INSTRUCTION MANUAL

Planer KP312 KP312S







DOUBLE INSULATION Read before use.

SPECIFICATIONS

Model	KP312	KP312S
Planing width	312 mm	
Planing depth	0 - 3.5 mm	
No load speed (min ⁻¹)	12,000	
Overall length	551 mm	
Net weight	18.4 kg	
Safety class	 /	

 Due to our continuing program of research and development, the specifications herein are subject to change without notice.

- Specifications may differ from country to country.
- Weight according to EPTA-Procedure 01/2014

Symbols

The followings show the symbols used for the equipment. Be sure that you understand their meaning before use.

\$	Read instruction manual.
	DOUBLE INSULATION
Ŕ	Only for EU countries Do not dispose of electric equipment together with household waste material! In observance of the European Directive, on Waste Electric and Electronic Equipment and its implementation in accordance with national law, electric equipment that have reached the end of their life must be col- lected separately and returned to an envi- ronmentally compatible recycling facility.

Intended use

The tool is intended for planing wood.

Power supply

The tool should be connected only to a power supply of the same voltage as indicated on the nameplate, and can only be operated on single-phase AC supply. They are double-insulated and can, therefore, also be used from sockets without earth wire.

Noise

The typical A-weighted noise level determined according to EN62841-2-14: Sound pressure level (L_{pA}) : 91 dB(A) Sound power level (L_{WA}) : 99 dB (A)

Uncertainty (K) : 3 dB(A)

NOTE: The declared noise emission value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

NOTE: The declared noise emission value(s) may also be used in a preliminary assessment of exposure.

AWARNING: Wear ear protection.

AWARNING: The noise emission during actual use of the power tool can differ from the declared value(s) depending on the ways in which the tool is used especially what kind of workpiece is processed.

AWARNING: Be sure to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

Vibration

The vibration total value (tri-axial vector sum) determined according to EN62841-2-14: Work mode: planing softwood Vibration emission (a_h): 2.5 m/s² Uncertainty (K): 1.5 m/s²

NOTE: The declared vibration total value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.

NOTE: The declared vibration total value(s) may also be used in a preliminary assessment of exposure.

AWARNING: The vibration emission during actual use of the power tool can differ from the declared value(s) depending on the ways in which the tool is used especially what kind of workpiece is processed.

AWARNING: Be sure to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

Declarations of Conformity

For European countries only

The Declarations of conformity are included in Annex A to this instruction manual.

General power tool safety warnings

AWARNING: Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Work area safety

- 1. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- 2. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- 3. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Electrical Safety

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- 3. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- 4. Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.
- 7. Use of power supply via an RCD with a rated residual current of 30 mA or less is always recommended.
- Power tools can produce electromagnetic fields (EMF) that are not harmful to the user. However, users of pacemakers and other similar medical devices should contact the maker of their device and/or doctor for advice before operating this power tool.
- 9. Do not touch the power plug with wet hands.
- 10. If the cord is damaged, have it replaced by the manufacturer or his agent in order to avoid a safety hazard.

Personal Safety

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection. Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- 4. Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.
- Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.
- 9. Always wear protective goggles to protect your eyes from injury when using power tools. The goggles must comply with ANSI Z87.1 in the USA, EN 166 in Europe, or AS/NZS 1336 in Australia/New Zealand. In Australia/New Zealand, it is legally required to wear a face shield to protect your face, too.



It is an employer's responsibility to enforce the use of appropriate safety protective equipments by the tool operators and by other persons in the immediate working area.

Power tool use and care

- Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- 7. Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.
- When using the tool, do not wear cloth work gloves which may be entangled. The entanglement of cloth work gloves in the moving parts may result in personal injury.

Service

- Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.
- 2. Follow instruction for lubricating and changing accessories.

