



Einhell[®]

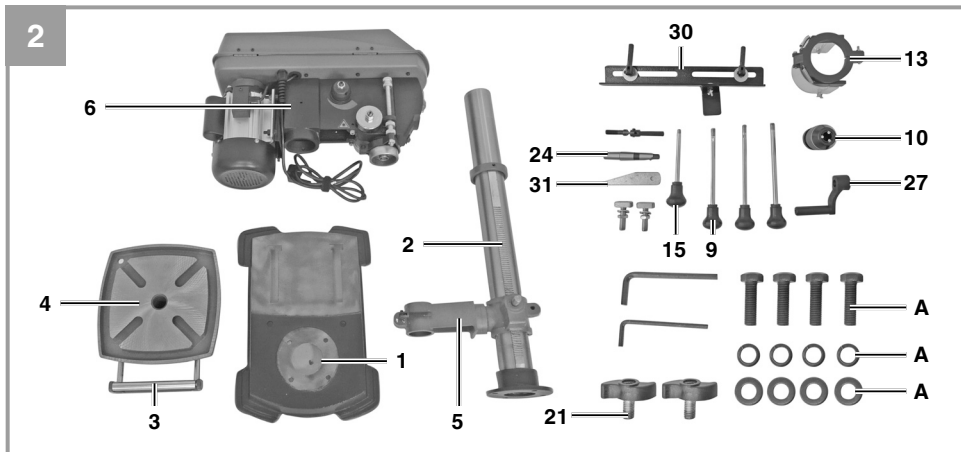
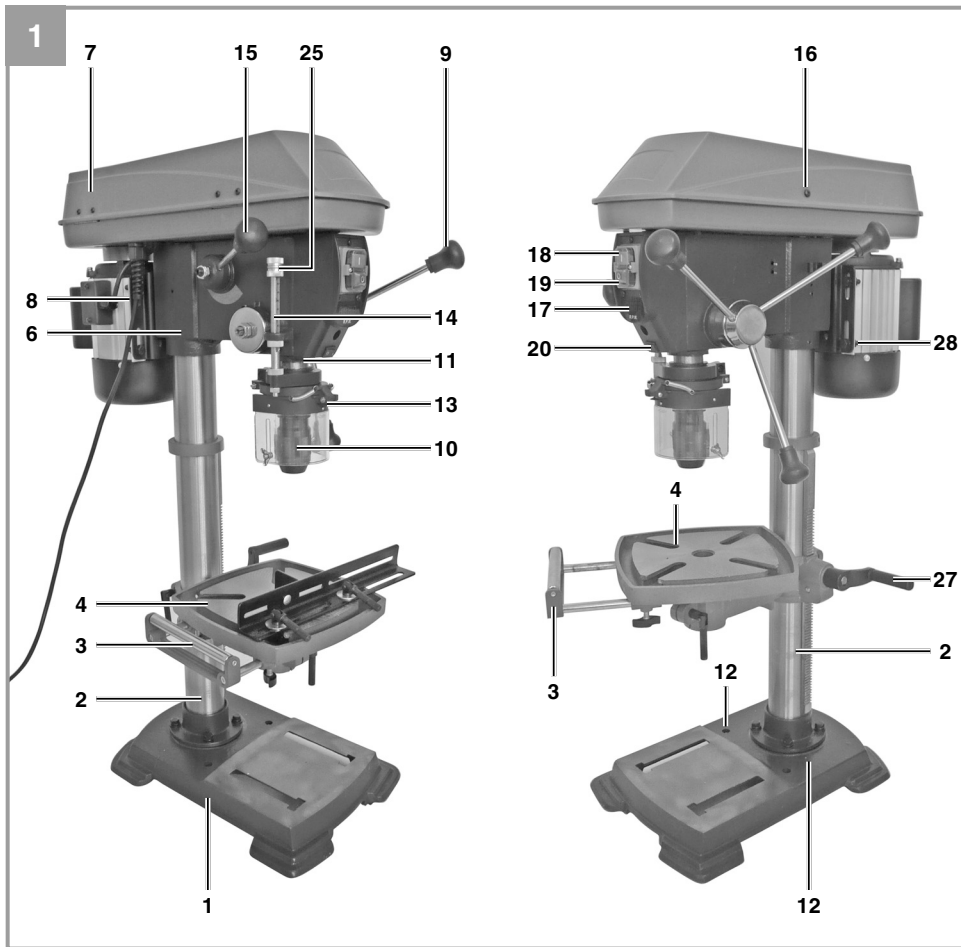
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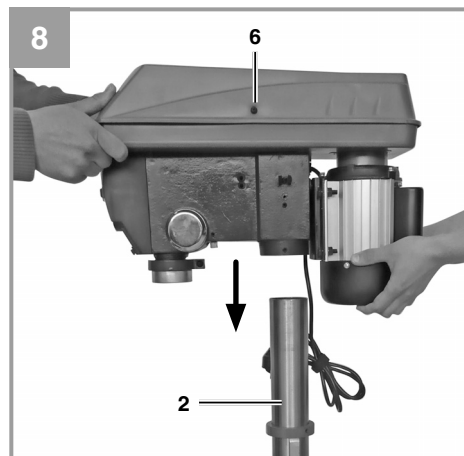
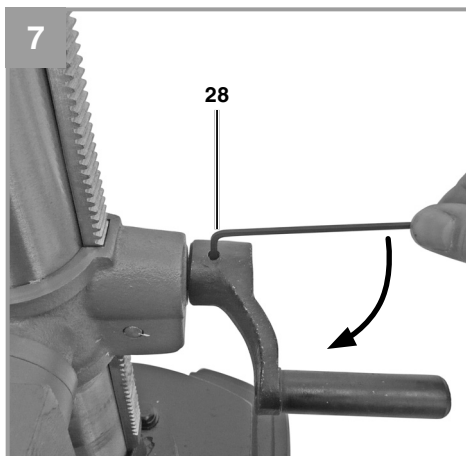
