

WOODFAST

Planer & Thicknesser
PT410A

Instruction Manual

IMPORTANT

For your safety read instructions carefully before assembling or using this product. Save this manual for future reference.



Original Instruction
V.1-201910

HEALTH AND SAFETY GUIDELINES

Always follow the instructions provided with the manual. Always wear safety glasses when using woodworking equipment. Always disconnect the power before adjusting any equipment. Failure to observe proper safety procedures and guidelines can result in serious injury.

WARNING: Do not allow familiarity (gained from frequent use of your machine and accessories) to become commonplace. Always remember that a careless fraction of a second is sufficient to inflict severe injury.



Always wear safety glasses when using woodworking equipment.



Always read the instructions provided before using woodworking equipment.

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1. General Information

1.1 FOREWORD

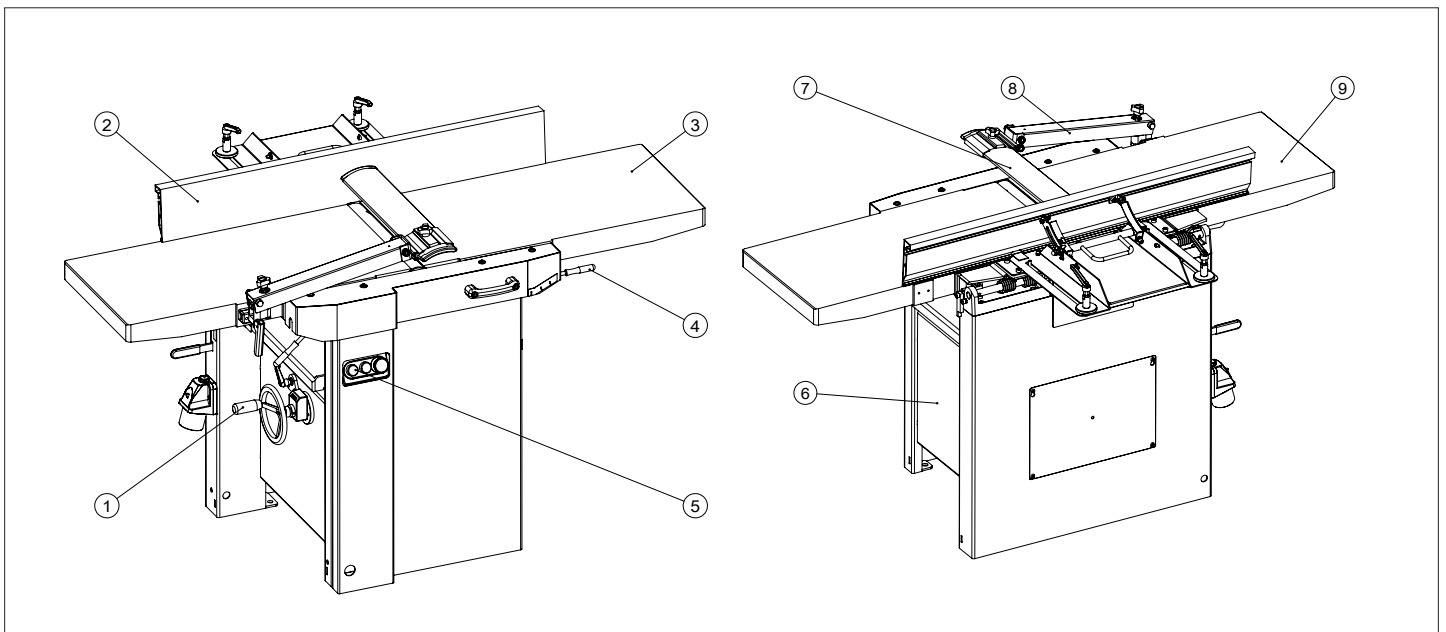
This manual must be read and understood before operating the machine. This will provide a better working knowledge of the machine, for increased safety and to obtain the best results.

2. Machine Description

2.1 MACHINE IDENTIFICATION

There is a metallic identification plate fixed to the machine, containing the manufacturer's data, year of construction, serial number.

2.2 GETTING TO KNOW YOUR MACHINE



- 1 Height setting of thicknesser bed
- 2 Jointer fence
- 3 Infeed table
- 4 Height setting of infeed table

- 5 On/off switch
- 6 Frame
- 7 Cutterblock
- 8 Cutterblock guard
- 9 Outfeed table

2.3 TECHNICAL SPECIFICATION

SPECIFICATION	PT410A
Feed speed m/min	7
Cutterblock speed rpm	5000
Cutterblock diameter mm	70
Max thicknesser capacity mm	405x225
Max planing width mm	410
Max depth of cut thicknesser mm	3
Max depth of cut planer mm	4
Knives pcs	3
Fence tilting degree	0-45
Motor power output	1*230V 3kW S6 3*400V 4kW S6
Net Weight kg	265

2.4 RECOMMENDED PROTECTIVE CLOTHING

- Non-slip footwear is recommended.
- Do not wear loose clothing, neckties or jewellery; they can be caught in moving parts.
- Roll up long sleeves above the elbow.
- Wear protective hair covering to contain long hair.

2.5 NOISE EMISSION

The measurements of noise, in the working position and during operation, were carried out under the standard ISO 7960 Annex B and C:

Instantaneous acoustic pressure:

Sound power level(no load)	<98dB(A)
Sound power level(load)	<107dB(A)
Sound Pressure level(no load)	<89dB(A)
Sound Pressure level(load)	<98dB(A)

Constant K=4 dB measured in accordance with EN ISO 3746:1995

The figures quoted are emission levels and are not necessarily safe working levels. Whilst there is a correlation between the emission and exposure levels, this cannot be used reliably to determine whether or not further precautions are required. Factors that influence the actual level of exposure of the workforce include the characteristics of the work room and the other sources of noise etc. i.e. the number of machines and other adjacent processes. Also the permissible exposure level can vary from country to country. This information, however, will enable the user of the machine to make a better evaluation of the hazard and risk.

