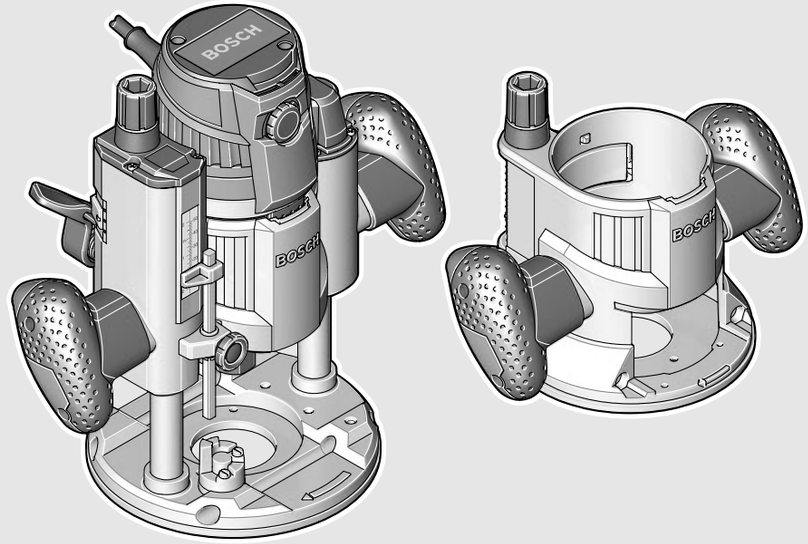

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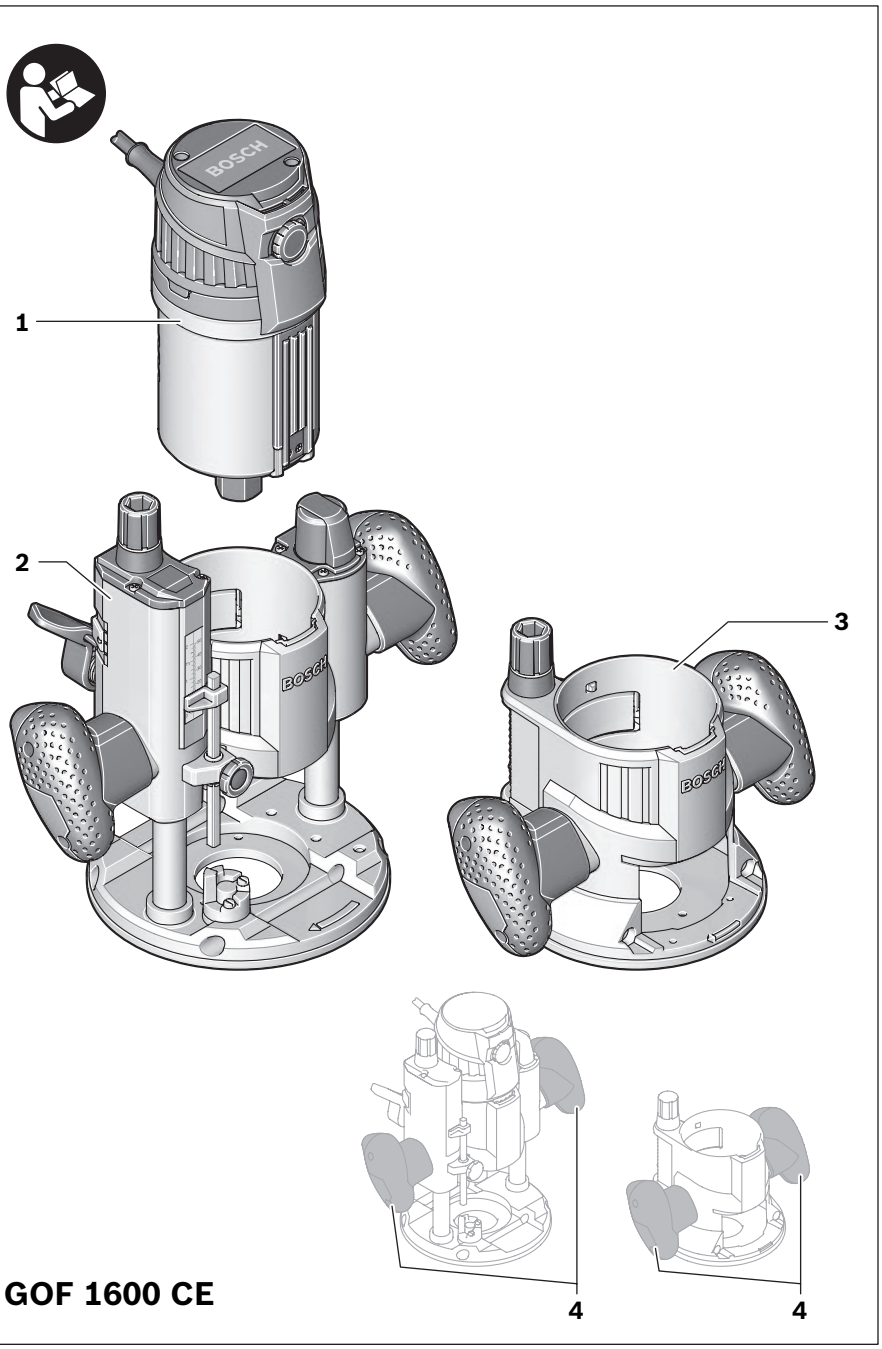
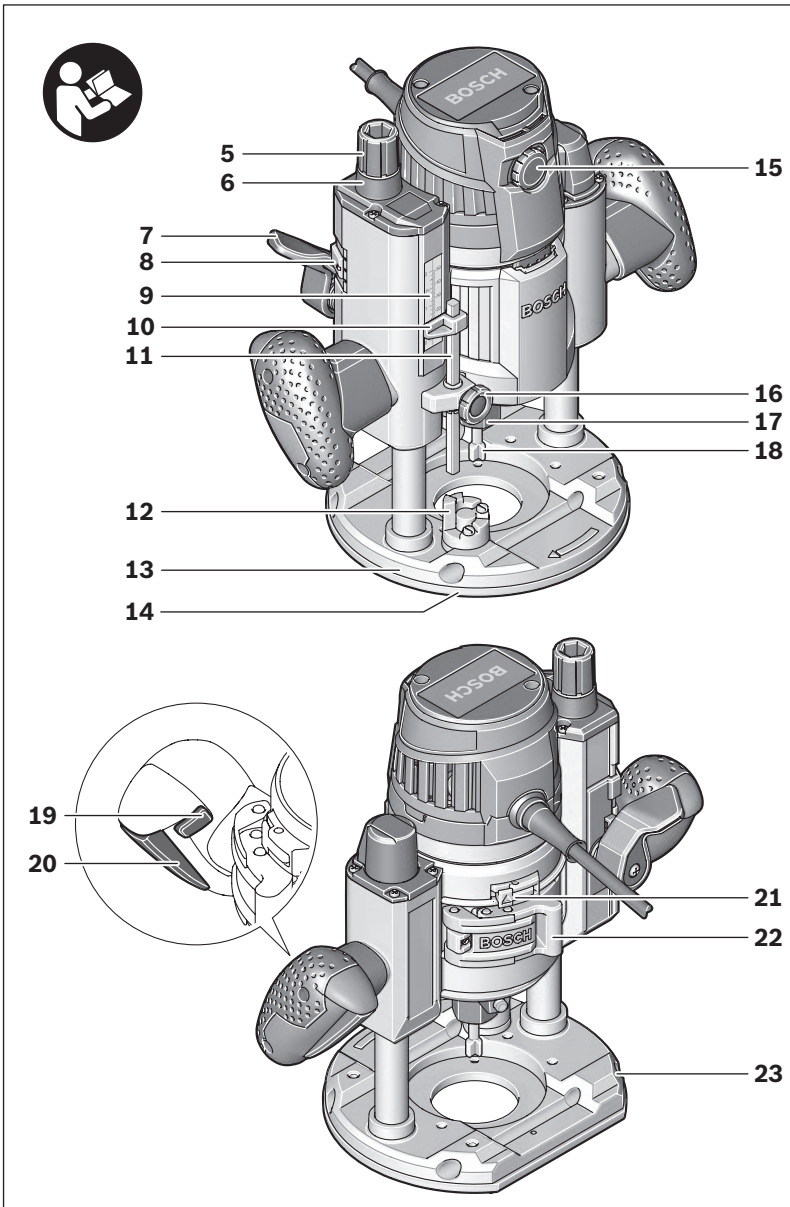
GOF | GMF 1600 CE Professional

