

WARRANTY CARD

1. KH Trading machines and tools are covered by 6/24 months warranty, starting on the date of purchase, as described in the Civil Code (proof of purchase or invoice receipt must be enclosed with the warranty card when making a claim).
2. This warranty does not cover defects caused by unprofessional handling, machine overloads, not complying with instructions contained in this manual, using accessories that are not approved, unauthorized repair, regular wear and tear and damages occurred during transport. Further, this warranty does not cover parts and accessories such as the motor, carbon brushes, seals and hot-air operated parts and parts that need to be changed regularly.
3. If the repair is to be found as not covered by the warranty policy, all costs including the repair and shipping to and from the repair centre will be paid by the customer, according to valid price list. See www.
4. When making a claim, you must present the warranty card, showing the date of the purchase, the serial number of the machine, vendor stamp and signature of sales clerk, as well as the proof of purchase receipt.
5. Warranty claim shall be made at the vendor shop where you bought your machine or you may mail it to a service centre. The vendor is obligated to fill out the warranty card (date of sale, serial number, vendor stamp and signature). All these information must be filled in at the time of sale.
6. The warranty period will be extended for the period of time for which the machine has been in the service centre possession. If the repair or defect is not covered by the warranty policy, all costs including the repair and shipping will be paid by the owner of the machine / tool. We recommend sending the machine in its original packaging. Please, also enclose brief description of the defect with the packaging.
7. Before sending the machine for repair, clean it thoroughly. If the received machine is dirty, it may be rejected by the service shop or you may be charged a cleaning fee.

SERVICE

Logistic centre Klecany

Topolová 483

250 67 Klecany

Czech Republic

Claim department phone number: 266 190 156

266 190 111

Fax:

260 190 100

T-mobile: 603 414 975

O2: 601 218 255

Vodafone: 608 227 255

<http://www.KHnet.cz>

Email: servis@KHnet.cz

Product: PLANE KNIFE SHARPENING MACHINE MF206	
Type: PKS100	Serial number (product series):
Date of manufacture:	Repair centre notes:
Date of sale, stamp, signature:	

Without the correctly filled warranty card or without proof of purchase receipt, including the product type (invoice, purchase receipt) no warranty claim will be processed.

uni-max

USER'S MANUAL

PLANE KNIFE SHARPENING MACHINE MF206



PKS100

Dear customer. Thank you for purchasing power hand saw from KH Trading, s.r.o.
Our company is ready to offer you our services - before, during and after you buy our product.
If you have any question, comment or idea, please contact our business centre. We will do our best to address your comment or question in timely matter.

Before first use, please read this manual carefully. It is your responsibility to study all instructions, necessary for safe use and operation and to understand all risks that may be involved during the use of power machines.

WARNING! Do not try to use this machine before reading this entire manual and before you know how to handle it. Keep this manual for future reference.
Pay special attention to safety instructions. Not complying with safety rules may cause injury to the operating person or to people standing by or it may cause damage to the machine or to the work piece. Pay special attention to safety notes and safety labels on the machine.
Never remove or damage them.

Please, write information such as the invoice number and the number of the sale receipt here in this box.

DESCRIPTION

Machine description

This machine may be used for straight, plane knife sharpening or for sharpening of similar cutting knives or tools used for wood working. Machine is very efficient and operation is easy and comfortable. Movement of the knife during sharpening process must be done manually.
This machine is specially important for companies that work or process wood.

Number of persons required to operate this machine: 1

TECHNICAL SPECIFICATIONS

Voltage	~ 230V
Frequency	.50 Hz
Electric motor power output	.500 W
Grinding wheel speed /rpm	.2,800 min. ⁻¹
Grinding wheel dimensions (D, d, W)	.100 × 20 × 50 mm
Maximum length of plane knife	.630 mm
Maximum knife thickness	.7 mm
Guide angle	.0° - 55°
Cutting angle	.35° - 90°
Total machine dimensions	.870 × 450 × 1,200 mm
Packaging	.950 × 570 × 700 mm
Gross weight	.75 kg
Net weight	.65 kg

The accuracy of instructions, graphs and information contained herein, depends on the printing date. Due to continuous product improvement, the manufacturer reserves the right to change technical parameters of the product, without prior customer notification.

