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Kama Bandsaw AD 105S

110 Volt, Single Phase
2 ¼ HP Portable Benchtop Bandsaw
For Accurate Cuts Up to 4".



Instruction Manual:

- Introduction to the Manual
- General Precautions
- Equipment
- Machine
- Start-Up
- Caution
- Maintenance

KAMA
AD 105 S

1. Introduction to the Manual

- **The purpose** of this manual is to provide the necessary information for competent, safe use of the equipment.
- **This information** is the result of continuous, systematic data processing and technical tests recorded and validated by the manufacturer, in accordance with the internal procedures to ensure the safety and quality of information: EN 89/392, EN 60204-1, CEI 110-8, IEC 801, EN 202-2, EN 418, prEN 1050, prEN 614-1.
- **The information below** is intended EXCLUSIVELY for specialized users, capable of interacting with the product with the utmost safety for people, the machine and the environment, interpreting basic diagnostics of problems and malfunctions and performing simple checks and maintenance, in full compliance with the instructions given in the pages that follow and with current health and safety regulations.
- **The document** does not examine in depth the topics of disassembly and extraordinary maintenance, as these operations must always be carried out solely by our authorized Technical Service.
- **For a proper** relationship with the product, it is essential to ensure that the manual remains legible and well-preserved, for future reference. Should it deteriorate or, more simply, for further technical and operating information, contact the nearest Authorized Retailer directly.
- **Before using** the machine or opening its packaging, read the instructions in the following manual very carefully.
- **If the machine** is used by more than one operator, each one must adhere to the following manual very carefully.
- **The Manufacturer** declines any responsibility for damage to persons, things or to the machine itself arising from its incorrect use, negligence and superficial interpretations of safety concepts contained in this manual.
- **This instructions manual** should serve the duration of the machines operating “life” and be available for at least **10 (ten) years**: it is advisable to keep it in a known and accessible place (possibly together with the other manuals relating to the machine).

2. General Precautions

Always make sure in advance that the minimum safety, placement and operating standards are respected, taking note of the environmental conditions, temperature, humidity, lighting, vibrations, suspended dust and the appropriateness of the area to be occupied.

The saw may operate outdoors (work sites, open spaces in general, etc.) or indoors (workshops, laboratories, etc.) where there is no risk of explosion or fire.

Before using the equipment, make sure that the surface where the machine will be placed is flat, sufficiently sturdy and ergonomical: we recommend using a workbench for this reason.

Always make sure in advance that the workpiece is tightly clamped; in any case, make sure that the start of the production cycle does not create hazardous situations for people and/or property.

Do not remove or damage the information plates on the machine; you must recognize their meaning and keep the message legible. Should they deteriorate, replace immediately, contacting only an authorized Technical Service directly.

The use of spares that do not respond to the specifications listed below, changes or tampering - however slight- shall exempt the manufacturer from any responsibility regarding the proper use, functioning and safety of people and/or property.

It is strictly forbidden to tamper with safety equipment and/or devices.

Dispose of processing waste in compliance with current regulations.



Any maintenance operation except for those specifically described in the pages of this manual, must be carried out by skilled personnel co-ordinated directly by the authorized Technical Service.

3. Equipment

The stationary band saw is supplied ready to use, packed in a cardboard box and protected by a sheet of cardboard.



The packing material must be disposed of according to current environmental protection regulations.

The machine is supplied initially with:

- a band saw blade measuring 44 - 7/8" x .025 x 1/2" M2 (dual metal), 8-12 TPI.
- part holder.
- instruction manual.
- warranty certificate.

3.1 Warranty

The machine is guaranteed for six months following the date of purchase: the warranty is valid only if all of the instructions listed on the warranty certificate and in this manual are fully complied with.



When unpacking the machine make sure the machine is in perfect condition and that the package contains the parts described; the Manufacturer shall not be responsible for errors or missing parts following five days after shipment.

3.2 Note

- The band saw has been designed, manufactured and protected for bench use, where it is necessary to cut all types of metal parts having a maximum diameter or thickness of 4 1/8".
- Any other use is excluded by the Manufacturer, who shall be exempt from any liability for damage to people, animals, property or the machine itself caused by improper use.
- Do not run the machine without a piece to be cut for long periods.
- Do not cut "hardened" or "cemented" steel parts.