Planer Safety Warnings

- 1. Wait for the cutter to stop before setting the tool down. An exposed rotating cutter may engage the surface leading to possible loss of control and serious injury.
- Hold the power tool by insulated gripping surfaces, because the cutter may contact its own cord. Cutting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

- Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the workpiece by your hand or against the body leaves it unstable and may lead to loss of control.
- 4. Rags, cloth, cord, string and the like should never be left around the work area.
- 5. Avoid cutting nails. Inspect for and remove all nails from the workpiece before operation.
- 6. Use only sharp blades. Handle the blades very carefully.
- 7. Be sure the blade installation bolts are securely tightened before operation.
- 8. Hold the tool firmly with both hands.
- 9. Keep hands away from rotating parts.
- 10. Before using the tool on an actual workpiece, let it run for a while. Watch for vibration or wobbling that could indicate poor installation or a poorly balanced blade.
- 11. Make sure the blade is not contacting the workpiece before the switch is turned on.
- 12. Wait until the blade attains full speed before cutting.
- 13. Always switch off and wait for the blades to come to a complete stop before any adjusting.
- 14. Never stick your finger into the chip chute. Chute may jam when cutting damp wood. Clean out chips with a stick.
- 15. Do not leave the tool running. Operate the tool only when hand-held.
- 16. Always change both blades or covers on the drum, otherwise the resulting imbalance will cause vibration and shorten tool life.
- 17. Use only Makita blades specified in this manual.
- 18. Always use the correct dust mask/respirator for the material and application you are working with.

SAVE THESE INSTRUCTIONS.

AWARNING: DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to safety rules for the subject product.

MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

FUNCTIONAL DESCRIPTION

ACAUTION:

 Always be sure that the tool is switched off and unplugged before adjusting or checking function on the tool.

Adjusting depth of cut



• 1. Knob 2. Scale plate

The depth of cut can be adjusted within a range of 0 -3.5 mm. Turn the knob on the front of the tool until the pointer is aligned with the desired cutting depth on the scale. Set the depth of a cut observing the maximum depth which is limited by width according to the following table.

Corelation of width of cut and maximun depth of cut

Width of cut	Maximum depth of cut	
0 - 150 mm	3.5 mm	
150 - 240 mm	2 mm	
240 - 312 mm	1.5 mm	

Switch action



1. Switch trigger 2. Lock button / Lock-off button
3. Restart button (for KP312S only)

ACAUTION:

 Before plugging in the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

For tool with lock button

To start the tool, simply pull the trigger. Release the trigger to stop. For continous operation, pull the trigger and then push in the lock button. To stop the tool from the locked position, pill the trigger fully, then release it.

For tool with lock-off button

To prevent the trigger from being accidentally pulled, a lock-off button is provided. To start the tool, press the lock-off button and pull the trigger. Release the trigger to stop.

Overload protecter (Option)

This tool is equipped with an overload protector which automatically cuts out to break the circuit whenever heavy work is prolonged. When it cuts out, inspect the blade for damage or something wrong. After making sure that there is nothing wrong with the tool, push the restart button to resume operation.

Edge fence (Guide rule)



Pins 2. Edge fence (Guide rule)

Edge fence is useful for minimizing a short run of cut by cutting in a uniform width. The edge fence (guide rule) is provided on the side of the tool. Press two pins for the edge fence (guide rule) so that the edge fence appears. Move the tool forward while keeping the flat surface of the edge fence in contact with the side of the workpiece. To return the edge fence to an original position, push it upwards from its underside.

Foot



▶ 1. Rear base 2. Foot 3. Planer blade

After a cutting operation, raise the back side of the tool and a foot comes under the level of the rear base. This prevents the tool blades to be damaged.

Guideline of cutting blade passage



1. Front base

Both ends of the front base are a guideline to show the ends of cutting blades passage.

ASSEMBLY

ACAUTION:

Always be sure that the tool is switched off and unplugged before carrying out any work on the tool.

Removing or installing planer blades



Hex wrench 2. Installation bolt

ACAUTION:

- Tighten the blade installation bolts carefully when attaching the blades to the tool. A loose installation bolt can be dangerous. Always check to see they are tightened securely.
- Handle the blades very carefully. Use gloves or rags to protect your fingers or hands when removing or installing the blades.
- Use only the Makita wrench provided to remove or install the blades. Failure to do so may result in overtightening or insufficient tightening of the installation bolts. This could cause an injury.