REPAIR AND MAINTENANCE REPORT









Report and maintenance report:

DATE	REPAIR AND MAINTENANCE REPORT	SERVICE SHOP

SAFETY PRECAUTIONS







- **This device may be used by a qualified person, 18 years or older who has been trained in work and environmental safety procedures.**
- **Any person using this equipment must possess a medical certificate demonstrating his eligibility to operate this equipment.**
- **"Prevent most common injuries" - GRINDING MACHINES**
- **"Prevent injuries" - METAL TURNING MACHINES.**

Safety symbols and self-adhesive safety stickers:

	Do not use water or foaming fire extinguishers		Caution. Electrical equipment
	Do not touch		Caution! Danger of being caught by machine moving parts
	Do not use in humid environment		Read manual before use
	Use eye protection		Danger of having fingers cut

Place the self-adhesive stickers on appropriate and visible spots on your machine.

Symbols used in this manual

-  **Warning!**
This symbol informs you about the risk of personal injury or damage to the machine or materials.
-  **Caution! You are using electrically powered machine!**
Risk of injuries by electrical current.
-  **Risk of being caught by moving machine parts!**
Beware of moving machine parts. Loose clothing or body parts may get caught by moving machine parts.
-  **Warning!**
Danger of damage.
-  **Note:**
Additional information.
-  **Use personal protective gear.**



General instructions

- Make sure you know how to control your tool or machine and that you are familiar with its operating procedure. Know the hazards that may occur, if not used correctly.
- If other person is using this machine make sure that he knows how to safely operate this equipment and that he is familiar with hazards and risk that may occur, if not used correctly.
- Pay special attention to safety notes and safety labels on the machine. Do not remove or damage them. If the warning label becomes unreadable, please contact your vendor.
- Dirty and disorganized workplace may cause accidents.
- Never work in poorly lit, narrow or too crowded rooms. Always keep stable posture.
- Maintain your tools clean and in safe working conditions.
- Handles must be kept free of grease and dirt.
- Make sure no children, unauthorized persons or animals have access to your workshop.
- Use only for purposes for which it has been designed.
- Use personal protective gear such as safety goggles, ear protection, respirator, safe working shoes etc.
- Do not overreach, use both hands.
- Never work under the influence of alcohol or other drugs.
- Do not use the machine/tool if you feel dizzy or weak.
- Any modifications or improvements to the machine are strictly prohibited. **DO NOT USE** if you discover bent part, crack or other damage.
- Never perform any maintenance during operation.
- If you see any unusual sign or hear any strange sound, switch off the machine immediately.
- Do not forget to remove all wrenches and screwdrivers from the machine after use.
- Before use, make sure all screws are tightened securely.
- Perform maintenance regularly. Before use make sure the machine is in good working conditions and without any damage.
- Use only original spare parts during repairs.
- Using extension pieces or accessories not approved by the manufacturer may cause injuries to the operating personnel.
- Use suitable tool for particular type of work. Do not overload tools, accessories or the machine. For large work volume use more powerful machine.
- Do not overload your device. Measure the work load in such way, so it could be done with comfortable speed. Damages due to machine overload are not covered by the warranty policy.
- Do not expose to extremely high temperature or direct sunlight.
- This machine is not designed for use in humid environments or under water.
- If you are not using your machine, store it in a dry and safe place, out of reach of children.
- Before use make sure that all safety elements work correctly and efficiently. Make sure all moving parts are in good working conditions.
- Before use make sure that no part is cracked or stuck, Make sure all parts are attached and assembled as designed. Beware of all other conditions that may have a negative effect on the proper functioning of your machine.
- If not stated otherwise in this manual, all damaged parts and safety elements must be repaired or changed.



