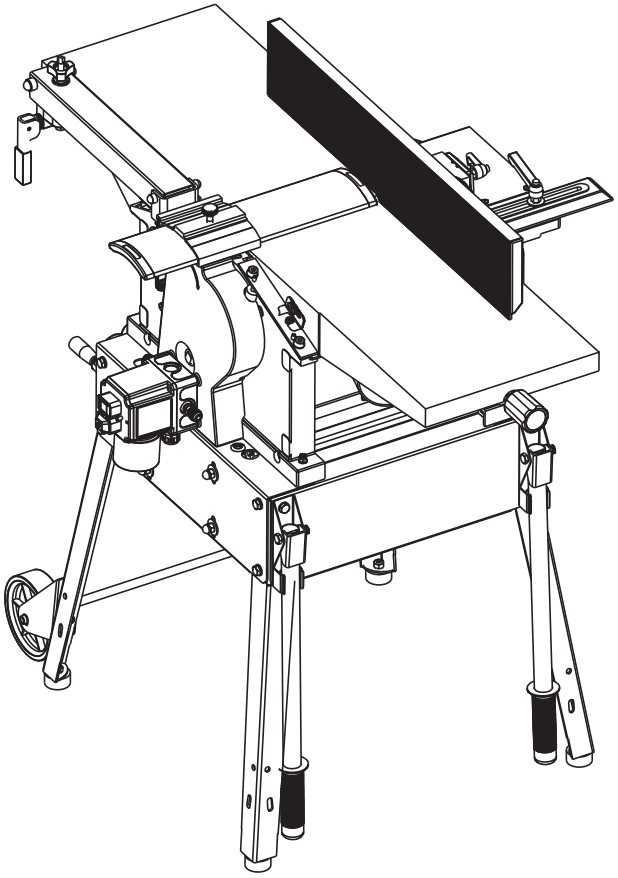
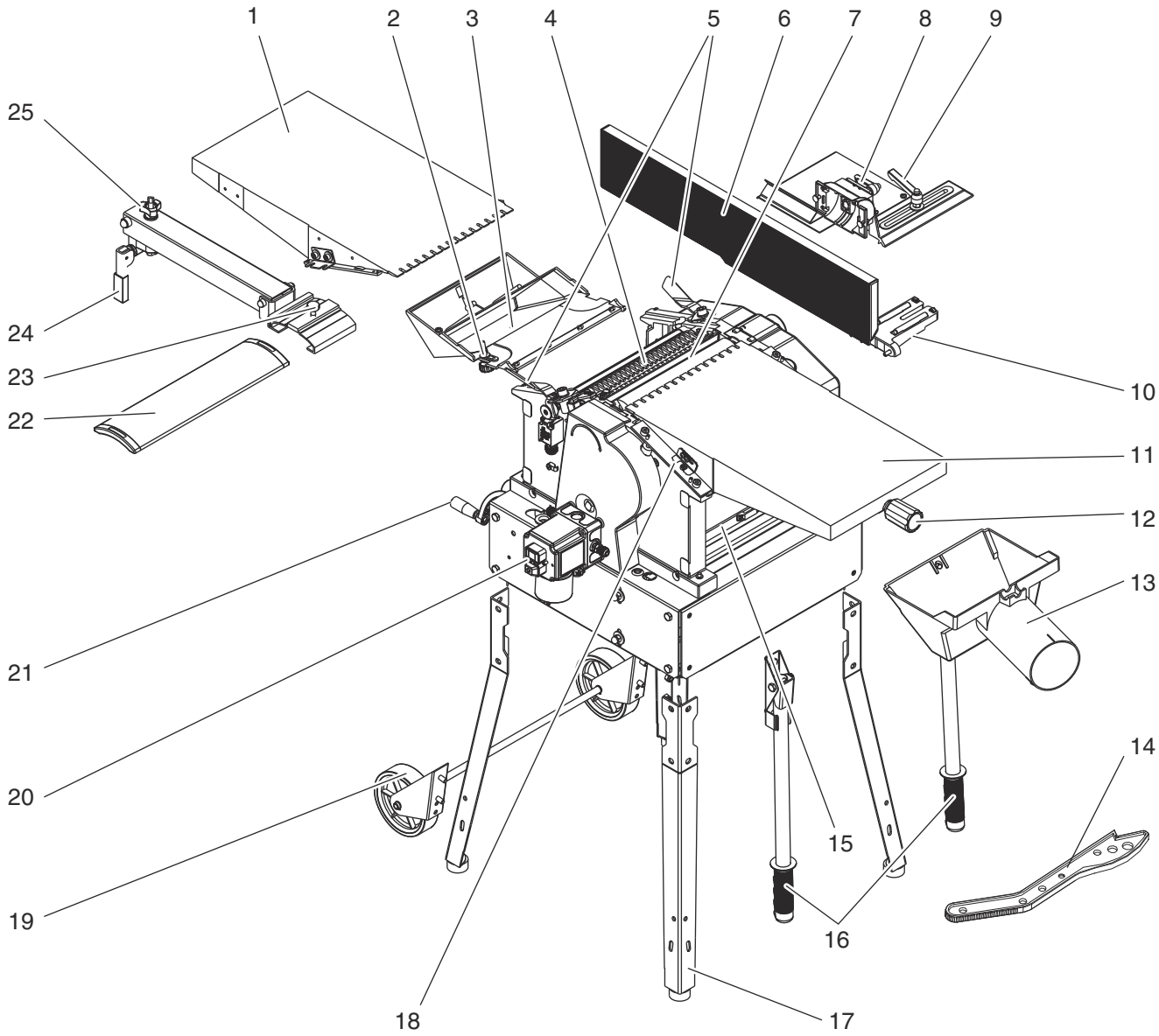
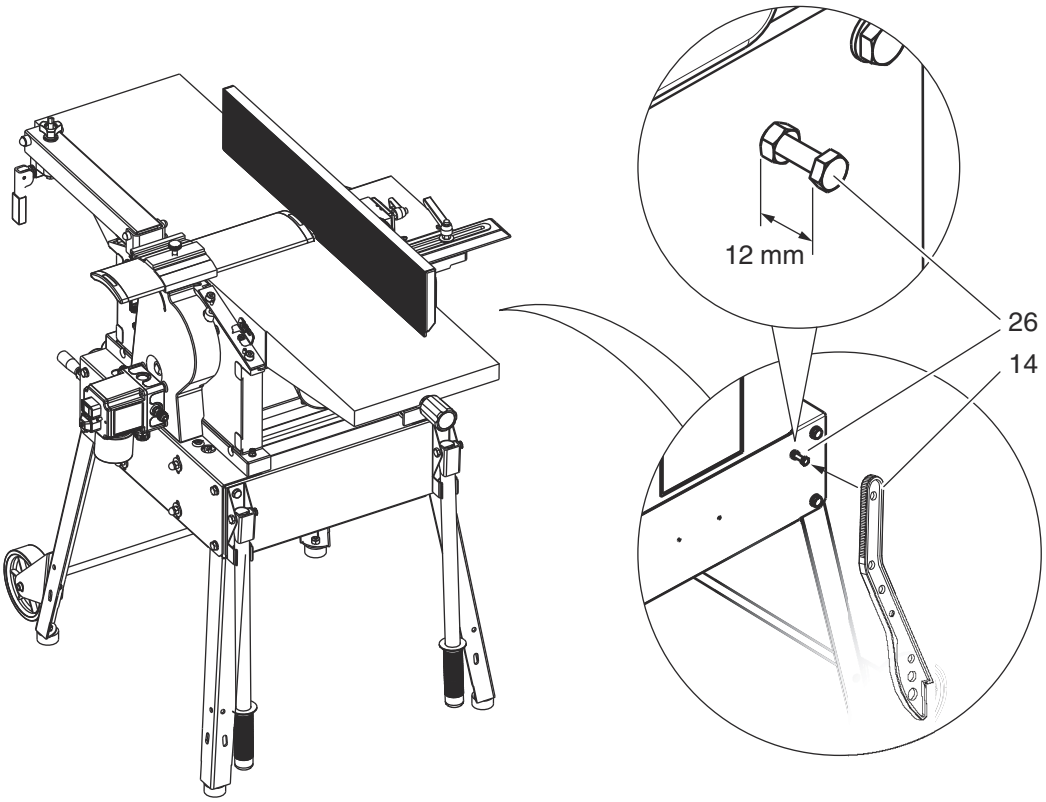
metabo®

