

COSTRUZIONE MACCHINE PER CALZATURE

Officina meccanica C.G.C.

VIA AGUZZAFAME 205 - 27029 VIGEVANO (PV) ITALIA

Tel. (0381) 40259 Fax (0381) 344801

MODEL : Z-9

SERIES : /

SERIAL No. : ..

YEAR OF CONSTRUCTION : ..

WARNINGS

- 1) In paragraphs containing technical description, the location of various machine parts and accessories is always to be understood in relation to the control position.
- 2) In paragraphs containing technical description, the appropriate technical term is used when referring to mechanical parts.
- 3) All the operations described in this manual must be carried out with the motor off, and only after the electric system has been properly disconnected, i.e., after the supply cable has been unplugged from the mains socket

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1. DESCRIPTION OF THE MACHINE

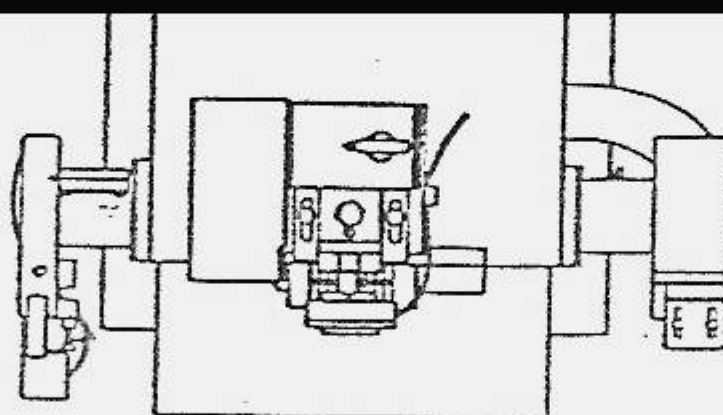
The machine Mod. Z-9, built by Officina meccanica C.G.C., is a pounding machine suitable for processing men's footwear, for the pounding of footwear bottoms, and for the striking of the leather.

The machine is equipped with a three-phase asynchronous motor which powers the pounding disc, for the processing of shoe bottoms, as well as three hammers for the striking of the leather.

The machine operations are commanded by the electrical control panel located on the front of the main upright.

The machine has a frontal work station, and is designed to work in manual mode.

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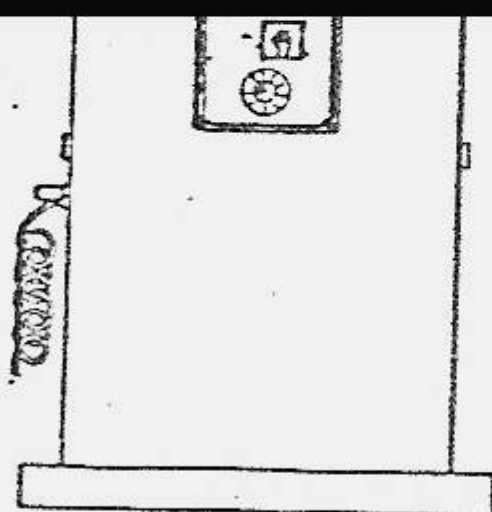


1.1 Safety guards and safety measures

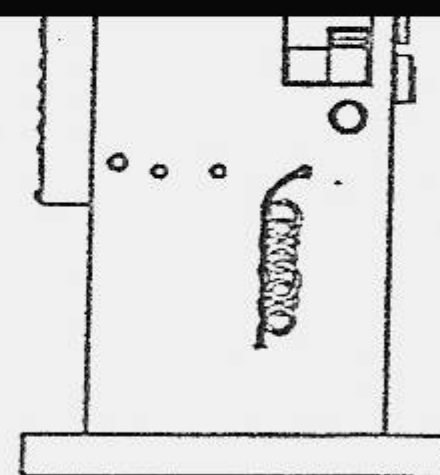
The manufacturer has provided and fitted the following safety guards :

- 1- Fixed guard of the upper hammer control belt.
- 2- Rear fixed guard, secured by cheese-headed screws with hexagonal slot.

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ADJUSTABLES



2. MOD. Z-9 : TECHNICAL DATA.

FEATURES	TECHNICAL DATA
Width	950 mm
Depth	

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On the left side of the column base there is a metal plate bearing the main technical features of the machine.

WORKING POWER	
SUPPLY VOLTAGE	
SUPPLY FREQUENCY	

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3. CORRECT AND INCORRECT USE OF THE MACHINE

The machine Mod. Z-10, built by Officina meccanica C.G.C., is designed to be used on men's footwear, for the pounding of shoe bottoms, and for the striking of the leather. If the machine is used for any purpose other than that for which it has been designed and built, such use is anomalous and, as well as putting the operator in serious danger it is also liable to result in damage to the machine itself.

3.1 Contra-indications and dangers associated with incorrect use of the machine.

- The control drives are set at the manufacturer's plant. The working cycle is tested several times before the machine is despatched to the user.

