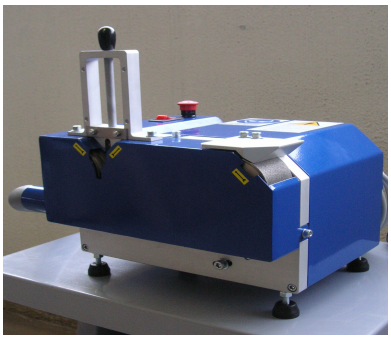
KNIVES AND SCISSORS SHARPENING MACHINE

(by Fazzini Technology)

USE AND MAINTENANCE MANUAL

MODEL	COMPACT KS10
SERIAL NUMBER	



CE

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PRELIMINARY INSTRUCTIONS

We thank you for your purchase of the COMPACT KS10 knives and scissors sharpener .

This manual contains general data and information about the machine use and maintenance. The manual must be always available for the operators . Before operating the unit please read this manual and mantain it for future referral .

For any communication concerning the machine, please always indicate the serial number contained in this manual and on the label applied on the machine side.

All machines are factory tested before shipment.

A different use of the machine as that foreseen in this manual is forbidden. The company Errebi Spa disclaims all responsibility for the improper use of the machine.

INDEX

1. MACHINE DESCRIPTION AND INSTALLATION

1.1 Machine description (FIG. 1.1 – FIG. 1.2 – FIG. 1.3- FIG. 1.4 – FIG. 1.5)

This sharpener has been designed to simply and effectively solve the problem of sharpening knives and scissors .

It consists of a aluminium structure (5) , a painted steel basement (15) containing the electric system and a front paitend steel structure (14) containing the wheels (1-2-3) . The control button and the emergency stop (22-21) are placed on the basement (15) on the left side (FIG. 1.3) . On the back of the basement (15) there is a cable with a socket for the power supply .

The structure (5) supports 3 C40 steel shafts (7) placed horizontally and supported by 6 bearings (18). Two helicoidal C.B.N.-coated wheels are placed on the 2 central shafts in order to sharpen knives (1-2). A cylindrical C.B.N.-coated wheel is mounted on the right shaft to sharpen scissors (3) .The wheel-holding shafts are moved by a system consisting of 4 toothed pulleys (8-10-12) and a double toothing belt (17) , placed in the basement (15).

The knives sharpening wheels (1-2) are penetrating and form a constant angle. The knives sharpening wheels turn upwards opposing each other so that they are opposed to the edge of the blade to be sharpened .The scissors sharpening wheel (3) turns anticlokwise. On the structure is mounted a reference inclined surface for scissors sharpening (4) (FIG. 1.2).

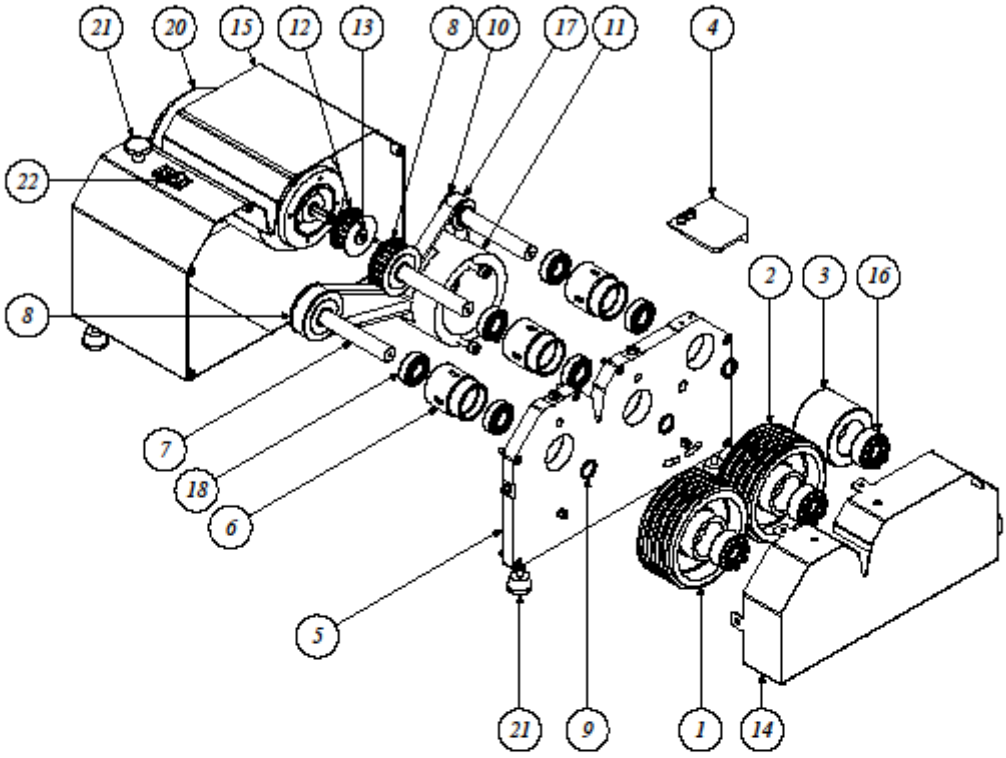
A connection to insert the vacuum cleaner tube is mounted on the right side of the front structure (14).