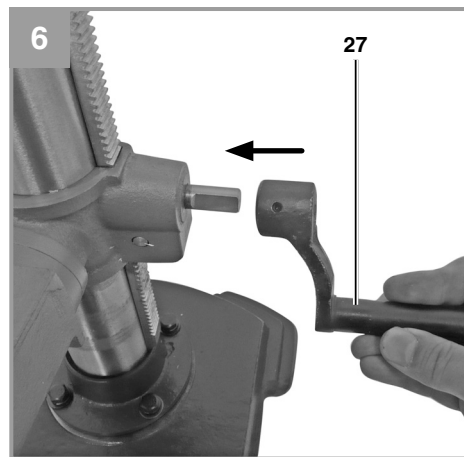
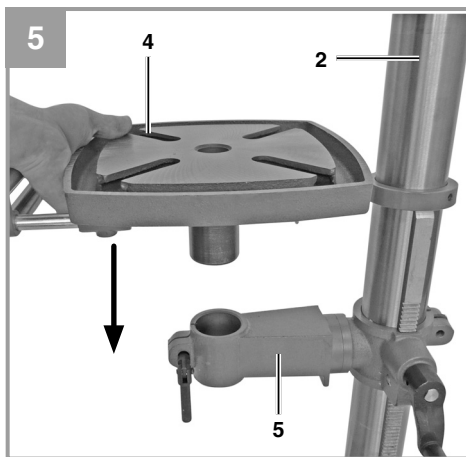
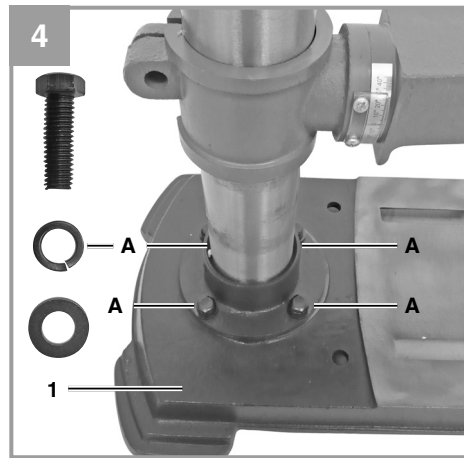
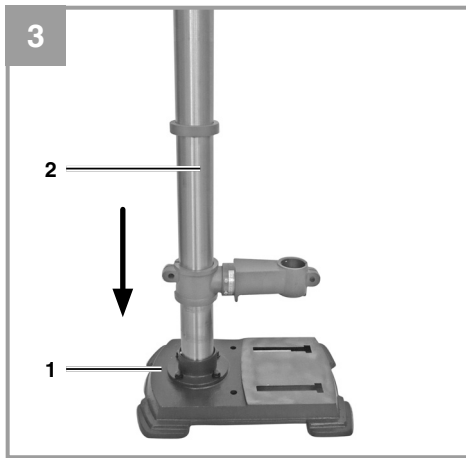
**GB Original operating instructions
Bench Drill**