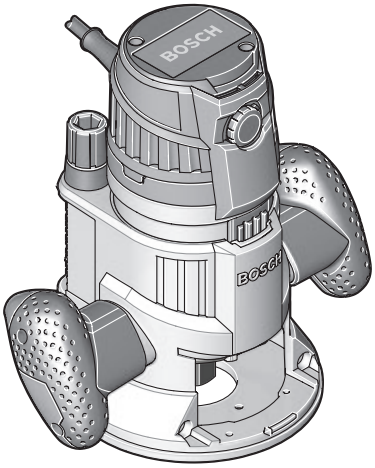
BOSCH

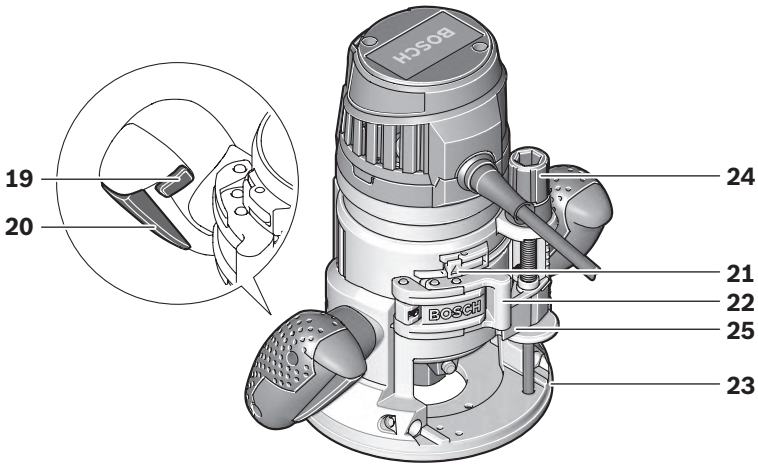
de Originalbetriebsanleitung
en Original instructions
fr Notice originale
es Manual original
pt Manual original
it Istruzioni originali
nl Oorspronkelijke gebruiksaanwijzing
da Original brugsanvisning
sv Bruksanvisning i original
no Original driftsinstruks
fi Alkuperäiset ohjeet
el Πρωτότυπο οδηγιών χρήσης
tr Orijinal işletme talimatı
pl Instrukcja oryginalna
cs Původní návod k používání
sk Pôvodný návod na použitie
hu Eredeti használati utasítás
ru Оригинальное руководство по эксплуатации
uk Оригінальна інструкція з експлуатації
ro Instrucţiuni originale
bg Оригинална инструкция
sr Originalno uputstvo za rad
sl Izvirna navodila
hr Originalne upute za rad
et Algupärane kasutusjuhend
lv Instrukcijas oriģinālvalodā
lt Originali instrukcija
ar تعليمات التشغيل الأصلية
fa راهنمای طرز کار اصلی