Assembly

- Do not use the machine unless completely assembled.



Electrical equipment

- Observe all basic safety rules when using electrical equipment to prevent risk of fire, injuries by electrical shock and other hazards. Before using this device, read this manual entirely and follow all safety instructions.

REVISION REPORT

The user is obligated to perform tests and revisions of electrical equipment of the machine in accordance with valid rules and regulations. Result report:

DATE	REVISION REPORT	REVISION TECHNICIAN Number / SIGNATURE

- Make sure your machine is properly grounded.
- Make sure the power cable plug is plugged into the correct wall outlet. The voltage in the wall outlet must be the same as shown on the specification label to prevent damage to the electric motor. Too low voltage will not provide your machine with enough power.
- Before connecting the machine to the wall outlet make sure that the main switch is in the "OFF" position. When you finished your work, disconnect the power plug from the wall outlet and switch off the main switch.
- When disconnecting the plug from the wall outlet, never pull the cable by its cord.
- Protect the power cable from high temperatures, oils, paint thinners and make sure that the cable is not hanging over sharp edges.
- Inspect the power cable regularly. If damaged have it replaced by qualified technician. Inspect extension cables regularly. If damaged, have it replaced.
- If you need to use an extension cable, use cable with appropriate power rating. Use only completely unwound. Inspect extension cables regularly. Damaged cable must be repaired or changed immediately.
- Before performing any maintenance, repair or adjustment, switch off the main switch and disconnect the power cable from the wall outlet.
- Make sure no one may switch you machine incidentally on. Do not keep your fingers close to the main switch, unless absolutely necessary.
- If you mount your machine to the work table, release the safety button after installation.
- Do not use in environments where explosives are stored or used (paint shops, warehouse with flammables etc.).
- Do not use in humid environments or if wet.



Rotary tools

- Always wear suitable work clothing (do not wear loose clothing, ties, jewellery etc.). Long hair must be covered and tied up behind you head. Do not wear worn out working shoes. Sleeves must be rolled up. There is danger of being caught by moving machine parts.
- Do not remove safety covers. Make sure the operating personnel is well-protected.
- Do not touch or come close with the moving machine parts during work. Keep your hands away from moving and spinning machine parts.



Metal turning operations

- Always securely fasten the work piece on the work table using appropriate clamping equipment or vise. Do not hold the work piece in your hands during work. Use both hands to hold the handles of the machine/tool.
- Do not overreach. Maintain stable posture on both legs. That way you will not be thrown out of balance in case of a reverse impact.
- Keep your tools clean and sharp.
- When changing tools or during maintenance, follow safety instructions.
- To feed or move the work piece use appropriate extension tool.
- Make sure the work piece complies with required technical parameters and that is securely fastened.
- Use extra caution when releasing the work piece from the fastening device.



Grinding operations

- Move the work piece slowly and against the turning rotation of the grinding wheel. Make sure the grinding wheel is not stressed too much. Otherwise the wheel may get damaged or may break into pieces.

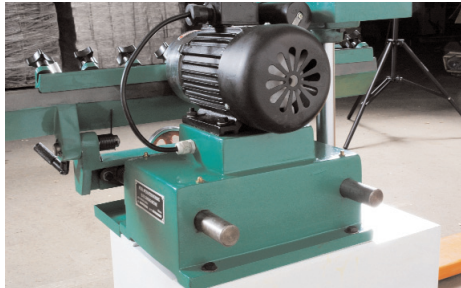


Power equipment

- If your machine is equipped with depressed springs, use suitable device to release them slowly and safely.