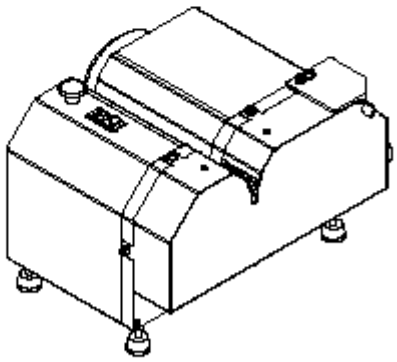
The machine can be provided by a system (Optional) that allows to keep the blade of the knife in the right position during the sharpening operation (Right Position System) (FIG. 1.5) .

The machine was designed and constructed to sharpen only metal knives ans scissors . The sharpening of any other cutting and/or working tool is forbidden.

<u>The following blades can be sharpened</u>: knives : flat blades with straight or convex edge ;
scissors : flat blades and straight edge .

<u>The following blades cannot be sharpened</u>: deformed or non-flat blades, broken or splintered blades, blades with concave edge, hook-shaped blades, too long and thick blades (max. thickness 4 mm, max. length 400 mm) , serrated blades , blades with hardness < 50 Hrc , cleavers , heavy butcher knives , half heavy butcher knives .





Pos.	n° pz	Codice
1	1	10060-101
2	1	10060-102
3	1	10060-103
4	1	10060-104
5	1	10060-111
6	3	10060-112
7	3	10060-121
8	2	10060-122
9	3	10060-123
10	1	10060-132
11	1	10060-141
12	1	10060-142
13	1	10060-143
14	1	10060-copertura mole
15	1	10060-copertura trasmissione
16	3	Calettatore
17	1	Cinghia
18	6	Cuscinetto
19	1	Emergenza
20	1	Motore
21	4	Piedino
22	1	Pulsante
23	8	Rondella ø6
24	7	Rondella ø8
25	1	Vite TCEI M5x12
26	8	Vite TCEI M6x12
27	4	Vite TCEI M6x16
28	6	Vite TCEI M6x25
29	3	Vite TCEI M8x35

FIG. 1.1

FIG. 1.2

FIG. 1.3

1.2 TECHNICAL DATA

PERFORMANCES :
Sharpening : knives and scissors
Wheels tip speed : 8,21 m/sec

MOTOR :
Power : 0,37 kw
Revolutions : 1400 rev/min

ELECTRICAL VOLTAGE / FREQUENCY :
Voltage : 230 Volt
Frequency : 50 Hz

HELICOIDAL WHEELS FOR KNIVES :
Diameter : 140 mm
C.B.N.grit : B107
Angle of the edge : 27°

CYLINDRICAL WHEEL FOR SCISSORS :
Diameter : 80 mm
C.B.N.grit : B107
Angle of the edge : 80°

DIMENSIONS AND WEIGHT :
Wight : 410 mm
Leght : 390 mm
Height : 270 mm *
Weght : 32 Kg **
* with R.P.S. : 410 mm → 500 mm
** with R.P.S. : 32,400 Kg

SOUND EMISSION :
Leq dBA machine on : 80,5 dB
Leq dBA sharpening : 81,8 dB

Data taken at 10 cm from the ear of the operator . Height of the operator 173 cm .

1.3 Installation and starting (Fig. 1.4 – 1.5)

WARNING : Carefully read this manual before installing and using the machine and carrying out maintenance operations. Respecting the instructions indicated in this manual it is possible to obtain better performances and to guarantee the personnel safety.

WARNING : Do always handle and store the machine in a careful manner paying attention to the fingers .

Unpack the machine and check that it was not damaged during transport.

Place the machine at approx. 90 cm on a stable working surface checking that it lays on the four lower supports .

WARNING : Failure to properly ground this power tool can cause serious electrical shock. It is absolutely necessary that the machine is connected to a power grid equipped with suitable earthing. The power supply should be equipped with protection fuses (6 Amp.).

Check that the line voltage and frequency correspond to the connection voltage and frequency of the machine motor.

Dust control (Fig. 1.4)

WARNING : Grinding generates dust. Most of the dusts generated when grinding are from the material being ground. Excessive dust inhalation may affect the breathing function. To avoid breathing impairment always employ dust controls . Contact the department responsible personnel concerning the safety regulations in force and the accident preventing devices .

The vacuum cleaner must be :

- in conformity with safety regulations ;
- with a power minimum of 1000 watts .

Connect the vacuum cleaner tube to the connection and verify that the line voltage and frequency correspond to the voltage and frequency connection .
Connect the outlet to the power supply socket.

Right Position System (R.P.S.) (Fig. 1.5)

If the machine it is provided by the R.P.S. , it is necessary assemble it on the front structure . Place it in the perfect centre and before to start the machine verify manually that the R.P.S. do not touch the wheels .