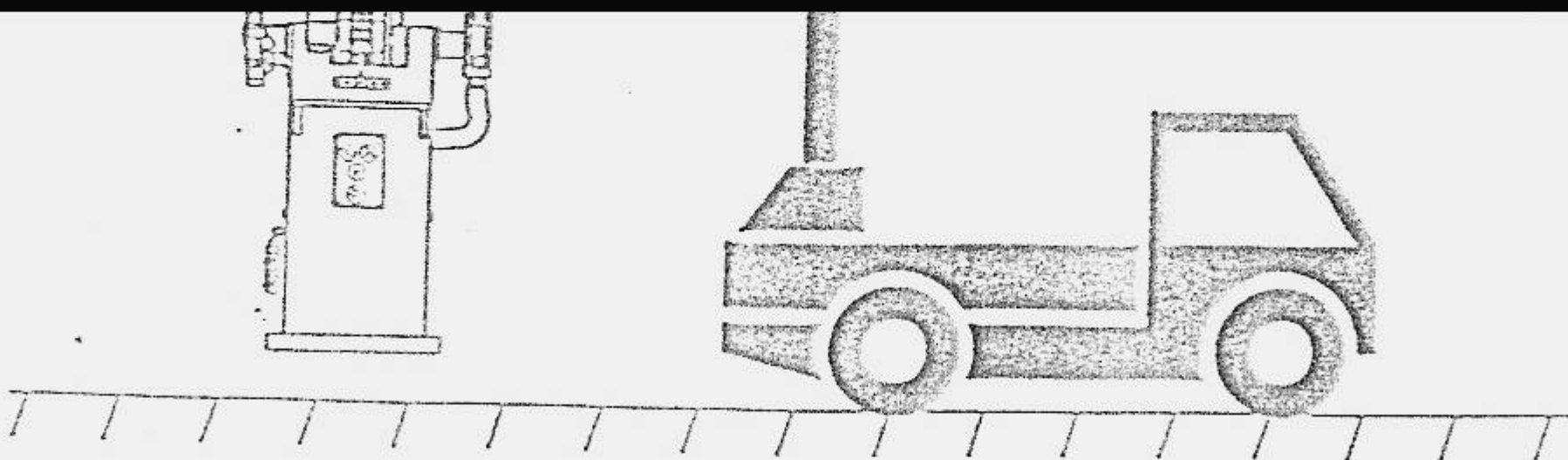
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4. HANDLING AND TRANSPORTATION OF THE MACHINE.

Providing a support pallet is first secured to the machine base, the pounding machine Mod. Z-9 can be moved by fork-lift truck. The machine must only be moved by an expert operator, assisted by a second machine handler who, on the ground, must ensure that there are no obstacles in the area across which the machine is to be moved.

Lifting cables (of adequate size) can be used for lifting and handling operations. These cables must be connected to the hook of a small crane, driven by an expert crane operator. A machine handler must check that the machine will not, during transportation, be impeded by obstacles which the crane operator is unable to see, due to the dimensions of the machine itself.

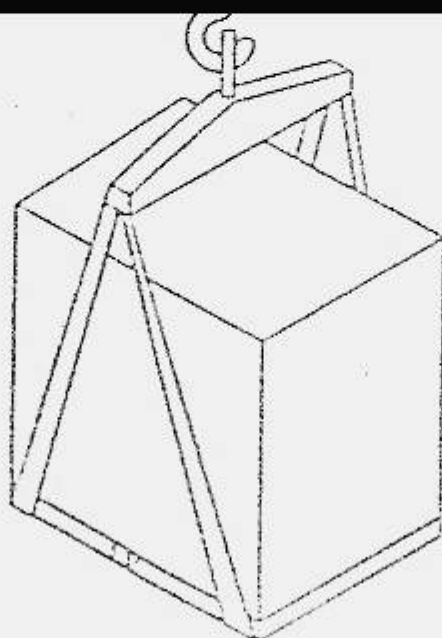
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Warnings:

- 1) If the pounding machine is shipped packed in a case or wooden crate, the packaged machine must be properly slung before being handled or moved.
- 2) In order to remove all risk of injury to staff during the movement of the suspended load, make sure that no one enters the area across which the crane or forklift truck is to travel.
- 3) It is advisable, especially if the machine is to be shipped by sea, in a case or crate, to place bags of hygroscopic salt in the case or crate; it is also advisable to protect the machine parts with protective anti-rust paint.

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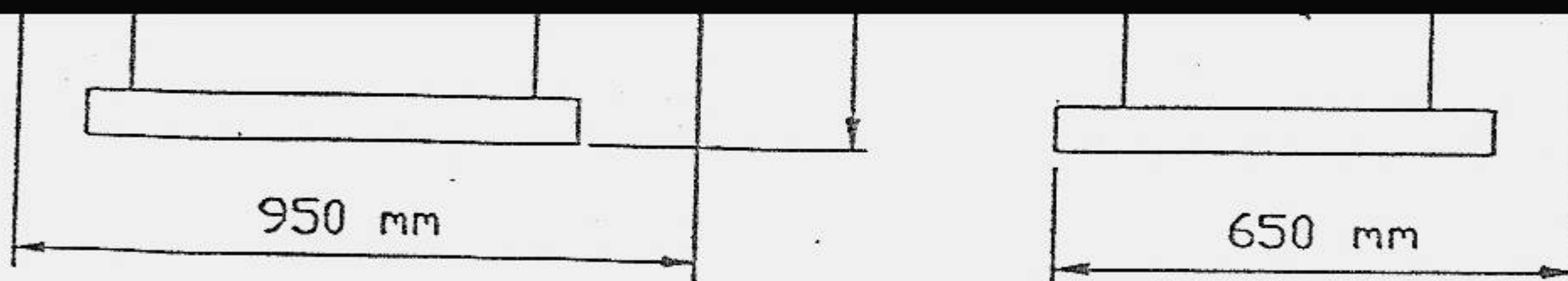


5. INSTALLING THE MACHINE.

Attention : the place where the machine is installed must - in order to reduce to the minimum the possibility of fatigue and to allow the operator to work in conditions of maximum safety - be one which presents optimal heat and humidity conditions for the well-being of the operator.

5.1 Machine dimensions

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5.2 Surface supporting the machine Mod. Z-9.

The machine does not need to be anchored to the floor.

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5.3. Front-on view of the Mod. Z-9 : main machine references.

CENTRAL

HAMMER

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5.4 Clearances to respect.