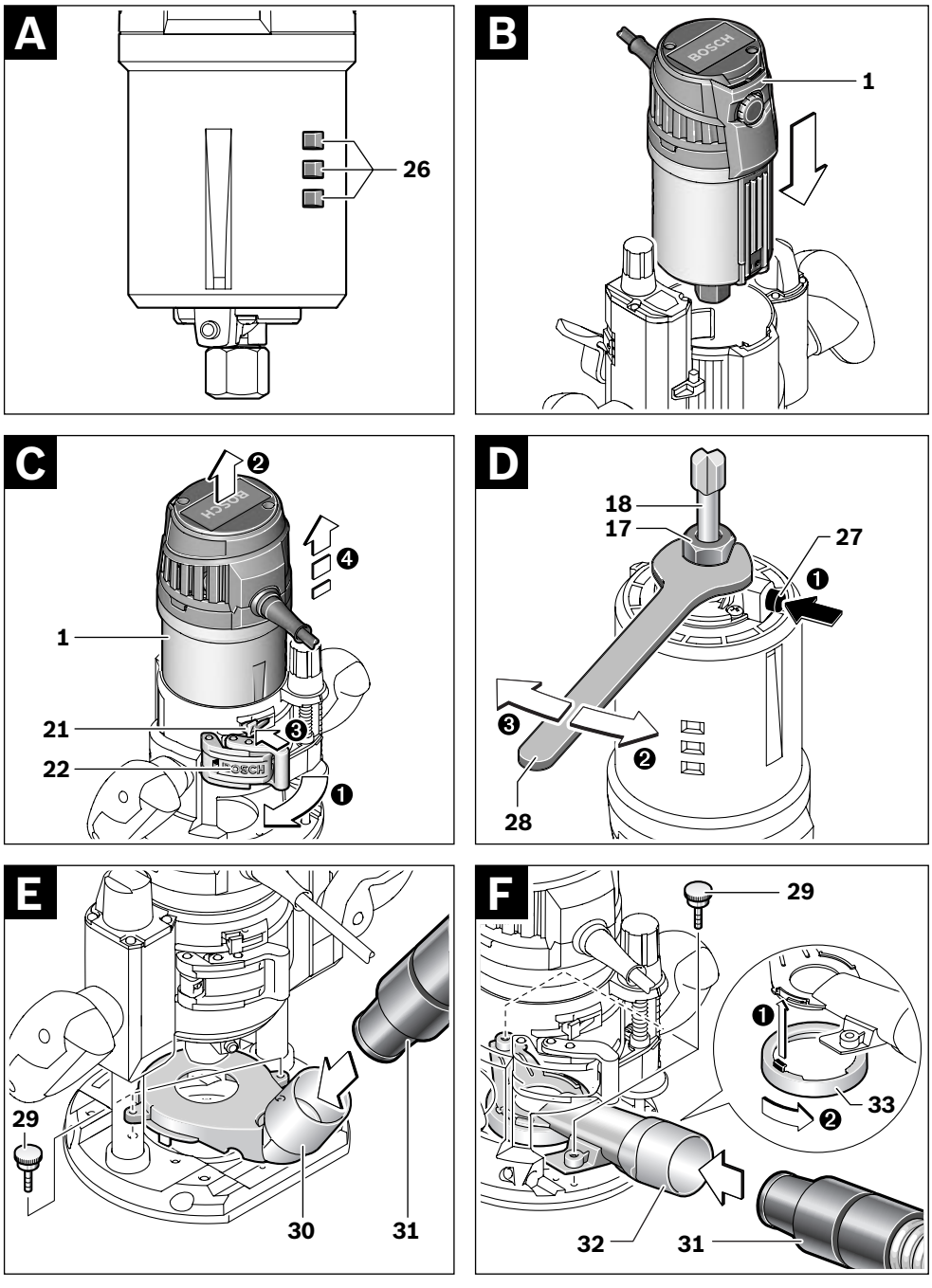


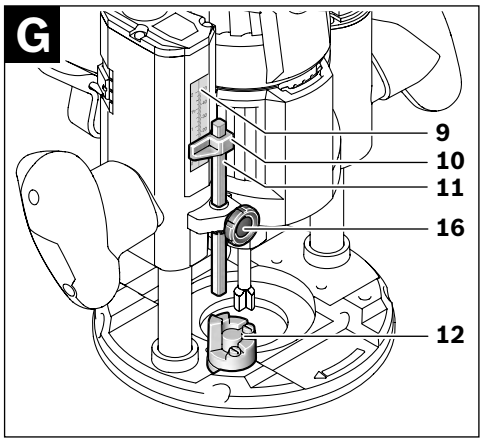
GOF 1600 CE

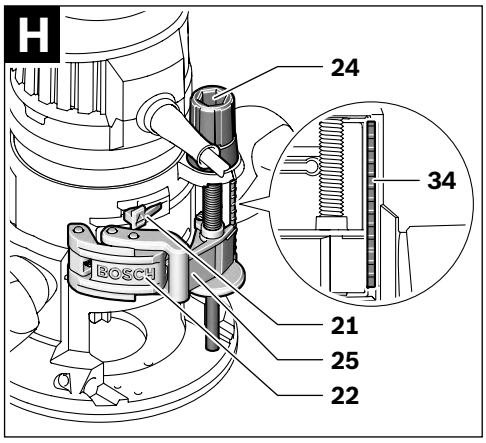


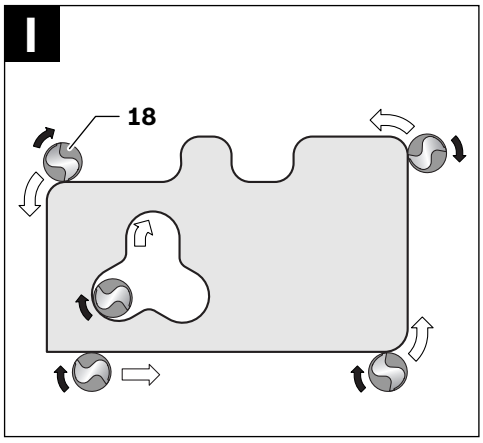


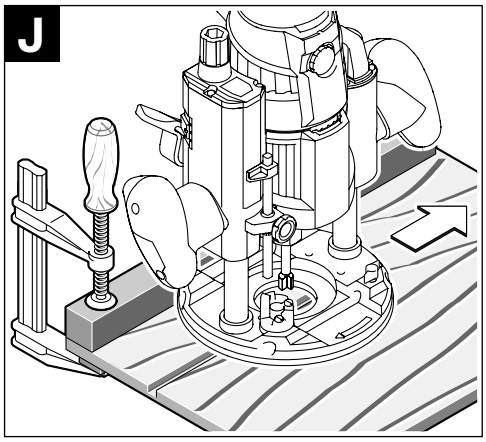
GMF 1600 CE

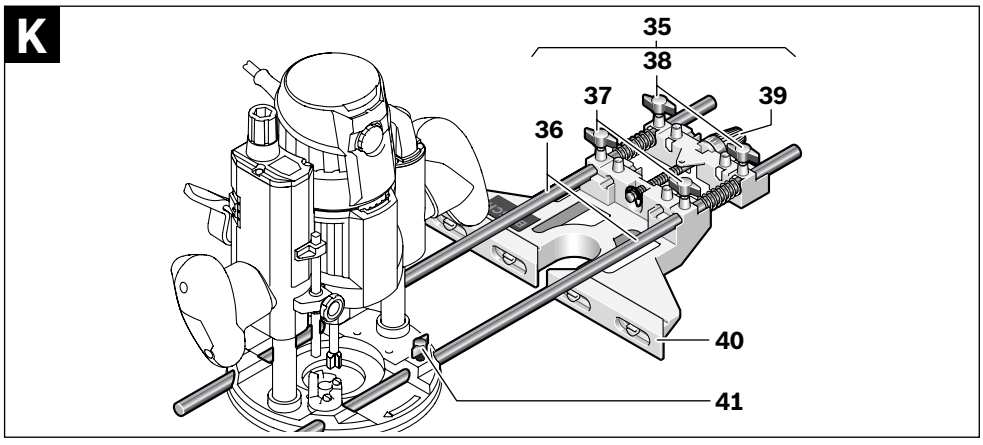


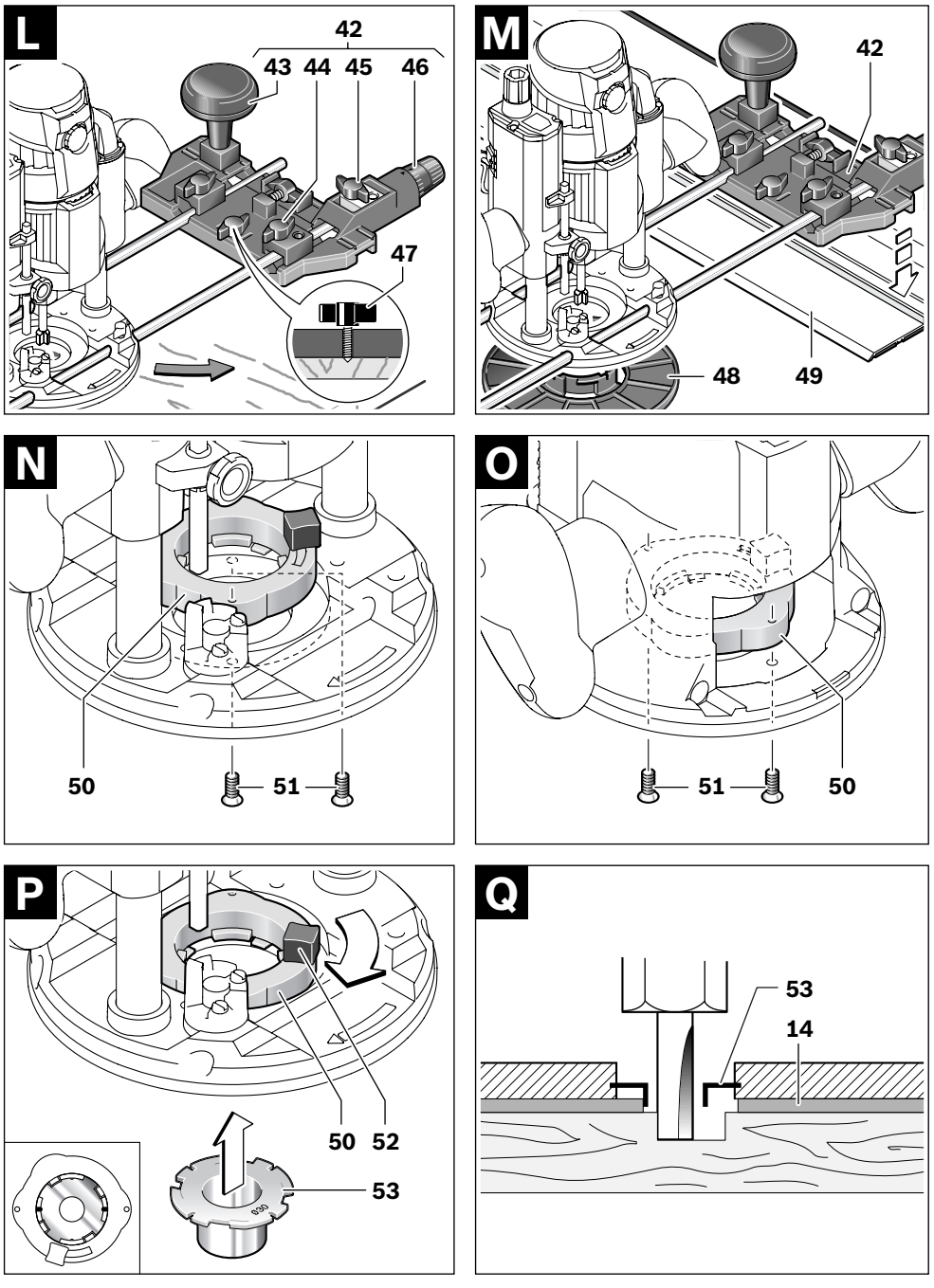


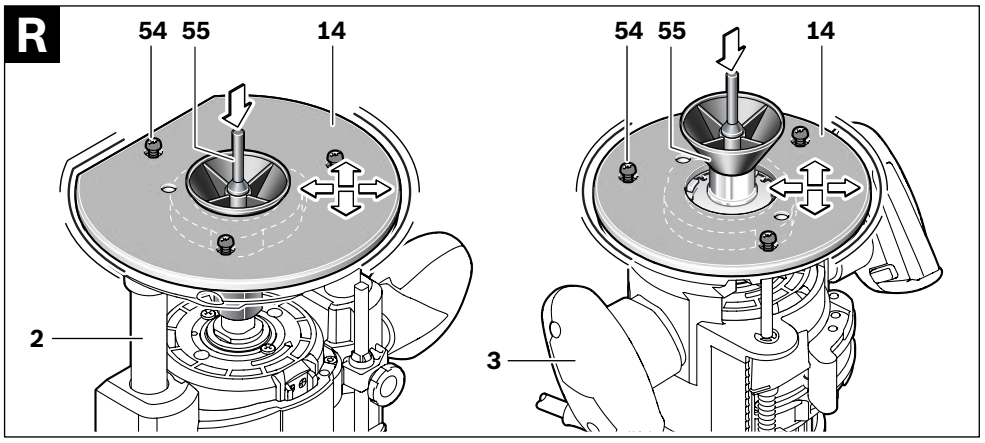


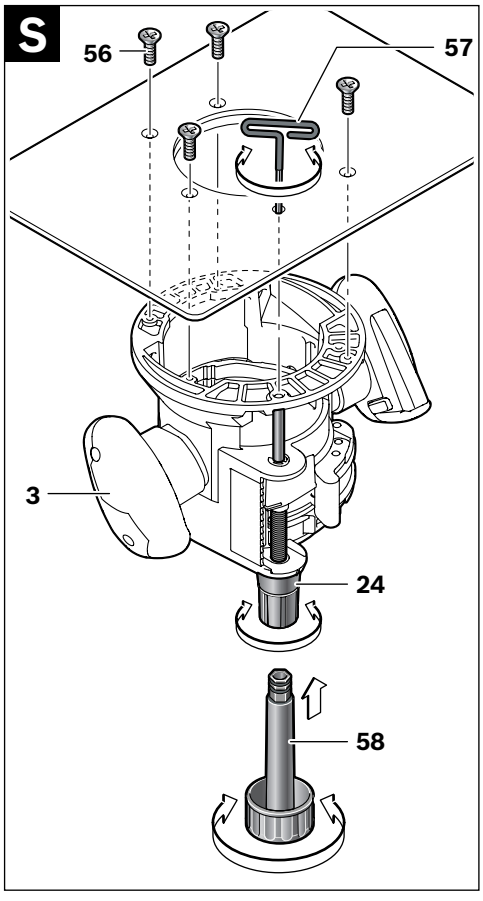


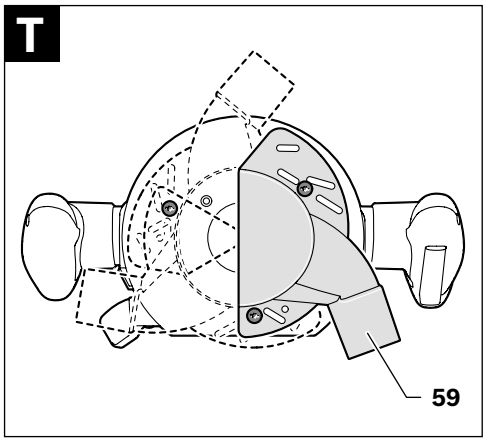


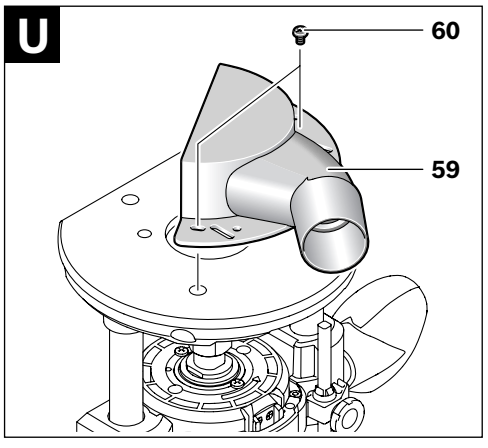












Kundendienst und Kundenberatung

Der Kundendienst beantwortet Ihre Fragen zu Reparatur und Wartung Ihres Produkts sowie zu Ersatzteilen. Explosionszeichnungen und Informationen zu Ersatzteilen finden Sie auch unter:
www.bosch-pt.com
Das Bosch-Kundenberater-Team hilft Ihnen gerne bei Fragen zu Kauf, Anwendung und Einstellung von Produkten und Zubehören.

www.powertool-portal.de, das Internetportal für Handwerker und Heimwerker.
www.ewbc.de, der Informations-Pool für Handwerk und Ausbildung.