FIG. 1.4

FIG. 1.5

2. INSTRUCTIONS

2.1 User obligations

 **WARNING : Carefully read this manual before installing and using the machine and carrying out maintenance operations. Respecting the instructions indicated in this manual it is possible to obtain better performances and to guarantee the personnel safety .**

 **WARNING : It is forbidden to carry out any operation when the machine is moving . Stop the machine, disconnect it from the electrical power supply and wait that the wheels stand still before carrying out any operation .**

1. place the machine in a ventilated place;
2. the working area should be suitably illuminated in order to guarantee a perfect visibility;
3. avoid the presence of explosive substances, flammable or harmful liquids and gases;
4. any tampering and/or change is forbidden;
5. place the machine in a suitable environment, since it is not made of rust preventing material and may release metal powder. The machine should not be placed in the following environments:

- rooms containing food ;
- humid or cold room ;

6. personnel and working environment should be equipped with suitable protections;
7. always keep the operating instructions handy at place of use.;
8. it is forbidden to make any change to the machine .

2.2 USER OBLIGATIONS

 **WARNING : Contact the department responsible personnel concerning the safety regulations in force and the accident preventing devices.**

1. it is very important to know all machine performances;
2. before using the machine avoid all dangerous conditions, check that the machine functions correctly and that it is operated by authorized personnel only;
3. the department responsible personnel should be informed about any irregularity;
4. the personnel using the machine should not wear gloves, beard, moustache or long hair. Long hair should be put up. Do not wear loose clothes such as ties, scarfs, clothes with wide sleeves, torn or unbottoned clothes; do not wear necklaces, bracelets, rings, watches or any other kind of jewel that can be entangled in moving parts;
5. the machine can sharpen only blades showing suitable dimensions, shape and material (see par. 1.1). Otherwise, metal part splitting can occur. **Alway use approved safety glasses . Safety glasses should have side shields.**
6. the mechanical or electrical safety devices should not be removed or changed;
7. do not put fingers or other body parts into the moving wheels;
8. the machine and the sorrounding area should be always free from foreign objects, especially if they are not suitably fixed;
9. pay attention during sharpening, avoid inattention and hurried operations;
10. the machine should be stopped after the sharpening operations;
11. check that the machine sorrounding area is not slippery;
12. rags soaked in flammable or harmful liquids should not be kept near the machine;
13. clean the blades before sharpening. Dirty blades would cause deposits that endanger the wheel effectiveness;
14. after sharpening clean the blades with a clean rag paying attention to the cutting edge;
15. do not clean the machine with humid rags and do not wet it with water or any other liquid. The machine should be cleaned only with a dry cloth and/or a vaccum cleaner;
16. keep the machine clean ;

17. **always employ dust controls appropriate to the materials being ground . The vacuum cleaner must be with a power minimum of 1000 watts ;**

18. **keep guards in place** , safety guards must be kept in place and in working order .

2.3 MAINTENANCE INSTRUCTIONS

WARNING : It is forbidden to carry out any operation when the machine is moving . Stop the machine, disconnect it from the electrical power supply and wait that the wheels stand still before carrying out any operation .

1. do not carry out any operation when the machine is switched on and/or moving;
2. do not carry out any operation before the wheels stand still;
3. the machine should be disconnected before carrying out any operation;
4. the machine cannot be connected if all protection screws are not tightened.

2.4 PERSONNEL – TRAINING

The working and maintenance operations should be carried out by suitable and qualified personnel. The use instructions should always be available and must be respected.

Suitable and qualified personnel should show the following characteristics:

- the personnel should know the machine functioning and the related dangers;
- it should be in full possession of its physical and mental faculties;
- it should not show alterations caused by medicines, drugs and alcohol;
- it should be psychically balanced;
- it should be aware that the blade can be dangerous if it is not handled correctly.

Unauthorized personnel cannot work with the machine and/or carry out any operation.

3. USE INSTRUCTIONS

WARNING : Carefully read this manual before installing and using the machine and carrying out maintenance operations. Respecting the instructions indicated in this manual it is possible to obtain better performances and to guarantee the personnel safety .

WARNING : CHECK VOLTAGE! Compare electrical data of machine with those of your power supply.

3.1 Operations and controls - use instructions

3.1.1 First starting of the machine (FIG. 3.1)

Carry out the following operations when first starting the machine:

- check that the machine has been correctly installed ;
- check that the safety device (21) is off ;
- push the bottom switch (I) (22) ;
- check that the machne does'nt make any anomalous noise

3.1.2. Starting of the machine (FIG. 3.1)

Push the start bottom - I (22).

Before the sharpening operation wait for 3-4 seconds .

3.1.3 Machine stop (FIG. 3.1)

To stop the machine push the bottom (O) (22) .

3.1.4 Start and stop the safety device - Turn off (FIG. 3.1)

The machine is equipped by a safety device (21), which can be easily pushed under all possible anomalous or dangerous conditions.

To deactivate the safety device it is necessary to turn it as indicated on the bottom .