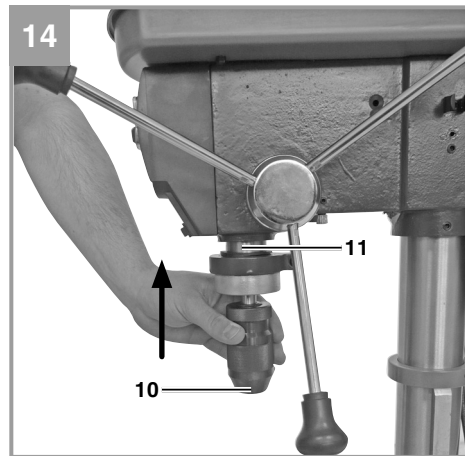
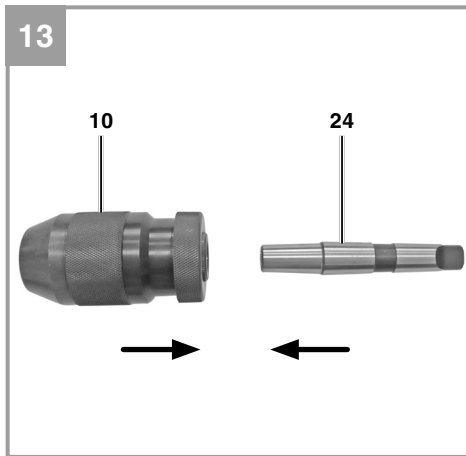
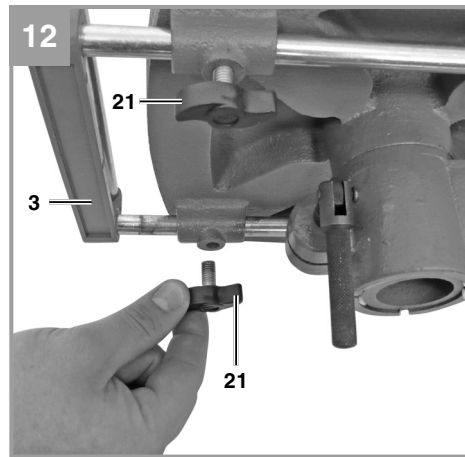
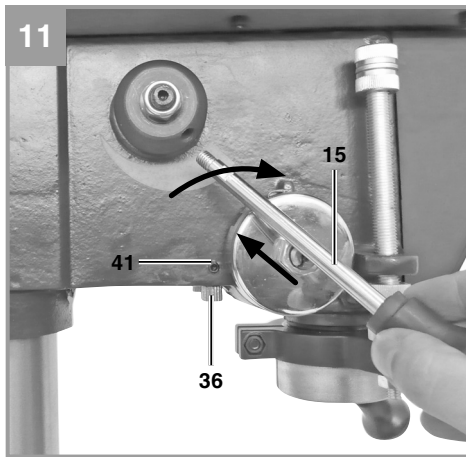
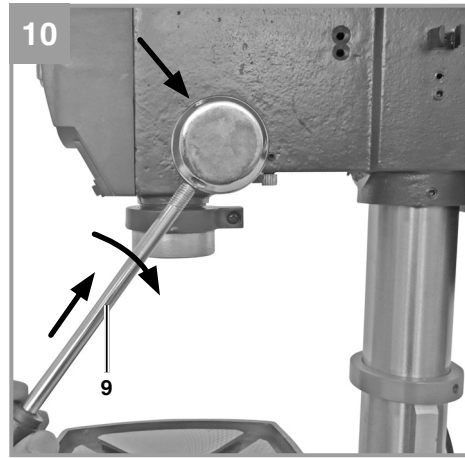
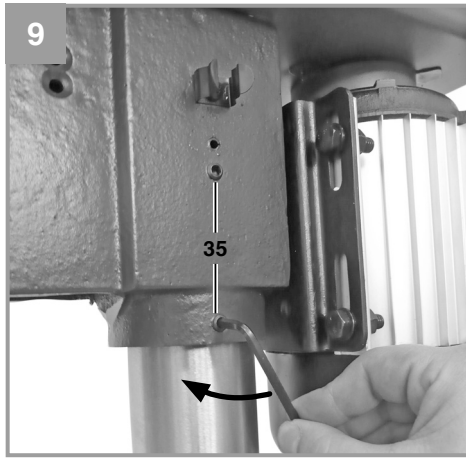
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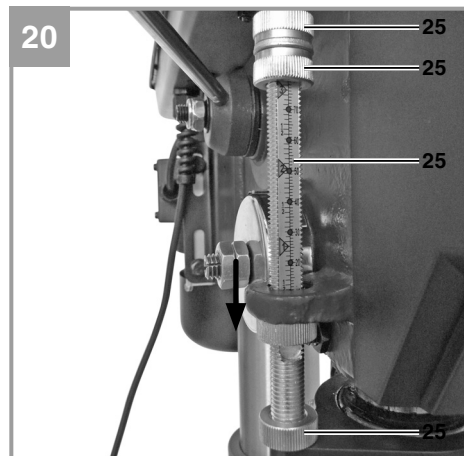
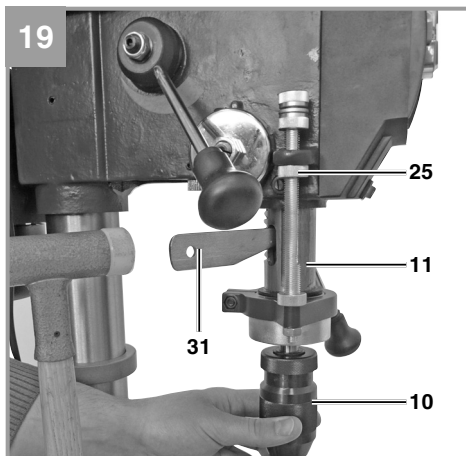
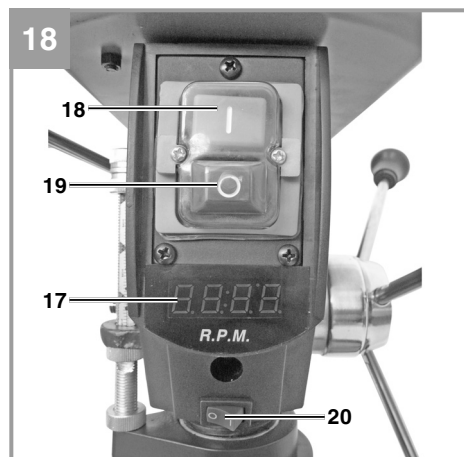
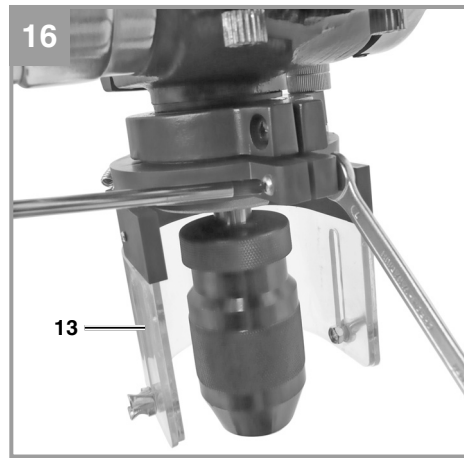