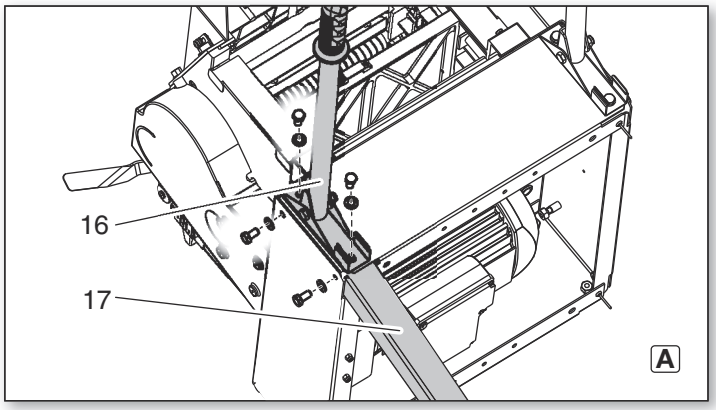
PROFESSIONAL POWER TOOL SOLUTIONS

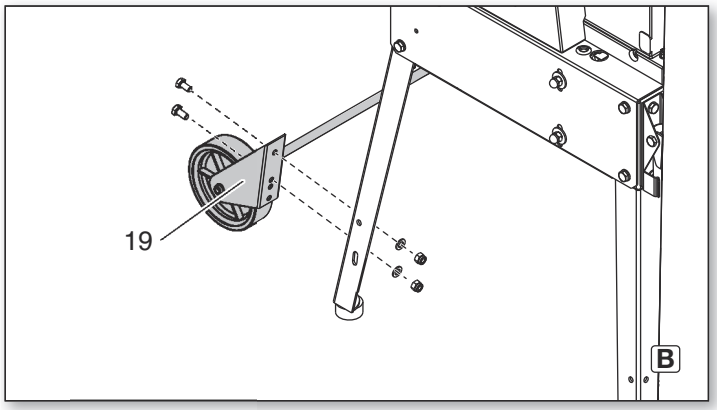
HC 260 C

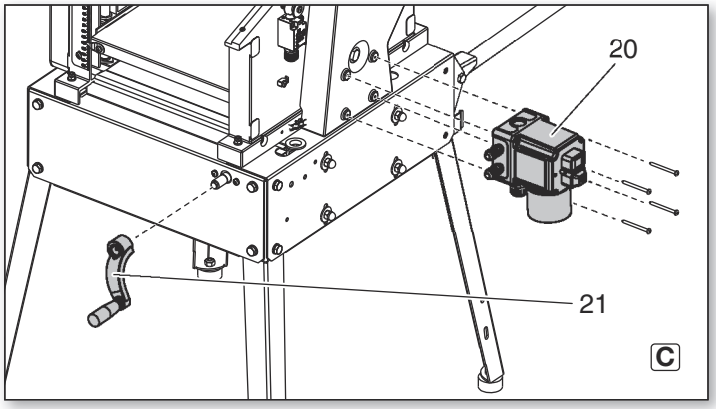


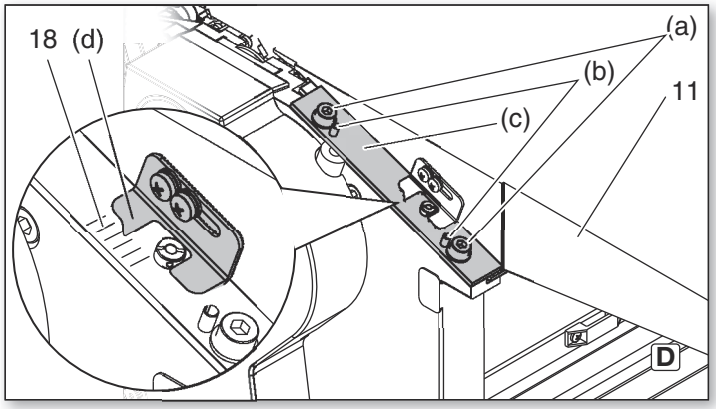

1
2
3
4
5
6
7
8
9
25
24
23
22
10
11
12
13
21
20
19
14
15
16
18
17

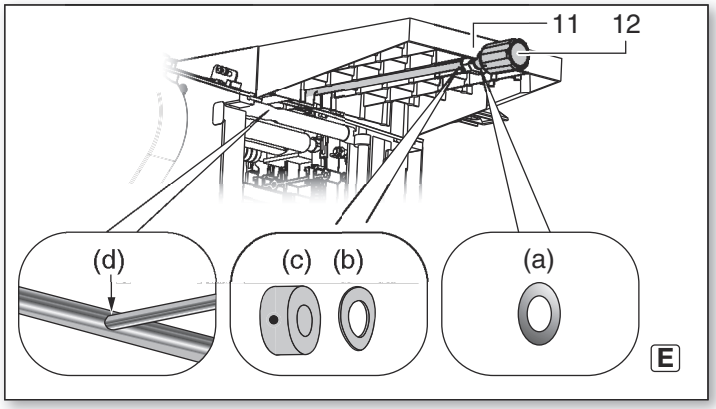

12 mm
26
14

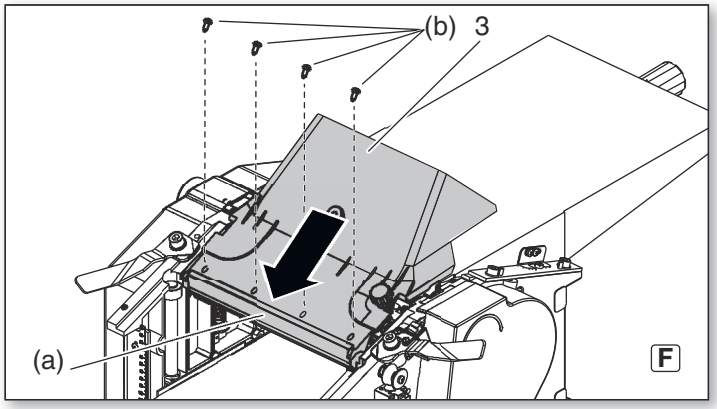

16
17
A

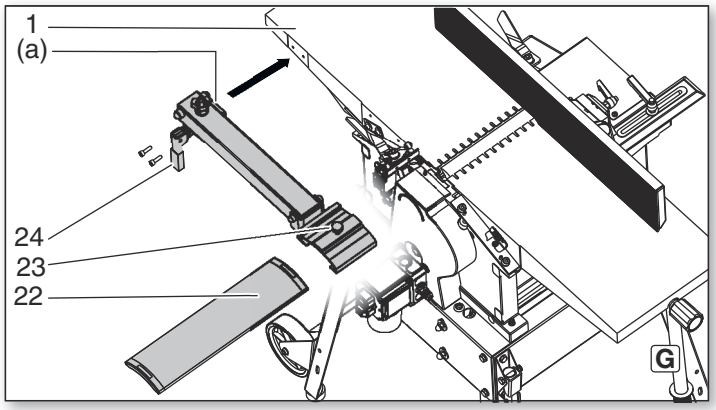