4. Machine

4.1 Identification

The essential information for identifying the machine is found on the plates located outside the product. This essentially includes:

- A) Manufacturer
- B) Serial number
- C) Model
- D) Year of Manufacture
- E) Voltage (V)
- F) Power (kW)
- G) Hertz (Hz)
- H) Amperes (A)
- I) Weight (kg)

The EC approval plate is located as shown in fig 2 ref. A.



It is strictly forbidden to remove or damage the plates; should this occur, always contact an authorized Technical Service only.

For any information and/or technical explanations regarding the machine, always indicate:

- model
- serial number
- edition and preparation date of the instruction manual

4.2 Description

Portable band saw consisting of a fixed bench pivoting head with screw lock for angle sawing, speed regulator, work clamp and operator tool.

The machine may be used for dry cutting (from 0° to 45° left) of materials compatible with the specifications listed below, in full respect of the environmental conditions and limitations recommended by the manufacture and current health and safety regulations.



The description includes the use for which the product has been designed built and protected; any other use or failure to comply with the technical parameters listed below may constitute a hazard to people and/or property.

4.3 Components (Refer to fig. 2)

- 1 Base
- 2 Safety / Shipment
- 3 Vise Crank
- 4 Vise
- 5 Machine Body
- 6 Blade Tension Lever
- 7 Grip
- 8 On / Off Switch
- 9 Cutting Speed Regulator
- 10 Blade Guide Lock Lever
- 11 Blade Guide
- 12 Band Saw Blade
- 13 Electric Motor
- 14 90° Rotation Unit
- 15 Power Cord
- 16 Cutting Depth Clamp

4.4 Technical Figures

DESCRIPTION

Dimensions (L x W x H)	22" x 15" x 15"
Belt Saw	44 - 7/8" x .025 x 1/2"
Single phase Electric Motor	1800 W - 110 V - 5 A - 60 Hz
Insulating Class	2
Cutting Depth	4 1/8"
Speed (continuous)	60 / 330 ft/min
Weight	42 Lbs

Cutting Capacity:

90°		4"		4" x 4 1/4"
45°		2 1/4"		2 1/4" x 2 1/2"

4.5 Technical Specifications

- Blade drive pulleys: on bearings.
- Transmission: treated, tempered steel gears.
- Switch with safety device.
- Steel clamp.
- Automatic blade stretcher.
- Cutting capacity: profiled material.

4.6 Lifting and Moving

The saw may be lifted, carried and moved by hand in compliance with the instructions below:

- fasten the blade arm in its end position using the mechanical lock provided (fig. 2 ref. 2);
- make sure it is properly fastened and grasp the center of the arm (fig. 2B), lifting carefully.



The machine must be lifted and carried only when free of materials, always disconnected from all power sources. In any case, always comply with current health and safety regulations.

5. Start-Up

5.1 Preliminary Steps



It is essential to determine size measurements and placement in advance in order to ensure safe placement, running, emergency actions within the surrounding environment. These conditions should be respected beginning with the preliminary stages, before cutting.

- Rest the machine on a bench of adequate size and sturdiness (four threaded holes are provided under the base so that the machine may be fastened securely in place).
- Move the safety lever down (2).
- Pivot the machine using the grip; it should stay in the raised position. If this is not the case, slightly tighten the screw (17) that works directly on the clutch inside the swivel and lifting unit.
- Make sure the machine is aligned with the graded scale (18) according to the chosen cutting angle.
- Make sure that the nut (19) is tight.



Before plugging the machine in, make sure that the line voltage corresponds to the voltage indicated on the machine.

- Mount the depth stop (20), tightening by means of the set screw (21).
- Loosen the knob (22).
- Slide the rod (23) to determine the desired cutting length.
- Tighten the knob (22) securely.
- Set the cutting speed using the regulator (9); set the blade speed based on the material to be cut.

5.2 Cutting Speed (FPM)

(Dial Speed is measured in Meter per Minute)

	FPM	MPM
Stainless Steel:	65-163	20-50
Copper, Aluminum and its Alloys:	163-260	50-79
Steel, etc.:	260-357	79-109

Clamp the piece to be cut in the vise securely.

5.3 Adjusting the Blade Guide (fig.3)

- Loosen the lever (24).
- Slide the blade guide (25) which also acts as a protection until the saw (26) is as covered as possible, based on the size of the part to be cut.

5.4 Operator Position

- The placement of the machine in relation to the operator position must make it possible to observe the results of the operation and maintain safety conditions.
- During this stage, make sure the start button (8) and speed regulator (9) are easily accessible, and that there is sufficient visibility and lighting on the tool, the surrounding area and base.