2.6 PRESCRIBED USE OF THE MACHINE

This machine is intended for surface planing and thickness planing of solid woods. The permissible workpiece dimensions must be observed (see Technical Specification).

Any other use is not as specified. Unspecified use, modification of the machine or use of parts not tested and approved by the equipment manufacturer can cause unforeseen damage.

2.7 HAZARDS

ATTENTION Planer & thicknesser still present risks that cannot be eliminated by the manufacturer. Therefore the user must be aware that wood working machines are dangerous if not used with care and all safety precautions adhered to.

2.8 SAFETY INSTRUCTIONS FOR PLANER.THICKNESSER

A planer/thicknesser is a tool which can, due to operator carelessness, cause serious personal injury. It is therefore strongly recommended you read and observe:

- these instructions, particularly the special safety information in the respective chapters;
- the relevant guidelines or regulations for the prevention of accidents pertaining to the use of planer/thicknessers, where applicable.

Keep all documents, supplied with the machine, for future reference.

The planer/thicknesser shall only be started and operated by persons familiar with planer/thicknessers and who are at any time aware of the dangers associated with the operation of such tool. Persons under 18 years of age shall use this planer/thicknesser only under the supervision of an instructor in the course of their vocational training.

The following residual risks do principally exist with planer/thicknessers and can not, even by employing safety devices, completely eliminated:

- Hazard generated by environmental conditions:

do not operate the planer/thicknesser in rain or damp environment. Ensure sufficient lighting. Do not operate the planer/thicknesser near inflammable liquids or gases.

- Hazard to other persons in the work area:

Keep bystanders, particularly children, out of the danger zone.

- Risk of injury by machine faults:

check the planer/thicknesser for damage before any use. Do not operate the machine with a damaged part. Replace blunt cutter knives at once. Risk of injury by kickback if a blunt knife gets caught in the workpiece's surface.

- Risk of injury by an unstable stand of the planer/thicknesser:

when working long stock use suitable supports on both sides of the machine. Avoid adverse body positions. Ensure firm footing, and keep your balance at all times.

- Risk of injury by foreign objects in the machine:

prior to any starting of the machine ensure that there are no objects (e.g. tools) in the machine.

- Risk of injury by workpiece kickback (workpiece is caught by the rotating cutterblock and thrown back against the operator):

operate machine only with a fully functional anti-kickback lock. Always use sharp cutter knives. If in doubt check workpiece for inclusion of foreign objects (e.g. nails, screws, loose knots).

- Risk of injury by touching the rotating cutterblock:

always keep your hands well clear of the cutterblock. Switch machine off and plug out if it is not used.

- Danger! Drawing-in/trapping hazard!

Take care that no parts of the body or clothing can get caught and drawn in by the rotating cutterblock (do not wear neck ties and garments with wide sleeves; contain long hair with a hairnet).

- Risk of injury by cuts with cutterblock at standstill: Wear gloves when changing cutter knives.

- Risk of injury by inhaling wood dust: dust of certain timber species (e.g. oak, beech, ash) can cause cancer when inhaled. Use a suitable dust collector:

- fitting the outer diameter of the suction port (100 mm)

- air volume \geq 815 m³/h;

- vacuum at suction port of machine \geq 740 Pa;

- air speed at suction port of machine \geq 20 m/s;

- Risk of injury by inadequate personal protection: when planing, wear:

- dust respirator;

- hearing protection;

- safety goggles.

3. Installation

3.1. LIFTING AND UNLOADING

The machine can be transported by two means:

- with a forklift truck. To do so, the machine is secured on a pallet with four hex bolts.
- by several persons. Here, the machine is carried by means of carrying straps or two battens (A, Fig.1) placed underneath the thicknesser bed.

CAUTION

Do not carry the machine holding it at the infeed and outfeed tables, these are not designed to withstand the tensile load by the machine weight.

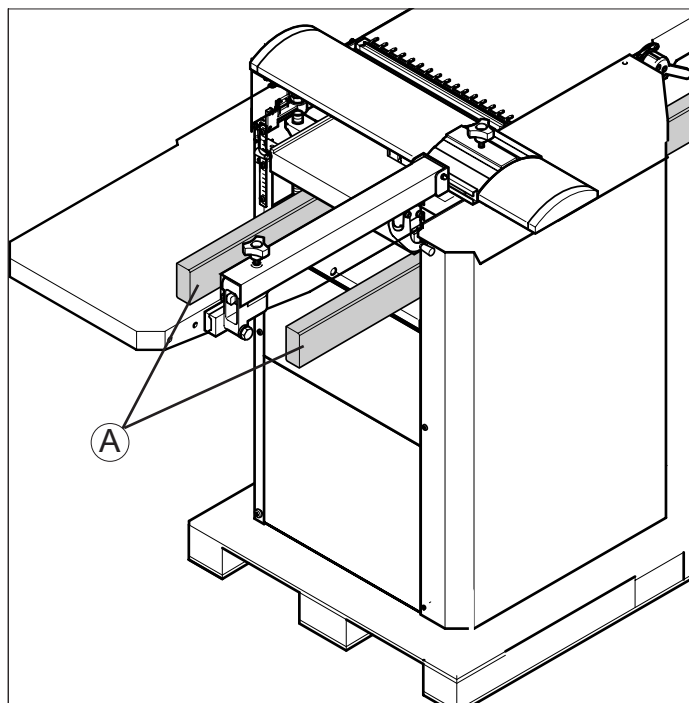


FIG. 1

3.2 POSITION OF THE MACHINE

CAUTION

It is prohibited to install the machine in explosive environments. Ensure that the floor area around the machine is level, well maintained and free from loose material e.g. chips;

1. Remove four mounting bolts from the machine base.
2. Lift machine off the pallet and set down on the floor.
3. Fix the machine to the floor. Fix the machine feet and fix on ground by means of expansion bolts (not supplied).