19
B

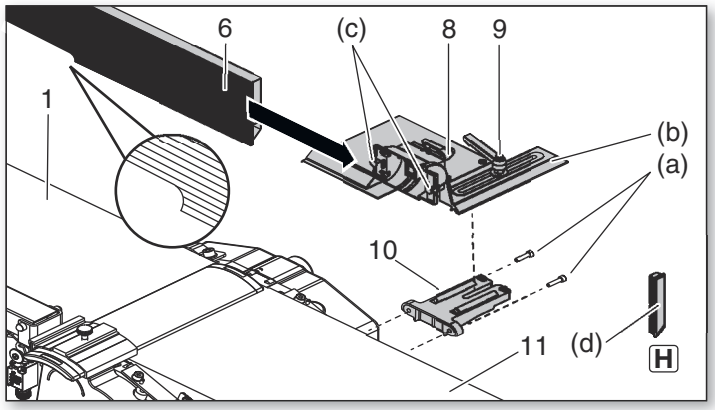

20
21
C

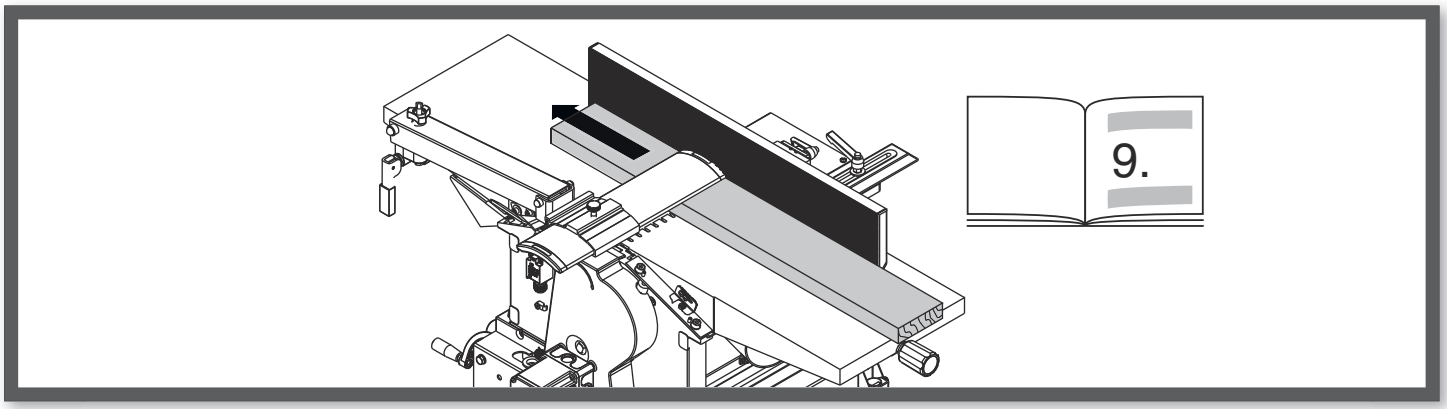

18 (d)
(a)
(b)
(c)
11
D

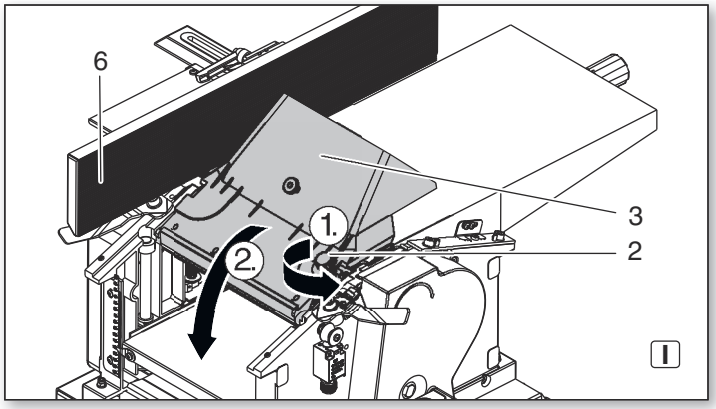

11 12
(d)
(c) (b)
(a)
E

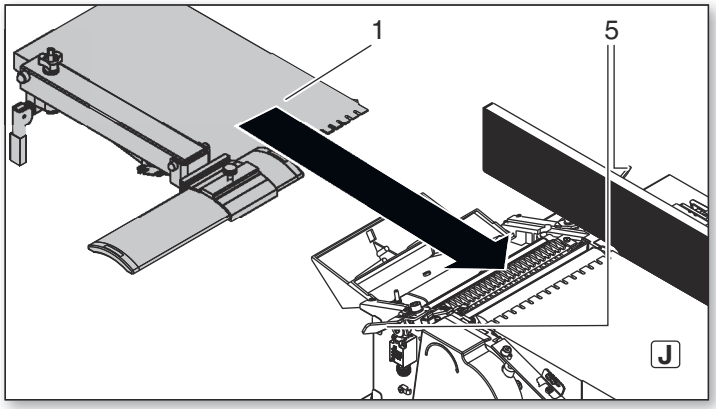

(b) 3
(a)
F

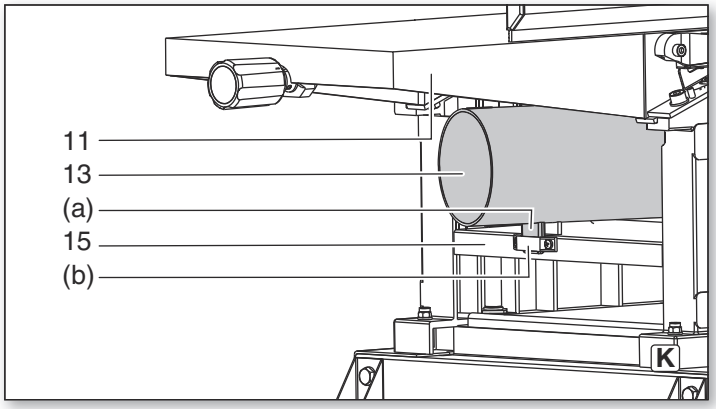

1
(a)
24
23
22
G

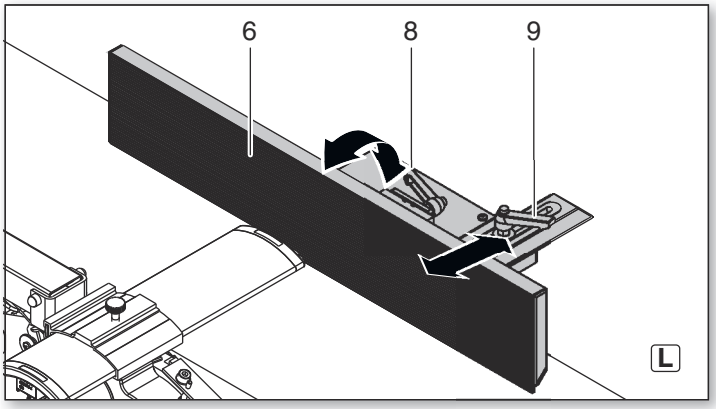

6
(c)
8
9
1
(b)
(a)
10
11
(d)
H

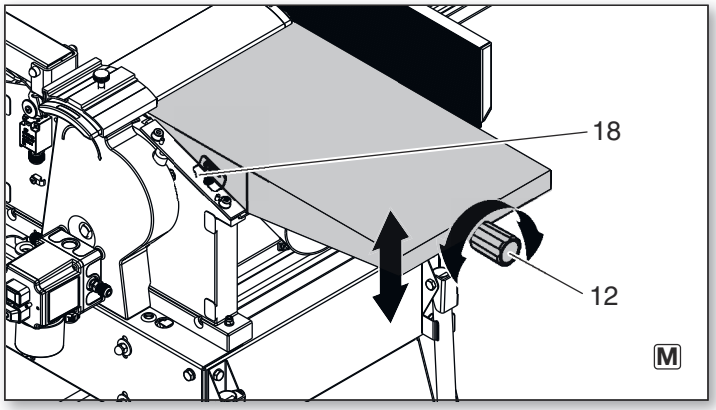

9.