It is strictly forbidden to place and/or use the saw when environmental conditions constitute a hazard of explosion or fire. It is forbidden to use the machine for any purpose other than that intended by the manufacturer. Make sure that operation of the saw does not create hazardous situations for people and/or property. Should you encounter a malfunction, stop the machine immediately and check the reason for and/or extent of the breakdown. Contact the authorized Technical Service if necessary to exceed the cutting capacity stated by the manufacturer.

5.5 Starting

Release the safety switch by turning the lock (orange) down (8) then press and begin cutting using even pressure.

6. Caution

The first time it is started, the machine will be fairly noisy, due to the normal breaking-in stage of the transmission gears. This noise will disappear after approximately 8 machine hours; in any case, the measurable noise level is equal to and not greater than 78 dbA.

IT IS ABSOLUTELY FORBIDDEN:

- **to lubricate the blade (saw) before/during/after cutting;**
- **work without the blade guide installed and positioned properly;**
- **work without the rear guard;**
- **hold the piece to be cut by hand.**

THE MANUFACTURER SHALL NOT BE HELD LIABLE:

For damage of any type or entity caused by irrational use of the machine, failure to observe the safety rules indicated in this manual or tampering with the machine, however slight. These actions will also invalidate all warranty coverage.

7. Maintenance

7.1 Replacing the saw



It is essential to wear protective gloves when changing the blade.

- Remove the corner plate (27) from the sliding blade guide. (fig. 4)
- Remove the protective guard (28). (fig. 5)
- Turn the lever (29) towards the position “-”.
- Remove the blade (30). (fig. 6)
- Insert the new blade, taking care to observe the cutting direction and placing it between the blade guide rollers, then between the rubber pulleys (31).
- Turn the lever (29) towards the position “+”.
- When the lever (29) reaches the end of its stroke, the blade will automatically position itself for cutting when the motor begins to turn.
- Replace the guard (28) and the plate (27) of the sliding blade guide.



During the first 4-6 cuts (after replacing the blade) use light pressure, to increase the duration and effectiveness of the blade thereafter.

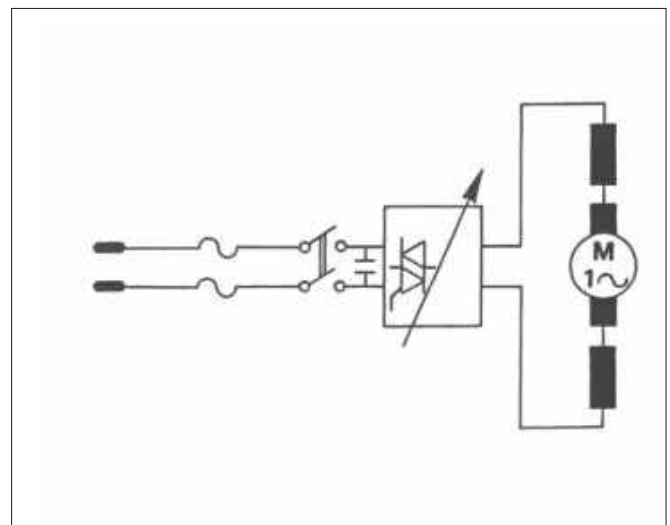
7.2 After Each Working Shift

Carefully clean all parts of the machine, to remove shavings and cutting residue.

7.3 Periodically

- Check the length of the electric motor brushes and make sure they are efficient: if they are less than 6 mm long, they must be replaced with other identical ones.
- The gear transmission requires no maintenance since it runs on LONG LIFE lubricants.

