FERM PRM1015 Router User Manual

Contents

FERM PRM1015 Router

INTRODUCTION

Thank you for buying this Ferm product. By doing so you now have an excellent product, delivered by one of Europe's leading suppliers. All products delivered to you by Ferm are manufactured according to the highest standards of performance and safety. As part of our philosophy we also provide an excellent customer service, backed by our comprehensive Warranty. We hope you will enjoy using this product for many years to come.
For your own safety and for the safety of others, please read these instructions carefully before using this appliance. It will help you understand your product more easily and avoid unnecessary risks. Keep this instruction manual in a safe place for future use.

MACHINE SPECIFICATIONS

Technical specifications

- **Voltage** 230 V~
- **Frequency** 50 Hz
- **Power input** 1300 W
- **No load speed** 9000-30000/min
- **Cutting depth** 60 mm
- **Collet** 6 & 8 mm
- **Weight** 3.57 kg
- **Lpa (sound pressure)** 87.9+3 dB(A)
- **Lwa (sound power)** 98.9+3 dB(A)
- **Vibration left handle** 3.509+1.5 m/s2
- **Vibration right handle** 2.441+1.5 m/s2

Vibration level

The vibration emission level stated in this instruction manual has been measured in accordance with a standardised test given in EN 60745; it may be used to compare one tool with another and as a preliminary assessment of exposure to vibration
when using the tool for the applications mentioned

- using the tool for different applications, or with different or poorly maintainted accessories, may significantly increase the exposure level
- the times when the tool is switched off or when it is running but not actually doing the job, may significantly reduce the exposure level

Protect yourself against the effects of vibration by maintaining the tool and its accessories, keeping your hands warm, and organizing your work patterns.

Contents of packing

- 1 Router
- 1 Parallel guide
- 1 Carbon brush set
- 1 Template guide
- 1 Adapter for dust extraction
- 1 Spanner
- 1 4 mm hex key
- 1 Collet 8 mm (assembled on the machine)
- 1 Collet 6 mm
- 6 Router bits
- 1 Safety instructions
- 1 Operating instructions
- 1 Warranty card