In order to ensure that the machine can be used correctly, and to facilitate maintenance operations on the machine, it should be installed in a position in which the minimum clearance distances, shown in the diagram, are respected :

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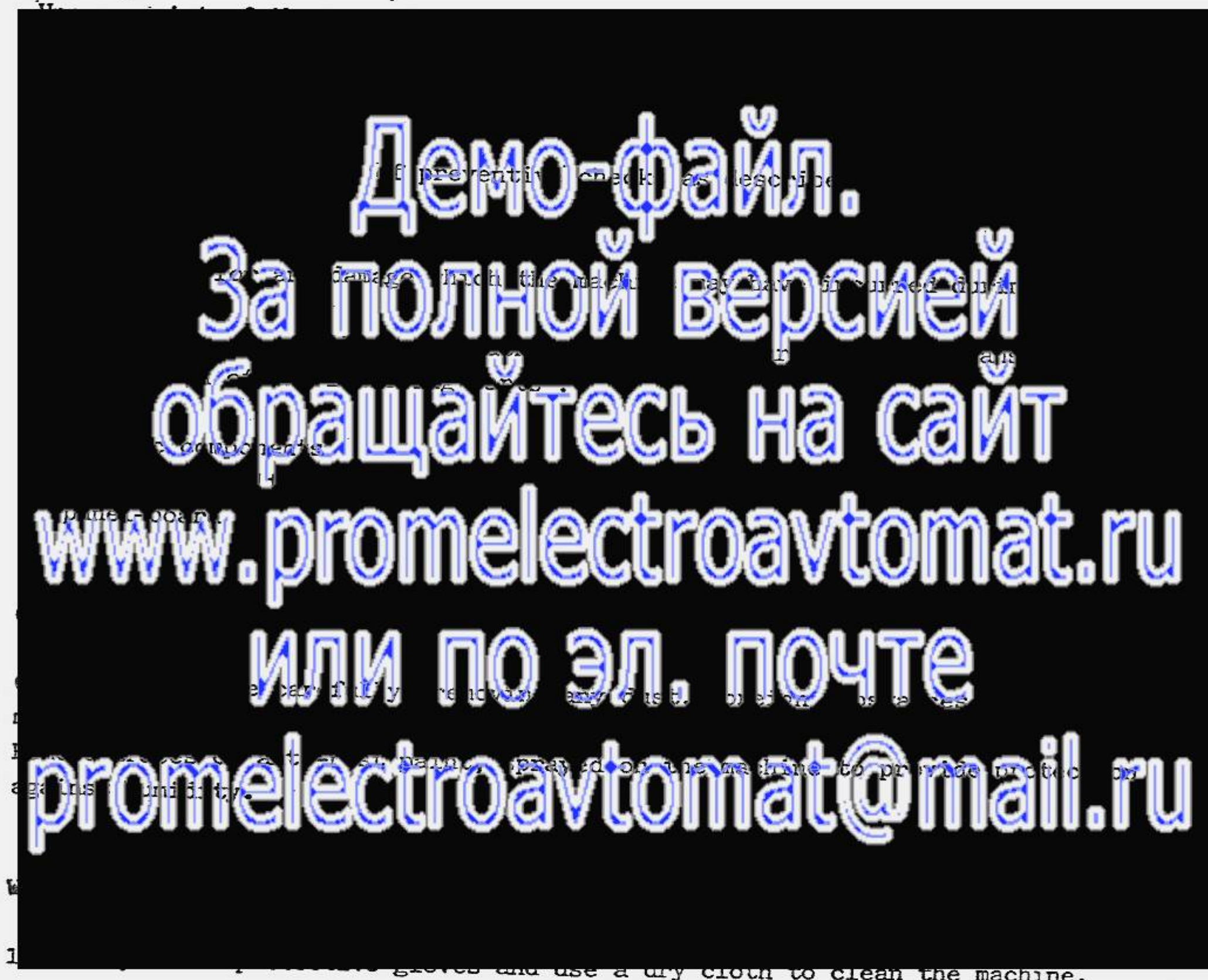
6. MACHINE ASSEMBLY AND PREPARATION FOR USE

6.1 Assembling the accessories.

The machine is fully assembled at the manufacturer's plant.

The user is not required to assemble any particular auxiliary group.

6.2 Preventive checks.



- 1) The machine should be cleaned with special gloves and use a dry cloth to clean the machine.
- 2) The operations described above must only be carried out after the electrical system has been properly disconnected, i.e., after the supply cable has been unplugged from the mains socket.

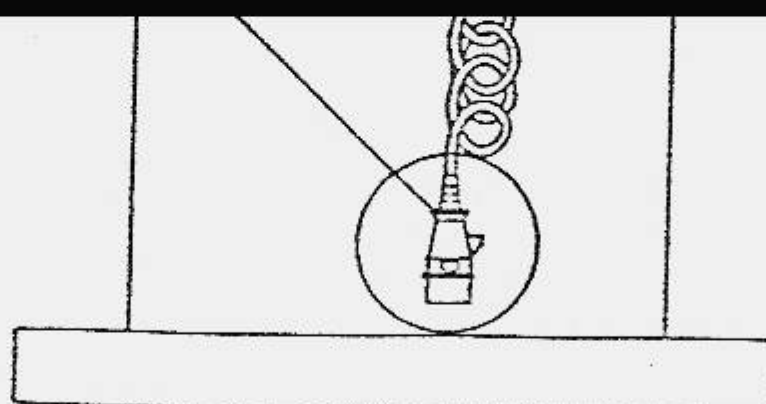
6.3 Connecting the machine with the external energy supply.

6.3.1 Connecting up the electrical energy supply.

The machine comes with a 4 metre electrical supply cable and plug.

The frequency and supply voltages for which the machine is intended, are indicated on the special plate located on the left side of the machine upright.

