CE VERSION: The mixer E095 has got a protection door (**B16**), which prevents the opening during the test so that the operator cannot come in touch either with the internal mechanisms or with the beater (**B1/C1**). The door opening causes an immediate interruption of the power feeding; in this way the motor (**B4/C4**) and the beater stop moving. The rotation can start again only after the closing of the protection door.

ATTENTION	It is suggested to open the protection door only when the mixer is not turning, the opening of the safety door during the working of the appliance must be made only in case of real and urgent need.

STANDARD VERSION: For the Mixer E094 no safety devices are foreseen.

- **ACTIVE SAFETY DEVICES**

Active Safety Devices are all those disposals and devices, which cancel or greatly reduce the risks to the operator. They require a conscious and active behaviour of the operator to be activated.

In every appliance there's a main switch (**B13/C13**) acting also as emergency switch.
By activating it, the feeding to the mixer is disconnected and therefore also the beater (**B1/C1**) stops moving.

2.3 DANGEROUS PARTS AND RESIDUAL RISK

The dangerous place is the space inside and around the machine where the operator could be wounded or damaged.

During some procedures the operator could face some risks of danger.
The risks can be eliminated following carefully the procedures written in this manual and using suitable safety devices.

ATTENTION	In case the manufacturer does not make the installation, use only people instructed on the installation of the specific appliance.

GENERAL INFO

- **Before starting the standard use of the equipment, ensure that all the components are in good working conditions, check there are no detective or damaged parts. If necessary repair or replace any damaged part.**
- Pay attention to the possibility of electric shocks (both direct or indirect), which could be caused by failures in the electric system.
- Do not subject the appliance to impacts or shocks.
- Do not expose the appliance to fire, extreme temperatures or weld splatter.
- Avoid corrosive substances to come in touch with the appliance.
- Do not wash the machine using water spray.

DURING THE USE

- **In order to grant the maximum-security level for the operator, do not touch any moving part of the appliance during the test execution and wear the convenient protection devices.**
- Never wear large clothes, ties, watches, chains, and so on, which may entangle into the moving parts of the machine**.**

DURING THE LIFTING

- During the lifting take care that the machine is conveniently held and secured and that it cannot slide.
- Do not stand in a direct line with the application of force. Do not allow people entrance under loads that are no conveniently supported by mechanical means**.**
- Never subject bars or cylinders to impacts or shocks.

RISK OR DANGER	PROTECTION DEVICES
FINGER SQUEEZE	REINFORCED GLOVES
CUTS OR ABRASIONS	REINFORCED GLOVES

The manufacturer assumes no liability for any damages to people and things due to a lack of observance of the instructions and the use of the safety devices.

2.4 NOISE

The indicated levels of noise are not necessarily safety levels for the operator.
The exposure levels of the operator are obviously related to the emission levels of the appliance, but other factors influence the exposure levels as the time of exposure, the environment, other appliances installed near to the appliance etc.
The exposure levels permit to value the damages that could be caused by the noise.

Acoustical pressure level equivalent **Laeq** at 1 m. distance	**52**	dB(A)
Acoustical power emitted by the appliance **LWA**	**57**	dB(A)
Standard above data are referred	**EN ISO 3746**	

DANGER	The continuous use of the machine together with other noisy appliances could cause a high level of exposure to the noise. If the daily exposure of the operator is equal or higher than 85 dB(A), Safety Devices as headphone are suggested to be worn. If the daily exposure is equal or higher than 90 dB(A), the use of the Safety Device is compulsory. For further information consult the standards of the country where the machine has been installed.

CHAPTER 3 INSTALLATION

DANGER	Consult chapter "**DANGEROUS PARTS AND RESIDUAL RISKS**" before proceeding**.**

3.1 LIFTING

The instructions of this section must be respected during the transport phases of the appliance in following situations:

- The lifting and the storing
- The first installation
- The further installations

The appliance is generally delivered in a wooden case movable by a forklift.