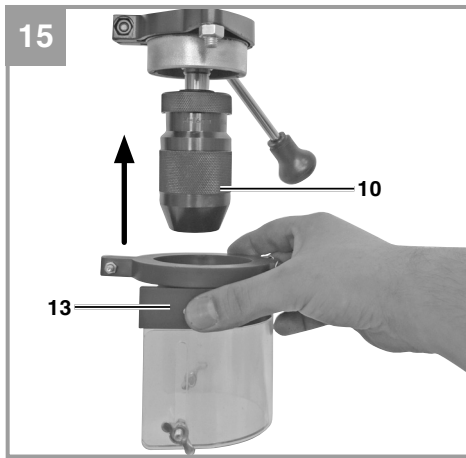
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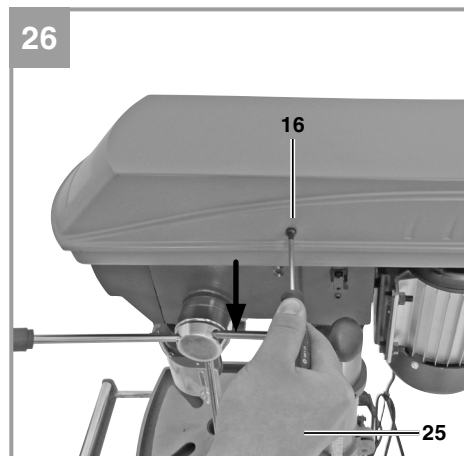
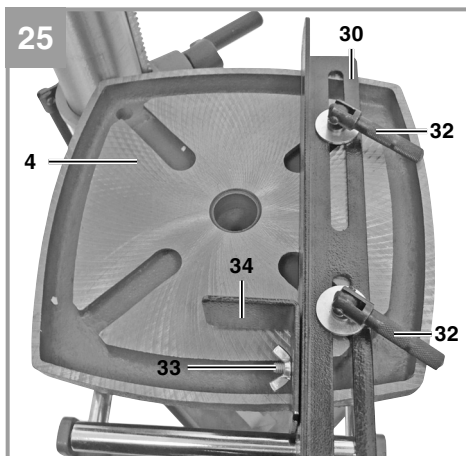
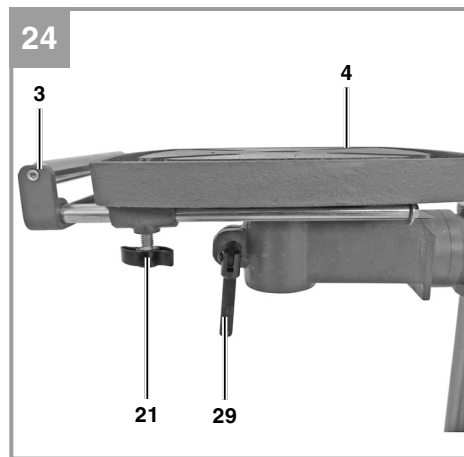
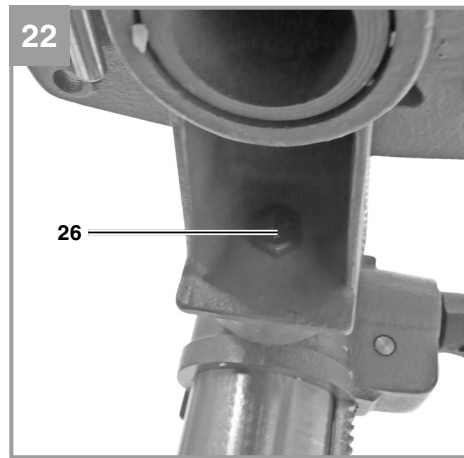
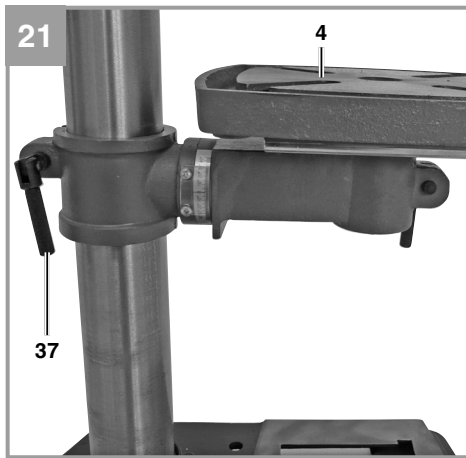
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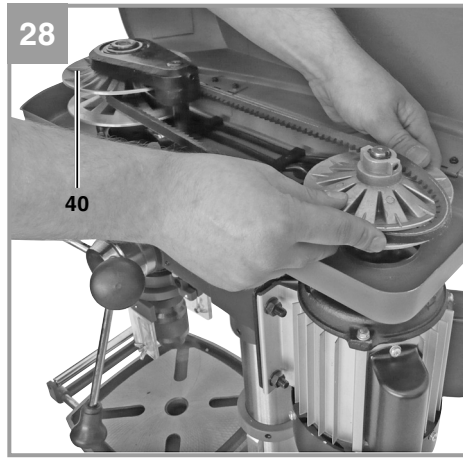
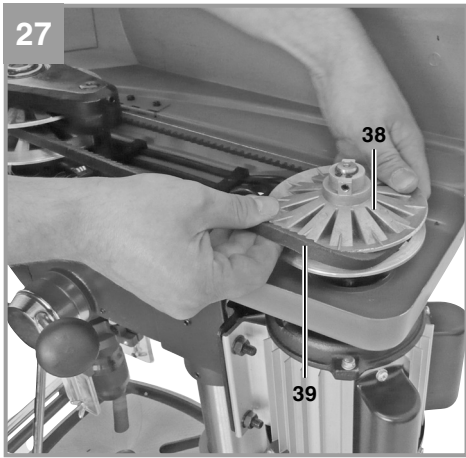