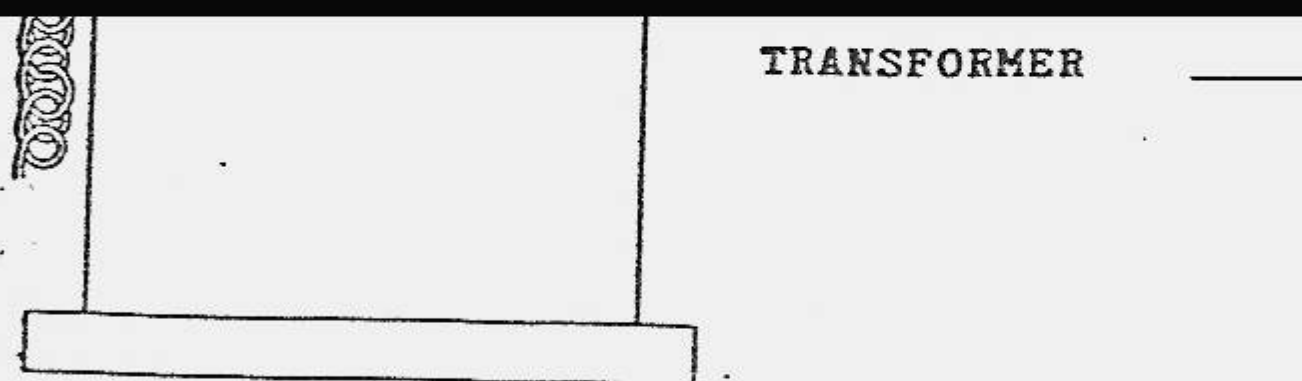
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Warnings :

- 1) It is advisable to use safety switches (magneto-thermal switches) to protect the user's mains against possible overloading.
- 2) If the machine supply voltage and the mains voltage are not the same, it will be necessary to change the terminal connections of the transformer and of the motor. The electric system supply transformer has its own housing, show, in the diagram. To reach it, loosen the 4 screws securing the control panel on the front of the machine upright.

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6.4. Checks and adjustments.

6.4.1 Checking the direction of motor rotation.

The correct direction of rotation is shown on a sticker on the upper part of the external fixed guard.

To carry out this check, proceed as follows :

- 1) Turn the MAIN SWITCH to position 1; the machine's electrical installation is now live.

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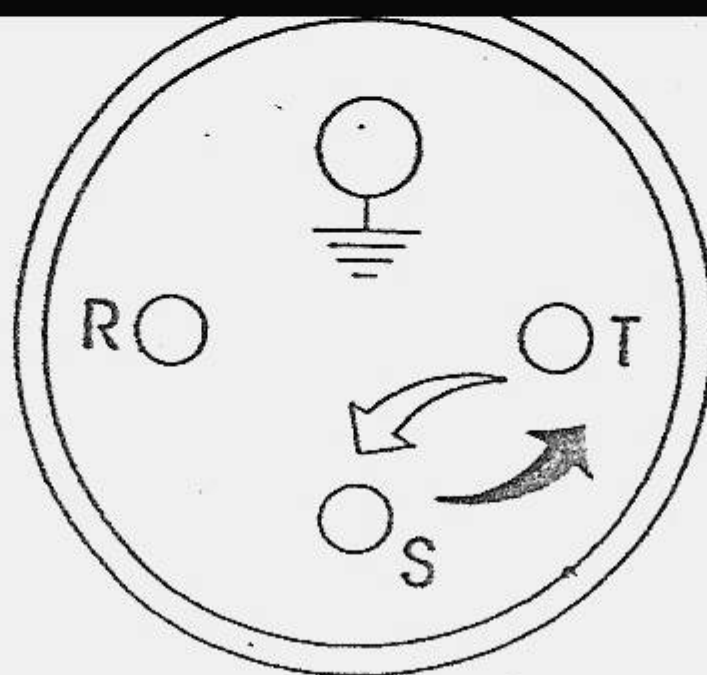


FIG. B

6.4.2 Upper and motor belts tension.

ATTENTION :

the tension of upper belt and motor belt should be checked at least once every six months. The motor belts and the belt which, through the camshaft, drives the upper hammer are trapezoidal belts type A 54 and Z 22-25.

This adjustment must be carried out in order to achieve the correct working tension.

The adjustment of the upper belt should be carried out as described below :

- turn the MAIN SWITCH to position 0;
- loosen the two 1.5-pitch, M12 screws (shown by the letter A) which fix the central support;