Pay attention during the lifting always follow the transport versus as labelled on the case. The use of forklift or crane is recommended. Avoid the use of chains for the case lifting preferring whenever is possible belts and hempen ropes.

ATTENTION	The moving of the packing with lifting systems must be made with caution and respecting the indications given on the packing itself. **Pay attention to avoid impacts and turnovers of the packing.**

ATTENTION	Protect the machine from the atmospheric agents. Water and humidity could oxidise it, damaging it seriously.

3.2 UNPACKING

After removing the package, check that any parts of the machine are not damaged. In case of doubt, **DO NOT USE THE MACHINE** and ask the manufacturer.

DANGER	The materials used for the package (plastic, polystyrene, screws, nails, wood etc.) have to be kept far from children. They must be thrown away in a proper collection centre.

ATTENTION	Pay attention to avoid impacts and turnover.

ATTENTION	Before throwing away the package, pay attention that any accessories, manuals, documents, spare parts are not inside.

3.3 INSTALLATION

The machine has to be placed in an environment suitable for the aim it has been conceived for (in a laboratory protected by the atmospheric agents). Skilled operator must do the installation.

ALLOWED TEMPERATURE	from +1°C to +40°C
ALLOWED HUMIDITY	from 30% to 100%
MAX HEIGHT OVER SEA LEVEL	No limits

As previously explained, this appliance has been projected for laboratory working, therefore it is recommended to place it in an environment having a constant temperature.

- The machine must be installed so that it is free from each side in order to be able to carry out easily the maintenance operations.
- No authorised people and no dangerous objects must be near the machine.

3.4 ELECTRIC CONNECTIONS

DANGER	Skilled operators must arrange the electric connections.

DANGER	Before connecting, see the attached electric diagram and the plate on the machine for the information about the voltage, the frequency, etc.

DANGER	Connect the ground by the terminal PE (yellow-green) before making any other connection.

DANGER	Apply a knife switch at the top of the connecting cable of the machine to the power system. The knife switch must be combined with a safety device against the overload with a differential switch (safety switch). The technical features of the safety device must be in accordance with the standards in force in the country where the machine has been installed.

ATTENTION	To grant an optimal working, the appliance needs a constant electric feeding with no interruptions and no loss of tension. If the feeding net is not stable and trouble free, it will be necessary to connect the appliance to a current equalizer with a 30 Watt power.

ELECTRIC TOLERANCES:

- Real voltage ± 10 % of the nominal one.
- Frequency: ± 1 % of the nominal one in a continuous way.
  ± 2 % of the nominal one for a short period.
- The harmonic distortion of the sum from the second to the fifth harmonics not more than 10 % of the total voltage as a real value between the conductors. A further distortion of 2% is accepted for the sum from the sixth to the thirtieth harmonics of the real total value between the conductors.
- With reference to the tension unbalance of the three-phase voltage, the inverted sequence component and the zero sequence component must not be more than 2% of the direct sequence component of the voltage.
- The voltage pulses must not last more than 1,5 ms with an up/down time between 500 ms and 500 μs and a peak value not higher than 200 % of the real value of the nominal tension.
- The electric feeding must not be interrupted or zeroed for more than 3 ms. Between two interruptions it must not take more than 1 s.
- The interruptions must not overcome 20 % of the tension peak for more than one cycle. Between two interruptions it must not take more than 1 s**.**

The manufacturer assumes no liability for any damages to people, things and animals caused by the non-compliance of the above instructions.

CHAPTER 4 MACHINE FEATURES

4.1 MACHINE DIMENSIONS AND MASS

	E095	E094
LENGTH	475	475 mm
WIDTH	355	355 mm
HEIGHT	756	624 mm
MASS	38	35 Kg
BOWL CAPACITY	4.7 Litres	4.7 Litres
RPM FOR REVOLVING ACTION	140 / 285	140 / 285
RPM FOR PLANETARY ACTION	62 / 125	62 / 125

4.2 CALIBRATION

The machine is controlled and calibrated by the manufacturer, using sampling tools, which are periodically checked by Official Institutions.