ASSEMBLY

- Before throwing the packaging material out, make sure no part is left inside. If so, take it out and install it. Use the part listing for check-up and the installation drawing for guidance.
- After opening the shipping box, inspect the engine, all machine parts and spare parts. If you discover any problem or missing part, contact your vendor immediately.
- All moving parts of your machine have been treated with conservation oil before shipment from the factory. Clean these parts and lubricate them before use.
- Clean the conservation oil out of the guiding groove and spray some lubricant inside. Treat all moving parts the same way.
- Remove the conservation oil from threading and screws.
- Use pressurized grease gun to lubricate 4 spherical grease caps on the upper side of the box. Before refilling, clean the grease caps with cloth.
- Move the guiding table from one end position to the other end position. Use the cross feed control wheel to do so.
- Repeat the procedure described in the two previous steps to ensure good lubrication of all guiding screws.
- Install the electrical engine.



- Connect the electrical machine system. Make sure to ground the machine properly. The grounding point is located at the bottom of the picture. Make sure that the electrical connection complies with all machining standards and rules and that is done by qualified electrician.
- Install the grinding wheel and tighten the fastening nut accordingly. Do not tighten too much. You may break the grinding wheel.



- Install the grinding wheel protective cover. It is prohibited to use your machine without the cover.
- Mount the cooling fluid tank.
- Make sure your machine is securely fastened to the floor. Use the anchoring bolts to fix your machine securely in place. It is prohibited to use your machine if not properly secured to the floor.



DISPOSAL

When the operational life of your device is over, dispose off it in accordance with valid rules and regulations. Your product is made of metal and plastic parts that may be recycled when separated.

1. Disassemble all parts.
2. Separate all parts according to the material they are made of (e.g. metals, rubber, plastics, etc.). Take the separated parts to the recycling facility near you.
3. Electrical waste (used electrical power tools, electric motors, recharging equipment, electronics, accumulators, batteries etc.).

Dear customer. In accordance with the valid regional rules and regulations describing the management of electrical waste, electrical waste is considered dangerous.

Disposal of electrical waste must be therefore handled as dangerous waste in accordance with waste management rules valid in the state you are in.

It is prohibited to mix electrical waste with regular household waste.

You may return your used electrical appliance to a recycling facility near you. More information about electrical and dangerous waste disposal may be obtained from your local authority or from the Internet.

CAUTION

If the machine breaks down, send it back to the vendor for quick repair.

Please, enclose brief description of the defect. That makes repair easier. If the machine is still covered by warranty, enclose the warranty card and proof of purchase receipt. After the warranty period expires, we repair your machine for a special price.

To prevent possible damages during shipping, packed the machine carefully or use the original packaging material. We are not liable for shipping damages due to incorrect packaging of your machine. If making a claim at the shipping company the level and method of packaging plays a major role during claim evaluation process.

Note: Pictures and contents in this manual may slightly differ from the actual product or accessories. It is due to continuous improvement of our products. Such small differences have no effect on the product functionality.

MAINTENANCE

- Keep your machine/tools clean. Dirt may enter the inner mechanism of your machine and cause damage.
- Do not use aggressive cleaning solution or paint thinners to clean the machine.
- Clean plastic parts with cloth dipped in soap water.
- Clean and lubricate metal surfaces with a cloth dipped in paraffin oil.
- If you are not using your machine, conserve it with grease and store it in dry place to prevent corrosion.

After work:

- Drain the cooling fluid from the cooling fluid tank.
- Hold the reflexive handles and remove the sliding ledge. Clean and dry both sliding guides and lubricate them with oil.
- Place the sliding ledge on its guide and slide it along its entire length to evenly lubricate the entire guide.
- Clean all other areas of your machine with dry cloth.
- Use pressurized grease pistol to lubricate 4 spherical grease caps and then turn the cross feed control wheel to the maximum to lubricate and protect all screws.
- If you are not using your machine long time, lubricate it with anti-corrosion oil.
- Lubricate all turning, sliding and moving parts with grease.

In accordance with the applicable law, the grinding wheel is considered as expandable material and is not covered by the warranty policy.