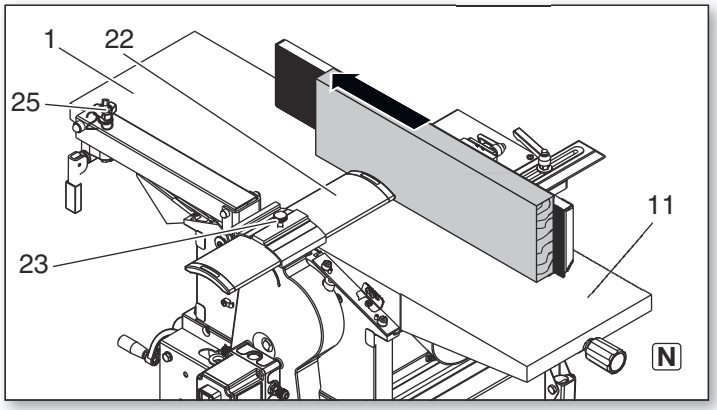

6
3
1.
2.
2
I

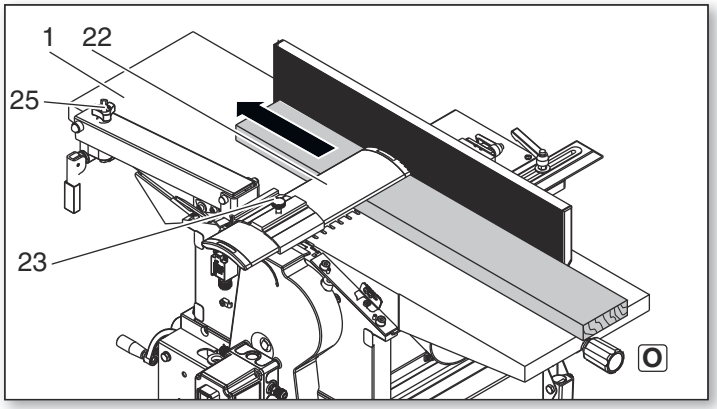

1
5
J

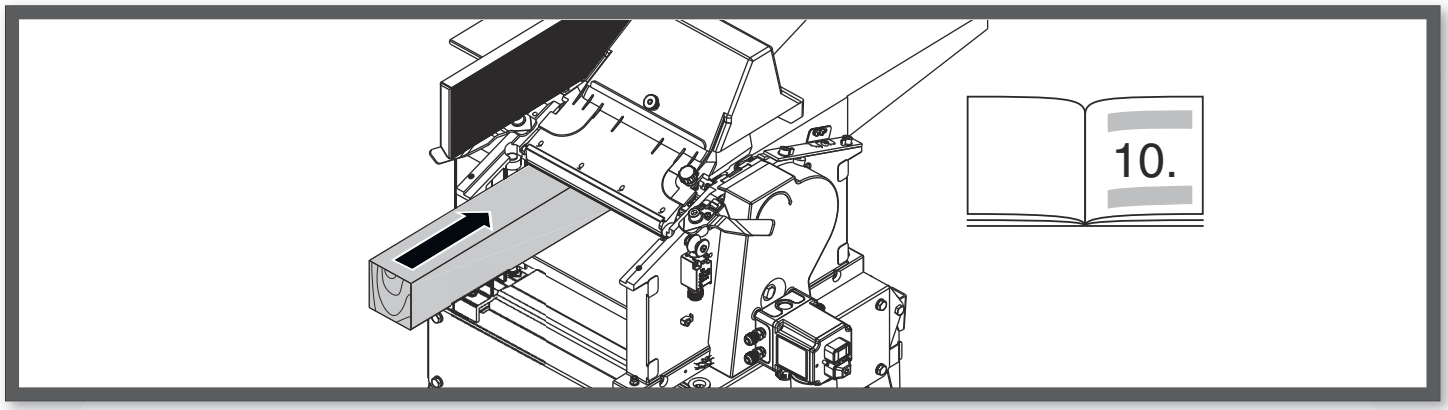

11
13
(a)
15
(b)
K

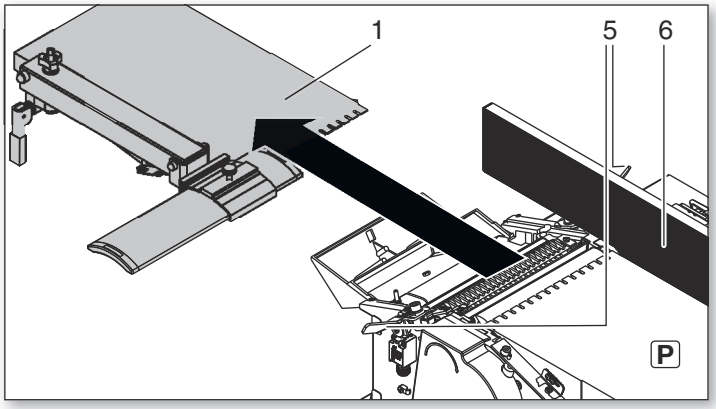

6
8
9
L

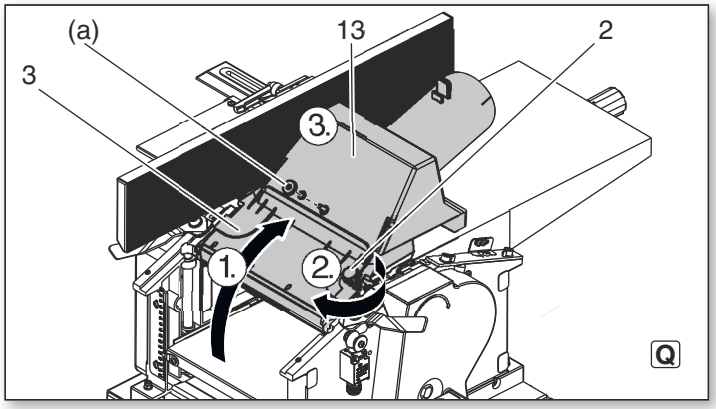

18
12
M

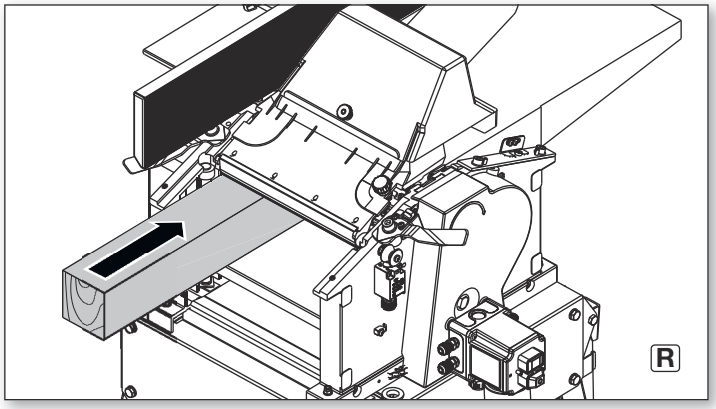

1
22
25
11
23
N

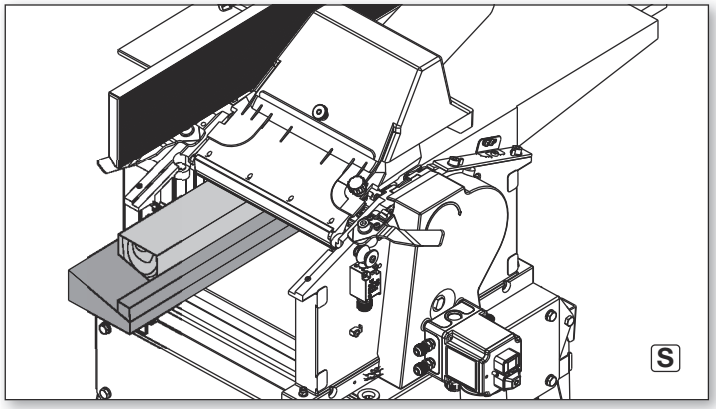

1
22
25
23
O

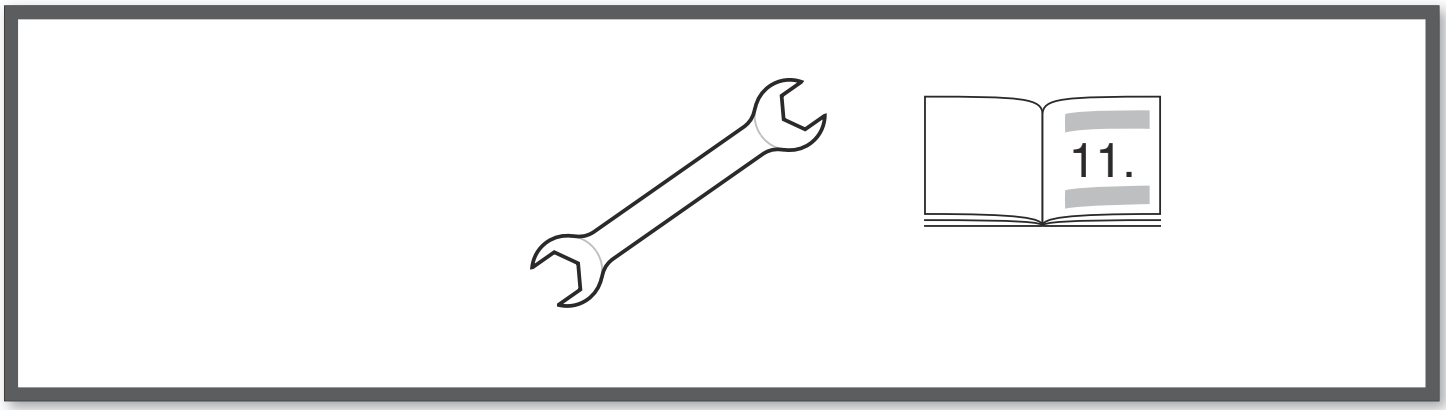

10.

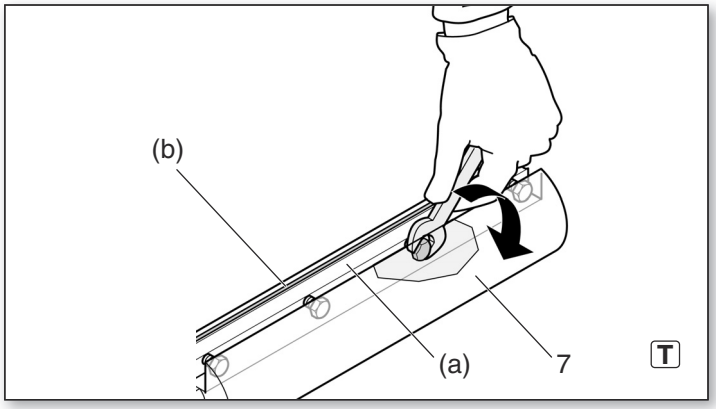

1
5
6
P

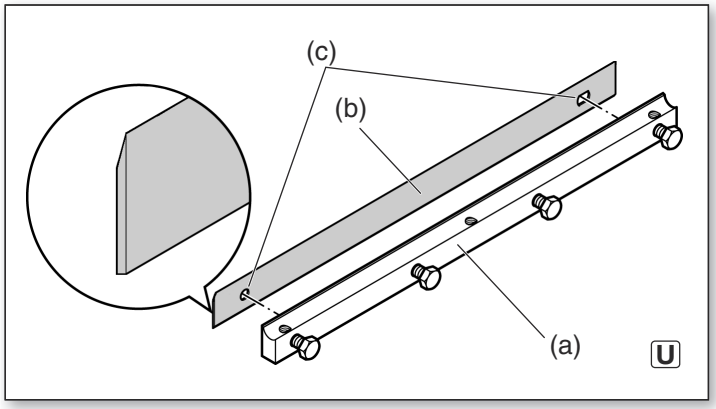

(a)
13
2
3
3.
1.
2.
Q

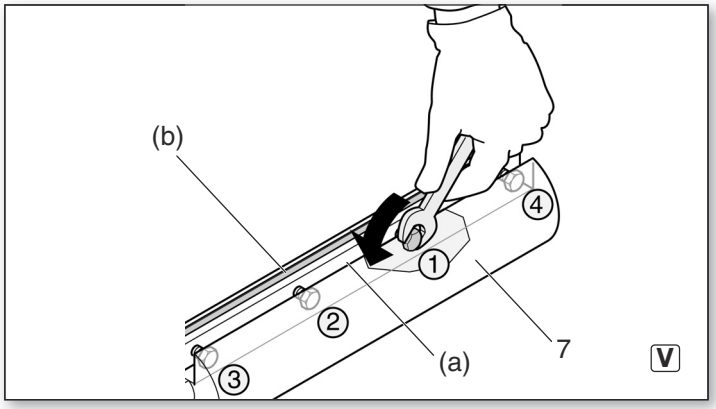

R

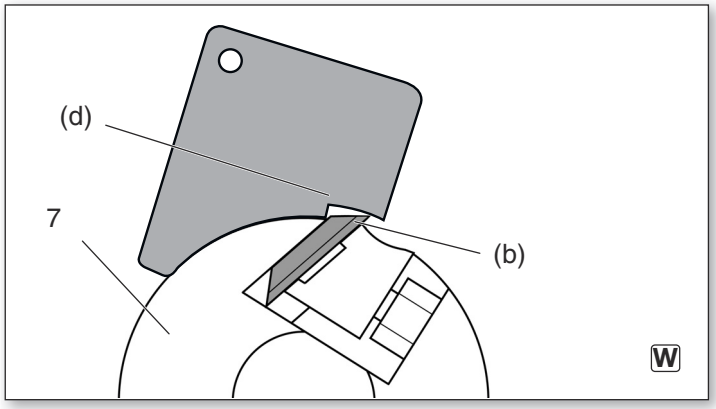

S

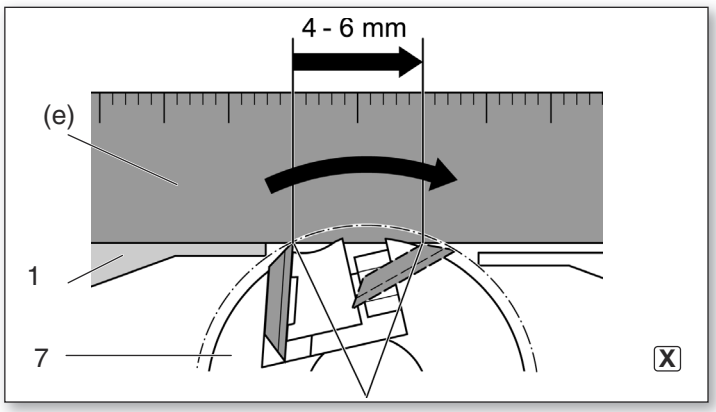

11.