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Caution - Read the operating instructions to reduce the risk of injury



Wear ear-muffs. The impact of noise can cause damage to hearing.



Wear a breathing mask. Dust which is injurious to health can be generated when working on wood and other materials. Never use the device to work on any materials containing asbestos!



Wear safety goggles. Sparks generated during working or splinters, chips and dust emitted by the device can cause loss of sight.



Wear safety gloves



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⚠ Important!

When using the equipment, a few safety precautions must be observed to avoid injuries and damage. Please read the complete operating instructions and safety regulations with due care. Keep this manual in a safe place, so that the information is available at all times. If you give the equipment to any other person, hand over these operating instructions and safety regulations as well. We cannot accept any liability for damage or accidents which arise due to a failure to follow these instructions and the safety instructions.

1. Safety regulations

The corresponding safety information can be found in the enclosed booklet.

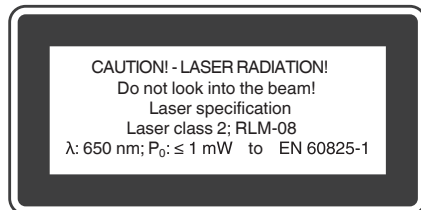
⚠ Caution!

Read all safety regulations and instructions. Any errors made in following the safety regulations and instructions may result in an electric shock, re and/or serious injury.
Keep all safety regulations and instructions in a safe place for future use.

1.1 Special instructions for the laser



Important: Laser radiation
Do not look into the beam
Laser class 2



- Never look directly into the laser path.
- Never direct the laser beam at reflecting surfaces or persons or animals. Even a low output laser beam can inflict injury on the eye.
- Caution: It is vital to follow the work procedures described in these instructions. Using the equipment in any other way may result in hazardous exposure to laser radiation.
- Never open laser module.

- When the pillar drill is not going to be used for an extended period of time, the batteries should be removed. It is prohibited to carry out any modifications to the laser to increase its power.
- Do not make any modifications to the laser that are designed to increase the laser's power.
- The manufacturer cannot accept any liability for damaged caused by a failure to comply with the safety information.

2. Layout and items supplied

2.1 Layout (Fig. 1)

1. Machine base
2. Pillar
3. Roller support
4. Drill table
5. Drill table clamp shaft
6. Machine head
7. V-belt
8. Motor
9. Grip knobs
10. Drill chuck
11. Spindle
12. Mounting holes
13. Folding chip guard
14. Depth stop
15. Speed control lever
16. Screw
17. Digital display
18. ON switch
19. OFF switch
20. ON/OFF switch (laser)
27. Drill chuck



2.2 Items supplied

Please check that the article is complete as specified in the scope of delivery. If parts are missing, please contact our service center or the nearest branch of the DIY store where you made your purchase at the latest within 5 work days after purchasing the article and upon presentation of a valid bill of purchase. Also, refer to the warranty table in the warranty provisions at the end of the operating instructions.

- Open the packaging and take out the equipment with care.
- Remove the packaging material and any packaging and/or transportation braces (if available).
- Check to see if all items are supplied.
- Inspect the equipment and accessories for transport damage.
- If possible, please keep the packaging until the end of the guarantee period.

Important!

The equipment and packaging material are not toys. Do not let children play with plastic bags, foils or small parts. There is a danger of swallowing or suffocating!

- Original operating instructions
- Safety instructions
- Pillar drill
- Drill chuck
- Folding chip guard
- Stop

3. Proper use

This pillar drill is designed for drilling metal, plastic, wood and similar materials. It is intended for use in the private sector only.

Food and harmful materials may not be processed with the machine. The drill chuck is only designed for use with drill bits and tools with a shaft diameter of 1,5 to 16 mm, and for cylindrical tool shanks. Tools with a tapered shank can also be used. The machine is intended for use by adults only.

The equipment is to be used only for its prescribed purpose. Any other use is deemed to be a case of misuse. The user / operator and not the manufacturer will be liable for any damage or injuries of any kind caused as a result of this.

Please note that our equipment has not been designed for use in commercial, trade or industrial applications. Our warranty will be voided if the machine is used in commercial, trade or industrial businesses or for equivalent purposes.

4. Technical data

Nominal input voltage	230V ~ 50 Hz
Power rating	550 W
Motor speed.....	1,400 rpm
Output speed (in nitely adjustable)	450 - 2,500 rpm
Drill chuck mount	B 16
Spindle taper	MK 2
Scroll chuck	Ø 1,5 - 16 mm
Reach	160 mm
Dimensions of drill table.....	240 x 240 mm
Angle adjustment of table	45° / 0° / 45°
Drill depth	80 mm
Pillar diameter.....	65 mm
Height	940 mm
Base area	450 x 300 mm
Weight.....	43 kg
Laser class.....	2
Wavelength of laser	650 nm
Laser output.....	≤ 1 mW

Sound and vibration

Sound and vibration values were measured in accordance with EN 60745.

	Operation	Idle speed
Sound pressure level L_{p_A}	69.2 dB(A)	65.5 dB(A)
Sound power level LW_A	78.6 dB(A)	76.4 dB(A)

Wear ear-muffs.