Product information

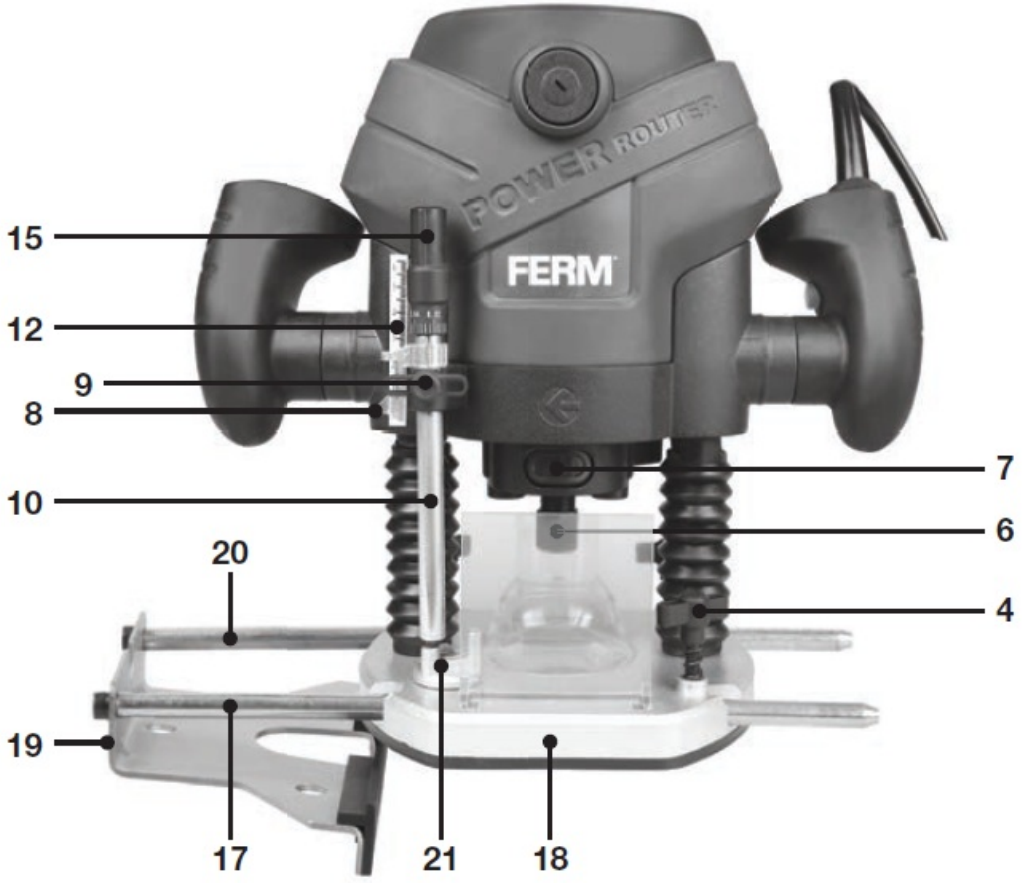


Fig. A

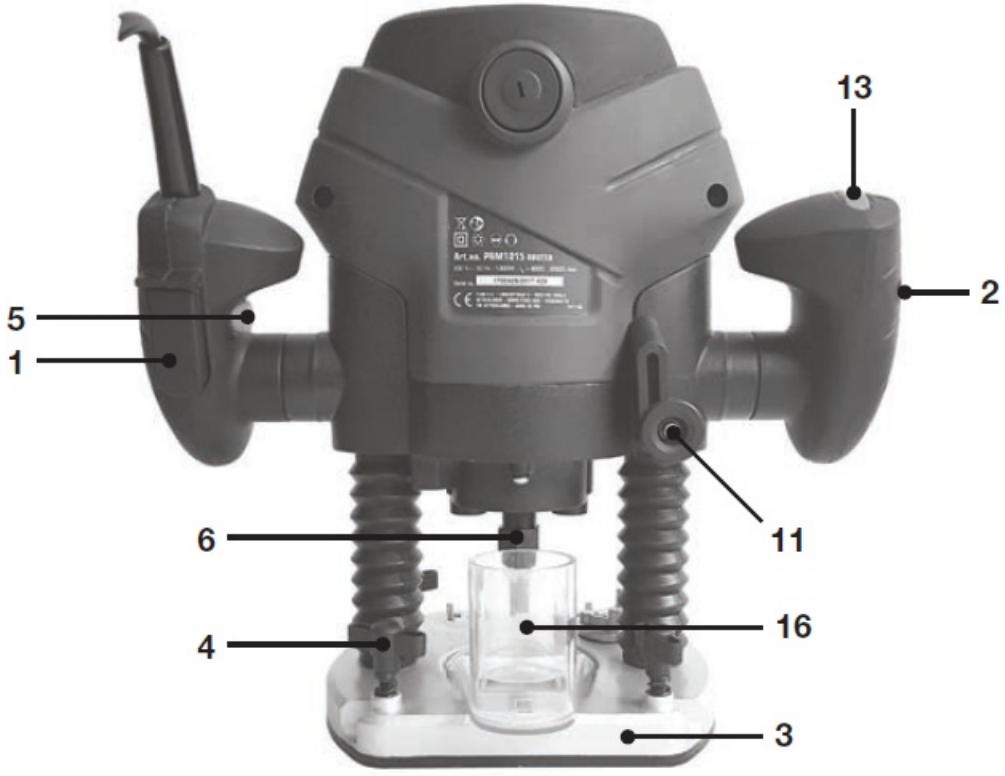


Fig. B

1. On/off switch
2. Handle

3. Base plate
4. Fixing screws for parallel fence
5. Switch lock button
6. Collet nut
7. Spindle lock
8. Plunge depth adjustment button
9. Wing bolt for depth stop
10. Depth stop
11. Clamping lever
12. Plunge depth scale
13. Adjusting wheel for electronic speed control
14. Spanner
15. Plunge depth fine-tuning button
16. Dust extraction facility
17. Parallel fence ruler
18. Zero mark
19. Parallel fence
20. Guide rod
21. Depth stop revolver
22. Screws
23. Template guide
24. Dust adapter
25. Dust tube

SAFETY INSTRUCTIONS

The following symbols are used in these instructions for use:


- Read the instructions carefully.


- Danger of life and risk of injury as well as risk of damage to the machine in case of non-adherence to the safety instructions in these instructions of use.

- Danger of electric shock.


- Remove the plug from the mains socket.


- Variable speed control.


- Wear ear and eye protection.


- Wear a dust mask.


- Wear protection gloves.