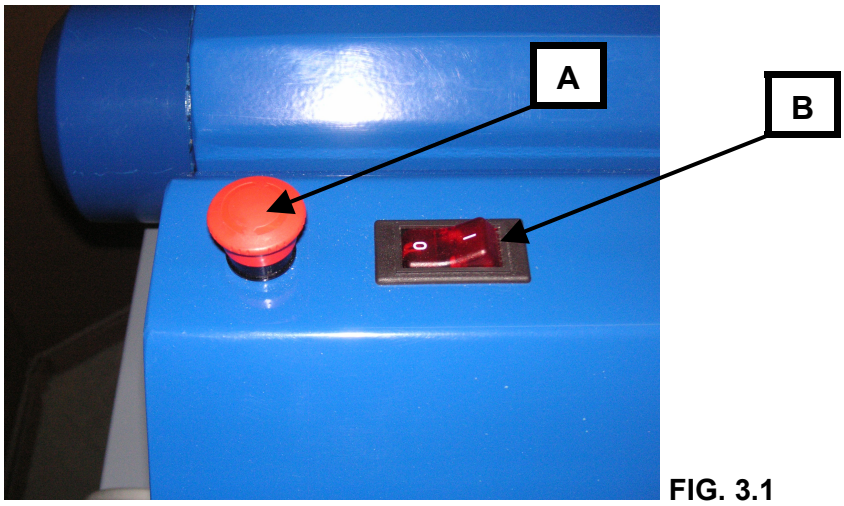


FIG. 3.1

3.1.5 Sharpening instructions

WARNING : Improper use may cause serious injury . The machine was designed and constructed to sharpen only metal knives and scissors . The sharpening of any other cutting and/or working tool is forbidden. Sharpen only blades showing suitable dimensions, shape and material (see par. 1.1). Otherwise, metal part splitting can occur. Alway use approved safety glasses . Safety glasses should have side shields.

Do not wet the wheels with any liquid or other material. The machine must be operated with dry functioning without using any kind of material.
Clean the blades before sharpening. Dirty blades would cause deposits that endanger the wheel effectiveness

KNIVES SHARPENING

OPERATOR'S POSITION (FIG. 3.2)

The figure 3.2 shows the correct position of the operator during the knife sharpening .

FIG. 3.2

SHARPENING (FIG. 3.3 – 3.4 – 3.5 – 3.6 – 3.7 – 3.8 – 3.9)

Carry out the following operations to obtain a satisfactory result :

Blades with straight and smooth edge (Figure 3.3 – 3.4):

1. take the knive by the handle and place the blade parallelly to the horizontal surface keeping the tip foreward;
2. approach the blade to the middle of the helicoidal wheels and keep it as straight as possible;
3. move the blade backward and foreward three times or more pressing it slightly .
4. remove the knive by lifting it;
5. check the obtained result ;
6. repeat the operation until obtaining the required edge.

WARNING : Light pressure works best , let the grinding wheels do its job . Extra pressure will reduce the wheels and knife life . Extra pressure may cause a machine block .

Blades with convex and smooth edge (Figure 3.5 – 3.6):

1. take the knife by the handle and place the blade with a slope of about 10 degrees with respect to the horizontal surface and keep the tip foreward ;
2. approach the blade to the middle of the helicoidal wheels without damaging the tip. Keep the tip as straight as possible ;
3. move the blade backward and foreward three times or more pressing it slightly. Follow the blade profile avoiding a too steep slope of the knive and pay attention not to damage the tip;
4. remove the knive by lifting it ;
5. check the obtained result by vertically cutting a piece of paper ;
6. repeat the operation until obtaining the required edge.

WARNING : Light pressure works best , let the grinding wheels do its job . Extra pressure will reduce the wheels and knife life . Extra pressure may cause a machine block .

Right Position System (R.P.S.) (Optional) (FIG. 3.9)

The R.P.S. allows to keep the blade of the knife in the right position during the sharpening operation . The sharpening operation should be done in the same way as explained leaning the reference of the R.P.S. on the back side of the blade . **In this case the free hand can be leaned on the top part of the R.P.S. , but without any pressing .** During the sharpening operation the R.P.S. will follow the movement .

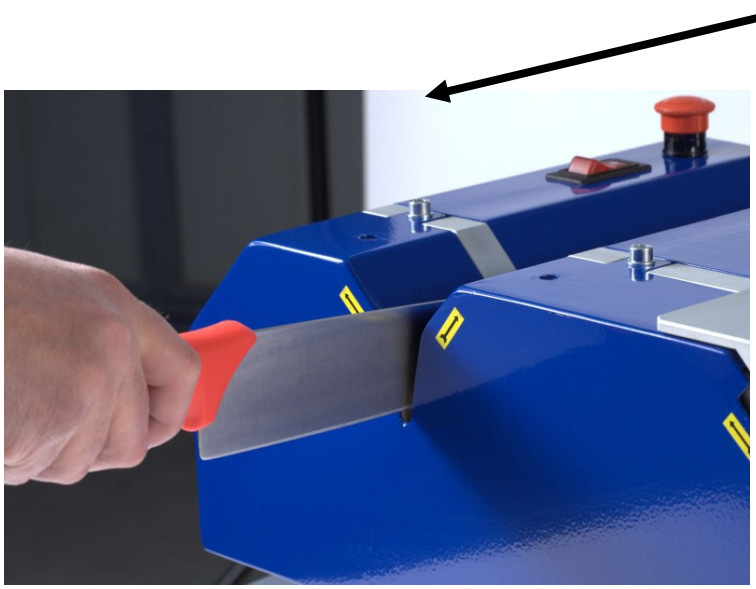
After sharpening the knife it is advisable to remove the featheredge by running the edge on both sides on a fine grain sharpening steel. The blade should form an angle of max. 20 degrees with respect to the sharpening steel axis.