ATTENTION	Laws now in force foresee the calibration checking after every machine lifting. Once the machine is installed and ready to work, Official Institutions must check the calibration before this can be used for official tests.

CHAPTER 5 OPERATOR'S INTERFACE

5.1 DESCRIPTION OF PARTS - ENCLOSURE B – MIXER MODEL CE/STANDARD

	CONTROL	DESCRIPTION
B1 / C1	BEATER	It allows mixing water, cement and sand into the bowl (**B14**) in order to get the desired quality of mortar. Its turning movement achieves the mixing action.
B2	HOPPER	It allows collecting the sand. Going through the membrane (**B3**) the sand falls into the bowl (**B14**).
B3	MEMBRANE	It connects the hopper (**B2**) to the bowl (**B14**).
B4 / C4	ELECTRIC MOTOR	It allows turning the beater (**B1**) inside the bowl (**B14**).
B5 / C5	FIXING SCREWS OF THE UPPER CARTER	They allow securing the upper carter to the sheet frame (**B9**). Removing it, the operator can easily inspect or maintain the inside components of the mixer.
B6 / C6	ROTATION PIN	It allows the beater rotation (**B1**). The pin is assembled, thanks to a reducer, directly to the electric motor (**B4**).
B7 / C7	LEVER	Using it the operator can free the bowl stop (**B14**). This allows the removing of the bowl. To block it once again put the lever back to its original position.
B8 / C8	SPRING	Together with the bayonet fitting on the tang (**B12**) it is used to block the tang itself to the rotation pin (**B6**).
B9 / C9	SHEET FRAME	It is the main structure of the whole appliance.
B10 / C10	BOWL STOP	It allows blocking the bowl (**B14**) in the position selected by using the fixing device (**B11**).
B11 / C11	FIXING DEVICE	Together with the pin (**B10**) it blocks the bowl in the mixer special housing. This fixing device is provided with notches to regulate the bowl position. This is extremely important to keep the minimum distance of 3 mm between the beater (**B1**) and the inner walls of the bowl (**B14**) as required by the Specifics.
B12 / C12	TANG	It allows the hook-up of the beater to the rotation pin.
B13/ C13	MAIN SWITCH	It allows switching the appliance on and off. If necessary it also acts as emergency switch.
B14 / C14	BOWL	It collects the sand making the mixture with water and cement possible. A special grip grants an easy handling of the bowl.
B15 / C15	GREASING DEVICE	It helps the operator during the maintenance procedures (greasing of the internal rotating components). To reach the greasing device, just remove the upper carter undoing the fixing screws (**B5**).
B16	PROTECTION CARTER	It protects the operator from the dangers coming from the beater rotation and from the internal rotating components.

5.2 DESCRIPTION OF PARTS – ENCLOSURE E – CONTROL PANEL

	CONTROL	DESCRIPTION
E1	SPEED SELECTOR	Activating this switch, it is possible to choose the desired turning speed of the beater (**B14**). To start the turning, press the button START (**E2**); furthermore it is possible to change the speed without stopping the test.
E2	START PUSH BUTTON	Pressing this button, the appliance starts (only motor rotation) in accordance to the pre-selected speed made using the switch (**E1**).
E3	STOP PUSH BUTTON	Pressing this button, the beater turning is interrupted. To continue the turning, press the button START (**E2**).
E4	FUNCTION SELECTOR	Turning this selector, it is possible to choose between two different turning modes (slow or fast). It is also possible to stop the turning.

CHAPTER 6 USE

DANGER	Consult the Chapter "**DANGEROUS PARTS AND RESIDUAL RISKS**" before proceeding.

6.1 WARNING

Before proceeding with the ordinary use of the appliance, we recommend checking that the appliance is in proper conditions to work and has no parts broken or used; eventually make all routine and special maintenance operations listed in this manual.

ATTENTION	**Never start the beater rotation if the bowl isn't at its place. The rotating components of the Mixer could be seriously damaged.**

6.2 SWITCHING ON THE APPLIANCE

ATTENTION	Before switching on the appliance, censure that the Mixer is connected to the electric feeding net (consult the Chapter "**ELECTRIC CONNECTION**" of this manual).