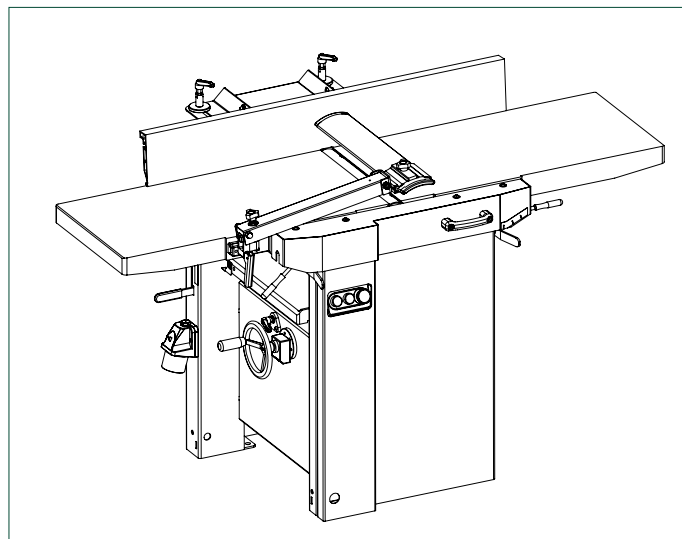


FIG. 2

3.3 IDENTIFYING SHIPPING BOXES

BEFORE ASSEMBLY

It is advisable that before unpacking to have plenty of paper towels or cloths available to clean off the rust preservative.



FIG. 3

3.4. INSTALLATIONS OF LOOSE PARTS

3.4.1 SWITCH - INSTALLATION

- Fit the switch (G, Fig.4) onto the bracket with two hex nuts.

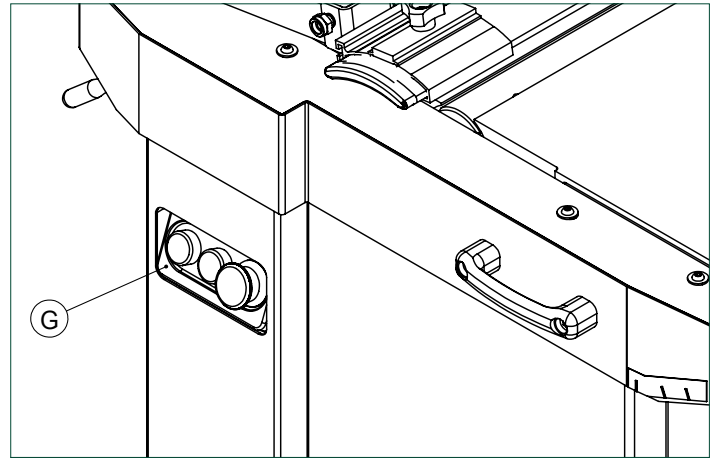


FIG. 4

3.4.2 Cutterblock guard - INSTALLATION

- Take off both of the hex socket screws (A, Fig.5). Install the cutterblock guard assembly (B, Fig.5) using two of hex socket screws. Make sure the square washer (C, Fig. 5) stay between the table and cutterblock guard.

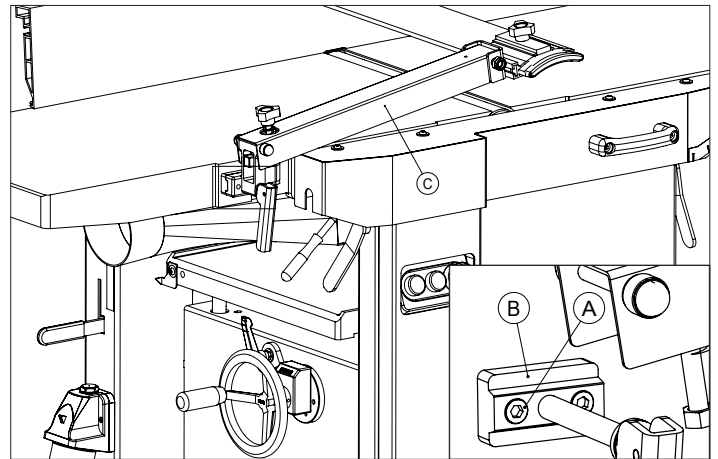


FIG. 5

3.5 ELECTRICAL CONNECTION

Electrical installation should be carried out by competent, qualified personnel.

The mains connection should be made using the terminal box.

Ensure that the mains supply corresponds with that of the machine, use cables of a section suitable for the power of the motor. For a supply tension of 400 V the minimum section recommended is 2.5 mm, including the earth wire.