Additional safety instructions

- Please check workpieces for any obstructions on the surface of the material, such as protruding nails etc., to protect the router head.
- Wait until the router has come to a complete stop before removing any blocked or routed material around the cutter. Use a long stick for this and never your finger.

- Please keep your hands away from the routing surface.
- Immediately switch off the tool if it starts producing any unusual noise or starts vibrating excessively.
- Please check that all parts are secure, tools are removed etc. before operation.
- Always check that the power supply corresponds to the voltage on the rating plate.
- Your machine is double insulated, therefore no earthwire is required.
- Immediately throw away old cables or plugs when they have been replaced by new ones. It is dangerous to insert the plug of a loose cable in the wall outlet.
- Only use an approved extension cable suitable for the power input of the machine. The minimum conductor size is 1.5 mm2. When using a cable reel always unwind the reel completely.
- Prior to mounting an accessory always unplug the tool.
- Wait until the machine has come to a complete standstill and the cutter has cooled down before replacing a cutter.

ASSEMBLY

Router Bit Selection
Depending on processing and application, router bits are available in the most different designs and qualities: Router bits made of high speed steel (HSS) are suitable for working with soft materials, e. g. soft wood and plastic. Carbide tipped router bits (HM) are particularly suitable for hard and abrasive materials, e. g. hard wood and aluminium.

Mounting and removing cutters
Fig. C

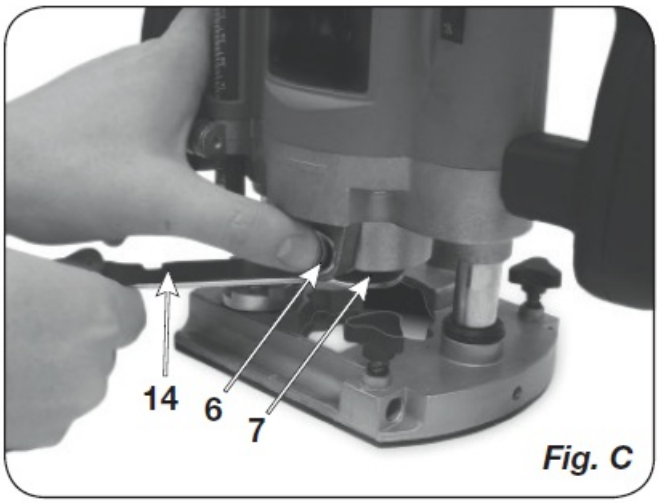


Fig. C

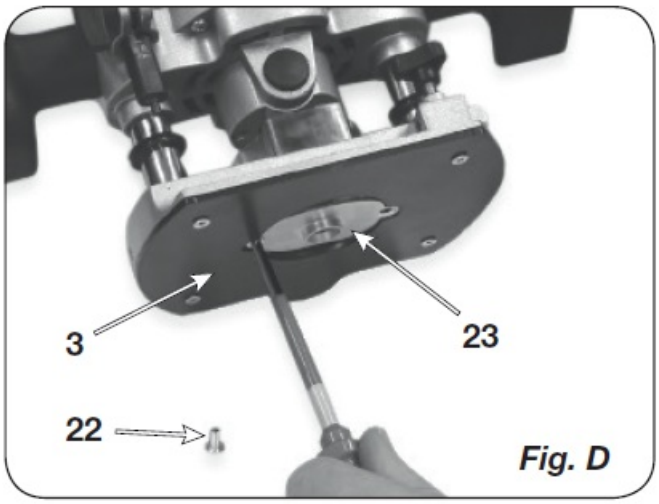
Only use cutters with a shaft diameter which corresponds with the size of the collet. Only use cutters which are suited for the maximum speed of the machine. The cutter diameter should not exceed the maximum diameter (see ‘Technical specifications’). Never tighten the collet nut, if there is no router bit
in the collet; the collet may be damaged.

- Press the spindle lock (7) and turn the collet nut (6) until it engages in the lock. Keep the spindle lock pressed during this procedure.
- Open the collet nut using the spanner (14).
- Place the cutter shaft in the collet.
- Tighten the collet nut so that the cutter is locked properly.
- Open the collet nut when you want to replace a cutter.

Adjusting the parallel fence ruler
The parallel fence is a useful tool for precision routing at a fixed distance from the edge of the workpiece.