To switch on the appliance, follow hereunder instructions:

1. Put the Main Switch (**B13 / C13**) on the "**I**" position.

ATTENTION	Reminder valid for Mixer E094 only: Before switching on the appliance, verify that the selector (**E4**) is on the middle position of "STOP". (See enclosure E for further details).

ATTENTION	**Never start the beater rotation if the bowl isn't at its place. The rotating components of the Mixer could be seriously damaged.**

6.3 TOOLING UP

We describe here under a **"standard procedure"** which allows even to an operator without a wide experience to carry out a procedure correctly:

BEATER POSITIONING
The automatic mortar mixer is furnished complete of tang for the beater attack. In order to place correctly the beater proceed in the following way:

1. If this was not already opened, open the safety door (**B16**) and remove the bowl if it's in the mixer housing.
2. Unthread the tang (**B12/C12**) of the rotation pin (**B6**).
3. Fix the beater (**B14/C14**) to the tang (**B12/C12**), inserting two fins set on the beater in the special joints present on the tang (see picture 1 of the enclosure D)
4. Screw the tang to the beater through the special screw.
5. Take the beater (**B1 4/C14**) and couple it with the pin (**B6/C6**) as shown in the picture 2.
6. Push the beater upwards till the small plug that is on the pin (**B6/C6**) touches its seat that is on the beater connection (see detail 2 of picture 3).
7. At this step, turn the beater counter clockwise until the rotation stops, and then release the beater (see detail 3 of picture 3); the spring (**B8/C8**) will automatically block it in the right position.
8. Fix the beater, the tang and the rotation pin through the fixing screw.

BOWL POSITIONING

Before placing the bowl (**B14** / **C14**) inside the mixer housing, ensure to have correctly filled the same with water and cement as foreseen by the Standards in force.

9. Open the safety door (**B16**) (only mixer E095).
10. Move the lever (**B7** / **C7**) as described in the picture 4 of enclosure D.
11. Put the bowl (**B14** / **C14**) so that it almost comes in touch with the tools housing (**B11** / **C11**), then move the lever (**B7** / **C7**) according to picture 5. In this way the fixing device (**B11** / **C11**) will block the bowl in 3 points.

Now everything is ready for the test and you just have to **close the safety door** (only for mixer E095).

ATTENTION	Before starting with the standard use of the appliance, verify that all the components have been correctly tooled up and are suitable for the test you are going to execute.

6.4 PREPARATION AND POSITIONING OF THE MORTAR

The preparation and the positioning of the material to be tested may be effected in several ways depending on the nature of the tests. For a correct procedure in the specimen handling, refer to the Standards ruling the test to be effected.

6.5 EMERGENCY STOP

In the event of an emergency, a sudden stop of the test is possible by positioning the Main Switch (**B13/C13**) on "**0**".

ATTENTION	It's always worth reminding that the test interruption causes its cancellation.

6.6 START AFTER AN EMERGENCY STOP

DANGER	Before starting the appliance again, find and eliminate the problem, which caused the need for an emergency stop.

To start the machine again, put the Main Switch (**B13/C13**) on the "**I**" position. This will reset the appliance normal functions.

6.7 STOP CONTROLLED BY SAFETY SYSTEMS

The test execution could be interrupted by the safety systems; in fact they are activated in case of working problems. This Mixer is supplied with the following systems:

STOP CAUSED BY THE MICRO SWITCH FOR DOOR OPENING.
The Mixer E095 has got a safety door (**B16**), which is equipped with a security micro switch. In fact during the test execution the operator cannot open the door since the micro is activated by the door opening and automatically disconnects the feeding to the electric motor (**B4 / C4**).

6.8 APPLIANCE FUNCTIONING

DANGER	Never try to use the appliance before reading and learning this manual in all its parts.