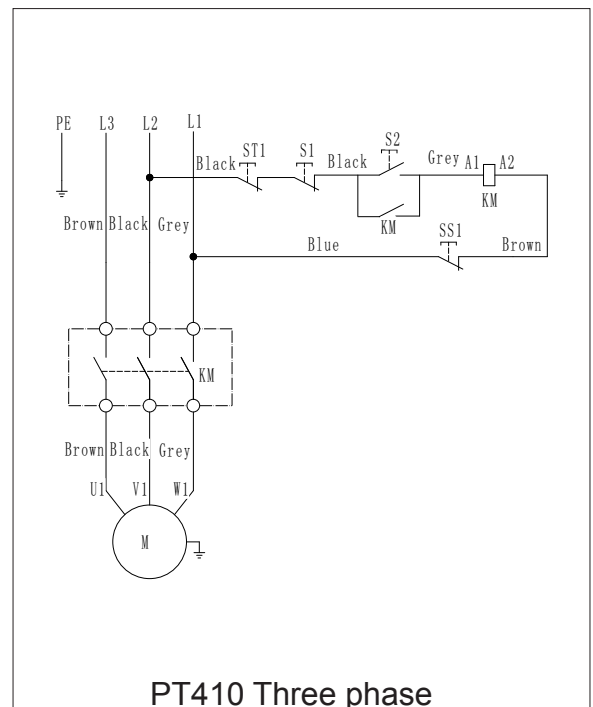
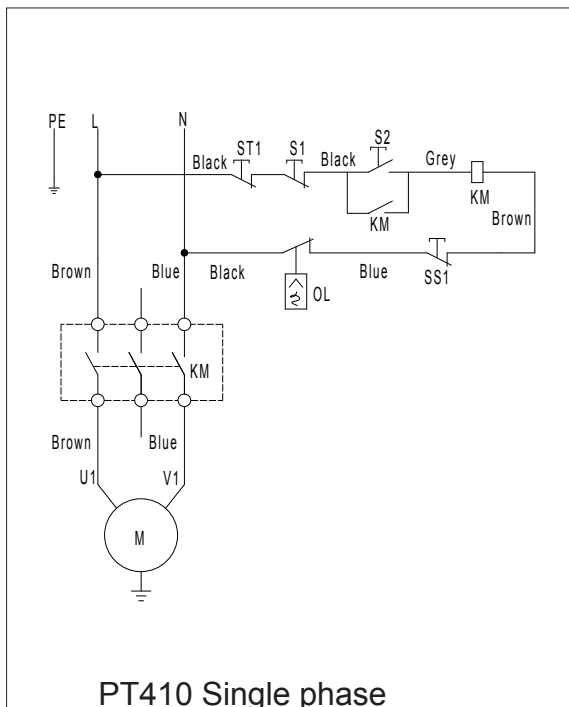
For a mains supply of 230 V or a power rating greater than 15 A it will be necessary to increase the section of the connecting cables .

Connect the phase wires to the terminals R- S - T (L1 - L2 - L3) and the earth wire to the earth terminal.

On initial start-up check the direction of rotation, if it is incorrect then invert the two phase wires (for machines with 3 phase supply).

Direction of rotation of machines with single-phase supply is pre-determined during production .

On completion of the installation check that the terminal box is closed correctly and that the plug points are locked.



3.6. DUST CHUTE - INSTALLATION

The dust chute complete with suction connector must be installed for thickness planing.

CAUTION: The contact pins on the shaft of the dust chute (A, Fig. 6) must engage properly in the limit switch. Incorrectly installed dust chute the machine will not start.

Connect a suitable dust collector to the suction connector of the planer/thicknesser.

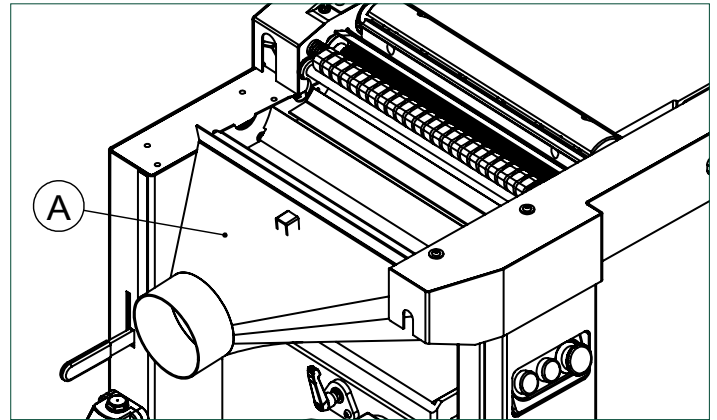


FIG. 6

4. Adjustment

4.1. THICKNESSER TABLE HEIGHT ADJUSTMENT

With the height setting for the thicknesser bed the planing thickness (= thickness of the workpiece after planing) is set when the machine is used for thickness planing.

- Per pass a maximum of 4 mm material can be removed.
- Workpieces of max. 225 mm thickness can be planed. Height adjustment is made with a handwheel (B, Fig.7). One full turn of the crank changes the height of the thicknesser bed (C, Fig.7) by 4 mm.
- Clockwise turning = raises the thicknesser bed
- Counter-clockwise turning = lowers the thicknesser bed. The set planing thickness is indicated on the scale (D, Fig.7).

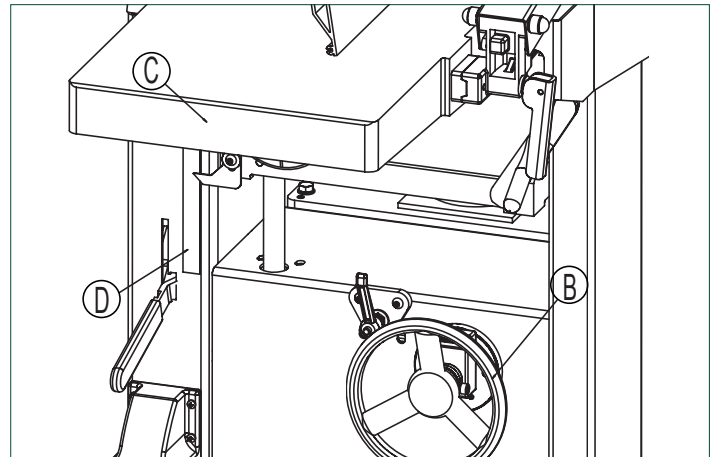


FIG. 7

4.2. INFEEED TABLE HEIGHT ADJUSTMENT

With the height setting for the infeed table (E, Fig.8) the depth of cut is set when the machine is used for surface planing.