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Entsorgung

Elektrowerkzeuge, Zubehör und Verpackungen sollen einer umweltgerechten Wiederverwertung zugeführt werden.

Werfen Sie Elektrowerkzeuge nicht in den Hausmüll!

Nur für EU-Länder:

Gemäß der Europäischen Richtlinie 2002/96/EG über Elektro- und Elektronik-Altgeräte und ihrer Umsetzung in nationales Recht müssen nicht mehr gebrauchsfähige Elektrowerkzeuge getrennt gesammelt und einer umweltgerechten Wiederverwertung zugeführt werden.

Änderungen vorbehalten.

English

Safety Notes

General Power Tool Safety Warnings

WARNING **Read all safety warnings and all instructions.** Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

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

Work area safety

- **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- **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.
- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

Electrical safety

- **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **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 and moving parts.** Damaged or entangled cords increase the risk of electric shock.
- **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

Personal safety

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

- **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.

Power tool use and care

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

Service

- **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

Safety Warnings for Routers

- **Hold power tool by insulated gripping surfaces, because the cutter may contact its own cord.** Cutting a "live" wire may make exposed metal parts of the power tool "live" and shock the operator.
- **Use clamps or another practical way to secure and support the workpiece to a stable platform.** Holding the work by your hand or against the body leaves it unstable and may lead to loss of control.
- **The allowable speed of the router bit must be at least as high as the maximum speed listed on the power tool.** Accessories that rotate faster than permitted can be destroyed.
- **Router bits or other accessories must fit exactly in the tool holder (collet) of your machine.** Routing bits that do not fit precisely in the tool holder of the machine rotate irregularly, vibrate heavily and can lead to loss of control.
- **Apply the machine to the workpiece only when switched on.** Otherwise there is danger of kickback when the cutting tool jams in the workpiece.
- **Keep your hands away from the routing area and the router bit. Hold the auxiliary handle or the motor housing with your second hand.** When both hands hold the machine, they cannot be injured by the router bit.
- **Never cut over metal objects, nails or screws.** The router bit can become damaged and lead to increased vibrations.
- **Use suitable detectors to determine if utility lines are hidden in the work area or call the local utility company for assistance.** Contact with electric lines can lead to fire and electric shock. Damaging a gas line can lead to explosion. Penetrating a water line causes property damage or may cause an electric shock.
- **Do not use blunt or damaged router bits.** Blunt or damaged router bits cause increased friction, can become jammed and lead to imbalance.
- **When working with the machine, always hold it firmly with both hands and provide for a secure stance.** The power tool is guided more secure with both hands.
- **Secure the workpiece.** A workpiece clamped with clamping devices or in a vice is held more secure than by hand.
- **Always wait until the machine has come to a complete stop before placing it down.** The tool insert can jam and lead to loss of control over the power tool.

Products sold in GB only: Your product is fitted with an BS 1363/A approved electric plug with internal fuse (ASTA approved to BS 1362).
If the plug is not suitable for your socket outlets, it should be cut off and an appropriate plug fitted in its place by an authorised customer service agent. The replacement plug should have the same fuse rating as the original plug.
The severed plug must be disposed of to avoid a possible shock hazard and should never be inserted into a mains socket elsewhere.
Products sold in AUS and NZ only: Use a residual current device (RCD) with a rated residual current of 30 mA or less.

Product Description and Specifications

Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

While reading the operating instructions, unfold the graphics page for the machine and leave it open.

Intended Use

The machine is intended for routing grooves, edges, profiles and elongated holes as well as for copy routing in wood, plastic and light building materials, while resting firmly on the workpiece.
With reduced speed and with appropriate routing bits, nonferrous alloys can also be machined.

Product Features

The numbering of the product features refers to the illustration of the machine on the graphics page.

1 Routing motor
2 Plunge base
3 Non-plunge base
4 Handle (insulated gripping surface)
5 Adjustment knob for fine adjustment of depth-of-cut (plunge base)
6 Scale for depth-of-cut fine adjustment
7 Release lever for plunge action
8 Index mark for fine adjustment
9 Scale for depth-of-cut adjustment (plunge base)
10 Slide with index mark (plunge base)
11 Depth stop (plunge base)
12 Turret stop
13 Base plate
14 Guide plate
15 Thumbwheel for speed preselection
16 Knurled screw for depth stop (plunge base)
17 Tightening nut with collet
18 Router bit*
19 Lock-on button for On/Off switch
20 On/Off switch
21 Securing latch for removal of motor
22 Clamping lever for plunge base/non-plunge base
23 Seat for parallel guide rods
24 Adjustment knob for depth-of-cut fine adjustment (non-plunge base)
25 Clamping lever for depth-of-cut coarse adjustment (non-plunge base)
26 Coarse adjustment notches for non-plunge base
27 Spindle lock button
28 Open-end spanner, size 24 mm
29 Knurled screw for extraction adapter (2x) *
30 Extraction adapter (plunge base)*
31 Extraction hose (Ø 35 mm)*
32 Extraction adapter (non-plunge base)*
33 Intermediate ring for extraction adapter (non-plunge base)*
34 Scale for depth-of-cut adjustment (non-plunge base)
35 Parallel guide*
36 Guide rod for parallel guide (2x)*
37 Wing bolt for fine adjustment of parallel guide (2x)*
38 Wing bolt for coarse adjustment of parallel guide (2x)*
39 Fine-adjustment knob for parallel guide*
40 Adjustable edge guide for parallel guide *
41 Wing bolt for guide rods of parallel guide (2x)*
42 Router compass/guide-rail adapter*
43 Router compass handle*
44 Wing bolt for coarse adjustment of router compass (2x)*
45 Wing bolt for fine adjustment of router compass (1x)*
46 Fine-adjustment knob for router compass*
47 Centring screw for compass stop *
48 Base spacer (included in the “router compass” set)*
49 Guide rail*
50 SDS guide-bushing adapter
51 Fastening screw for guide bushing adapter (2x)
52 Release lever for guide bushing adapter
53 Guide bushing
54 Fastening screw for guide plate
55 Centring pin
56 Fastening screws for non-plunge base*
57 Specialty Allen key for depth-of-cut fine adjustment (non-plunge base)*
58 Extension for depth-of-cut fine adjustment (non-plunge base)*
59 Extraction hood for edge routing *
60 Fastening screw for extraction hood *