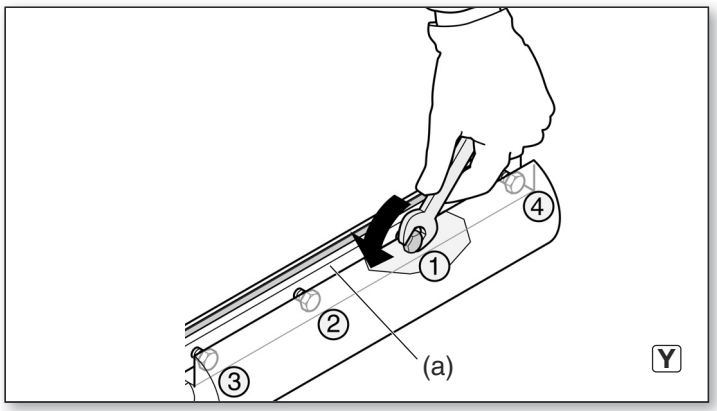

(b)
(a)
7
T

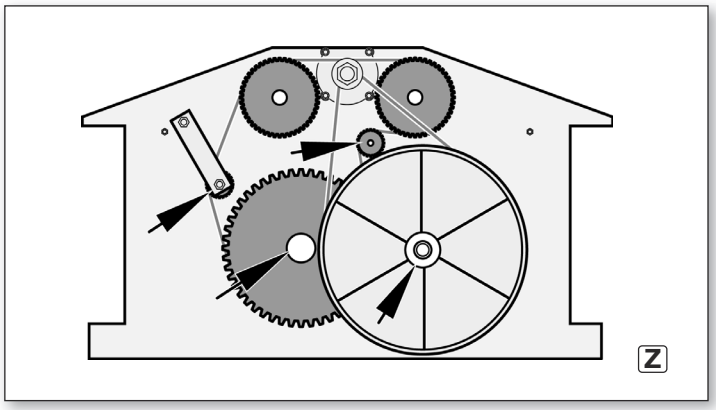

(c)
(b)
(a)
U

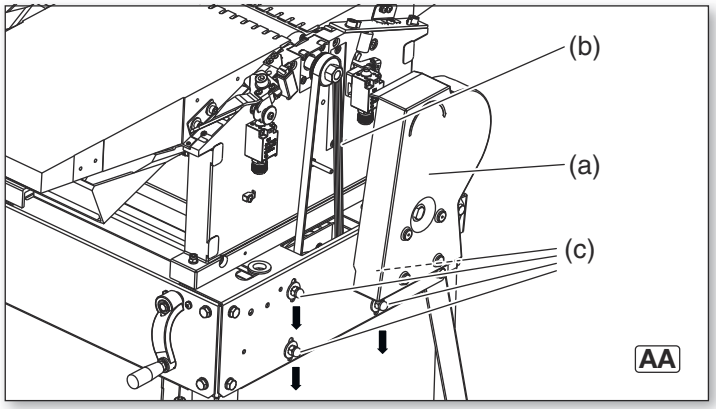

(b)
4
1
2
3
(a)
7
V

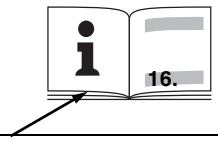

(d)
7
(b)
W


4 - 6 mm
(e)
1
7
X


4
1
2
3
(a)
Y


Z


(b)
(a)
(c)
AA

		HC 260 C - 2,2 WNB	HC 260 C - 2,8 DNB
***1) Serial Number**		01140260..	01140261..
U	**V**	220-240 (1~ 50 Hz)	380-415 (3~ 50 Hz)
I	**A**	9,85	4,8
P_1	**W**	2200	2800
F	**A**	16	16
n_0	**1/min**	6500	6500
v_D	**m/min**	5	5
m	**kg**	71	71
H	**mm**	260 x 18,6 x 1,2	260 x 18,6 x 1,2
A	**mm**	1110 x 620 x 980	1110 x 620 x 980
$B_{max.}$	**mm**	260	260
H_{max}	**mm**	160	160
$L_{pA(A)}/K_{pA(A)}$	**dB(A)**	95,6 / 3	94,8 / 3
$L_{WA(A)}/K_{WA(A)}$	**dB(A)**	102,1 / 3	104,6 / 3
$L_{pA(D)}/K_{pA(D)}$	**dB(A)**	91,5 / 3	94,2 / 3
$L_{WA(D)}/K_{WA(D)}$	**dB(A)**	99,1 / 3	102,3 / 3

CE *2) 2014/30/EU, 2006/42/EC, 2011/65/EU
*3) EN 61029-1:2009+A11:2010, EN 61029-2-3:2011, EN IEC 63000:2018
*4) 4811006.15004-1
*5) TÜV Rheinland LGA Products GmbH (Tillystraße 2, D-90431 Nürnberg, Registiernummer 0197).

2022-05-20, Bernd Fleischmann ppa. B. F.
Direktor Produktentstehung & Qualität (Vice President Product Engineering & Quality)
*6) Metabowerke GmbH - Metabo-Allee 1 - 72622 Nuertingen, Germany

Original instructions

1. Table of Contents

2. Declaration of Conformity

On our own responsibility, we hereby declare that these surface planers and bench thicknessers, identified by type and serial number *1), meet all relevant requirements of directives *2) and standards *3). Test report *4), Issuing testing authority *5), Technical documents for *6) - see page 7.

For UK only:

UK CA We as manufacturer and authorized person to compile the technical file, see *6) on page 7, hereby declare under sole responsibility that these planers and bench thicknessers identified by type and serial number *1) on page 7, fulfil all relevant provisions of following UK Regulations S.I. 2016/ 1091, S.I. 2008/1597, S.I. 2012/3032, and Designated Standards *3) on page 7.

Approved Body No.: 2571; TUV Rheinland UK Ltd (Friars Gate (Third Floor), 1011 Stratford Road, Shirley, Solihull, B90 4BN, UK; Certificate No.: A6 50552584 0001, A6 50552608 0001

3. Specified Conditions of Use

This machine is intended for surface planing and thickness planing of solid woods. The permissible work piece dimensions must be observed (see "Technical Specifications").

The following tasks may not be carried out with this tool:

– Insertion work (i.e. any work that does not extend the full length of the work piece),
– Planing of cavities, pins or cut-outs,
– Planing of heavily curved wood with which there is insufficient contact with the infeed and outfeed table.

Any other use does not comply with the intended purpose. Unspecified use, modification of the device or use of parts that have not been tested and approved by the manufacturer can cause unforeseeable damage!

4. General Safety Information

For your own protection and for the protection of your electrical tool, pay attention to all parts of the text that are marked with this symbol!

WARNING – Reading the operating instructions will reduce the risk of injury.

Pass on your power tool only together with these documents.

General Power Tool Safety Warnings

WARNING – 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.*

4.1 Work area safety

a) **Keep work area clean and well lit.** *Cluttered or dark areas invite accidents.*

b) **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.*

c) **Keep children and bystanders away while operating a power tool.** *Distractions can cause you to lose control.*

4.2 Electrical safety

a) **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.*

b) **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.*

c) **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*

d) **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.*

e) **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.*

f) **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.*

4.3 Personal safety

a) **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.*

b) **Use personal protective equipment. Always wear eye protection.** *Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*

c) **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.*

d) **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 device may result in personal injury.*

e) **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*

f) **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.*

g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of dust extraction can reduce dust-related hazards.*

h) **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.*

4.4 Use and handling of the power tool

a) **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.*

b) **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.*

c) **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.*

d) **Store idle power tools out of the reach of children. 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.*

e) **Maintain power tools and accessories with care. 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.*

f) **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*

g) **Use the power tool, accessories, 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.*

h) **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.*

4.5 Service

a) **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.*

4.6 Additional Safety Instructions

– These operating instructions are intended for people with basic technical knowledge regarding the operation of a machine like this or similar electrical power tools. Inexperienced persons are strongly advised to seek competent advise and guidance from an experienced person before operating this machine.
– The manufacturer assumes no liability for any damage caused by neglect of these operating instructions.

Information in these instructions is marked as under:

Danger!
Risk of personal injury or environmental damage.

Risk of electric shock!
Risk of personal injury by electric shock.

Entanglement hazard!
Risk of personal injury by body parts or clothing being drawn into the rotating saw blade.

Caution!
Risk of material damage.

Note:
Additional information.

5. Special Safety Instructions

5.1 Additional Safety instructions

A thicknessing machine is a dangerous tool which can, due to operator carelessness, cause serious injury.

Caution!

- Please also observe the special safety instructions in the respective chapters.
- Where applicable, follow the legal directives or regulations for the prevention of accidents.

General hazards!

- Consider environmental conditions: Keep work area well lighted.
- Use suitable work piece supports to support the work piece when cutting long stock. Set the work piece rests to an appropriate height.
- This thicknessing machine shall only be started and operated by persons familiar with thicknessing machines and the dangers associated with the operation of thicknessing machines. Persons under 18 years of age shall use this machine only in the course of their vocational training, under the supervision of an instructor.
- Keep bystanders, particularly children, out of the danger zone. Do not permit other persons to touch the machine or power cable while it is running.
- Do not plane deeper than 1/8" (3 mm).
- Turn power off if the tool is not used.
- Place the machine on a level and horizontal ground. Provide a secure base for the machine. If necessary, screw the legs (17) to the ground with 4 long screws (To do this, unscrew the transport wheels (19) and the rubber feet).

Risk of electric shock!

- Prevent body contact with earthed objects such as radiators, pipes, cooking stoves, refrigerators when operating this machine.
- Do not use the power cable for any purpose it is not intended for.
- Regularly check the power cable on the device and have it replaced by an approved expert if damaged.
- Regularly check extension cables and replace if damaged.
- When working out of doors, only use extension cables that are also approved for outdoors.
- Ensure the machine is disconnected from power supply before servicing.

Cutting hazard when touching the rotating cutterblock!

- Always keep your hands well clear of the cutterblock.
  - Use suitable feeding aids, if necessary.
  - Keep sufficient distance to driven components when operating this machine.
  - When in operation, do not reach into the dust collector or the cutterblock cover.
- To prevent accidental starting, always turn the machine OFF:
  - after a power failure,
  - before unplugging or plugging in.
- Do not operate the machine without installed guards.
- Wait until the cutterblock has come to a complete stop, before removing jammed parts or small cutoffs, chips, etc. from the work area.

Cutting hazard, even with the cutterblock at standstill!

- Wear gloves when changing planer knives.
- Store the planer knives in a safe place and in such a manner that nobody can get hurt.

Entanglement hazard!

- Be careful that no part of your body or objects can be drawn into the machine together with the workpiece. Do not wear ties, gloves, garments with loose-fitting sleeves. Contain long hair with a hairnet.
- Never plane workpieces to which ropes, cords, strings, cables or wires are attached or which contain such materials.

Risk of injury by work piece kickback (work piece 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 planer knives. Blunt planer knives may get caught in the surface of the work piece.
- Do not jam any work pieces.
- If in doubt, check work piece for inclusion of foreign matter (e.g. nails or screws).
- Never plane several work pieces at the same time. Risk of personal injury if individual pieces are uncontrolled caught by the cutterblock.
- Remove small cutoffs, scrap, etc. from the work area – when doing so, the cutterblock must be at standstill and the power cable unplugged.
- Ensure that when switching on (e.g. after servicing) no tools or loose parts are left on or in the machine.

Hazard generated by insufficient personal protection gear!

- Wear hearing protection.
- Wear safety glasses.
- Wear dust mask.
- Wear suitable work clothes.
- Wear non-slip footwear.
- Wear gloves for handling (transporting) rough material.

Risk of injury by inhaled wood dust!

Reducing dust exposure:

WARNING - Some dust created by the machining contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
- Lead from lead-based paints,
- arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals,work in a well-ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

This also applies to dust from other materials, such as some timber types (like oak or beech dust). Other known diseases are e.g. allergic reactions, respiratory diseases. Do not let dust enter the body.

Observe the relevant guidelines and national regulations for your material, staff, application and place of application (e.g. occupational health and safety regulations, disposal).

Collect the particles generated at the source, avoid deposits in the surrounding area.

Use suitable accessories for special work. In this way, fewer particles enter the environment in an uncontrolled manner.

Use a suitable extraction unit.

Reduce dust exposure with the following measures:
- do not direct the escaping particles and the exhaust air stream towards yourself or nearby persons or towards dust deposits,
- use an extraction unit and/or an air purifier,
- ensure good ventilation of the workplace and keep it clean using a vacuum cleaner. Sweeping or blowing stirs up dust.
- Vacuum or wash protective clothing. Do not blow, beat or brush protective gear.

Hazard generated by modification of the machine or use of parts not tested and approved by the manufacturer!

- Assemble the machine in strict accordance with these instructions.
- Use only parts approved by the manufacturer. This applies especially to all safety devices (see spare parts list for stock numbers).
- Do not change any parts.

Hazard generated by machine defects!