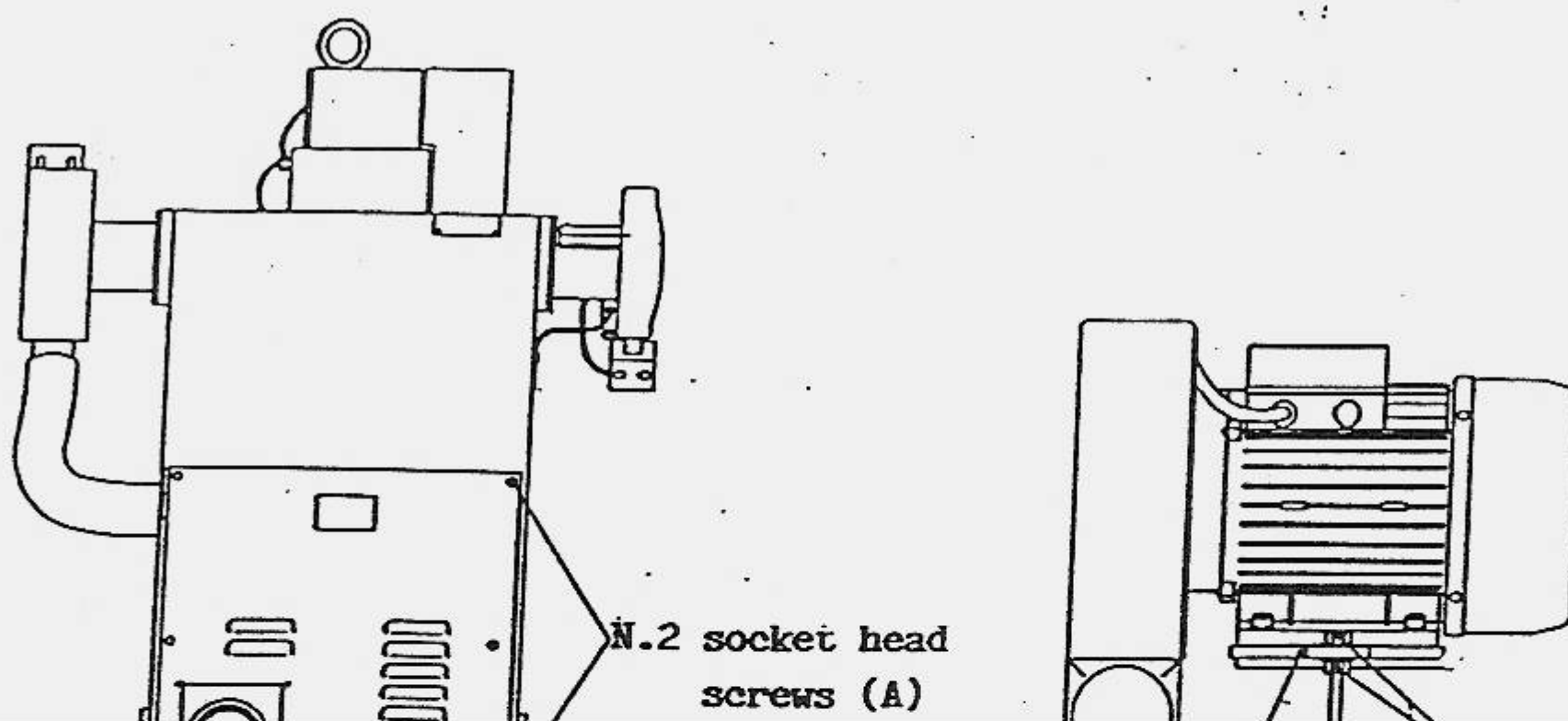
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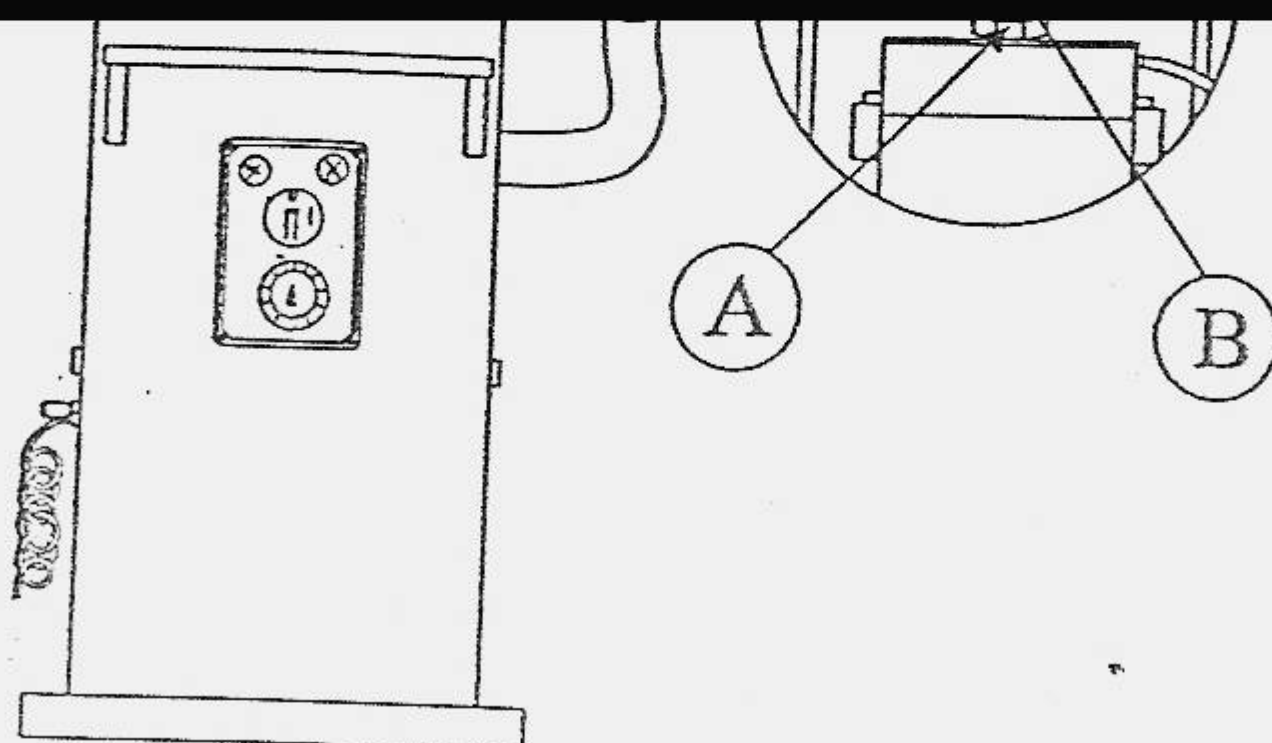
- turn the MAIN SWITCH to position 0;
- open the back carter A loosen the two socket head screws A;
- loosen the blocking nut C;
- pull down the square B that support motor until you have obtained the desired tension, then tighten blocking nut C;
- close carter A tighten the two socket head screws A;

Warning :

If, for any reason, the belt breaks or has to be replaced, specially trained personnel must be called.



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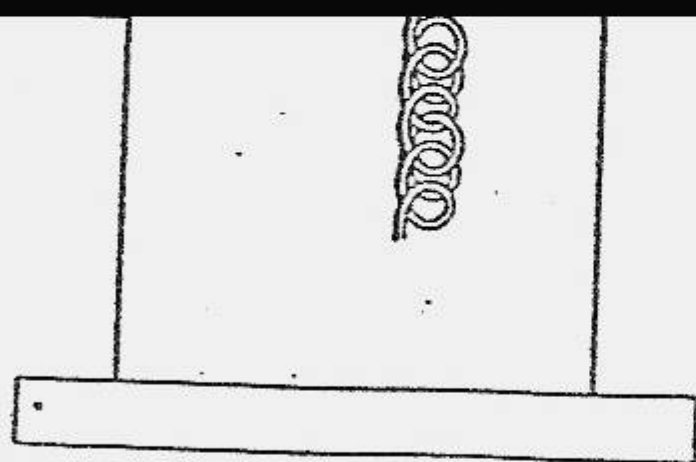
6.4.4 Adjusting the central hammer stroke.