***Accessories shown or described are not part of the standard delivery scope of the product. A complete overview of accessories can be found in our accessories program.**

Technical Data

Multifunction Router		GOF 1600 CE	GMF 1600 CE
Article number		3 601 F24 0..	3 601 F24 0..
Rated power input	W	1600	1600
No-load speed	min^{-1}	10000 – 25000	10000 – 25000
Speed preselection		●	●
Constant electronic control		●	●
Connection for dust extraction		●	●
Tool holder	mm inch	8 – 12 ¼ – ½	8 – 12 ¼ – ½
Plunge depth (plunge base)	mm	76	76
Weight according to EPTA-Procedure 01/2003 – Contour router – Plunge router	 kg kg	 – 5.8	 4.3 5.8
Protection class		⧈/II	⧈/II

The values given are valid for a nominal voltage [U] of 230 V. For different voltages and models for specific countries, these values can vary.

Noise/Vibration Information

Measured sound values determined according to EN 60745.

Typically the A-weighted noise levels of the product are: Sound pressure level 86 dB(A); Sound power level 97 dB(A). Uncertainty K = 3 dB.

Wear hearing protection!

		Routing with Non-plunge Base	Routing with Plunge Base
Vibration total values a_h (triax vector sum) and uncertainty K determined according to EN 60745:			
a_h	m/s^2	= 6.0	= 5.5
K	m/s^2	= 1.5	= 1.5

The vibration emission level given in this information sheet has been measured in accordance with a standardised test given in EN 60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure.

The declared vibration emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period.

An estimation of the level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period.

Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep hands warm, organise work patterns.

Declaration of Conformity CE

We declare under our sole responsibility that the product described under "Technical Data" is in conformity with the following standards or standardization documents: EN 60745 according to the provisions of the directives 2011/65/EU, 2004/108/EC, 2006/42/EC.

Technical file (2006/42/EC) at:
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Senior Vice President
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Dr. Eckerhard Strötgen
Engineering Director
PT/ESI

ppa. i.V.

Robert Bosch GmbH, Power Tools Division
D-70745 Leinfelden-Echterdingen
25.01.2012

Assembly

► **Before any work on the machine itself, pull the mains plug.**

Inserting the Routing Motor into the Plunge Base/Non-plunge Base (see figures A – B)

– Open the clamping lever for the plunge base/non-plunge base **22**.
– Push the routing motor to the stop into the plunge base/ non-plunge base.
– When using the non-plunge base **3**, press clamping lever **25** and slide the routing motor **1** up or down to the desired

position in the non-plunge base **3**, until it, with the clamping lever **25** released, engages in one of the 3 notches **26**.
– Shut the clamping lever for the plunge unit/non-plunge base **22**.
– Adjust the required depth-of-cut; see Section “Adjusting the Depth-of-cut”.

Separating the Routing Motor from the Plunge Unit/Non-plunge Base (see figure C)

– Open the clamping lever for the plunge base/non-plunge base **22**.
– Pull the routing motor to the stop and and hold it in this position.
– Press securing latch **21** and pull the routing motor completely out of the plunge base/non-plunge base. When using the non-plunge base **3**, additionally press clamping lever **25**.

Inserting a Router Bit (see figure D)

▶ **It is recommended to wear protective gloves when inserting or replacing router bits.**

Depending on the application, router bits are available in the most different designs and qualities.

Router bits made of high speed steel (HSS) are suitable for the machining of soft materials, e. g. softwood and plastic.

Carbide tipped router bits (HM) are particularly suitable for hard and abrasive materials, e. g. hardwood and aluminium.

Original router bits from the extensive Bosch accessories program are available at your specialist shop.

Use router bits with a shank diameter of 12 mm as far as this is possible. Only use clean router bits that are in perfect condition.

The router bit can be changed when the routing motor is mounted in the plunge base/non-plunge base. However, it is recommended to change the tool with the routing motor dismounted.

– Remove the routing motor from the plunge base/non-plunge base.
– Press and hold the spindle lock button **27** (❶). If required, turn the spindle by hand until the lock engages.
Actuate the spindle lock button 27 only when at a standstill.
– Loosen the tightening nut **17** with the open-end spanner **28** (size 24 mm) by turning in antclockwise direction (❷).
– Insert the router bit into the collet. The shank of the router bit must be immersed at least 20 mm into the collet.
– Tighten the tightening nut **17** with the open-end spanner **28** (size 24 mm) by turning in clockwise direction. Release the spindle lock button **27**.

▶ **Do not insert a router bit with a diameter larger than 50 mm when the guide bushing is not mounted.** Such router bits do not fit through the base plate.

▶ **Do not tighten the tightening nut of the collet without a router bit inserted.** Otherwise the collet can be damaged.

Dust/Chip Extraction

▶ Dusts from materials such as lead-containing coatings, some wood types, minerals and metal can be harmful to one’s health. Touching or breathing-in the dusts can cause allergic reactions and/or lead to respiratory infections of the user or bystanders.
Certain dusts, such as oak or beech dust, are considered as carcinogenic, especially in connection with wood-treatment additives (chromate, wood preservative). Materials containing asbestos may only be worked by specialists.
– As far as possible, use a dust extraction system suitable for the material.
– Provide for good ventilation of the working place.
– It is recommended to wear a P2 filter-class respirator.
Observe the relevant regulations in your country for the materials to be worked.

▶ **Prevent dust accumulation at the workplace.** Dusts can easily ignite.

Mounting the Extraction Adapter to the Plunge Base (see figure E)

The extraction adapter **30** can be mounted with the hose connection facing toward the front or rear. When the guide-bushing adapter **50** is inserted, it may be required to mount the guide-bushing adapter turned by 180°, so that the extraction adapter **30** does not touch the release lever **52**. Fasten the extraction adapter **30** with the 2 knurled screws **29** to the base plate **13**.

To ensure optimum extraction, the extraction adapter **30** must be cleaned regularly.

Mounting the Extraction Adapter to the Non-plunge Base (see figure F)

The extraction adapter **32** can be mounted with the hose connection facing toward the front or rear. When the guide-bushing adapter **50** is inserted, fasten the extraction adapter **32** with the 2 knurled screws **29** to the base plate **13**. For applications without the guide-bushing adapter **50**, firstly mount the intermediate ring **33** to the extraction adapter **32**, as shown in the figure.

Connecting the Dust Extraction

Insert an extraction hose (Ø 35 mm) **31** (accessory) into the mounted extraction adapter. Connect the extraction hose **31** to a vacuum cleaner (accessory).

The machine can be plugged directly into the receptacle of a Bosch all-purpose vacuum cleaner with remote starting control. The vacuum cleaner starts automatically when the machine is switched on.

The vacuum cleaner must be suitable for the material being worked.