- Keep the machine and accessories in good repair. Observe the maintenance instructions.
- Prior to each use check the tool for any eventual damage:
  before continuing to use the tool, safety devices, protective devices or lightly damaged parts must be carefully inspected for correct and proper operation. Check to see that all moving parts work properly and do not jam. All parts must be correctly installed and fulfil all conditions necessary to ensure perfect operation of the unit.
- Do not operate tool while under the influence of drugs, alcohol or medication. There is the risk of electrical shock. Ask a qualified electrician immediately to replace a damaged mains cable.
- Damaged protection devices or parts must be repaired or replaced by a qualified specialist. Have damaged switches replaced by a service centre. Do not operate the machine if the switch can not be turned ON or OFF.
- Keep handles free of oil and grease.

Danger from blocking workpieces or workpiece parts!

If blockage occurs:

1. switch machine OFF;
2. Unplug power cable;
3. Wear gloves.
4. Clear the blockage using a suitable tool.

5.2 Symbols on the Machine

Danger!

Disregard of the following warnings may lead to serious personal injury or material damage.


Read instructions.


Always keep your hands well clear of the cutterblock.
Keep sufficient distance to driven components when operating this machine.


Warning - general danger. Risk of personal injury or environmental damage.

Height setting of thicknesser bed One full turn of the crank changes the height position of the thicknesser bed by 3 mm.

Notes on the safety screw (2). See chapters 9.1 and 10.1.

5.3 Safety Devices

Anti-kickback lock

The anti-kickback lock (4) prevents the work piece from being thrown back against the operator by the rotating cutterblock.

– All fingers of the anti-kickback lock must end in a point on the underside.
– All anti-kickback fingers must automatically return to their rest position (downwards).

Cutterblock guard extrusion

The cutterblock guard extrusion (22) prevents the rotating cutterblock from being touched from the top when surface planing.

– After loosening the clamping screw (23) the cutterblock guard extrusion is adjusted to the work piece width.
– With the height adjustment screw (25) the cutterblock guard extrusion is adjusted to the work piece height. The height of the cutterblock cover extrusion can be adjusted from 0 to 85 mm for surface planing.

For effective protection the cutterblock guard extrusion must always be set against the work piece. The clamping lever (24) must be pressed downwards.

When guiding the work piece the hands slide over the cutterblock guard extrusion.

Chip chute

See fig. Q.

When thickness planing the chip chute (3) serves as cutterblock guard.

For this purpose the chip chute (3) is folded upwards and the safety screw (2) is turned in clockwise direction to the end position (secured). The chip chute is secured.

6. Overview

See page 2.

1 Outfeed table
2 Safety screw of the chip chute
3 Chip chute
4 Anti-kickback lock
5 Lock lever
6 Fence / fence profile

7 Cutterblock
8 Clamping lever (angle)
9 Clamping lever (width)
10 Fence bracket (to attach the fence)
11 Infeed table
12 Height adjustment (infeed table)
13 Chip extraction guard (with port for extraction)
14 Push stick
15 Thicknesser bed
16 Transport handles
17 Legs
18 Scale (surface planing)
19 Transport wheels
20 On/Off switch
21 Height adjustment for the thicknesser bed (hand crank)
22 Cutterblock guard extrusion
23 Clamping screw (of the cutterblock guard extrusion)
24 Clamping lever (of the arm of the cutterblock guard extrusion)
25 Height adjustment screw (of the cutterblock guard extrusion)
26 Screw for storing the push stick when not in use

Standard accessories:

- open-ended spanner
- Allen key
- planer knife setting gauge

7. Operating Controls

On/off switch (20)

- Switching on = press green switch.
- Switching off = press red switch.

Undervoltage relay

In the event of a voltage failure an undervoltage relay will trip. This prevents the machine from starting up when the power is restored. To restart, the green switch button must be pressed.

Overload protection

The planer/thicknesser has an integrated overload protection. It shuts the machine down if the motor heats up too much. To restart the machine:

1. let motor cool down (approx. 10 minutes);
2. press green switch button .

Infeed table height setting (when operated in surface planer mode)

With the height setting (21) for the thicknesser bed the planing thickness (= thickness of the work piece after planing) is set when the machine is used for thickness planing.

- One full turn of the crank changes the height position of the thicknesser bed by 3 mm.
- Per pass a maximum of 3 mm material can be removed.
- Work pieces of max. 160 mm thickness can be thickness planed.

Infeed table height setting (when operated in surface planer mode)

With the height setting (12) for the infeed table the depth of cut is set when the machine is used for surface planing.

- Graduation of the scale (18) in 0.5 mm steps.
- Per pass a maximum of 3 mm material can be removed.

Fence profile

The fence profile (6) provides lateral support for the work piece when surface planing.

- After loosing the clamping lever (9) the fence profile can be adjusted to the width of the work piece.
- Loosen the clamping lever (8) to tilt the fence extrusion to a maximum of 45°.

8. Assembly

Danger!

Modification of the machine or use of parts not tested and approved by the manufacturer can cause unforeseen damage.

- **Assemble machine exactly as per these instructions.**
- **Use only the parts supplied with the machine as standard equipment.**
- **Do not change any parts.**

Required tools

– Spanner 10 mm
– Spanner 13 mm
– Philips screwdriver
– Allen key (different sizes)
– Hammer

8.1 Removal of shipping protection

- Remove protective film and soak up excess oil using cloths.

8.2 Leg installation

- Attach the transport handles (16) on the side of the infeed table (11). Fasten each leg with 4 screws and washer.

1. With the help of a second person, carefully place the machine on a suitable surface on one side of the machine.
2. **See fig. A:**
   On the side of the infeed table (11):
   Push two legs (17) into the corners of the machine from the inside. Hold the two transport handles (16) from the outside to the machine and fix with screws:
   - Put the washers on the (longer) hexagon head screws.
   - Fit hexagon head screws into holes from the outside;
   - Screw on the hexagon nuts from the inside and tighten them.
3. **On the side of the infeed table (1):**
   Push two legs (17) into the corners of the machine from the inside:
   - Put the washers on the hexagon head screws.
   - Fit hexagon head screws into holes from the outside;
   - Screw on the hexagon nuts from the inside and tighten them.
4. **See fig. B:**
   On the side of the outfeed table (1) mount the transport wheels (19) on the legs with hexagon head screws, washers and hexagonal nuts.

8.3 Mounting the thicknesser bed height adjuster

See fig. C.

- Fit the hand crank (21) onto the port so that the hexagon socket screw on the side faces the flattened side for the nozzle.
  Tighten the hexagon socket screw with a hexagon wrench to secure the hand crank (21).

8.4 Install on/off switch

See fig. C.

- Fix on/off switch (20) with the 4 long screws.

8.5 Mounting the infeed table

See fig. D.

1. Remove the 2 fastening screws (a) of the left bar (c) and remove the bar (c).
2. Also remove the right bar.
3. Place the infeed table (11) onto the machine and hold it firmly so that it cannot fall down.
4. Slide the left bar (c) in sideways and align it so that the 2 metal pins (b) in the bar match the holes in the unit.
   Make sure that the reading mark (d) on the infeed table is in the area of the scale (18) (change the position of the infeed table if necessary).
   Use a hammer to drive the 2 metal pins (b) flush into the holes in the device.
   Screw the bar back in place with the 2 fixing screws (a) (and washers).
5. Also attach the right bar.

See fig. E.

6. Prepare the height adjustment (12):
   Slide a washer (a) onto the threaded rod.
7. Insert the threaded rod of the height adjustment (12) into the hole at the front of the infeed table (11).
8. Push the spring washer (b) and then the locking ring (c).
9. Screw the threaded rod into the threaded hole (d) of the crossbar (under the infeed table (11)).
10. There is a conical recess in the threaded rod. Position the locking ring (c) in such a way that the screw in the locking ring is above this recess.
    Secure the locking ring by tightening the screw with a hexagonal wrench.

8.6 Chip chute installation

See fig. F.

- Slide the chip chute (3) under the fastening profile (a) and screw tight with the 4 self-tapping screws (b).

8.7 Attach the outfeed table and mount cutterblock guard extrusion.

See fig. G.

1. Attach the outfeed cable (1) at the device: See chapter 9.1, step 1 to 6.
2. Hold the bracket (a) of the cutterblock guard extrusion against the side of the outfeed table (1) and fix with 2 screws. To avoid jamming, tighten the 2 screws alternately. (Note: To access the screws, the clamping lever (24) must be pressed downwards.)
3. Insert the guard extrusion (22) into the bracket to that the entire cutterblock is covered and secure it with the clamping screw (23).

8.8 Fence profile installation

Note: The clamping lever can be repositions on the hexagon underneath by pulling it outwards a little in an axial direction.

See fig. H.

1. Screw the fence bracket (10) with 2 screws (a) to the infeed table (11).
2. Place the fence bracket (b) on the stop bracket (10), whilst inserting the screw of the clamping lever (9) into the groove of the fence bracket (10).
3. Tighten the clamping lever (9), thereby securing it to the device.
4. Move the other clamping lever (8) upwards and clamp it so that there is enough space to insert the fence profile (6).
5. Hold the fence profile (6) in such a way that the recess points downwards and towards the outfeed table (1).
6. Push the fence profile (6) with its groove onto the 2 carriage bolts (c) until the stop. Tighten the nuts of the carriage bolts (c), thereby securing the fence profile.
7. Put on the plastic cap (d) supplied at the end of the fence profile.

8.9 Inserting the screw (26)

See figure page 2.

Insert the screw (26) (for storing the push stick) as shown and tighten lock nut.

8.10 Connection to Power Mains

Danger!

High voltage
Operate in dry environment only.
Operate machine only on a power source matching the following requirements (see also "Technical Specifications"):

- **fuse protection by a residual current operated device (RCD) of 30 mA sensitivity;**
- **outlets properly installed, earthed and tested;**
- **400 V: three-phase outlets with neutral wire installed;**
- **When a dust collector is used it must also be properly earthed.**

Make sure the power supply cable is out of the way, so that it does not interfere with the work and does not pose a tripping hazard or will get damaged.

Protect the power supply cable from heat, aggressive liquids and sharp edges.

Use only extension cables with a sufficient lead cross section.

Do not pull on the power supply cable to unplug.

Check direction of rotation! (machines with 3-phase motor only):

Depending on the phase sequence the cutterblock may turn in the wrong direction. This can cause damage to the machine and work piece. It is therefore necessary to check the direction of rotation after initial commissioning and every time the machine is connected to a different outlet.
If the direction of rotation is incorrect the phases must be changed on the supply line or mains connection by an electrician.