 **WARNING : At the end of the downward movement the blade tip should be moved away form the sharpening steel so that it does not touch the handle in order to avoid dangers.**

Take the sharpening steel vertically with one hand. With the other hand seize the knive handle and lay the blade on the sharpening steel tip without exceeding the suggested 20 degree angle. Slide the blade on the sharpening steel along the edge performing an arched movement.
It is of great importance that the sharpening steel has a very fine grain. The commonly used sharpening steels are not suitable for this operation.

We suggest the use of the ceramic-coated sharpening steel produced by our company (art. FR300-300) .

FIG. 3.3



CORRECT

FIG. 3.4

FIG. 3.5

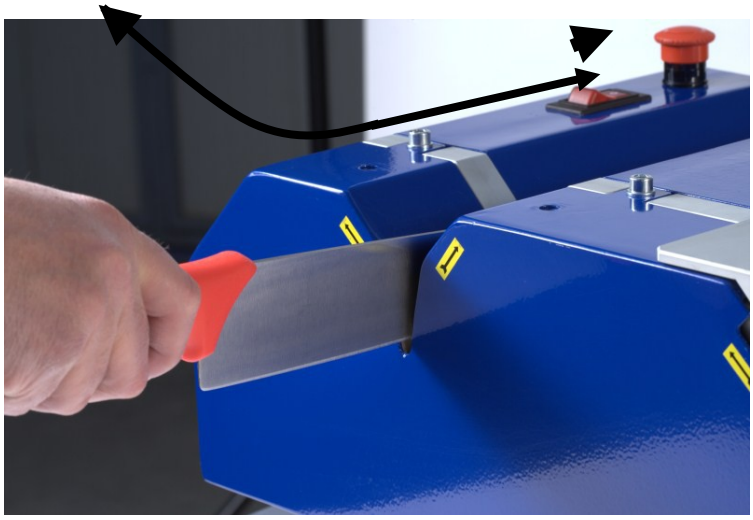


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FIG. 3.6

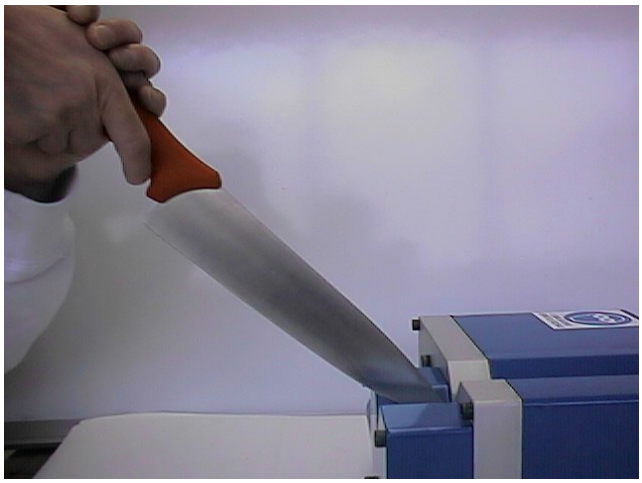

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FIG. 3.7

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FIG. 3.8

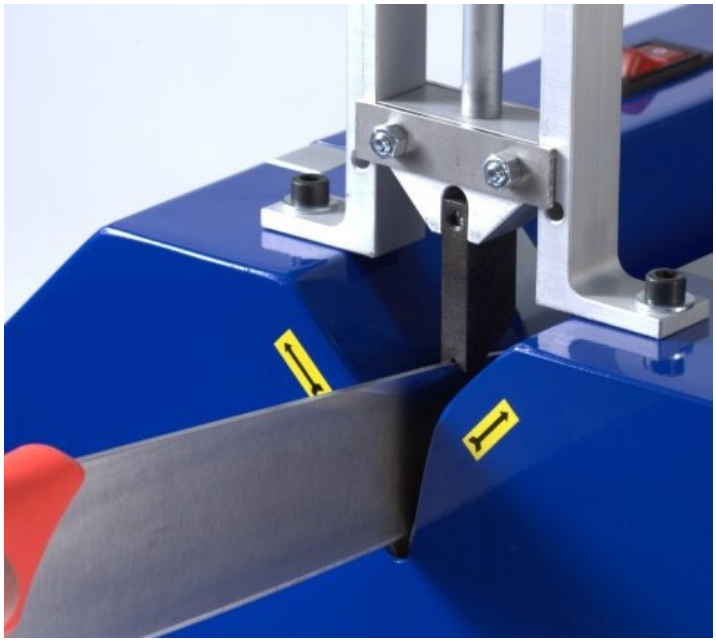

FIG. 3.9

SCISSOR SHARPENING

OPERATOR'S POSITION (FIG. 3.10)

The figure 3.10 shows the correct position of the operator during thescissors sharpening .