- The scale (F, Fig.8) next to the adjusting lever (G, Fig.8) corresponds to 1 mm chip removal.
- Per pass a maximum of 3 mm material can be removed.

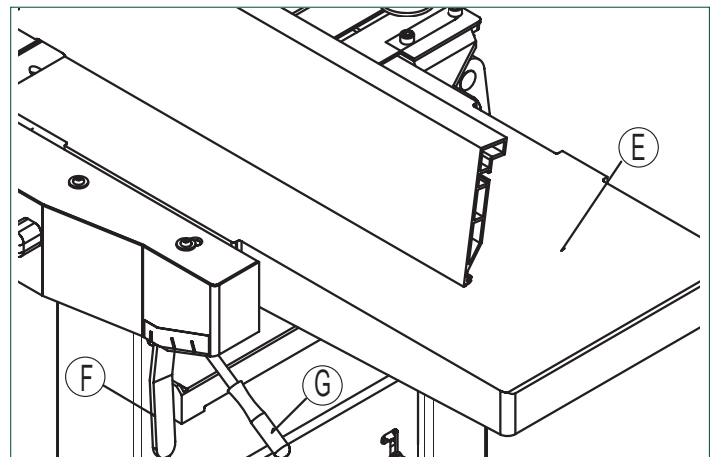


FIG. 8

4.3. JOINTER FENCE ADJUSTMENT

The jointer fence (I, Fig.9) provides lateral support for the workpiece when surface planing.

- After loosening the lock lever (J, Fig.9) the jointer fence can be adapted to the workpiece width.
- After loosening the lock lever (K, Fig.9) the jointer fence extrusion can be tilted to the angle between 0°- 45°.

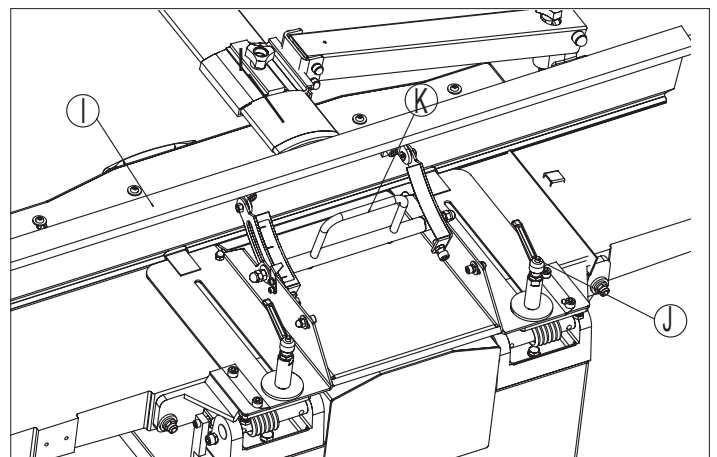


FIG. 9

5. Operating Procedures

5.1. ON/OFF SWITCH (Fig.10)

- To switch ON = press green switch button.
- To switch OFF = close cover or press red switch button.
- To unlock the switch cover push the pin on the stop cover.

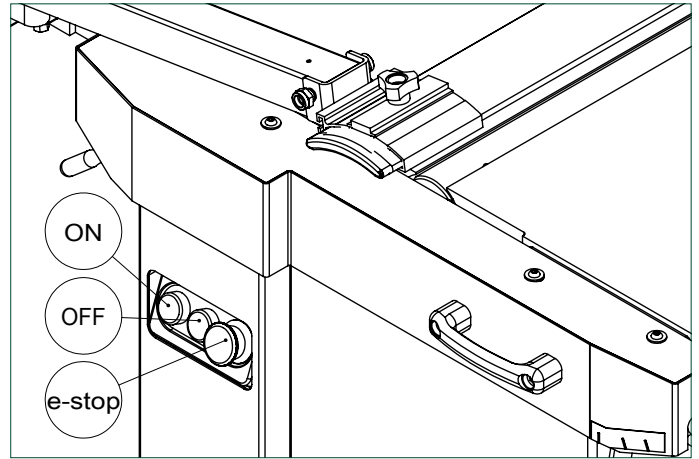


FIG. 10

5.2 SURFACE PLANER MODE:

Note: With surface planing, an irregular surface is planed flat (= jointed).

- The workpiece rests on top of the infeed table.
- The workpiece is cut on the underside.
- The feed direction of the workpiece is exactly opposite than when thickness planing.

Workpiece dimensions

- Length: use a push stick to feed workpieces shorter than 250 mm; for workpieces over 1500 mm use a second person for support.
- Width: max. 410 mm.
- Thickness: min. 5 mm.

Note: The max. depth of cut for a single pass is 3 mm.

1. Assume proper operating position:
position yourself to one side of the infeed table.
2. Set jointer fence as required.
3. Set planing thickness.
4. Place workpiece against jointer fence .
5. Adjust cutterblock cover:

- when planing narrow edges (jointing) or workpieces more than 75 mm thick:

Set cutterblock cover from the side against the workpiece (A, Fig.12)..