- Place the desired cutter in the tool.
- Slide the parallel guide with the guide rods into the baseplate and tighten at the required measure with the wing bolts

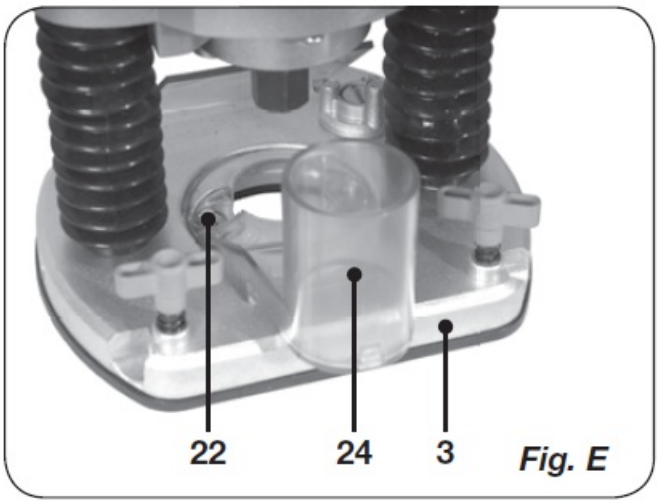
Mounting the template guide



The template guide is a handy aid for cutting a pattern.

- Mount the template guide (23) on the router base (3) using the screws (22).

Mounting the adapter for dust extraction



Use the dust adapter for the extraction of dust. In case the adapter is not mounted on the machine, follow these instructions.

- Mount the dust adapter (24) with the screws (22) on the cutter sole (3).
- Place the dust tube (25) in the dust output (16).
- Place the tube of your vacuum cleaner on the dust tube (25).

Keep the outlet of the machine behind the machine for a good view on the workpiece.

OPERATION

Switching on and off (Fig. B)

- To switch the machine on, press the lock-off button (5) and then press the On/ off switch (1).
- To switch the machine off, release the On/off switch (1).

Usage tips

- After switching the machine on, make sure the machine reaches full speed before using it on the workpiece.
- Clamp the workpiece and make sure that the workpiece cannot slide from under the machine during the cutting activities.
- Hold the machine firmly and move it evenly over the workpiece. Do not force the machine.
- Only use cutters which do not show any signs of wear. Worn cutters have a negative effect on the efficiency of the machine.
- Always switch off the machine first before removing the plug from the wall socket.

Speed Preselection
The required speed can be preselected with the thumbwheel. Also during running the rotational speed can be adjusted.

- **1 – 2 =** low speed
- **3 – 4 =** medium speed
- **5 – 6 =** high speed
- **Max =** maximum speed

The required speeds depends on the material and can be determined by practical testing. Furthermore router bits with a large diameter need a lower rotational speed.

Material	Diameter Router bit	Speed stages
Hardwood	>20 mm	1 – 2
	10 – 20 mm	3 – 4
	<10 mm	5 – max
Softwood	>20 mm	1 – 3
	10 – 20 mm	3 – 6
	<10 mm	5 – max
Aluminium	>15 mm	1
	<15 mm	1 – 2
Plastic	>15 mm	1 – 2
	<15 mm	2 – 3

After longer periods of working at low speed, allow the machine to cool down by running it for a few minutes at high speed with no load

Height setting of the router column

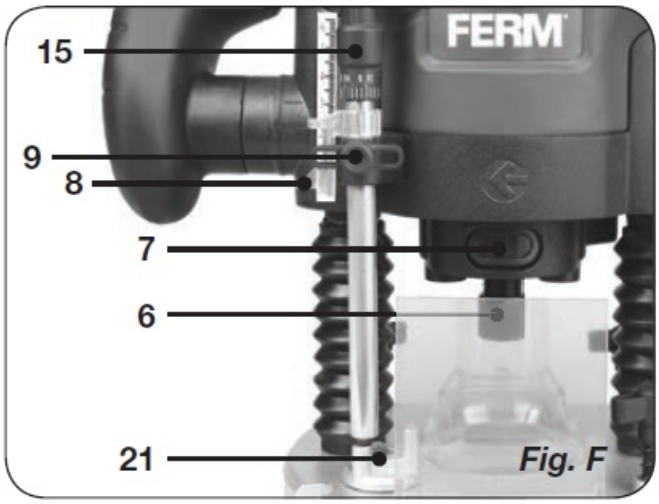


Fig. F

- The clamping lever (11) is used to set the maximum height of the router.
- The plunge depth is then fixed. This is usually necessary when using the tool on a special router table.
- Make sure the router column is not locked. The router can be pushed down against the spring force.
- Lock the router column using the clamping lever The router is now locked and will no longer return to its original position.