This adjustment enables the operator to increase or reduce the stroke of the central hammer, depending on the type of leather which is to be processed.

Proceed as follows :

- turn the MAIN SWITCH to position 0;
- loosen the blocking nut (A) located behind the central hammer;
- use the socket head screw (B) to obtain the hammer stroke required;
- tighten the blocking nut (A).

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6.4.5 Adjusting the upper side hammer stroke.

This adjustment enables the operator to increase or reduce the stroke of the upper side hammer, depending on the type of leather which is to be processed.

Proceed as follows :

- turn the MAIN SWITCH to position 0;
- loosen the blocking nut (A);
- use the socket head screw (B) located on the 1st side of the

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6.4.6 Adjusting the lower side hammer stroke.

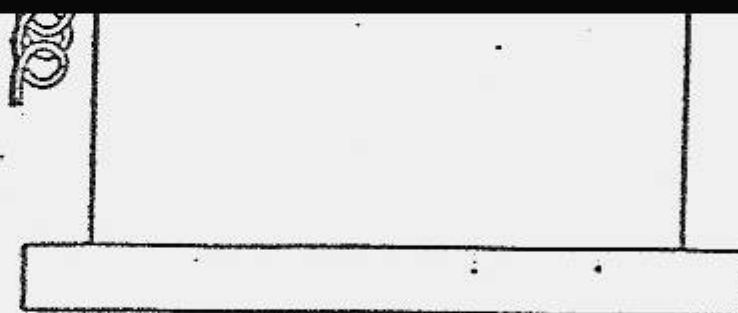
This adjustment enables the operator to increase or reduce the stroke of the lower side hammer, depending on the type of leather which is to be processed.

Proceed as follows :

- turn the MAIN SWITCH to position 0;
- loosen the blocking nut (A);
- use the socket head screw (B) located on the left of the hammer itself to obtain the hammer stroke required;

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(B)



7. PUTTING THE MACHINE INTO OPERATION.

The machine's control and work station is located opposite the pounding and striking device.

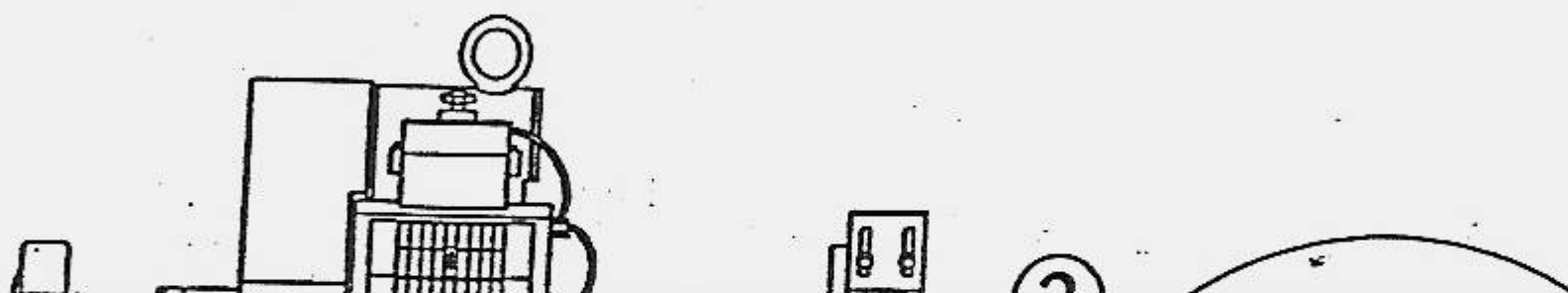
To ensure its good working and long life, the machine Mod. Z-9, should only be used by specially-trained operators.



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7.1 Electrical control panel

The electrical control panel is located in the work station, on the front of the machine upright. It is secured by 4 screws .



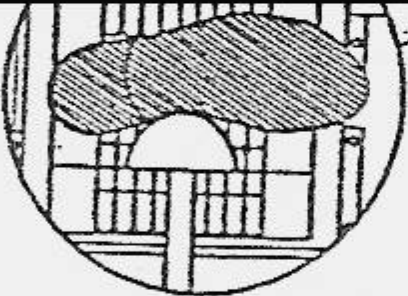
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- 1) RESISTANCE SWITCH
THE SWITCH WORKS AT 24V
- 2) MACHINE LIVE'S LIGHT
- 3) RESISTANCE LIVE'S LIGHT
- 4) START SWITCH

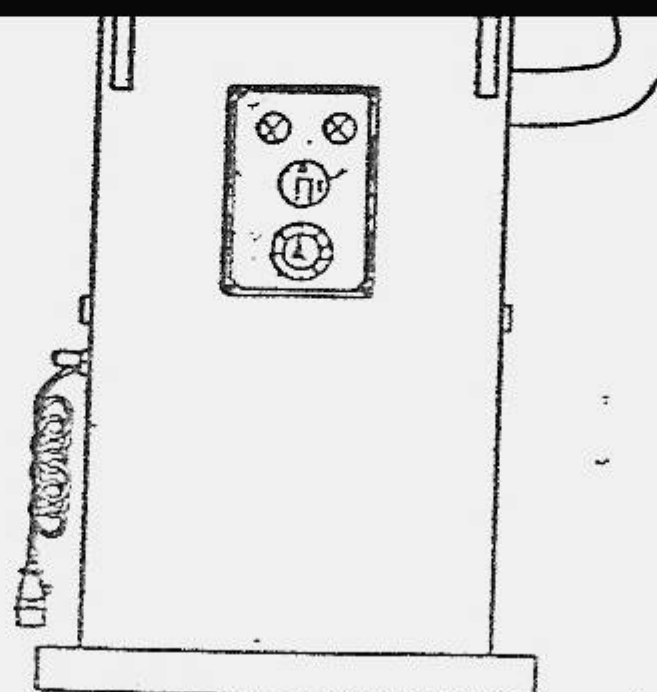
7.2 Positioning the material for processing.