8. Wiring Diagram



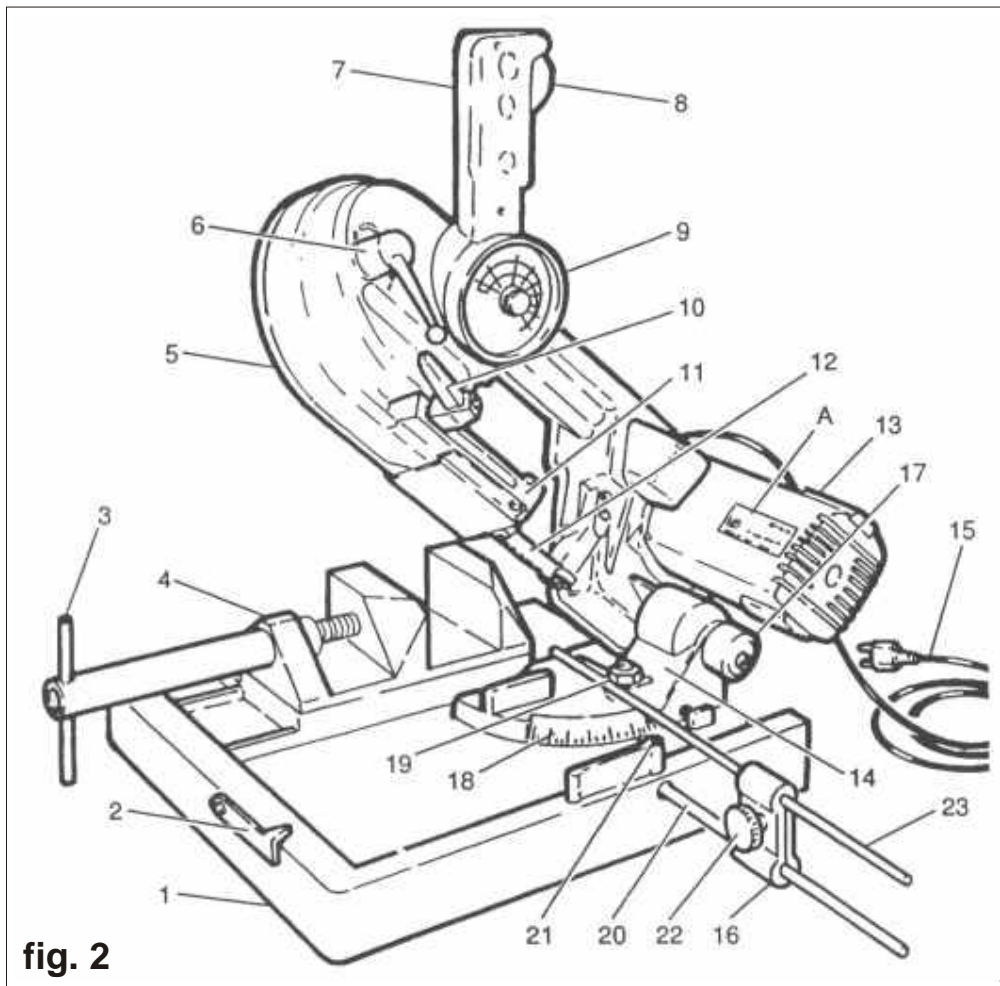


fig. 2

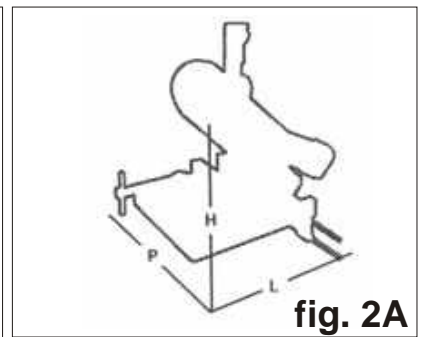


fig. 2A

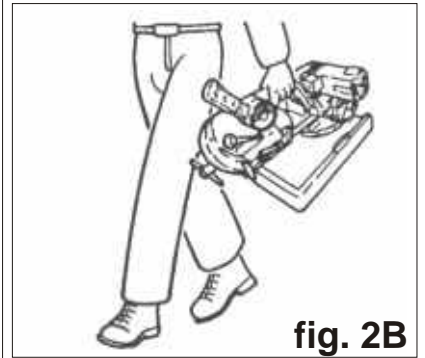


fig. 2B

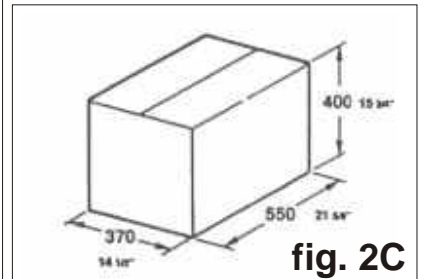


fig. 2C

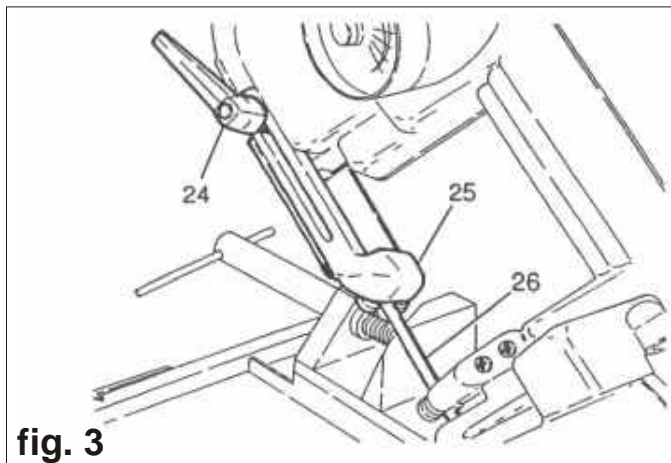


fig. 3

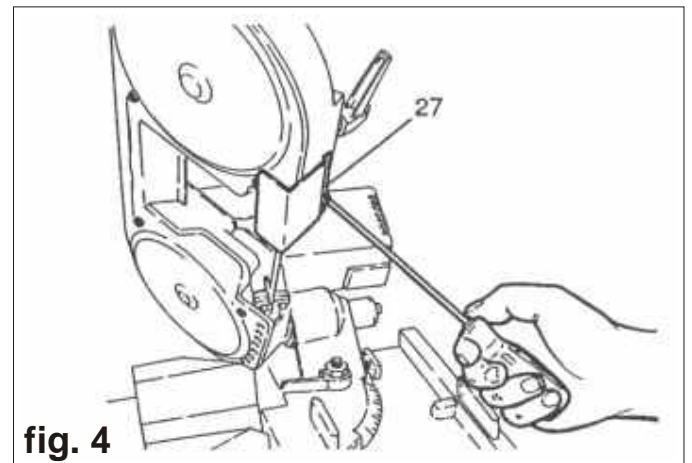


