MANUAL DE INSTRUCCIONES
OPERATING INSTRUCTIONS
MODE D´ EMPLOI
GEBRAUCHSANWEISUNG
MANUALE D'ISTRUZIONI
MANUAL DE INSTRUÇÕES
ИНСТРУКЦИЯ ПО ЭКСПЛУАТАЦИИ
INSTRUKCJE OBSŁUGI

FR66P

Fresadora tupí
Router
Défonceuse
Tischfräsmaschine
Fresatrice toupie
Fresadora tupia
Ручной Фрезер
Frezarka górnowrzecionowa

Las escobillas deben ser sustituidas cuando tengan una longitud mínima de 5 mm. Para ello desmontar la caja del interruptor A (Fig. 8) retirando los tornillos que la sujetan. Quitar los tapones D1 (Fig. 8) que sujetan las escobillas E1 (Fig. 8) y sustituirlas por otras originales VIRUTEX, asegurándose de que deslicen suavemente en el interior de las guías. Es aconsejable dejar la máquina en marcha en vacío durante algunos minutos después de un cambio de escobillas. Aproveche el cambio de escobillas para verificar el estado del colector. Si éste presentase quemaduras o resaltes es aconsejable llevarlo a reparar a un servicio técnico VIRUTEX. Asegúrese al montar de nuevo la caja interruptor A que los cables quedan bien situados en su interior.

15. LUBRICACIÓN Y LIMPIEZA

La máquina se entrega totalmente lubricada de fábrica no precisando cuidados especiales a lo largo de su vida útil. Es importante limpiar siempre cuidadosamente la máquina después de su utilización mediante un chorro de aire seco. Mantener el cable de alimentación en perfectas condiciones de uso.

16. ACCESORIOS OPCIONALES

Opcionalmente pueden suministrarse los siguientes accesorios:
5000000 Plantilla lazos PL11
6027020 Pinza Ø 6
6727020 Pinza Ø 1/4"
6446073 Acoplamiento aspiración estandar 2,25 m
Guías plantillas:
7722168 Ø ext. 10 mm para fresas de 6 mm
7722120 Ø ext. 12 mm para fresas de 8 mm
7722121 Ø ext. 14 mm para fresas de 10 mm
7722122 Ø ext. 16 mm para fresas de 12 mm
7722169 Ø ext. 18 mm para fresas de 14 mm
7722118 Ø ext. 20 mm para fresas de 16 mm
7722119 Ø ext. 27 mm para fresas de 23 mm
7722114 Ø ext. 30 mm para fresas de 26 mm
Guías plantilla cola de milano:
7722161 Para fresa de D.9,5 y lazos de paso 16
7722123 Para fresa de D.15 y lazos de paso 26
7722162 Para fresa de D.20 y lazos de paso 34
7722160 Guía para plantilla AGB de herrajes oscilobatientes
7722342 Guía para plantilla AGB aire 11-12
6640125 Fresa para plantilla AGB.

17. NIVEL DE RUIDO Y VIBRACIONES

Los niveles de ruido y vibraciones de esta herramienta eléctrica han sido medidos de acuerdo con la Norma Europea EN 60745-2-17 y EN60745-1 y sirven como base de comparación con máquinas de semejante aplicación. El nivel de vibraciones indicado ha sido determinado para las aplicaciones principales de la herramienta, y puede ser utilizado como valor de partida para la evaluación de la exposición al riesgo de las vibraciones. Sin embargo, el nivel de vibraciones puede llegar a ser muy diferente al valor declarado en otras condiciones de aplicación, con otros útiles de trabajo o con un mantenimiento insuficiente de la herramienta eléctrica y sus útiles, pudiendo llegar a resultar un valor mucho más elevado debido a su ciclo de trabajo y modo de uso de la herramienta eléctrica.
Por tanto, es necesario fijar medidas de seguridad de protección al usuario contra el efecto de las vibraciones, como pueden ser mantener la herramienta y útiles de trabajo en perfecto estado y la organización de los tiempos de los ciclos de trabajo (tales como tiempos de marcha con la herramienta bajo carga, y tiempos de marcha de la herramienta en vacío y sin ser utilizada realmente ya que la reducción de estos últimos puede disminuir de forma sustancial el valor total de exposición).

18. GARANTÍA

Todas las máquinas electroportátiles VIRUTEX, tienen una garantía válida de 12 meses a partir del día de su suministro, quedando excluidas todas las manipulaciones o daños ocasionados por manejos inadecuados o por desgaste natural de la máquina.
Para cualquier reparación dirigirse al servicio oficial de asistencia VIRUTEX S.A.

VIRUTEX se reserva el derecho de modificar sus productos sin previo aviso.

ENGLISH

FR66P ROUTER

(Illustrations in page 29)

Important

Read these OPERATING INSTRUCTIONS and the attached GENERAL SAFETY INSTRUCTIONS LEAFLET carefully before using the machine. Make sure you have understood them before operating the machine for the first time.
Keep both sets of instructions for any future queries.

1. TECHNICAL DATA

Universal motor.....50/60 Hz
Input power.....1,300 W
No-load speed.....26,000/min
Standard chuck diameter.....8 mm
Routing depth.....0-60 mm

Revolving depth gauge.....6-position depth adjustment
Weight.....3.8 Kg

Weighted equivalent continuous acoustic pressure level A.....87 dBA
Acoustic power level A.....98 dBA
Uncertainty.....K = 3 dBA

Wear ear protection!