The material for processing is placed on the pounding disc (when it is the bottom of the shoe which is to be processed) or on one of the 3 hammers (in case of striking of the leather).

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Material being processed
(shoe bottom)



8. USING MACHINE MOD. Z-9

8.1 Description of the working cycle : actions and consequences.

The working cycle is as follows :

- 1) Turn the MAIN SWITCH, located on the control panel on the front of the machine upright, to position 1.

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9. REPLACEMENT OPERATIONS.

9.1. Replacing the pounding disc.

The pounding disc should be replaced whenever its rings look worn.

ATTENTION :

The pounding disc rings and the relevant pins must never be replaced by the operator. Contact the manufacturer who will change them.

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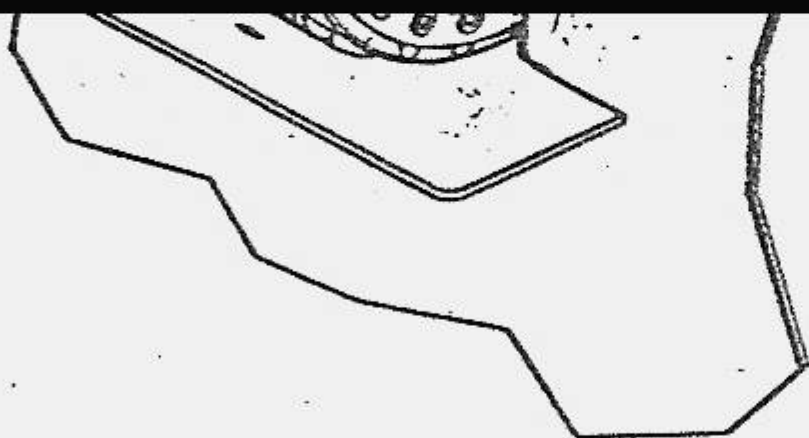


FIG.1

9.2 Replacing the long resistance.

The term "long resistance" describes the resistance situated in the central hammer. This resistance should be replaced whenever the central hammer fails to heat up.

ATTENTION :

Before replacing the long resistance, make sure that the central hammer has cooled down.

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9.3 Replacing the short resistances.

The term "short resistances" describes the resistances situated in the side hammers. The procedure for replacing a short resistance is the same for both side hammers. A short resistance should be replaced whenever the relevant side hammer fails to heat up.

ATTENTION :

Before replacing a short resistance, make sure that the relevant side hammer has cooled down.

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10. ACCESSORY DEVICES

10.1 Aphonic box for Mod. Z-9, Z-10 (PATENTED).

The Z-9 and Z-10 aphonic box is used to reduce the noise level - measured in the operator's working position which is the position in which maximum noise levels are recorded - from 95.8 dB to 89.1 dB.

The inside of the box is lined with soundproofing material and equipped with neon service lights for the operator.

The box is on the wheels, which makes it easier to mount it on the machine.

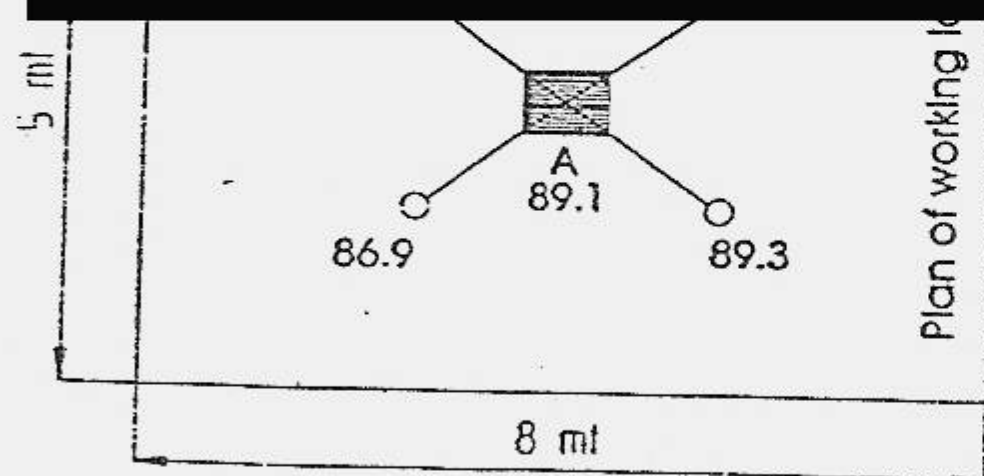
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As shown in the diagram, noise recording was carried out at a distance of one meter, measured diagonally outwards from the outer corners of the machine. Normal working conditions were reproduced, and noise levels were measured both with and without the box, and in the machine operator's working position.