When vacuuming dry dust that is especially detrimental to health or carcinogenic, use a special vacuum cleaner.

Operation

Starting Operation

▶ **Observe correct mains voltage! The voltage of the power source must agree with the voltage specified on the nameplate of the machine. Power tools marked with 230 V can also be operated with 220 V.**

Preselecting the Speed

The required speed can be preselected with the thumbwheel **15** (also while running).

1 – 2 low speed

3 – 4 medium speed

5 – 6 high speed

The values shown in the chart are standard values. The necessary speed depends on the material and the operating conditions, and can be determined by practical testing.

Material	Router bit diameter (mm)	Thumbwheel 15
Hardwood (Beech)	4 – 10	5 – 6
	12 – 20	3 – 4
	22 – 40	1 – 2
Softwood (Pine)	4 – 10	5 – 6
	12 – 20	3 – 6
	22 – 40	1 – 3
Particle Board	4 – 10	3 – 6
	12 – 20	2 – 4
	22 – 40	1 – 3
Plastics	4 – 15	2 – 3
	16 – 40	1 – 2
Aluminium	4 – 15	1 – 2
	16 – 40	1

After longer periods of working at low speed, allow the machine to cool down by running it for approx. 3 minutes at maximum speed with no load.

Switching On and Off

Adjust the depth-of-cut before switching on or off; see Section “Adjusting the Depth-of-cut”.

To **start** the machine, press the On/Off switch **20** and keep it pressed.

To lock the **pressed** On/Off switch **20**, press the lock-on button **19**.

To **switch off** the machine, release the On/Off switch **20** or when it is locked with the lock-on button **19**, briefly press the On/Off switch **20** and then release it.

When not using the power tool, switch it off in order to save energy.

Constant Electronic Control

Constant electronic control holds the speed constant at no-load and under load, and ensures uniform working performance.

Soft Starting

The electronic soft starting feature limits the torque upon switching on and increases the working life of the motor.

Adjusting the Depth-of-cut

▶ **The adjustment of the depth-of-cut may only be carried out when the router is switched off.**

Adjusting the Depth-of-cut on the Plunge Base (see figure G)

For coarse adjustment of the depth-of-cut, proceed as follows:

– Place the machine with the router bit mounted on the workpiece to be machined.
– Set the scale for fine adjustment **6** to **“0”**.
– Set the turret stop **12** to the lowest setting; the turret stop can be felt to engage.
– Loosen the knurled screw at depth stop **16**, so that the depth stop **11** moves freely.
– Press the release lever for plunge action **7** down and slowly guide the router down until the router bit **18** touches the workpiece surface. Let go of release lever **7** again to lock this plunging depth.
– Push the depth stop **11** down until it faces against the turret stop **12**. Set the slide with the index mark **10** to the “0” position on the scale for depth-of-cut adjustment **9**.
– Set the depth stop **11** to the desired routing depth and tighten the knurled screw **16** for the depth stop. Take care not to misadjust the slide with the index mark **10**.
– Press the release lever for plunge action **7** and guide the router to the uppermost position.

The set routing depth is only reached when depth stop **11** touches the turret stop **12** while plunging.

For deep cuts, it is recommended to carry out several cuts, each with little material removal. By using the turret stop **12**, the cutting process can be divided into several steps. For this, adjust the desired depth-of-cut to the lowest step of the turret stop and select the higher steps first for the initial cuts. The clearance of the steps is approx. 3.2 mm.

After a trial cut, the depth-of-cut can be set exactly to the desired measure by turning the adjustment knob **5**; turn in clockwise direction to increase the cutting depth and in anticlockwise direction to decrease the cutting depth. The scale **6** can be used for guidance. One full turn corresponds with a setting range of 1.5 mm; a graduation mark on the top edge of the scale **6** corresponds with a 0.1 mm change of the setting range. The maximum setting range is ± 16 mm.

Example: The desired depth-of-cut is to be 10.0 mm; the trial cut resulted in a cutting depth of 9.6 mm.

– Press the release lever for plunge action **7** and guide the router to the uppermost position.
– Turn adjustment knob **5** by 0.4 mm/4 graduation marks (difference from nominal to actual value) in clockwise direction.
– Check the selected depth-of-cut by carrying out another trial cut.

When fine-adjusting the routing depth, take care that the index mark **8** on the side of the plunge base points towards the centre imprinted line. This measure ensures that there is sufficient travel in both directions for readjustment of the plunge depth.

When the plunge base **2** is lowered to the maximal plunge depth, cutting deeper by means of the fine adjustment is not possible, as the maximum travel has been utilised.

Fine adjustment is also not possible when the depth stop **11** faces against the turret stop **12**.

Adjusting the Depth-of-cut on the Non-plunge Base (see figure H)

For adjustment of the depth-of-cut, proceed as follows:

- Open the clamping lever for the non-plunge base **22**.
- Coarse pre-adjustment of the routing depth is possible in 3 steps. For this, press clamping lever **25** and slide the routing motor **1** up or down in the non-plunge base **3**, until it, with the clamping lever **25** released, is locked in one of the 3 notches **26**. The notches each have a clearance of 12.7 mm (0.5 ").
- The adjustment knob for depth-of-cut fine adjustment **24** is used for fine adjustment of the routing depth; turn clockwise to increase the routing depth, and anticlockwise to decrease the routing depth. The travel on the scale of adjustment knob **24** is indicated in inch and millimeter. The maximum setting range is 41 mm. The scale for depth-of-cut adjustment **34** provides added orientation.
  Example: The desired depth-of-cut is to be 10.0 mm; the trial cut resulted in a cutting depth of 9.5 mm.
- Set the scale of the adjustment knob **24** to "0" without changing the setting of the adjustment knob **24** itself. Then set the adjustment knob **24** to the value "0.5" by turning in clockwise direction.
- Check the selected depth-of-cut by carrying out another trial cut.

Working Advice

Direction of Feed and Routing Process (see figure I)

▶ **The routing process must always be carried out against the rotation direction of the router bit 18 (up-cutting motion). When routing in the direction with the rotation of the router (down-cutting), the machine can break loose, eliminating control by the user.**

For routing with the plunge base **2**, proceed as follows:

- Adjust the required depth-of-cut; see Section "Adjusting the Depth-of-cut".
- Place the machine with the router bit mounted on the workpiece to be machined and switch the power tool on.
- Press the release lever for plunge action **7** down and slowly guide the router down until the set depth-of-cut is reached. Let go of release lever **7** again to lock this plunging depth.
- Carry out the routing process applying uniform feed.
- After finishing the routing process, guide the router up to the uppermost position.
- Switch the power tool off.

For routing with the non-plunge base **3**, proceed as follows:

- **Note:** Take into consideration that for routing work with the non-plunge base **3**, the router bit **18** always protrudes out of the base plate **13**. Do not damage the template or the workpiece.
- Adjust the required depth-of-cut; see Section "Adjusting the Depth-of-cut".
- Switch the machine on and guide it to the location subject to routing.
- Carry out the routing process applying uniform feed.
- Switch the power tool off. Do not place the power tool down until the router bit has come to a standstill.