Detailed description of the use of this device is not included in this manual, because the manufacturer / distributor assumes that the user is experienced in similar type of work. Also according to the applicable law, this device is considered as a commonly sold and used tool. If the user is unfamiliar with the use of this device, we recommend finding out more information about using this device at the Department of work safety.

Lubrication

Lubricate working surfaces with suitable grease regularly.

Pressure grease cap must be lubricated or refilled with pressurized grease gun.

Spilled grease or oil must be cleaned with dry cloth.

OPERATION

- Before connecting your machine to the power plug make sure that all safety precautions have been taken.
- Before work, switch your machine on to test if all works as designed.

Using your machine:

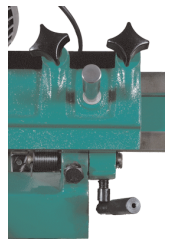
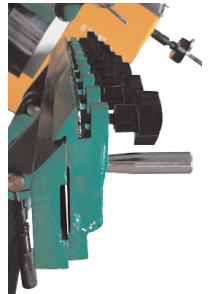
- By turning the red wheel, move the table to a safe distance from the grinding wheel.

- Clean the fastening groove in the table so the plane knife fits perfectly along its entire length.
- Place the plane knife inside the groove. Make sure the knife is in the middle of the groove. Put the fastening ledge on the knife and fasten it by tightening all 10 screws with plastic heads. Screws must not touch directly the surface of the plane knife. The knife must be placed in the middle of the groove. Placing the knife more towards one side may cause uneven wear of the guiding system.

The guide does not have stoppers on either side.

- Tighten the screws from the middle and continue towards each side.
- Sharpen one knife only at a time.
- Set the angle of the sharpening by setting the two screws with turn handles.
- Use the cross feed control wheel to move the table as close as possible to the grinding wheel but do not touch the wheel.

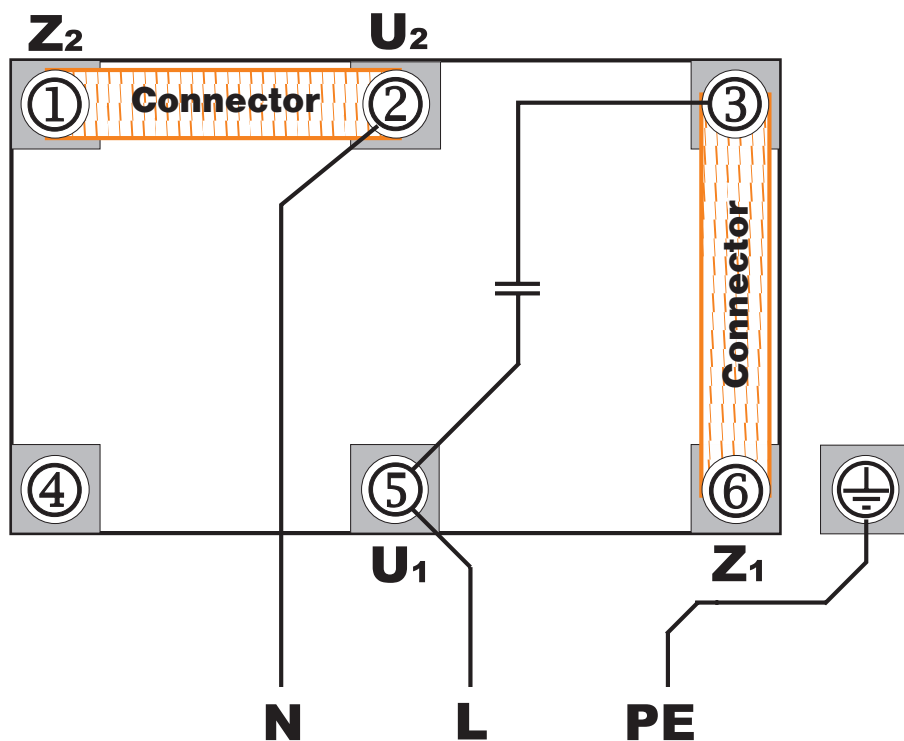
- Pull the reflexive handles to move the table to its side position.
- Fill the cooling tank with cooling fluid, open the valve and set the nozzle so the fluid is dripping steadily on the knife cutting edge. That way you eliminate sparks from flying away and the knife will not overheat.