We describe hereunder the correct procedure for both models:

MIXER E095 – CE MODEL

1. Switch on the mixer (for further details, consult the Chapter "**SWITCHING ON THE APPLIANCE**" in this manual).

2. Choose the slow or fast rotation according to your needs. Use the Selector (**E1**).

3. Push the START button (**E2**) to start the beater rotation (**B1** / **C1**). During the mixer working, it is also possible to change the selected speed acting on the special selector (**E1**) and without interrupting the present turning.

To end the rotation cycle, push the STOP button (**E3**).

MIXER E094 – STANDARD MODEL

4. Switch on the mixer (for further details, consult the Chapter "**SWITCHING ON THE APPLIANCE**" in this manual).

ATTENTION	**Before switching on the appliance, ensure that:** - The bowl is correctly located in its housing (**B11** / **C11**). - The selector (**E4**) is on the middle position of "STOP" (see enclosure E for further details).

5. Choose the slow or fast rotation according to your needs. Use the Selector (**E4**). The rotation starts immediately after the selection. During the mixer working, it is also possible to change the selected speed acting on the special selector (**E4**) and without interrupting the present turning.

To end the rotation cycle, turn the selector (**E4**) on the middle position "STOP".

6.9 SWITCHING OFF THE APPLIANCE

After a test series, follow these instructions to switch off the appliance:

1. Verify that there are no residuals or dirty either in the bowl (**B14/C14**) or on the beater (**B1/C1**)**,** if necessary clean the components thoroughly.
2. Switch off the Mixer, by positioning the Main Switch (**B13/C13**) on the "**0**".

6.10 TRIAL STARTING

Before beginning the standard use of this machine, check its perfect working conditions by carrying out at least one complete empty cycle.

ATTENTION	Never start the beater rotation if the bowl isn't at its place. The rotating components of the Mixer could be seriously damaged.

In case of problems during this test cycle, see Chapter "**DIAGNOSIS**".
If neither the instructions given in this manual are not able to solve the problem, please contact our After Sale Service or ask your local distributors for information about the repair procedures and diagnosis service.

CHAPTER 7 MAINTENANCE

DANGER	Consult "**DANGEROUS PARTS AND RESIDUAL RISKS"** before proceeding.

DANGER	All the maintenance operations must be carried out with the machine turned off and unplugged from the knife switch.

DANGER	Skilled operators instructed about the purposes the machine is made for must carry any kind of maintenance operations concerning the components of the machine and of the electric components, even those that may seem very simple.

DANGER	Only the use of original spare parts is allowed. The Manufacturer assumes no liability in the event that non – original spare parts are used.

7.1 ROUTINE MAINTENANCE

In order to maintain good working of the machine for a long time, clean periodically all the parts and oil the parts that are not painted.
Do not use solvents, which may damage the painting and the parts made of synthetic materials.

Ensure that all procedures described in the Chapter "**PERIODICAL INSPECTIONS**" are correctly and punctually executed. This care will help preventing failures and dysfunctions.

7.2 SPECIAL MAINTENANCE

In case of special maintenance operations (repairs, replacement of parts and any other operation not described in this manual) ask directly to the manufacturer.

7.3 CALIBRATION

Proceed with a check of the calibration by officially recognised institutes following the standards in force.

7.4 PERIODICAL INSPECTIONS

Ensure that all procedures described in this Chapter are correctly and punctually executed. This care will help preventing failures and dysfunctions.

OPERATION	**CLEANING AND GREASING OF THE ROTATION PIN (B6 / C6)**
PROCEDURE	The rotation pin must be cleaned from every dust residual and oiled every 100 working hours.
FREQUENCY	**EVERY 100 WORKING HOURS**

OPERATION	CHECK OF THE SAFETY CAGE (B16)
PROCEDURE	Verify after 30 working hours the conditions of the safety disposals which form the safety cage **B16**); in case of bad working conditions repair or replace the parts immediately. Clean the surfaces of the magnet plaques from any mortar dirty, in order to grant the perfect closing of the door.
FREQUENCY	**EVERY 30 WORKING HOURS**