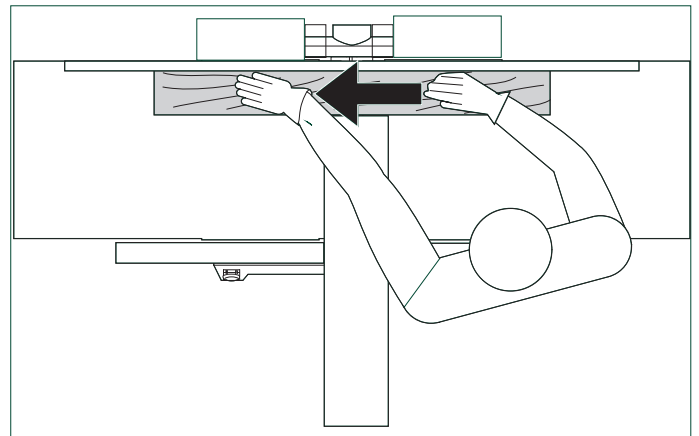


FIG. 11

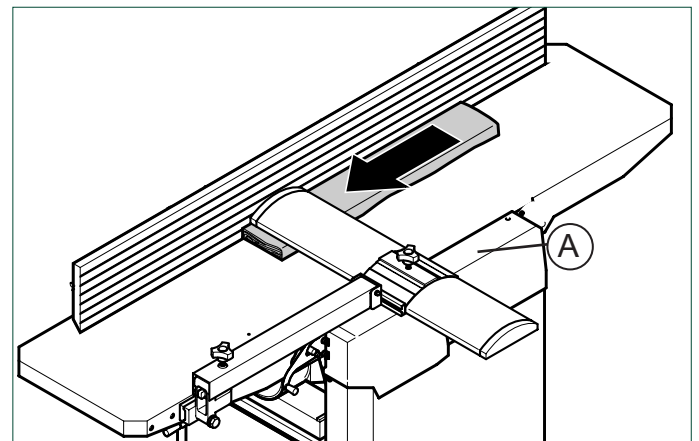


FIG. 12

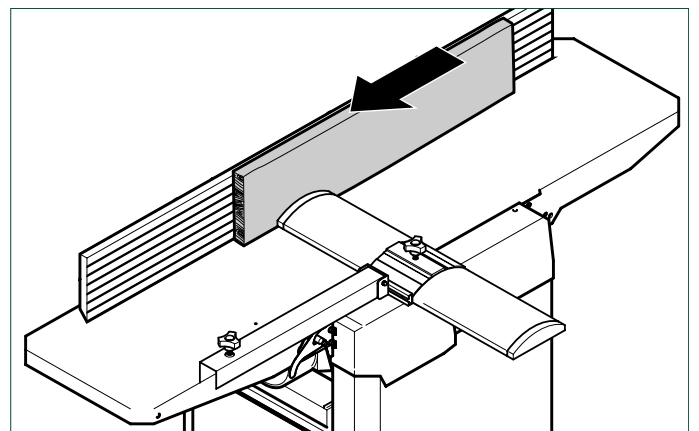


FIG. 13

- Planing the face of a plank or workpieces up to 75 mm thick: lower cutterblock cover from top onto workpiece. Adjust cutterblock cover so that the undermentioned distances are not exceeded in any position:

rear edge (A, Fig.14) – workpiece max. 3 mm;

front edge (B, Fig.14) – workpiece max. 2 mm.

6. Start motor.

7. Feed workpiece straight across the infeed table holding your fingers close together, guiding the workpiece with the palm of your hands. Exert downward pressure on the workpiece only in the infeed table area.

8. Switch machine off if no further cutting is to be done immediately afterwards.

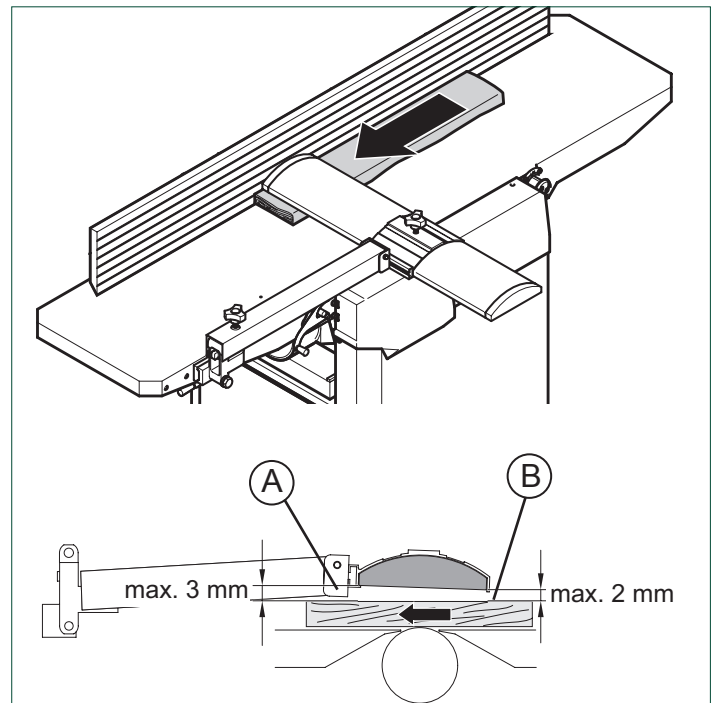


FIG. 14

5.3. THICKNESS PLANER MODE

Note: Thickness planing is used to reduce a workpiece with one already surface planed surface to a desired thickness.

- The workpiece is run through the thicknesser.
- The surface already planed flat rests on the thicknesser bed.
- The workpiece is cut on the upper side.
- The feed direction of the workpiece is exactly opposite than with surface planing.

Workpiece dimensions

- Length: min. 200 mm; for workpieces over 1500 mm use a second person for support.

- Width: max. 405 mm.

- Thickness: min 6 mm; max. 200 mm.

Note: The max. depth of cut for a single pass is 4 mm.

1. Turn clamping lever (B, Fig.15) outward and swing the outfeed table (C, Fig.15) together with the fence to the left. Make sure the outfeed table stopper (D, Fig.15) is engaged (When close the outfeed table, please don't forget the release the stopper first).
2. Turn the dust chute (E, Fig.15) with installed suction connector to the machine .