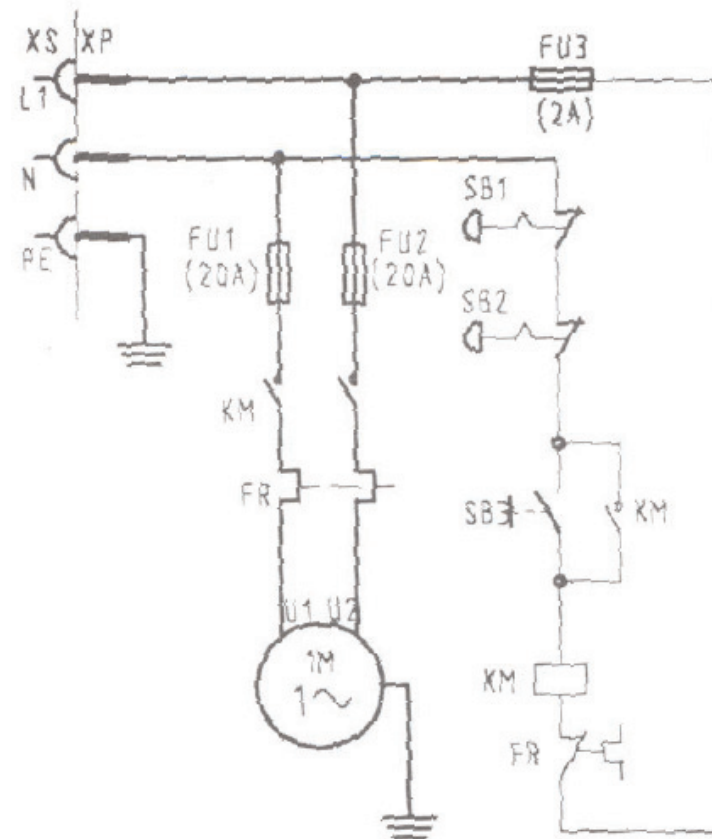
- Switch the motor on by pressing the switch on the side of your machine.
- Then turn the cross feed wheel about 0.1 mm (that is the thickness that will be grinded out. Pay special attention to this value).
- Hold the reflexive handles and slowly move the table along its entire length of the plane knife edge. Be careful not to hit the grinding wheel with too big strength. You may damage the grinding wheel.
- After you have made the first cut, close the cooling fluid, remove the plane knife and inspect the knife edge for quality and angle.
- If you need to make any adjustment (e.g. change the angle), use the setting and fastening screws to do so.
- To perform another cut, follow the step described earlier. Do not use more than 0.1 mm of cross feed at a time.
- Sharpen only one knife at a time.
- Always use the cooling fluid.
- When you finish sharpening, remove the plane knife and fine-finish it with fine grinding stone.
- To protect the plane knife from damages, remove drops of cooling fluid from it.

ELECTRICAL DIAGRAM

Motor terminal connection



Electrical diagram



No.	Code	Name and specification	Number of pieces	Notes
1	FU1, FU2	Fuse RT18 - 32 (20 A)	1	Use 10 A fuse for three-phase engine
2	FU3	Fuse RT18 - 32 (2 A)	1	
3	KM	Contactor relay LC101810M5-N	1	
4	FR	Thermal relay LR2-D1321	1	LR2-D1310, for three-phase engine
5	SB1	Emergency switch MK/AE-22	1	
6	SB2	Emergency switch LAY3-01ZS/40	1	Red
7	SB3	Switch LAY3-10	1	Green
8	XS	Plug HT-015 16 A 250 V	1	3P+N+E, for three-phase engine
9	XP	Plug HT-215 16 A 380 V	1	3P+N+E, for three-phase engine