Setting the plunge depth

The plunge depth can be adjusted by using buttons 8, 9, 11 and 15. If the plunge depth is set correctly, the groove

in question can be routed accurately to within 0.1 mm.

- **Preparation:**
  - Place the desired cutter in the tool. The router can be pushed down against the spring force.
  - Push the tool down until the cutter touches the workpiece, then lock it using the clamping lever (11).
  - Loosen button 9.
  - Set button 15 to zero.
  - Use button 8 to set the depth all the way down.
  - Tighten button 9 (clockwise). The plunge depth is now set to precisely 0 mm.
- **Rough setting:**
  - Read the value from the scale (12).
  - Loosen button 9.
  - Turn button 8 and re-read the value from the scale. The difference between the two values is the plunge depth setting. For example: If the value on the scale (12) is 8.5 in the zerosetting and the value is 7.0 after button (8) has been turned, then the plunge depth has been set to 1.5 cm.
  - Retighten button 9.
- **Fine adjustment:**
  - Loosen button 9.
  - The top button (15) is still set to zero. Give this button a full counter-clockwise turn, until it is back in the zero position. The plunge depth is now 1.0 mm less.
  - If required, the plunge depth can be set accurately to within 0.1 mm.
  - Retighten button 9.
    Unlock the clamping lever (11)

Adjustment using the revolver- depth stop
The revolver-depth stop enables you to quickly choose between three different cutting depths. These are also determined by the adjustment of the depth stop (10). For larger routing depths, it is recommended to carry out several repetitive cuts with lower removal rates.

- Adjust the required cutting depth by rotating the revolver-depth stop (21).

MAINTENANCE

Make sure that the machine is not live when carrying out maintenance work on the motor. These machines have been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper machine care and regular cleaning.

Cleaning
Regularly clean the machine housing with a soft cloth, preferably after each use. Keep the ventilation slots free from dust and dirt. If the dirt does not come off use a soft cloth moistened with soapy water. Never use solvents such as petrol, alcohol, ammonia water, etc. These solvents may damage the plastic parts.

Troubleshooting
Please find some potential causes and solutions to possible failure.

1. **The operating switch is switched on, but the motor is not working**
   - The electric circuit is broken

- Have the electric circuit repaired
- Wires in the mains plug or in the socket are loose
- Have socket and plug checked or repaired
- The switch is faulty
- Have the switch repaired

2. **Router runs slowly**
    - Blunt or damaged cutter
    - Re-sharpen or replace cutter
    - Variable speed set low
    - Increase variable speed
    - Motor is overloaded
    - Reduce pushing force on router
3. **Excessive vibration**
    - Bent cutter shank
    - Replace cutter
4. **Sparks inside the housing**
    - Carbon brushes are worn
    - Replace the carbon brushes

Faults
Should a fault occur, e.g. after wear of a part, please contact the adress on the warranty card. Included you find an exploded view showing the parts that can be ordered.

ENVIRONMENT

In order to prevent the machine from damage during transport, it is delivered in a sturdy packaging. Most of the packaging materials can be recycled. Take these materials to the appropriate recycling locations. Faulty and/or discarded electrical or electronic apparatus have to be collected at the appropriate recycling locations.

Only for EC countries
Do not dispose of power tools into domestic waste. According to the European Guideline 2012/19/EU for Waste Electrical and Electronic Equipment and its implementation into national right, power tools that are no longer usable must be collected separately and disposed of in an environmentally friendly way.