To remove planer blades on the drum, loosen the eight installation bolts by only one full turn with the hex wrench. Then push and slide a planer blade sideways from the belt side using the helm of the hex wrench. To remove another planer blade, follow the same procedure as above.



1. Hex wrench



1. Drum plate 2. Installation bolt 3. Set plate screw
4. Set plate 5. Planer blade 6. Adjusting screw
7. Drum

To install the blades, first clean out all chips or foreign matter adhering to the drum or blades. Insert the blade between the drum and the set plate from the nozzle extraction side so that the blade will be centered from both ends of the drum or set plate. First tighten the eight installation bolts lightly and evenly shifting from the center bolts to the outward bolts with the hex wrench.

And then, tighten all of the installation bolts securely. Install another blade in the same manner as above.



For the correct planer blade setting

Your planing surface will end up rough and uneven, unless the blade is set properly and securely. The blade must be mounted so that the cutting edge is absolutely level, that is, parallel to the surface of the rear base. Below are some examples of proper and improper settings.

- (A) Front base (Movable shoe)
- (B) Rear base (Stationary shoe)





1. Drum plate 2. Installation bolt 3. Set plate screw
4. Set plate 5. Planer blade 6. Adjusting screw
7. Drum

Blade height adjustment is usually not necessary. However, if you notice that the blade edge is below the level of the rear base or protrudes too far from the rear base, proceed as follows.

Loosen the eight installation bolts and the set plate screws. Turn the adjusting screws clockwise to retract the blade or counterclockwise to protrude it. After adjusting the blade height, tighten the set plate screws and the eight installation bolts securely.

1. Hex wrench 2. Wrench holder 3. Rear base

When not in use, store the hex wrench as shown in the figure to keep it from being lost.

Nozzle assembly and joint (Accessory)



1. Chip guide

Nozzle assembly and joint are used when connecting the tool to vacuum cleaner.

When you wish to perform cleaner operation, connect a vacuum cleaner to your tool.

To connect vacuum cleaner, remove the chip guide from the tool. Place nozzle assembly and joint in its place and then tighten screws to secure them.

Connect a hose of vacuum cleaner to the joint.



1. Joint 2. Nozzle assembly

Nozzle cleaning

Clean the nozzle regularly. Use a compressed air to clean the clogged nozzle.

OPERATION

AWARNING: To reduce the risk of injury to persons, do not operate without nozzle assembly and joint or chip guide in place.

Planing operation



1. At the start of planing 2. At the end of planing

First, rest the tool front base flat upon the workpiece surface without the blades making any contact. Switch on and wait until the blades attain full speed. Then move the tool gently forward. Apply pressure on the front of tool at the start of planing, and at the back at the end of planing.

The speed and depth of cut determine the kind of finish. The power planer keeps cutting at a speed that will not result in jamming by chips. For rough cutting, the depth of cut can be increased, while for a good finish you should reduce the depth of cut and advance the tool more slowly.

Front roller



▶ 1. Front roller

When performing repeated cuts, the use of the front roller enables quick and effortless return of the tool toward an operator by raising the back end of the tool so that the tool blades do not contact a workpiece and then sliding tool on the front roller.

MAINTENANCE

ACAUTION:

- Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.
- Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result.

Replacing carbon brushes



1. Limit mark

Remove and check the carbon brushes regularly. Replace when they wear down to the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.

Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.



1. Screwdriver 2. Brush holder cap

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized Service Centers, always using Makita replacement parts.

OPTIONAL ACCESSORIES

ACAUTION:

These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita Service Center.

- Planer blade
- Triangular rule
- Nozzle assembly
- Joint
- Hex wrench

NOTE:

Some items in the list may be included in the tool package as standard accessories. They may differ from country to country.

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