The impact of noise can cause damage to hearing.

Total vibration values (vector sum of three directions) determined in accordance with EN 61029.

Handle

Vibration emission value $a_h \leq 2.5 \text{ m/s}^2$
K uncertainty = 1.5 m/s^2

**Warning!**

The specified vibration value was established in accordance with a standardized testing method. It may change according to how the electric equipment is used and may exceed the specified value in exceptional circumstances.

The specified vibration value can be used to compare the equipment with other electric power tools.

The specified vibration value can be used for initial assessment of a harmful effect.

Keep the noise emissions and vibrations to a minimum.

- Only use appliances which are in perfect working order.
- Service and clean the appliance regularly.
- Adapt your working style to suit the appliance.
- Do not overload the appliance.
- Have the appliance serviced whenever necessary.
- Switch the appliance off when it is not in use.
- Wear protective gloves.

Residual risks

Even if you use this electric power tool in accordance with instructions, certain residual risks cannot be ruled out. The following hazards may arise in connection with the equipment's construction and layout:

1. Lung damage if no suitable protective dust mask is used.
2. Damage to hearing if no suitable ear protection is used.
3. Health damage caused by hand-arm vibrations if the equipment is used over a prolonged period or is not properly guided and maintained.

5. Before starting the equipment**5.1. Installing the machine**

- Place the base plate (1) in the desired position.
- Fasten the pillar (2) with flange using the supplied bolts (A) (Figs. 3 - 4).
- You can now fit the table and clamp in place with the clamping lever. Following this, fit the crank (27) and fasten tightly with the screw (28). (Fig. 5-7)
-

- Finally, fit the complete bit head to the pillar. Align the head so that it is horizontal to the base plate and fasten it in position with the screws (35). (Fig. 8-9)
- Screw the 3 supplied handles (9) in the handle mounts. (Fig. 10).
- Screw in the speed control lever (15) as shown in Figure 11.
- Secure the roller support (3) with thumb screws (21) (Fig. 12).
- Before you mount the drill chuck with the MK shank, check that both parts are clean. Insert the taper mandrel in the taper of the drill chuck with a powerful jolt. Then insert the taper in the spindle. To do this, place the drill chuck (10) with taper (24) in the spindle (11) and guide it to the stop point, then turn the chuck until it slips a little further into the spindle (11). Insert the drill chuck (10) with taper (24) into the spindle (11) with a jolt and check that the chuck is secure (Figs. 13 - 14).

Important: All bare parts are greased in order to protect them from corrosion. Before mounting the drill chuck (10) onto the spindle (11), both parts must be completely degreased using an environmentally friendly solvent. This ensures optimal transmission of power.

5.2. Installing the machine

Before you use the drill for the first time it must be mounted in a stationary position on a firm surface. Use both mounting holes (12) in the base plate to do this. Ensure that the machine is freely accessible for operation, adjustment and maintenance. Important: The fixing screws may only be tightened to a point where they do not distort or deform the base plate. Excessive tension can lead to fracture.

5.3. Folding chip guard (Figs. 15 - 17)

Mount the folding chip guard (13) as shown in Figures 15 and 16.

The height of the cover (23) is infinitely adjustable and can be locked using both thumb screws (22). The chip guard (13) can be clipped up to enable bits to be changed.

5.4. Prior to starting

Ensure that the voltage of the mains supply complies with the specifications on the rating plate. Connect the machine only to a socket with the properly installed earthing contact.

The table drill is equipped with a no-volt trip that is designed to protect the operator from an undesi-



red restart following a drop in voltage. Should this occur, the machine must be manually restarted.

6. Operation

6.1. General (Fig. 18)

To switch on the machine, push in the green On button "I" (18); the machine starts up. To switch off, press the red Off button "O" (19); the device shuts down.

Ensure that you do not overload the device.

If the sound of the motor drops in pitch during operation, it is being overloaded.

Do not overload the device to the point where the motor comes to a standstill. Always stand in front of the machine during operation.

6.2. Inserting the tool (Fig. 1)

Make sure that the power plug is removed from the socket-outlet before changing tools. Only cylindrical tools with the stipulated maximum shaft diameter may be clamped in the scroll chuck (10). Only use a tool that is sharp and free of defects. Do not use tools whose shaft is damaged or which are deformed or bowed in any other way. Use only accessories and attachments that are specified in the operating instructions or have been approved by the manufacturer. If the pillar drill should become jammed, switch off the machine and return the drill to its starting position.

6.3. Handling the keyless chuck

Your pillar drill is equipped with a keyless chuck. This enables tools to be changed without the need for an additional chuck key. To do so, insert the tool in the quick-change drill chuck and tighten by hand.

6.4 Using tools with tapered shanks (Fig. 19)

The pillar drill comes with a spindle taper.

To use tools with tapered shanks (MK2), proceed as follows:

- Move the drill chuck to the lower position.
- Lock the spindle in the lowered position using the bottom scale ring (25) to maximize access to the drill chuck (see point 7.6).
- Eject the tapered shank using the supplied drill drift (31), taking care as you do so to ensure that the tool does not land on the floor.
- Insert the new tool with tapered shank in the spindle taper with a jolt and then check that the tool is correctly seated.

6.5. Setting the speed (Fig. 1)

The operating speed of the machine is infinitely adjustable.

Important!