OPERATION	GREASING OF THE ROTATING COMPONENTS
PROCEDURE	Grease every 250 working hours the gears for beater rotation, which are placed inside the frame sheet. Use complex lithium grease suitable for high temperatures. To remove the upper carter, undo the special fixing screws (**B5** / **C5**) on both mixer sides. Then introduce the grease using the special fitting for greasing device (**B15** / **C15**). You can find it on the machine.
FREQUENCY	**EVERY 250 WORKING HOURS**

OPERATION	CHECKING THE MEMBRANE CONDITIONS (B3)
PROCEDURE	Periodically check the wear and tear conditions of the membrane. In fact cuts or abrasions could be provoked by the normal use and by the sand flowing. If necessary immediately replace it.
FREQUENCY	**6 MONTHS**

OPERATION	BOWL POSITIONING (B14 / C14)
PROCEDURE	The standard EN 196/1 states that a minimum distance of 3 mm ± 1 mm must be left between the inside walls of the bowl (**B14** / **C14**) and the beater. Since the beater (**B1** / **C1**) is made of material, which is subject to wear and tear, it is possible to modify the bowl position by using the special notches of the fixing device. (**B11** / **C11**).
FREQUENCY	**EVERY 100 WORKING HOURS**

CHAPTER 8 DIAGNOSIS

8.1 DIAGNOSIS

Some easy to solve and simple problem, which can happen during the working of the appliance, are introduced in this chapter.

ATTENTION	All maintenance, checking, control and repairing operations of each part of the machine or of the electric system, must be carried out by skilled operators instructed about the functions and working procedures of the appliance.

PROBLEM	POSSIBLE CAUSE	CURE
After the activation of the Main switch, the appliance doesn't start.	No supply	Check the correct use of the Main Switch
		Verify the Main in the Panel
The beater (B1 / C1) doesn't turn	The inside mechanisms for the beater movement are broken or too worn out	Contact the After Sale Service
	Failure to the electric motor (**B4/C4**)	Contact the After Sale Service
The lever (B7 / C7) doesn't go down or doesn't come back to the original position	The inside components for lever movement are broken or too worn out	Contact the After Sale Service
The safety door (B16) doesn't close	The magnet surfaces to close the carter are dirty or damaged	Clean the blocking plates carefully. In the event they are too damaged or worn out Contact our After Sale Service
When opening the safety door (B16), the Mixer doesn't stop	Failure to the electric system	Check if the wires and the connections of the electric circuit are interrupted.

ATTENTION	Contact our After Sale Service for any other problem not listed or in the event the problem remains even after the operator's intervention according to the instructions given above.

CHAPTER 9 SCRAPPING

9.1 SETTING ASIDE

In case of setting aside for a long time it is necessary to disconnect the electric feeding.
Execute all the maintenance operations.
It's recommended to cover the machine against the dust.

9.2 SCRAPPING

When the machine is not used anymore, it is recommended:

- Disconnect the feeding cable.
- Cover/destroy all the parts which may be dangerous as cutting, projecting or sharpened ones.
- Disassemble the machine and scrap it as per the actual laws.

Recycling notice for the disposal of electrical and electronical devices

This symbol, placed on the device or on the package and/or on the documentation, suggest that the device shouldn't be dispose together with other home garbage at the end of its life cycle.
To avoid further environment, or health-care damages, caused by the unsuitable disposal of garbage, we kindly recommend the user to separate this device from other different types of garbages and to recycle it in a responsible way to avoid the arguable reuse of material resources.
Indeed users must take care at the disposal of the equipment that have to be discarded, taking them away to the next recycling site for the appropriate recycling treatment for electrical and electronical devices. Gathering and Recycling deplete devices allow the preservation of natural resources and grant for them the adequate treatment respecting health and environment.
For further information about your local recycling site please contact your local city hall or city waste treatment department. The developer, as producer of electrical and electronical devices, will provide to finance the recycling and treatment services for deplete devices that will come back through these recycling site, accordingly the local statement.