3. Assume proper operating position:

- to feed the workpiece into the machine, position yourself offset to one side of the feed opening.(Fig.16)
- to remove the workpiece from the machine, position yourself offset to one side of the outfeed opening.(Fig.17)

5. To thickness plane stock which surfaces are not parallel, use suitable feeding aids (make fitting templates).

6. Set planing thickness.

7. Start motor.

8. Feed workpiece slowly and straight into the thicknesser. It will then be automatically fed through the thicknesser.

9. Guide workpiece straight through the thicknesser.

10. Switch machine off if no further cutting is to be done immediately afterwards.

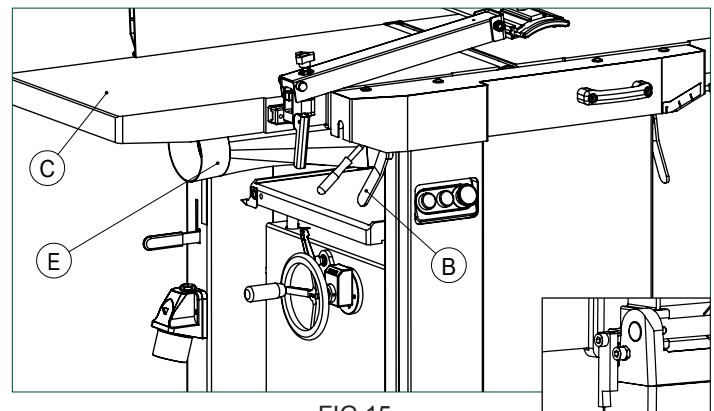


FIG.15

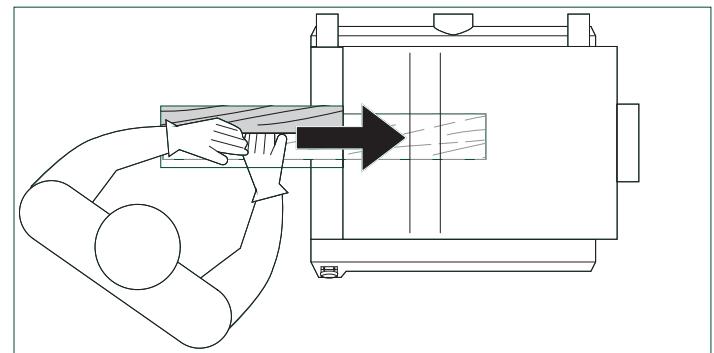


FIG.16

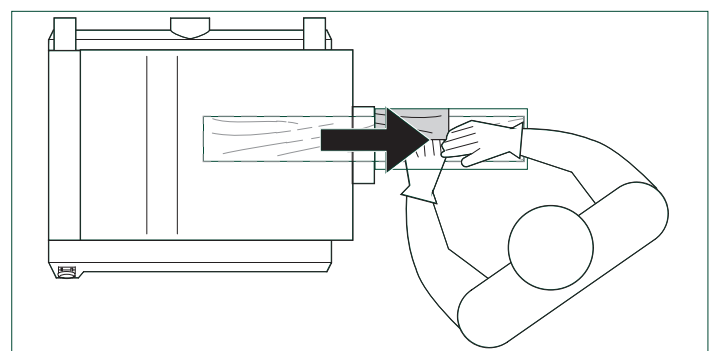


FIG.17

6. Maintenance

6.1 REPLACING CUTTER KNIVES

CAUTION! Risk of personal injury by cuts from the cutter knives!
Wear gloves when changing cutter knives.

To remove the cutter knives:

1. Unplug power cable.
 2. Push fence back.
 3. Raise cutterblock cover fully and pull extrusion fully outwards.
 4. Turn the five hexagon head screws of the cutter knife lockbar fully in wear gloves! (Fig.18).
 5. At first remove cutter knife, then cutter knife lockbar from the cutterblock.
 6. Clean all surfaces of cutterblock and cutter knife lockbar with a suitable solvent.
 7. Place fresh cutter knife on cutter knife lockbar.
 8. Place cutter knife lockbar with the fitted cutter knife into the cutterblock.
 9. Check the projection of the knives:
 - With the provided straight edge gauge .
 - Place straight edge gauge across outfeed table and cutterblock as shown.
 - Turn cutterblock by hand one turn against the direction of feed.
 - The cutter knives are set correctly if the straight edge is moved forward 4 to 6 mm by the turning cutterblock. This check must be performed at both ends of the cutterblock. (Fig.19)
 10. To tighten the cutter knives, turn the five hexagon head screws of the cutter knife lockbar fully out. To prevent distortion of the cutter knife lockbar start with the screws in the centre , then tighten the screws closer to the edges step by step.(Fig.20)
- Danger!**
- Do not extend tool when tightening the screws.
 - Do not tighten bolts by striking the wrench.
11. Return cutterblock cover to its starting position.
 12. Pull fence forward.