Routing with Auxiliary Guide (see figure J)

For working large workpieces, e. g., when routing grooves, a board or straight edge can be securely fastened to the workpiece as an auxiliary guide. The multifunction router can be guided alongside the path of this auxiliary guide. When using the plunge base **2**, guide the guide plate (flattened side) of the multifunction router alongside the auxiliary guide.

Shaping or Molding Applications

For shaping or molding applications without the use of a parallel guide, the router bit must be equipped with a pilot or a ball bearing.

- Guide the switched on power tool from the side toward the workpiece until the pilot or the ball bearing of the router bit faces against the workpiece edge to be machined.
- Guide the power tool alongside the workpiece edge with both hands, paying attention that the router is positioned rectangular. Too much pressure can damage the edge of the workpiece.

Routing with Parallel Guide (see figure K)

Slide the parallel guide **35** with the guide rods **36** into the base plate **13** and tighten as required with the wing bolts **41**. Additionally, the parallel guide can be adjusted lengthwise with the wing bolts **37** and **38**.

Fine adjustment of the length is possible with the fine-adjustment knob **39** after loosening both wing bolts **37**. One revolution corresponds with a setting range of 2.0 mm. One graduation mark on the fine-adjustment knob **39** changes the setting range by 0.1 mm.

The effective contact surface of the parallel guide can be adjusted with the edge guide **40**.

Guide the switched on power tool with uniform feed and lateral pressure on the parallel guide alongside the workpiece edge.

Routing with the Router Compass (see figure L)

The router compass/guide-rail adapter **42** can be used for circular routing jobs. Mount the router compass as shown in the figure.

Screw the centring screw **47** into the thread on the router compass. Insert the point of the centring screw into the centre of the circular arc to be routed, paying attention that point of the screw engages into the workpiece surface.

Coarsely adjust the required radius by moving the router compass and tighten the wing bolts **44** and **45**.

The length can be fine adjusted with the fine-adjustment knob **46** after loosening the wing bolt **45**. One revolution corresponds with a setting range of 2.0 mm. One graduation mark on the fine-adjustment knob **46** changes the setting range by 0.1 mm.

Guide the switched on power tool over the workpiece with the right handle **4** and the router compass handle **43**.

Routing with Guide Rail (see figure M)

Straight routing cuts can be carried out with help of the guide rail **49**.

The base spacer **48** must be mounted in order to compensate the height difference.

Mount the router compass/guide-rail adapter **42** as shown in the figure.

Fasten the guide rail **49** to the workpiece with suitable clamping devices, e. g. screw clamps. Place the machine with the guide-rail adapter **42** mounted onto the guide rail.

Routing with Guide Bushing (see figures N – Q)

The guide bushing **53** enables template and pattern routing on workpieces.

In order to use the guide bushing **53**, the guide bushing adapter **50** must be inserted into the guide plate **14** first.

Place the guide bushing adapter **50** from above onto the guide plate **14** and tighten it firmly with the 2 fastening screws **51**. Pay attention that the release lever for the guide bushing adapter **52** is freely movable.

Choose a suitable guide bushing, depending on the thickness of the template or the pattern. Because of the projecting height of the guide bushing, the template must have a minimum thickness of 8 mm.

Actuate the release lever **52** and insert the guide bushing **53** from below into the guide bushing adapter **50**. Ensure that the encoding keys clearly engage in the grooves of the guide bushing.

Check the clearance from router bit centre and guide bushing edge, see section “Centring the Base Plate”.

► **Select a router bit with a diameter smaller than the interior diameter of the guide bushing.**

For routing with the guide bushing **53** proceed as follows:

– **Note:** Take into consideration that for routing work with the non-plunge base **3**, the router bit **18** always protrudes out of the base plate **13**. Do not damage the template or the workpiece.
– Guide the switched on power tool with the guide bushing toward the template.
– When using the plunge base **2**: Press the release lever for plunge action **7** down and slowly guide the router down until the set depth-of-cut is reached. Let go of release lever **7** again to lock this plunging depth.
– Guide the switched on power tool with the protruding guide bushing alongside the template applying lateral pressure.

Centring the Base Plate (see figure R)

To ensure that the distance from router bit centre and guide bushing edge is uniform, the guide bushing and the guide plate can be adjusted to each other, if required.

– When using the plunge base **2**: Press the release lever for plunge action **7** down and guide the router toward the base plate to the stop. Let go of release lever **7** again to lock this plunging depth.
– Loosen fastening screws **54** approx. 2 turns, so that guide plate **14** can move freely.
– Insert the centring pin **55** into the tool holder as shown in the figure. Hand-tighten the tightening nut so that the centring pin can still be moved freely.
– Align the centring pin **55** and the guide bushing **53** to each other by slightly moving the guide plate **14**.
– Retighten the fastening screws **54** again.
– Remove the centring pin **55** from the tool holder.
– When using the plunge base **2**: Press the release lever for plunge action **7** and guide the router back to the uppermost position.

Operation with Router Table (see figure S)

The non-plunge base **3** can be used with a suitable router table. To install the router, remove the guide plate **14** and fasten the non-plunge base **3** to the router table with the fastening screws **56**.

► **For mounting of the non-plunge base, please observe the operating instructions of your router table.** If necessary, matching holes must be drilled into the router table in order to mount the non-plunge base.

For fine adjustment of the depth-of-cut, it is best to use the extension **58** or the specialty Allen key **57**.

Routing with Extraction Hood (see figures T – U)

For routing edges, the extraction hood **59** can additionally be used.

– Fasten the extraction hood **59** with the 2 fastening screws **60** to the base plate **13**. The extraction hood **59** can be fastened in 3 different positions, as shown in the figure.
– Remove the extraction hood again for routing smooth plane surfaces.

Maintenance and Service

Maintenance and Cleaning

► **Before any work on the machine itself, pull the mains plug.**

► **For safe and proper working, always keep the machine and ventilation slots clean.**

► **In extreme conditions, always use dust extraction as far as possible. Blow out ventilation slots frequently and install a residual current device (RCD).** When working metals, conductive dust can settle in the interior of the power tool. The total insulation of the power tool can be impaired.

If the replacement of the supply cord is necessary, this has to be done by Bosch or an authorized Bosch service agent in order to avoid a safety hazard.

If the machine should fail despite the care taken in manufacturing and testing procedures, repair should be carried out by an after-sales service centre for Bosch power tools.

In all correspondence and spare parts order, please always include the 10-digit article number given on the type plate of the machine.

After-sales Service and Customer Assistance

Our after-sales service responds to your questions concerning maintenance and repair of your product as well as spare parts. Exploded views and information on spare parts can also be found under:
www.bosch-pt.com
Our customer service representatives can answer your questions concerning possible applications and adjustment of products and accessories.