WARNING : The cylindrical C.B.N. coated wheel mounted on the right shaft allows to sharpen scissors. The sharpening of any other cutting and/or working tool is forbidden.

WARNING : Avoid any fitting of the blade between wheel and reference . Otherwise, metal part splitting can occur and the machine will be damaged . Alway use approved safety glasses . Safety glasses should have side shields.

SHARPENING (FIG. 3.11 – 3.12)

Carry out the following operations to obtain a satisfactory result:

1. open the scissors, seize the handle of the blade to be sharpened and lay the inner side of the scissors blade on the reference inclined surface of the cylindrical wheel ;
2. press the blade slightly towards the wheel and slide it backward and foreward 2 or 3 times keeping the inclined surface as a reference ;
3. turn the scissors and sharpen the other blade;
4. repeat the operation until obtaining the required edge.

FIG. 3.10

Fig. 3.11

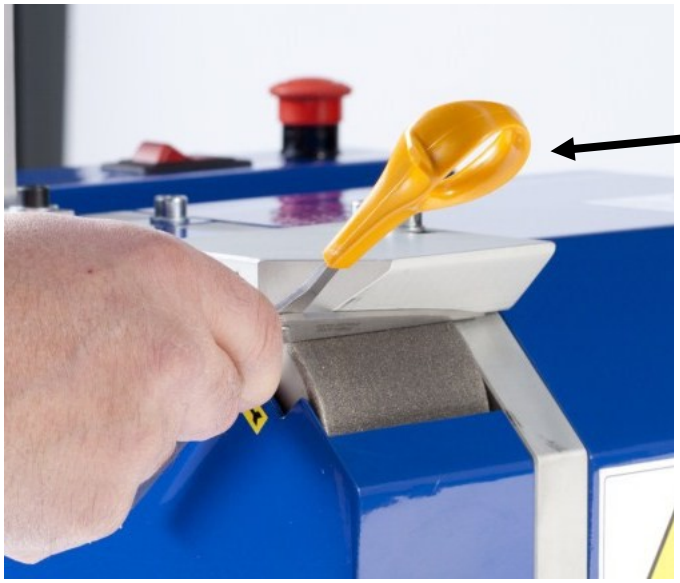

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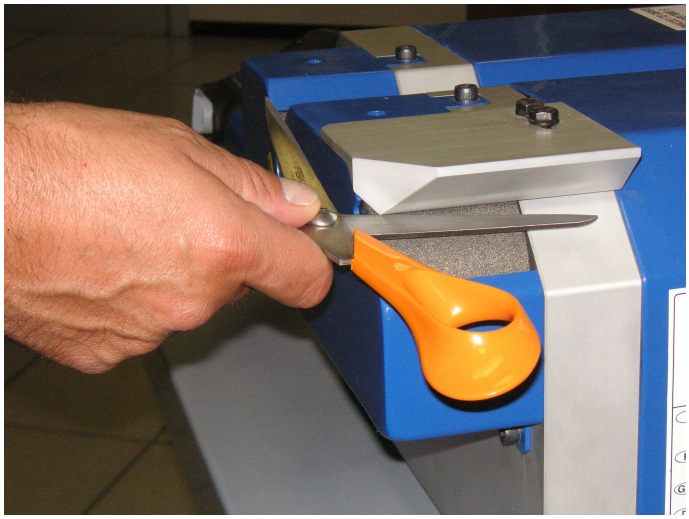
FIG. 3.12



NON CORRECT

FIG. 3.13

4. MAINTENANCE (FIG. 1.1)

 **WARNING : It is forbidden to carry out any operation when the machine is moving . Stop the machine, disconnect it from the electrical power supply and wait that the wheels stand still before carrying out any operation .**

4.1 Routine maintenance

WHEELS

 **WARNING : The wheels should be handled carefully at all times .**

Each use inspect wheel quality. If damage has occurred on the wheel profile the wheels should be changed .

SAFETY DEVICES

Each use check the efficiency of the protections and the safety systems .

EXTERNAL CLEANING OF THE MACHINE

Daily clean the machine working surface and the upper protection using a dry rag or a vaccum cleaner to avoid metal powder deposits .

INTERNAL CLEANING OF THE MACHINE (Fig. 1.1)

Carry out the following operations montly or every 50 hours of use :

FRONT STRUCTURE

1. remove the screws of the front structure (14) ;
2. check that in the wheel compartment there is no metal powder. If necessary, clean it by a dry rag or the vaccum cleaner ;
3. check that the vacuum cleaner connection is not clogged. If necessary clear and clean it using a dry rag or the vacuum cleaner ;
4. empty the dust control and check its functioning ;
5. assemble the front structure (14) .