- **Speed adjustments are allowed only when the motor is running.**
- **Slowly and steadily move the speed control lever (15) while the machine is in idle mode.**
- **Ensure that the machine can run without interruption (i.e. remove workpieces, drill bits, etc.).**

Use the speed control lever (15) to infinitely adjust the speed. The set speed is shown on the digital display (17) in revolutions per minute.

Important! Never let the pillar drill run when the V-belt cover is open. Always pull power plug before opening the cover. Never touch the V-belt when it is rotating.

6.6 Drill depth stop (Fig. 20/Item 14)

The drilling spindle has a swivelling scale ring for setting the drill depth. Only adjust the setting when the machine is at a standstill.

- Press the drilling spindle (11) downwards until the tip of the drill bit touches the workpiece.
- Turn the scale ring (25) all the way down.
- Turn the scale ring (25) up by the distance of the desired drill depth and lock the setting with the second scale ring (25).
- The highest setting of the drilling spindle can likewise be adjusted using the bottom scale ring (practical when ejecting the drill chuck (see point 7.4).

6.7. Setting the angle of the drill table (Fig. 21-22)

- Slacken the carriage bolt (26) under the drill table (4).
- Set the drill table (4) to the desired angle.
- Tighten down the carriage bolt (26) in order to lock the drill table (4) into this position.

6.8. Setting the height of the drill table (Fig. 21; 23)

- Slacken the tightening screw (37).
- Set the drill table to the desired position with the help of the hand crank (27).
- Screw the tightening screw (37) back down again.

6.9 Drill table and roll base (Fig. 24)

- Slacken the clamping screw (29) to turn the drill table (4).
- Slacken the thumb screws (21) to extend the roll base (3).

6.10 Clamping the workpiece (Fig. 25)

As a general rule, use a machine vice or another suitable clamping device to secure a workpiece in position. Never hold the workpiece in place with your hand! When drilling, the workpiece should be able to travel on the drill table (4) for self-centering purposes. Ensure that the workpiece cannot rotate. This is best achieved by placing the workpiece /machine vice on a sturdy block. Caution! Sheet metal parts must be clamped in to prevent them from being torn up. Properly set the height and angle of the drill table for each workpiece. There must be enough distance between the upper edge of the workpiece and the tip of the drill bit.

This machine is fitted with an adjustable stop (30). Proceed as follows to position it:

- Move the sliders on the stop (30) into two of the four guide slots in the drill table (4).
- Set the stop (30) to the desired position.
- Fasten the stop (30) to the drill table using both spindle screws (32).
- Now slacken the thumb screw (33) on the angle piece (34) and position the angle piece (34) such that the workpiece can be placed against the stop (30) and the angle piece (34).

6.11 Using the laser (Fig. 11; 18/Item 36)

To switch on: Move the ON/OFF switch (20) to the "I" position to switch on the laser. Two laser lines are projected on the workpiece and intersect at the center of the drill tip contact point.

To switch off: Move the ON/OFF switch (20) to the "0" position.

Setting the laser: Slacken the screws (41) to adjust the laser. Retighten the screws after you have made the adjustment. Important! Never look directly into the laser beam!

6.12 Working speeds

Ensure that you drill at the proper speed. Drill speed is dependent on the diameter of the drill bit and the material in question.

The table below acts as a guide for selecting the proper speed for various materials.

Note: The drill speeds specified are merely suggested values.

Drill bit Ø	Cast iron	Steel	Iron	Aluminium	Bronze
3	2550	1600	2230	9500	8000
4	1900	1200	1680	7200	6000
5	1530	955	1340	5700	4800
6	1270	800	1100	4800	4000
7	1090	680	960	4100	3400
8	960	600	840	3600	3000
9	850	530	740	3200	2650
10	765	480	670	2860	2400
11	700	435	610	2600	2170
12	640	400	560	2400	2000
13	590	370	515	2200	1840
14	545	340	480	2000	1700
16	480	300	420	1800	1500
18	425	265	370	1600	1300
20	380	240	335	1400	1200
22	350	220	305	1300	1100
25	305	190	270	1150	950

6.13 Countersinking and center-drilling

With this table drill, you can also countersink and center-drill. Please observe that countersinking should be performed at the lowest speed, while a high speed is required for center-drilling.

6.14 Drilling wood

Please note that sawdust must be properly evacuated when working with wood, as it can pose a health hazard. Ensure that you wear a suitable dust mask when performing work that generates dust.



7. Replacing the power cable

If the power cable for this equipment is damaged, it must be replaced by the manufacturer or its after-sales service or similarly trained personnel to avoid danger.

8. Cleaning, maintenance and ordering of spare parts

Warning!

Pull out the power plug before carrying out any adjustments, maintenance or repairs.

8.1 Cleaning

- The table drill is to a large extent maintenance-free. Keep the device clean. Pull out the mains plug before doing any cleaning and maintenance work on the machine. Do not use any harsh, abrasive cleaning solvents. Ensure that no liquid seeps into the device. Regrease all bare parts when the work is finished. The drill pillar, blank parts of the column, and the drill table especially should be regreased at regular intervals. Use a standard, acid-free lubricating grease to do this.
Caution: Do not use your household refuse bin as a receptacle for oil and grease-soaked cleaning rags or grease and oil sludge. Dispose of these toxic materials in an environmentally-friendly fashion. Regularly check and clean the ventilation holes. Store the device in a dry room. Should the device become damaged, do not try to repair it yourself; leave this work to the hands of a qualified electrical technician.
- We recommend that you clean the device immediately each time you have finished using it.
- Clean the equipment regularly with a moist cloth and some soft soap. Do not use cleaning agents or solvents; these could attack the plastic parts of the equipment. Ensure that no water can seep into the device.