WARRANTY

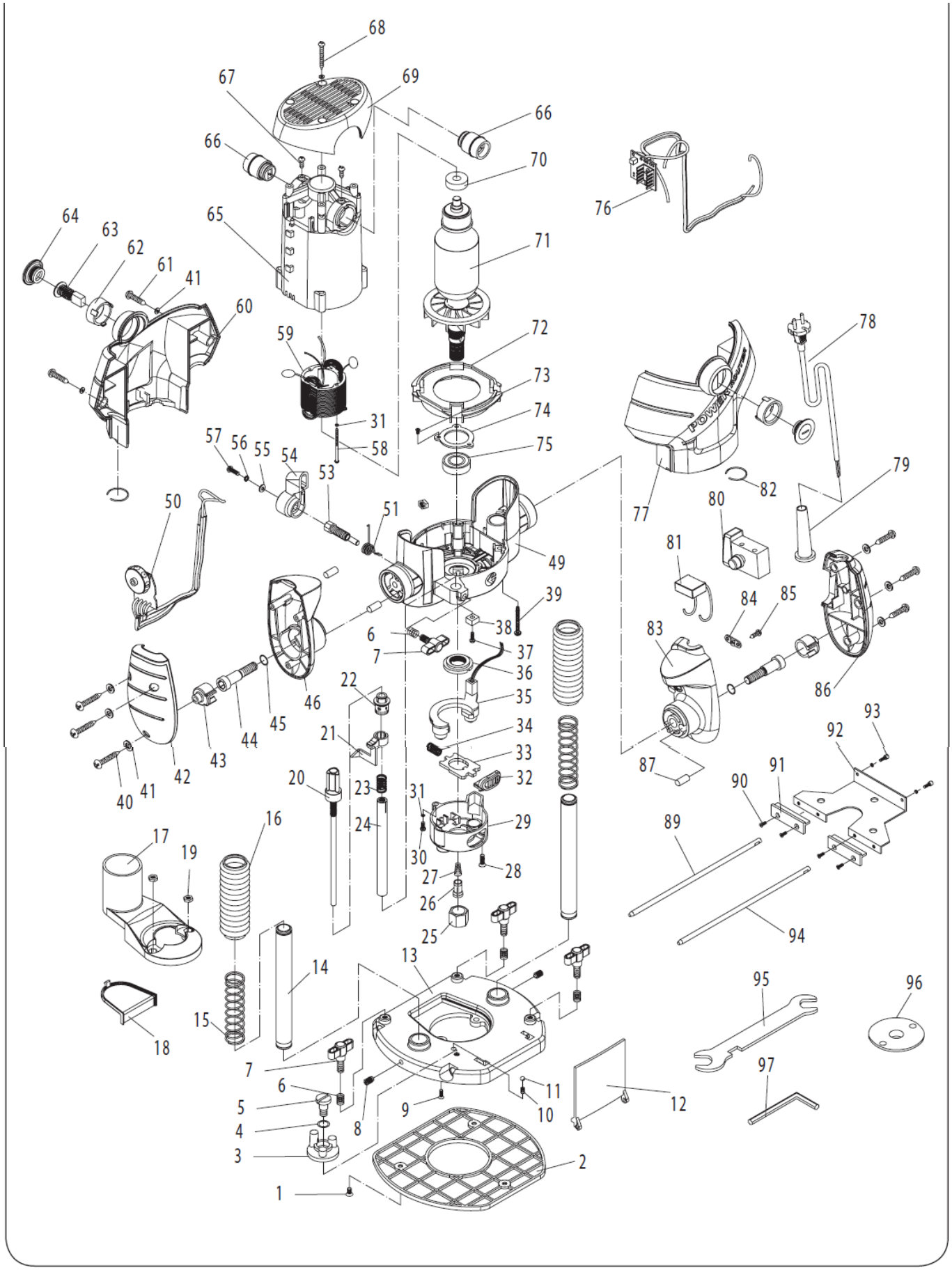
The guarantee conditions can be found on the separately enclosed guarantee card. The product and the user manual are subject to change. Specifications can be changed without further notice.

Spare parts list

PRM1015

Article no.	Description	Position no.
409800	Guard	12
409801	Dust extraction	17, 18
409802	Depth adjustment	20 – 24
409803	Collet nut	25
409804	Collet	26
409805	Spindle lock	32 – 34
409806	Speed control	50
409807	Locking lever	51 – 57
409808	Stator	59
409809	Carbon brush cap	62 + 64
409810	Carbon brush set	63
409811	Carbon brush holder	66
409812	Rotor	71
480581	Switch (Lock-off)	80
409814	Guiding rod	89 – 94
409815	Template ring	96

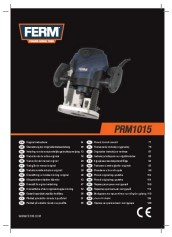
Exploded view



DECLARATION OF CONFORMITY

We declare under our sole responsibility that this product is in conformity with directive 2011/65/EU of the European parliament and of the council of 8 June on the restriction of the use of certain hazardous substances in electrical and electronic equipment is in conformity and accordance with the following standards and regulations:

Documents / Resources

	FERM PRM1015 Router [pdf] User Manual PRM1015 Router, PRM1015, Router

References

- FERM Power Tools - Power to create