STEEL BASEMENT

1. remove the screws of the steel basement (15) ;
2. check that in the compartment there is no metal powder. If necessary, clean it by a dry rag or the vaccum cleaner ;
3. check status of belt and pulley ;
4. assemble the steel basement (15) .

4.2 Special maintenance

The special maintenance includes all repairs caused by failures or wear of components except the wheels.

 **WARNING : Before carrying out any special maintenance operation, contact the manufacturer.**

4.3 Operations and personnel in charge

WHEEL REPLACEMENT (FIG. 4.1)

When the wheel efficiency decreases the wheel metal becomes visible or the sharpened blade is overheated. In this case it is necessary to replace the wheels.

 **WARNING : use only wheels supplied by the manufacturer , the removed wheels should be disposed of as scrap and not in the environment .**

Wheel disassembly:

1. remove the screws from the machine front side (14);
2. insert a 7/8 mm diameter pin into the 10 mm hole on the helicoidal wheel (1). The pin should be inserted into the hole on the alluminium structure;
3. unloose the eight M6 socket head screws of the wheel fixing system (16) ;
4. repeat the same operation on the fixing system of the wheel (2) ;
6. mantaining the pin into the wheel (2) it is possible unloose the eight M6 socket head screw of the fixing system of the wheel (3) ;
6. remove the two helicoidal wheels from the shafts.

Wheel assembly:

 **WARNING : Before assembling check the status of the new wheels , if damage has occorred on the wheel profiles the wheels should be changed . Otherwise metal part splitting can occur .**

 **WARNING : The wheel marked with D/R must be mounted on the right side shaft , the wheel marked with S/L must be mounted on the left side shaft , the profile of the wheels will move in the opposite direction of the operator . Wrong assembling the profile will move towards the operator creating a dangerous situation , approacing the sharpening with the tip the knife could be ejected .**

Clean the wheels housing and lubricate the shafts before the wheels assembly . Check that both parts (7) are in correct position .

1. place the two helicoidal wheels (1-2) on the shaft . The wheel screws should fit one into the other. **ATTENTION** : **The wheel marked with D/R must be mounted on the right side shaft , the wheel marked with S/L must be mounted on the left side shaft** ;
2. insert the 7/8 mm pin into the 10 mm hole on the helicoidal wheel (1). The pin should be inserted into the hole on the alluminium structure;
3. **the wheel (1) should be fixed correctly; simultaneously tighten the 8 socket head screws of the wheel fixing system pushing the pulley and keeping the wheel against the shaft end ; when fixed it must be any movement to the shaft direction** ;
4. remove the 7/8 mm pin and insert it into the helicoidal wheel (2). Turn the fixed wheel (1) so that the screw crest of one wheel is in the middle of the other screw. It is very important to avoid any contact between the screws. Repeat the same operations did before (see point 3) ;
5. mantaining the pin into the wheel (2) it is possible loose the eight socket head screw of the fixing system of the wheel (3) ;
6. remove the 7/8 mm pin from the wheel (2) ;
7. check the rotation of the wheels manually , any contact should be between the wheels ;
8. assemble the front structure (14) and the basement (15).

The wheels should be replaced by personnel of the mechanical workshop and/or specialized personnel equipped with the suitable tools.

ATTENTION: use only wheels supplied by the manufacturer. The removed wheels should be disposed of as scrap and not in the environment.