8.2 Maintenance

There are no parts inside the equipment which require additional maintenance.

8.2.1 Changing the V-belt (Figs. 26 - 28)

The V-belt of the pillar drill is a wear part and should be replaced when worn. Proceed as follows:

- Run the machine in idle mode while slowly setting the speed adjuster lever (15) to the minimum speed (see point 7.5).
- Switch the machine off, then pull the power plug.
- Set the speed adjuster lever (15) to the maximum speed setting to slacken the V-belt.
- Undo the screw (16) to open the V-belt cover (7).
- Pry the V-belt (39) off of the drive pulley (38) by pulling up the belt on one side and slowly turning the pulley (38). The drive pulley (38) comprises two disks that are pressed together via a spring. If the V-belt (39) does not exhibit enough play to remove it, gently press the bottom half of the drive pulley (38) down to slacken the V-belt (39).
- Fit one end of the new V-belt (39) to the variable pulley (40). Fit the other end to the drive pulley (38) by first sliding it into the groove on one side of the pulley (38), then prying the V-belt (39) across the pulley into the groove on the other side.
- Close the V-belt cover and screw down using the screw (16).

8.3 Ordering replacement parts:

Please quote the following data when ordering replacement parts:

- Type of machine
- Article number of the machine
- Identification number of the machine
- Replacement part number of the part required

For our latest prices and information please go to www.einhell.com.au



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9. Disposal and recycling

The equipment is supplied in packaging to prevent it from being damaged in transit. The raw materials in this packaging can be reused or recycled. The equipment and its accessories are made of various types of material, such as metal and plastic. Never place defective equipment in your household refuse. The equipment should be taken to a suitable collection center for proper disposal. If you do not know the whereabouts of such a collection point, you should ask in your local council offices.



The guarantee provided in this Guarantee Certificate is given by Einhell Australia Pty Limited
ACN 134 632 858 of 6/166 Wellington Street, Collingwood, Victoria (Telephone number 1300 922 271)
(Einhell Express Guarantee).

GB GUARANTEE CERTIFICATE

Dear Customer,

All of our products undergo strict quality checks. In the unlikely event that your device develops a fault, please contact our service department at the address shown on this guarantee certificate. Of course, if you would prefer to call us then we are also happy to offer our assistance under the service number printed below. Please note the following terms under which claims under the Einhell Express Guarantee can be made:

1. The benefits conferred by the Einhell Express Guarantee are in addition to all rights and remedies which you may be entitled to under the Australian Consumer Law, and any other statutory rights you may have under other applicable laws. This Einhell Express Guarantee does not exclude, restrict or modify any such rights or remedies.
We do not charge you for the Einhell Express Guarantee.
2. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.
3. The Einhell Express Guarantee only covers problems caused by material or manufacturing defects, and our liability under the Einhell Express Guarantee is limited, at our discretion, to the rectification of these defects or replacement of the product. Please note that the product has not been designed for use in commercial, trade or industrial applications. Consequently, the Einhell Express Guarantee will not apply if the product is used in commercial, trade or industrial applications or for other equivalent activities.
4. The following are also excluded from the Einhell Express Guarantee: compensation for transport damage, damage caused by failure to comply with the installation/assembly instructions or damage caused by unprofessional installation, failure to comply with the operating instructions (e.g. connection to the wrong mains voltage or current type), misuse or inappropriate use (such as overloading of the product or use of non-approved tools or accessories), failure to comply with the maintenance and safety regulations, ingress of foreign bodies into the product (e.g. sand, stones or dust), effects of force or external influences (e.g. damage caused by the product being dropped) and normal wear resulting from proper operation of the product. The Einhell Express Guarantee will also not apply if any attempt is made to tamper with the product.
5. The Einhell Express Guarantee is valid for a period of 2 years starting from the purchase date of the product. Claims made under the Einhell Express Guarantee should be submitted before the end of this guarantee period and within two weeks of the defect being noticed. No claims under the Einhell Express Guarantee will be accepted if submitted after the end of this guarantee period. The original guarantee period remains applicable to the device even if repairs are carried out or parts are replaced. In such cases, the work performed or parts fitted will not result in an extension of the guarantee period for the Einhell Express Guarantee, and the Einhell Express Guarantee will not apply for the work performed or parts fitted. This also applies when an on-site service is used.
6. To make a claim under the Einhell Express Guarantee, please send the relevant product postage-free to the address shown below and enclose either the original or a copy of your sales receipt or another dated proof of purchase. It would help us if you could describe the nature of the problem in as much detail as possible. If the defect is covered by the Einhell Express Guarantee, your product will be repaired immediately and returned to you, or we will send you a new device (at our election).

Any costs incurred by you in making a claim under this Einhell Express Guarantee, unless specified otherwise in this guarantee certificate, must be borne by you.

Of course, we are also happy to offer a chargeable repair service for any defects which are not covered by the scope of the Einhell Express Guarantee or for products which are no longer covered by the Einhell Express Guarantee. To take advantage of this service, please send the product to our service address.

EINHELL AUSTRALIA PTY LTD
6/166 Wellington Street
Collingwood VIC 3066
Australia
Phone: 1300 922 271



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Lined writing area consisting of 20 horizontal lines.



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A series of horizontal lines for writing, starting with a pencil icon and a squiggly line on the first line.



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