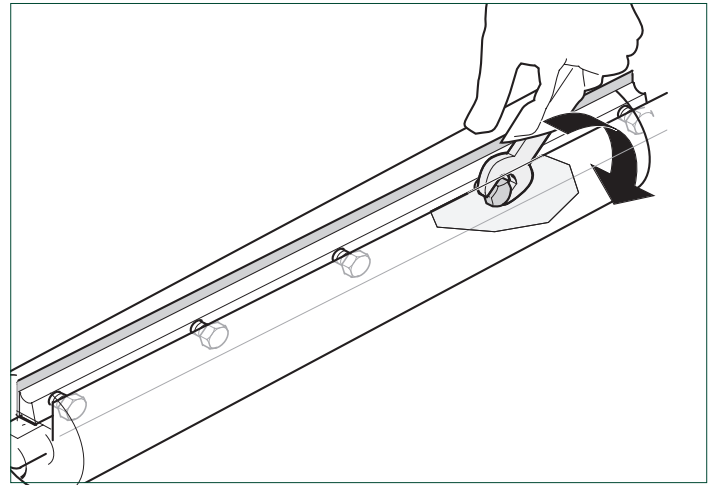


FIG. 18

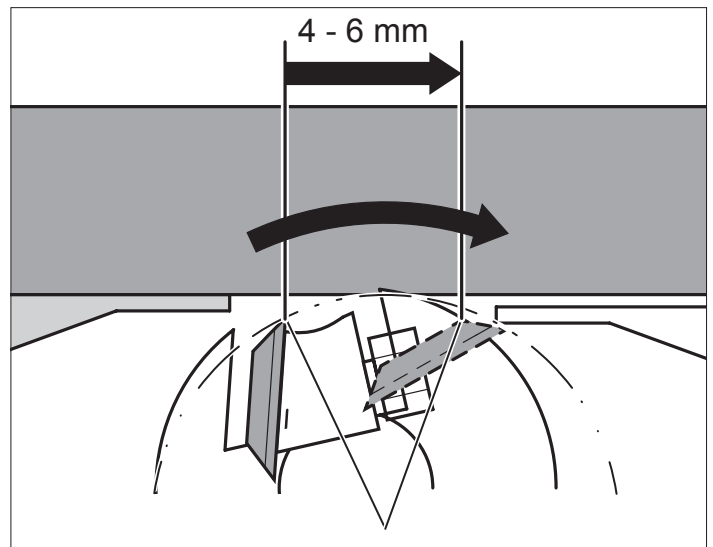


FIG. 19

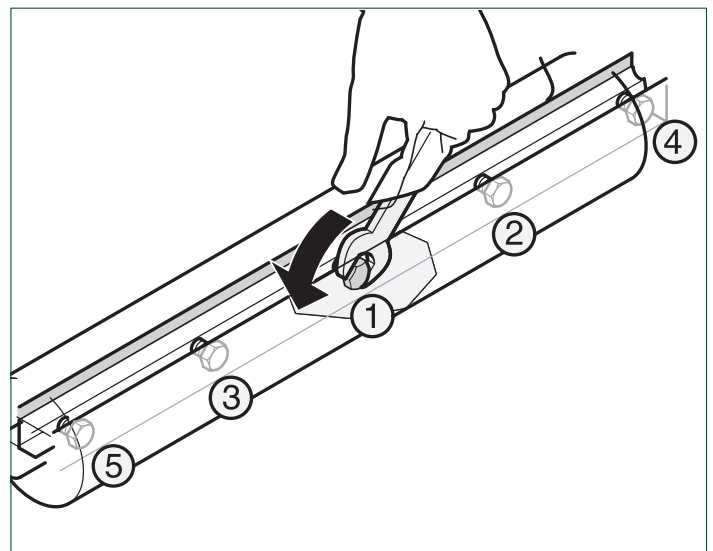


FIG. 20

6.2 Drive Belt Check

The cutterblock drive belt and the feedgear drive belt need to be checked periodically and retightened if necessary. Both drive belts are located behind the machine's side panel.

Checking the drive belt:

1. Unplug power cable.
2. Pull the fence (A, Fig.21) forward.
3. Take off the the side panel (B, Fig.21) and belt cover (C, Fig.21).
4. Check belt tension with thumb pressure. The drive belt should not give more than 10 mm in the centre.

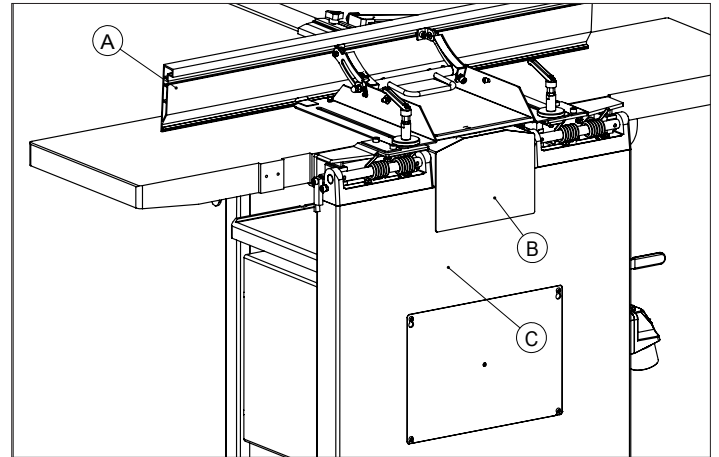


FIG. 21

Tensioning the drive belt:

5. From outside the machine, loosen the four nuts (D, Fig.22) – using stick (E, Fig.22) to increase the motor, the cutterblock drive belt will be slackened.

CAUTION: When increase the motor by stick, don't damaged the motor wiring box.

6. To tension the cutterblock drive belt, push the motor downward. When belt tension is correct tighten motor mounting nuts (D, Fig.22).
7. If necessary, remove chips and dust with dust collector or brush.
8. Replace the side panel and belt cover secure with the screws.

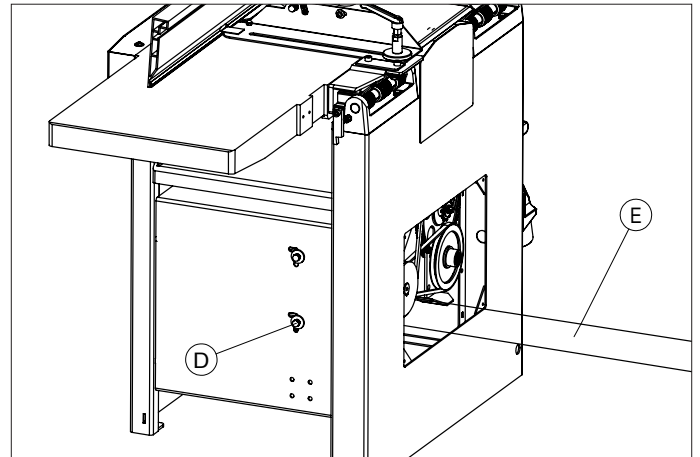


FIG.22