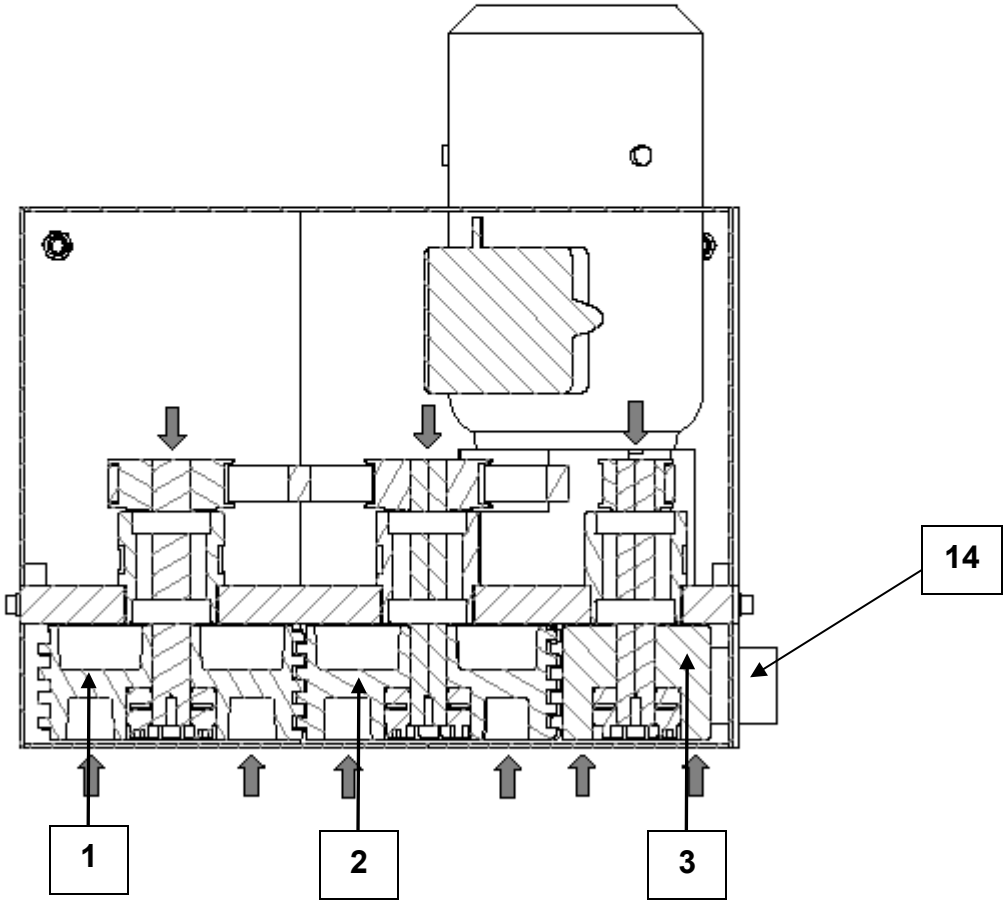


FIG. 4.1

6. DECLARATION OF CONFORMITY

MANUFACTURER : Fazzini Technology di Ing. Patrizio Fazzini & C. s.a.s.
Via Vittorio Veneto 9/D
23815 Introbio (Lecco) – Italy
C.F./P.I. 02237320136
Tel. 0341-981440 Fax 0341-983097
www.fazzinitechnology.com

herewith declares that the machine :

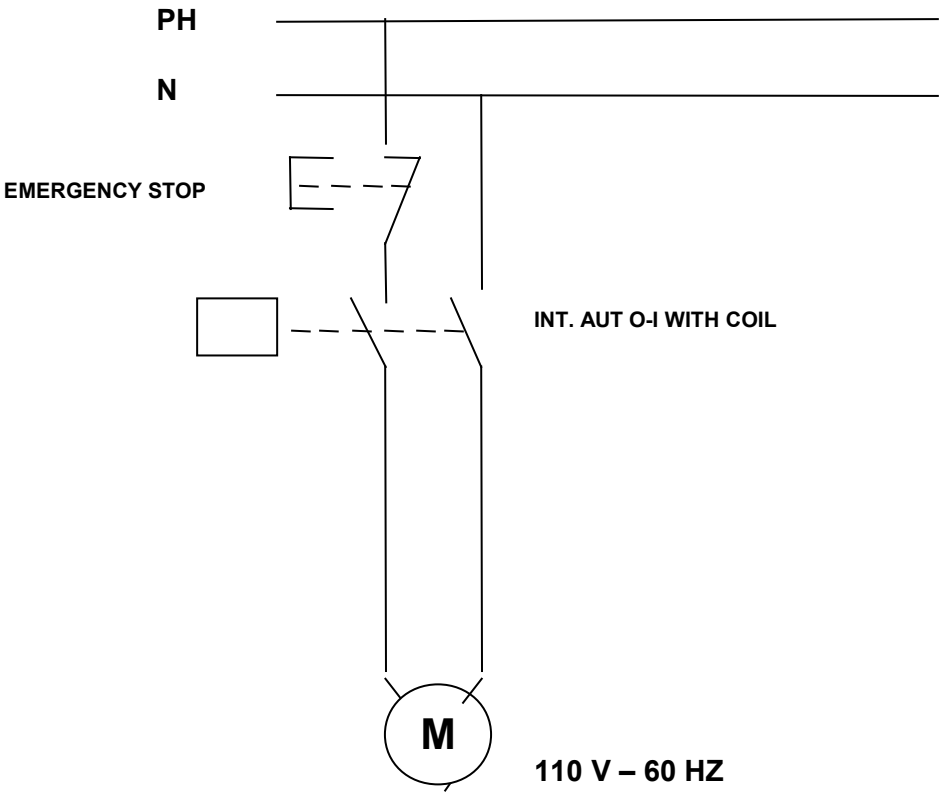
NAME : FAZZINI
TYPE : PROFESSIONAL KS100
SERIAL NUMBER :
YEAR OF BUILT :

is in conformity with the machinery directive 2006/42/CE .

NAME : Patrizio
SURNAME : Fazzini
POSITION : Owner

Introbio :

6. ELECTRICAL DIAGRAM



7. SYMBOLS

HAZARD WARNING SYMBOL

WEAR EYE PROTECTION

7. WARRANTY

The machine has a warranty of 12 months from the delivery. The components subjected to wear are not included in the warranty.

The warranty is not valid in case of damages and/or failures depending on negligence and/or inexperience.

The warranty is not valid if the customer performs any change to the machine.