9. Operation Surface planer mode

Note:
Surface planing is used to level an uneven surface (= jointing), for example the edges of a plank.

– The work piece rests on top of the infeed table.
– The work piece is cut on the underside.
– The feed direction for the work piece is exactly opposite than that for thickness planing.

Work piece dimensions

length	width	heig ht
use push block (feeding aid) if less than 250 mm	max. 260mm	5 mm min.
use extra work piece supports or helper if over 1500 mm		

9.1 Preparation, conversion to surface planer

Danger!

Always unplug before servicing!

1. Adjust the fence (6) outwards so that it does not interfere.

See fig. I.
2. Turn the setting screw (2) in anti-clockwise direction to the end position (undo).
3. Swing chip chute (3) downwards.

See fig. J.
4. Turn both left and right lock lever (5) outwards.
5. Put outfeed table (1) on the machine – both pins on the machine housing must engage in the **lower** slots of the outfeed table guide.

Note:
Only when the outfeed table is correctly mounted can the end switch be triggered. Only then the machine can be switched on.

6. Secure outfeed table (1) with both lock levers (5). **Close both lock levers until the stop. Only then can the device be switched on.**
7. Set the thicknesser bed (15) all the way down using the hand crank (21).

See fig. K.
8. On the side of the infeed table (11):
   Attach the chip extraction guard (13) between infeed table (11) and thicknesser bed (15). Pay attention to the correct position:
   - round suction port points outwards. Fence (a) points downwards.
   - Insert the fence (a) into the tab (b) on the thicknesser bed (15).
9. Crank the thicknesser bed carefully up to secure the chip extraction guard (13). **The chip extraction guard covers the cutterblock from below. Only when the chip extraction guard (13) is correctly mounted can the end switch be triggered. Only then can the device be switched on.**
10. If necessary: Connect the hose of a suitable extraction system to the suction port of the chip extraction guard (13). Pay attention to chapter 10.3.
11. Cover the cutterblock with the cutterblock guard extrusion (22).

9.2 Surface Planing and Edge Jointing

Danger!

– Risk of serious personal injury by rotating cutterblock! Always cover the part of the cutterblock that it not covered by the workpiece with the cutterblock guard extrusion (22). Adjust the cutterblock guard extrusion exactly to the dimension of the work piece.
– Check the function of the cutterblock guard extrusion. Push the cutterblock guard extrusion downwards and release. After releasing the cutterblock guard extrusion has to spring back automatically to the set position. Do not operate the device with a defective cutterblock guard extrusion.
– Never reach with your hands under the cutterblock guard extrusion when guiding the work piece!
– Use a feeding aid (push block) when planing small work pieces, which can not be guided with a sufficient safety distance to the cutterblock.
– Use the jointer fence when edge jointing to have safe lateral support and guiding. Use an auxiliary fence when planing thin or narrow stock, to have your hands at a sufficient safety distance to the cutterblock.
– Use a stop block behind the work piece for set-in work, to keep the work piece from being thrown back against the direction of feed.
– Use a work piece support (e.g. roller stand) to keep long stock in balance.
– Do not pull the work piece back over the unguarded cutterblock!
– Use if necessary:
Chip extraction system, sliding wax (to enhance the gliding of work pieces across the infeed and outfeed table).

1. Assume proper operating position:
   - on the switch side;
   - head-on to the machine;
2. **See fig. L:** Set fence (6) with clamping lever (8) and clamping lever (9) as require**d.**
3. **See fig. M:** Set the desired chip removal with the height adjustment (12) and read off the scale (18).

Note:
The machine can remove 3 mm maximum in a single pass. This measure, however, shall only be used:

– with very sharp planer knives;
– for soft woods;
– if the full planing width is not utilized.

Otherwise there is a risk of overloading the machine.

It is recommended to machine a workpiece in several operations.

4. Place workpiece against the fence (6) (if required, use auxiliary fence).
5. Adapt the cutterblock guard extrusion to the workpiece:
   - **A)** Planing small edges (jointing):
     See fig. N: Set the cutterblock guard extrusion (22) all the way down by turning the screw (25). Loosen the clamping screw (23), push the cutterblock guard extrusion (22) sideways to the workpiece, tighten the clamping screw (23).
   - **B)** Planing wide surfaces:
     See fig. O: Lower the cutterblock guard extrusion (22) from the top onto the workpiece. Adjust to the thickness of the workpiece by turning the screw (25). Loosen the clamping screw (23), push the cutterblock guard extrusion (22) sideways to the fence (6), tighten the clamping screw (23).
6. Switching on the motor.
7. Exert downward pressure on the workpiece only in the infeed table area (1).
8. Push the workpiece straight across the infeed table (11). Keep fingers together and guide work piece with the flat of your hand.
9. Switch machine off if no further thicknessing is to be done immediately afterwards.

10. Operation Thickness Planer Mode

Note:
Thickness planing reduces the thickness of a work piece with one already planed surface.

– The work piece is fed through the thicknesser.
– The surface already planed flat rests on the thicknesser bed (15).
– The work piece is cut on the upper side.
– The feed direction for the work piece is exactly opposite than for surface planing. **See fig. R**.

Work piece dimensions

length	width	height
200 mm min.	–	6 mm min.
use extra work piece supports or helper if over 1500 mm	max. 260 mm	max. 160 mm

10.1 Preparation, converting to thickness planing

Danger!

Always unplug before servicing!

1. Adjust the fence (6) outwards so that it does not interfere. (Alternatively: Remove the fence (6) and lay it aside.)

See fig. P.
2. Turn both left and right lock lever (5) outwards.
3. Remove outfeed table (1) and lay it aside.

See fig. Q.
4. Swing chip chute (3) up over the cutterblock. (The chip chute serves as a guard for the cutterblock).
5. Turn the safety screw (2) **in clockwise direction to the end position (tighten), only then will the limit switch be triggered and only then can the guard unit be switched on.**
6. When operating with a chip extraction unit: Remove the wing nut (a) from the chip chute (3). Place the chip extraction guard (13) onto the chip chute (3) and fix with the wing nut (a). Connect the hose of a suitable extraction system to the suction port. Pay attention to chapter 10.3.

10.2 Thickness Planing

Danger!

– Entanglement hazard by the rotating feed rollers! Do not reach into the machine! Use a feeding aid (push stick (14)), if you want to feed short stock into the thicknesser.
– Do not jam any work pieces. Risk of kickback.
– Remove stuck stock only after motor has come to a complete stop and machine is unplugged.
– Guide a work piece on the outfeed side if it has been fed so far into the thicknesser that it can no longer be safely guided from the infeed side.
– Do not thickness plane more than two work pieces at the same time. In this case feed both work pieces near the outer edges of the thicknesser bed.
– Use if necessary:
Chip extraction system, sliding wax (to enhance the gliding of work pieces across the thicknesser bed).

Caution!

There is a limit switch inside the machine. Take care not to damage the limit switch when feeding work pieces.

1. Assume proper operating position:
   - on the switch side;
   - head-on to the machine;
2. Adjust the planing thickness with the hand crank (21) and read off the scale.

Note:
The machine can remove 3 mm maximum in a single pass. This measure, however, shall only be used:

– with very sharp planer knives;
– for soft woods;
– if the full planing width is not utilized.

Otherwise there is a risk of overloading the machine.

It is best to make several passes to bring the work piece down to the desired thickness. **See fig. R.**

3. To thickness plane stock the surfaces of which are not parallel, use suitable feeding aids (make suitable templates (**see fig. S**)).
4. Switching on the motor.
5. Feed work piece slowly and straight into the thicknesser. It will then be automatically fed through the thicknesser.
6. Guide work piece straight through the thicknesser.
7. Switch machine off if no further thicknessing is to be done immediately afterwards.

10.3 Use a suitable extraction system

Danger!

Some types of wood dust (e.g. from oak and ash wood) can cause cancer when inhaled: In closed rooms work only with a suitable chip extraction system.

- **Fitting the outer diameter of the suction port (100 mm);**
- **Air volume [3] 550 m³/h;**
- **Vacuum at suction port of thicknesser [3] 740 Pa;**
- **Air speed at suction port of thicknesser [3] 20 m/s.**

Caution!

Operation without a dust collector is only possible:

- **outdoors;**
- **if only a minimum of chips is generated (with narrow stock and little chip removal);**
- **with dust respirator.**

11. Care and Maintenance

Danger!

Prior to all servicing:

- **Switch off the machine.**
- **Unplug power cable;**
- **Wait until machine has come to a complete stop.**

Replace defective parts, especially of safety devices, only with genuine replacement parts. Parts not tested and approved by the manufacturer can cause unforeseen damage.

After all servicing:

- **Put back into operation and check all safety installations.**
- **Make sure that no tools or other parts remain on or in the machine.**

Repair and maintenance work other than described in this section should only be carried out by qualified specialists.

11.1 Replacing Planer Knives

Note:
Blunt planer knives are recognizable by:

- reduced planing performance;
- increased risk of kickback;
- motor overloads.

Note:
The supplied planer knives are sharpened on both sides and cannot be resharpened. Reverse blunt planer knives. If both sides are worn, the planer knife must be replaced, see chapter Accessories.

Note:
Follow the manufacturer's instructions for the replacement planer knives. Have a specialist carry out the resharpening of planer knives intended to be resharpened.

Danger!

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

To remove the planer knives:

1. Unplug power cable;
2. Remove fence (6).
3. To gain access to the cutterblock: Move the cutterblock guard extrusion (22) all the way up and out.

See fig. T.

4. Insert the four hexagon head screws of the planer knife lockbar (a) completely (wear gloves!).
5. Remove planer knife lockbar (a) with planer knife (b) from the cutterblock (7).
6. Clean all surfaces of cutterblock and planer knife lockbar.

Danger!

Do not use cleaning agents (e.g. to remove resin residue) that could corrode the light metal components; the stability of the light metal components would be adversely affected.

To install the planer knives:

Note:
If you use planer knives having an edge on both sides you simply need to reverse the knives, provided the other edge is sufficiently sharp.

Danger!