fig. 4

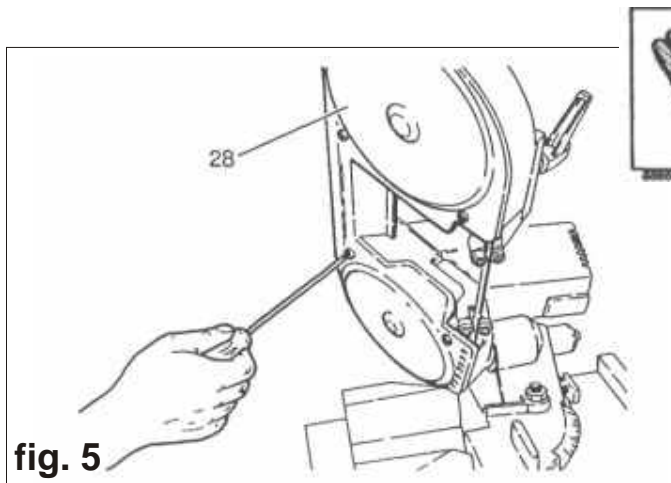


fig. 5

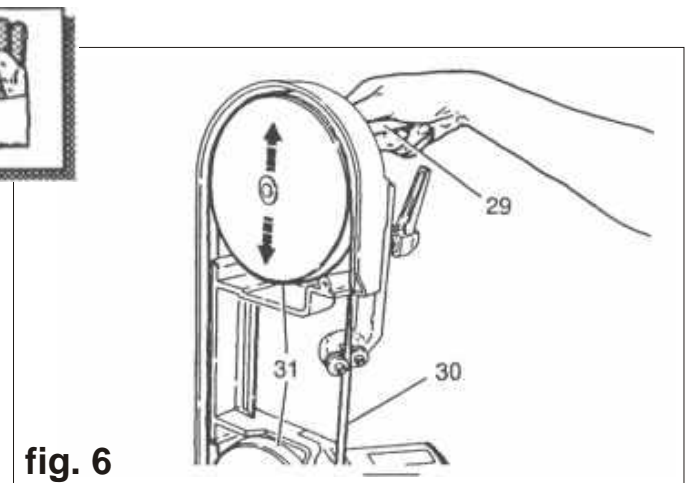
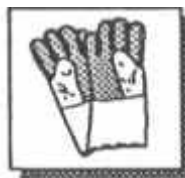


fig. 6

KAMIA

AD 105 S



KAMA AD 105S BANDSAW

PURCHASED ON: _____

PURCHASED FROM: _____

NOTES:



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