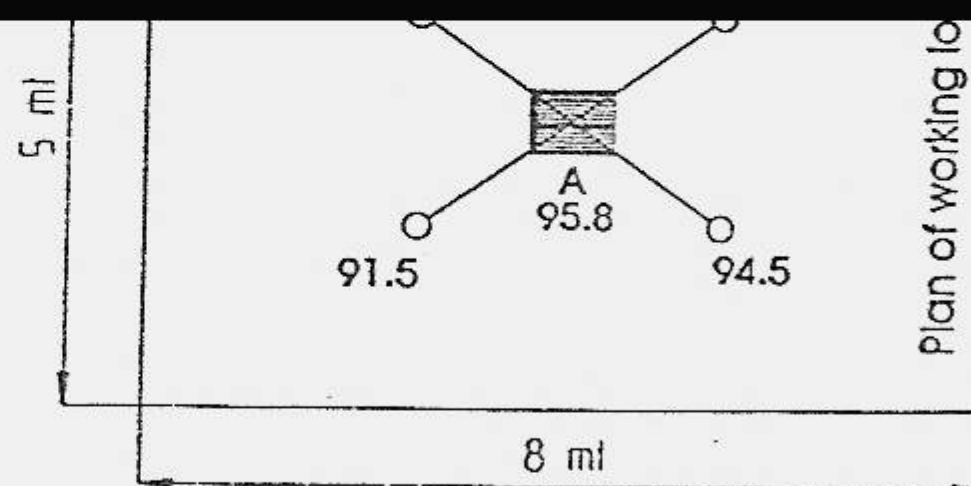
TABLE OF REFERENCE DATA

Pounding machine Z-9 equipped with noise-reduction booth

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A = operator's working position



A = operator's working position

11. MAINTENANCE AND REPAIR.

11.1 Maintenance.

Correct maintenance is important in order to have a longer working life and optimal performance from the machine and in order to guarantee the safety conditions laid down by the manufacturer.

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The maintenance operations listed below are those which require specialist knowledge and must, therefore, only be carried out by personnel specially trained by the manufacturer.

The user must never, for any reason whatsoever, do the following :

- replace or repair of any mechanical drive parts;
- replace electrical parts;
- open the electrical control panel or carry out operations on the wiring;
- replace the pounding disc rings;

11.3 Difficulties that may occur with the machine Mod. Z-9

1) Fault

The motor fails to start when the MAIN SWITCH is turned to position 1.

Remedy

Check the electrical mains and fuses.

Cause

Lack of power or faulty fuses.

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Cause

Faulty or worn bearings.

11.4 Parts subject to wear and replacement.

Listed below are all the parts subject to wear and replacement which you are advised to have in stock.

Quantity	Machine part	Life expectancy (in years)
22	pounding disc pins	1-2
44	7.5 mm ring	2-4
22	10 mm ring	2-4
22	11 mm ring	2-4
1	central hammer	3
1	upper side hammer	3
1	lower side hammer	3
1	1204 bearing	2-4
1	6305 bearing	2-4
2	2207 bearing	2-4
1	camshaft	3
1	hexagonal cam	3

Quantity	Machine part
1	short resistance 24 V 100W A.C.
1	long resistance 24V 100W A.C.
2	fuses 6 A
1	oil lubricator
1	socket head wrench 3
1	socket head wrench 4
1	socket head wrench 5
1	socket head wrench 6
1	socket head wrench 7
1	socket head wrench 8
1	wrench 17 - 19

12. DISMANTLING THE MACHINE MOD. Z-9.

Should it be necessary, for any reason, to put the machine out of service and dismantle it, always observe the following rules (designed to protect public health and the environment) :

- remove from the machine even the smallest traces of oil and grease; lubricants must not be disposed of in the environment. They should, rather, be reclaimed or treated by a company which specialises in the disposal of these products;
- sheaths, flexible tubes and plastic (or non-metallic) components must be dismantled and disposed of separately;
- provided they are in good condition, electrical components (switches, transformers, etc.) must be taken apart and reused, otherwise, if possible, they must be reconditioned and recycled;
- the machine frame and all the metallic parts of the machine must be taken apart and sorted according to material type. The various parts can then be demolished and melted down so that the material from which the machine was built can be recycled.

13. NOISE EMISSION OF MOD. Z-9

In order to limit the noise emitted by the Mod. Z-9, the manufacturer recommends use of the noise-reduction box Mod. Z-9, Z-10.

Whether or not the noise-reduction box is used, the use of a protective headset is compulsory.

14. MAIN INSTRUCTIONS AND WARNINGS.

- 1) The manufacturer has provided and fitted safety guards in order to ensure the safety of the operator while he is carrying out his duties.
When the machine is in operation, these protective guards must not be removed for any reason whatsoever.
- 2) Since it is not possible to mount devices in the pounding and striking areas of the machine to provide protection against eventual contact with the working area and against the high temperatures of the three hammers, the operator must pay full attention to what he is doing when operating the machine in the pounding and striking phases.
- 3) In order to stop the work cycle instantaneously at any time, press the red EMERGENCY button, located on the panel board on the front of the machine upright. This button cuts off the power supply to the motor and activates the pounding disc blocking device.
To restore normal working conditions, turn the red button in an anti-clockwise direction; the blocking device of the button will be released and it will return to its rest position.
- 4) The user is strictly forbidden to replace the original drive pulley with one which has a bigger diameter. The original drive pulley is of the correct size to grant optimal working of the machine and to reach a working speed which enables the operator to work in maximum safety.
- 5) The place where the machine is installed must - in order to reduce to the minimum the possibility of fatigue and to allow the operator to work in conditions of maximum safety - be one which presents optimal heat and humidity conditions for the well-being of the operator.
- 6) If the machine is placed on a pallet and shipped packed in a case or wooden crate, the packaged machine must be properly slung before being handled or moved.
- 7) In order to remove all risks of injury to staff during the movement of the suspended load, make sure that no one enters the area across which the crane or forklift truck is to travel.
- 8) It is advisable, especially if the machine is to be shipped by sea, in a case or crate, to place bags of hygroscopic salt in the crate/case; it is also advisable to protect the machine parts with protective anti-rust paint.

- 9) If a small crane is used to lift or move the machine, in order to ensure maximum safety, the diameter of the lifting ropes must be sufficient to carry the weight of the machine (+) plus the weight of the case/crate.
- 10) If the machine supply voltage and the mains voltage are not the same, it will be necessary to change the connections to the terminal board of the transformer and of the motor.
- 11) Adjustments and replacement operations must be carried out only after the machine has been stopped (MAIN SWITCH turned to position 0) and, if necessary, after the electrical supply cable plug has been removed from the mains socket.