- **Use only suitable planer knives (see "Technical Specifications", chapter "Accessories") – unsuitable, incorrectly mounted, dull or damaged planer knives can work loose, or increase the risk of kickback considerably.**
- **Always replace or reverse both planer knives.**
- **Install planer knives using only genuine replacement parts.**

7. **See fig. U:** Place the sharp planer knife (b) as shown on the planer knife lockbar (a). Both pins of the planer knife lockbar must fit into the two holes (c) of the planer knife (b).
8. Place the planer knife lockbar (a) with he planer knife (b) into the cutterblock (7). Ensure that the planer knife does not slip off the pins of the planer knife lockbar.
9. **See fig. V:** Unscrew the four hexagon head screws from the planer knife lockbar (a), until the lockbar (a) and planer knife (b) can still just be moved along the axis of the cutterblock.
10. There are **two ways** to check the projection of the knives:
    - Option 1: **See fig. W:** Place the setting gauge (d) (supplied) as shown on the cutterblock (7). The planer knives (b) must project so much that they touch the setting gauge. This check must be performed on both planer knives and at both ends of the cutterblock.
    - Option 2: **See fig. X:** Using an aluminium straight-edge (e) (this is more accurate than using the setting gauge (d)).
    - Place the aluminium straight-edge (e) as shown over outfeed table (1) and cutterblock (7).
    - Turn cutterblock by hand one turn against the direction of feed.
    - The planer 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.
11. To set the knife projection, turn the grub screws in the planer knife lockbar with a 3 mm Allen key as required.
12. **See fig. Y:** To tighten, unscrew the four hexagon head screws completely from the planer knife lockbar. To prevent distortion of the planer knife lockbar start with the screws in the centre, then tighten the screws closer to the edges.

Danger!

- **Do not extend tool when tightening the screws.**
- **Do not tighten bolts by striking the wrench.**

13. Return cutterblock guard extrusion (22) to its starting position.
14. Replace the fence (6).

11.2 Feedgear Maintenance

(on the side of the fence (6)).

1. Unplug power cable;
2. Unscrew the two nuts of the drive cover and remove the drive cover.
3. Remove chips and dust with dust collector or brush.
4. **See fig. Z:** Apply a light coat of care and maintenance spray to roller chain and shaft and axle bearings (do not use oil!).
5. Replace the drive cover and secure with the two nuts.

11.3 Main Drive Belt Tensioning

(on the side of the on/off switch (20)).

See fig. AA:

1. Unplug power cable;
2. Unscrew the nut of drive belt cover and remove cover (a).
3. Check belt tension with thumb pressure. The drive belt (b) should not give more than 10 mm in the centre.
   If the drive belt requires tensioning:
4. Loosen the four motor mounting screws (c) by approx. one turn.
5. Push motor down to tension belt.
6. When belt tension is correct tighten motor mounting screws (c) crosswise.
7. If necessary, remove chips and dust with dust collector or brush.
8. Put belt cover back on and secure with nut.

11.4 Machine Cleaning and Care

1. Unplug power cable;
2. Remove chips and dust with dust collector or brush from
   - cutterblock;
   - height-setting mechanism of cutterblock guard extrusion;
   - thicknesser bed spindles;
   - thicknesser feed drive.
3. Apply a light coat of care and maintenance spray to the following components (do not use oil!):
   - thicknesser bed spindles;
   - height-setting mechanism of cutterblock guard extrusion.
4. Apply a light coat of anti-seize compound to infeed table, outfeed table and thicknesser bed.

11.5 Transporting the Machine

Caution!

Do not carry from the infeed or outfeed table!

The machine can be transported by one person. Tilt the machine at the transport handles (16) until the machine stands on the transport wheels (19) and move it on the transport wheels.

11.6 Machine storage

Danger!

1. **Unplug power cable;**
2. **Store machine in such manner that**
   - **it cannot be used or tampered with by unauthorized persons, and**
   - **that nobody can get hurt while the machine is turned off.**

Caution!

Do not store machine unprotected outdoors or in damp environment.

11.7 Maintenance Table

The checks and procedures described in this section are an aid to safety! Should there be faults evident on any of the mentioned components, the machine must not be used until these faults have been remedied in a workmanlike manner.

Prior to operation	
Anti-kickback lock (4)	Check: – mobility of anti-kickback fingers (must fall down by their own weight) – points of anti-kickback fingers (not rounded)
Planer knives	Check: – tight seat – sharpness – general condition (no notches, etc.)
Inside of machine Threaded rods (height adjustment) Dust spout (when working without dust collection)	Remove: – chips – sawdust
Outfeed roller	Check: – coating undamaged? – is stock properly transported?
Infeed and outfeed table	– apply light coat of anti-seize compound

Once per month (if used daily)	
Threaded rods (height adjustment)	Apply a light coat of care and maintenance spray to the following guiding elements (do not use oil!)
Infeed and outfeed table	Check alignment, correct if necessary
Power supply cable	Check for damage, if necessary have replaced by a qualified electrician.

12. Troubleshooting Guide

Danger!

Before carrying out any fault service or maintenance work, always:

1. **switch machine OFF;**
2. **Wait until the cutterblock has come to a complete stop.**
3. **Unplug power cable;**

Cutting hazard when touching the rotating cutterblock!
Unintentional startup of the machine may lead to serious injuries.

Risk of burning!
Shortly after working the planer knives may be hot - Let the device cool down before rectifying any malfunction.

Danger!
Check to see that: all safety devices are operational after each fault service.

Motor does not run:

- Undervoltage relay tripped by temporary voltage failure.
  - switch on again.
- No mains voltage.
  - Check cables, plug, outlet and mains fuse.
- Motor has overheated, e.g. due to blunt planer knives, overloading or chip buildup.
  - Remove cause for overheating and allow to cool down for approx. 10 minutes, then start again.
- Activate the contact pins, not the contact switch.
  - For operation as thickness planer: Check if the setting screw (2) of the chip chute (3) is turned to the end position and correct if necessary. Only then the contact switch is activated and the machine can be switched on (see chapter 10.1).
  - For operation as surface planer: Check if the outfeed table is correctly mounted. Check if the chip extraction guard is mounted correctly. Only then the contact switch is activated and the machine can be switched on (see chapter 9.1).
  - If necessary, adjust contact pins. Please contact the customer service, see chapter 14.

Performance lessens

- Planer knives blunt
  - Install sharp knives.
- Drive belt slips
  - Re-tension drive belt (see chapter 11.3).

Planed surface not smooth

- Planer knives blunt
  - Install sharp knives.
- Planer knives blocked by chips
  - remove chips.
- Moisture contents of work piece too high
  - Dry work piece.

Planed surface cracked

- Planer knives blunt
  - Install sharp knives.
- Planer knives blocked by chips
  - remove chips.
- Work piece was planed against the grain
  - Plane work piece in opposite direction
- Too much material removed in one pass
  - Make several passes at less depth of cut.

Feed rate too little (thicknessing)

- Resin buildup on thicknesser bed
  - Clean thicknesser bed and apply light coat of anti-seize compound.
- Feed rollers stiff
  - Repair feed rollers.
- Drive belt slips
  - Re-tension drive belt (see chapter 11.3).

Work piece jammed (thicknessing)

- Too much material removed in one pass
  - Make several passes at less depth of cut.

13. Accessories

Use only genuine Metabo accessories.

Use only accessories that fulfil the requirements and specifications listed in these operating instructions.

A Suction port (for connection to a chip extraction unit),
Order no.: 0913031288
B Roller stand RS 420 (for precise guidance of long workpieces), order no.: 0910053353
C Cutter bar conversion set (mandatory when converting from single-use reversible planer knives to HSS or carbide planer knives), order no.: 0911030845
D HSS planer knife (for planing wood, can be resharpened), order no.: 0911030721
E Single-use reversible knives (for planing wood), order no.: 0911030713
F Planer knife for planing wood (carbide, long service life, for all types of hard wood, can be resharpened), order no.: 0911030730
G Lubricant WAXILIT (For good sliding quality of the wood on the support table and the thicknesser bed), order no.: 0911001071
H Spray for maintenance and care for the removal of resin residues and to preserve the metal surfaces),.order no. 0911018691

See www.metabo.com or the catalogue for a complete range of accessories.

14. Repairs

Danger!

Repairs to electrical tools must ONLY be carried out by qualified electricians!

Contact your local Metabo representative if you have Metabo power tools requiring repairs. For addresses see www.metabo.com.

You can download a list of spare parts from www.metabo.com.

15. Environmental Protection

Observe national regulations on environmentally compatible disposal and on the recycling of disused machines, packaging and accessories.

Packaging materials must be disposed of according to their labelling in accordance with municipal guidelines. Further information can be found at www.metabo.com in the “Service” section.

Only for EU countries: never dispose of power tools in your household waste! According to European Directive 2012/19/EU on Waste from Electric and Electronic Equipment and implementation in national law, used power tools must be collected separately and recycled in an environmentally-friendly manner.

16. Technical Specifications

Explanatory notes on the specifications on page 7.

Changes due to technological progress reserved.

U = Mains voltage
I = Rated power
P_1 = Rated input power
F = Min. fuse protection
n_0 = No-load speed (cutterblock)
v_D = Feed rate for thickness planing
m = Weight

Dimensions of the planer knives:
H = length x width x thickness

Dimensions of the machine:
A = Depth (across infeed and outfeed table) x width x height

Work piece dimensions:
B_{max} = max. width
H_{max} = max. height (thickness planing)

Measured values determined in conformity with EN 61029-2-3.

~ AC power

The technical specifications quoted are subject to tolerances (in compliance with relevant valid standards).

Emission values
These values make it possible to assess the emissions from the power tool and to compare different power tools. The actual load may be higher or lower depending on operating conditions, the condition of the power tool or the accessories used. Please allow for breaks and periods when the load is lower for assessment purposes. Arrange protective measures for the user, such as organisational measures based on the adjusted estimates.

Typical A-effective perceived sound levels (according to EN 61029-2-3):
$L_{pA(A)}$ = Emission sound pressure level (surface planing)
$L_{WA(A)}$ = Sound pressure level (surface planing)
$L_{pA(D)}$ = Emission sound pressure level (thickness planing)
$L_{WA(D)}$ = Sound pressure level (thickness planing)
$K_{pA...}$, $K_{WA...}$ = uncertainty

Wear ear protectors!