Vibration total values.....a_h: <2.5 m/s²
Uncertainty.....K: 1.5 m/s²

2. OPERATION RANGE

The router is an electric appliance used for routing wood and plastics. It is also very convenient for trimming edges, cutting out of knots, copy cutting, rebate cutting, making of frames and engraving.
Together with parallel guide, template followers, compasses and profile cutters, it is an exceedingly useful appliance.

3. SAFETY INSTRUCTIONS FOR MACHINE OPERATION

Before using the machine carefully read the GENERAL SAFETY INSTRUCTIONS LEAFLET, which is included in the machine documentation.

- When changing the tools or performing any other operation close to the cutting head, remove hand from the switch lever and disconnect from the mains.
- Use safety goggles when working with the router.
- Always guide the router with both hands using the two knobs J (Fig. 1), with stop lever B (Fig. 1) within easy reach.
- Following completion of a job, disconnect the motor and release the base before leaving the router.
- Always place the router on the base, on a flat, clean surface.
- Always use the lever of the main switch to turn the router on.
- Ensure that the router cannot accidentally fall over.
- Use only bits of diameter suitable for the chuck to be used, and adapted to the router speed.
- The specifications of the bits of the VIRUTEX range are especially adapted to the performance of this router. Use preferably bits from the extensive VIRUTEX range, or only bits whose characteristics conform to the said specifications.

4. STANDARD EQUIPMENT

You will find the following items inside the box:

- Surface router FR66P
- Size 26 service key
- Template guide diameter 19 for 26 mm dovetailing
- Lateral fence unit
- Aspiration connector
- Instruction manual and other documentation

5. STARTING UP THE MACHINE

Cut-out box A (Fig. 1) is equipped with lever B (Fig. 1), which can be pressed with a finger. This enables the user to start it up or stop it with no need to move his hand from knob. To do this, activate the switch's lateral stop C (Fig. 1) and, without releasing it, push forward lever B. Stop C prevents the machine from starting up accidentally.

6. ASSEMBLY OF THE CUTTING TOOLS

Assemble cutting tool D (Fig. 2, 3) in chuck E (Fig. 2), block the axis by pressing brace F (Fig. 3) and insert wedge G (Fig. 3) to lock the fastening in place. Tighten nut H (Fig. 2, 3) with the service key I (Fig. 3).

Avoid leaving the machine with no tools installed, since the chuck could be over-tightened and damage the shaft.

7. BLOCKING OF THE BASE

The base can be locked in any position using knob J (Fig. 1). When knob is loosened, the base will automatically return to its highest position due to the action of the springs incorporated in the columns.

Following completion of any job, flick the switch to OFF and release the base using knob before leaving the router, which must be on a flat surface.

8. ADJUSTING THE DEPTH

ADJUSTING THE DEPTH. The depth is adjusted using the incorporated rack and pinion depth-adjustment mechanism. With the cutter bit face flat against the wood surface, the penetration depth may be adjusted to up to 60 mm.
To unlock the depth rod K (Fig. 4) press down firmly on adjustment knob L (Fig. 4) and turn it to raise or lower the depth rod, if a greater or lesser cutting depth is required. The gauged adjustment indicator M (Fig. 4) can be moved separately from the knob, so that it may be set to zero from any position using the reference mark. When turning the knob after adjusting the indicator, both elements will turn together, thereby indicating the degree to which the rod has been moved. A full turn of the knob moves the rod by 34 mm, with a maximum

distance of 55 mm.
To hold the depth rod in the required position, release the pressure from the adjustment knob. Next, to ensure that the knob is firmly held in place, it should be locked using fastening knob N (Fig. 4). PRECISION ADJUSTMENT. If you wish to make precision adjustments to the previously set depth, simply turn adjustment knob O (Fig. 4). A full turn of the knob moves the rod by 1 mm, with a maximum distance of 5 mm. Each division in the gauged fine-adjustment indicator P (Fig. 4) represents a movement of 0.1 mm.
MAKING DEEP CUTS. To perform cuts that are too deep to carry out with a single cut, we recommend making several successive cuts using the six 3-mm steps in the revolving depth turret Q (Fig. 4).
Lower the machine until the cutting bit is level with the surface on which the router is resting. Use locking knob J (Fig. 1) to hold the machine in this position. Loosen fastening knob N (Fig. 4), then press down and turn adjustment knob L (Fig. 4) until the depth rod presses against the lower step of the revolving depth turret, using fine adjustment if required. In this position, turn depth indicator M (Fig. 4) until position zero matches the reference mark. This will be the starting position indicating the point at which the bit comes into contact with the material. Hold the rod in place with knob N (Fig. 4), release the locking knob and leave the machine in the off position.
Loosen fastening knob N, then press down and turn adjustment knob L, moving the adjustment rod K (Fig. 4) upwards to the required cut depth. Then use knob N once again to turn turret Q (Fig. 4) until the highest step is below rod K (Fig. 4). Make the first cut on the material. Turn the turret Q to the next step and then make another cut, and so on until the required depth is obtained when the bottom step is reached.

9. LOCKING THE ROUTING DEPTH

To carry out several repetitive jobs in which the same router depth is required, it may be useful to prevent the head being released by accidentally moving the locking knob J (Fig. 1). This may be done by inserting two M8 nuts R (Fig. 4) in the threaded shaft, one above and one below the head body. This locks the head at any point along its depth setting.

When working with the depth locked, the tool is permanently held outside the surface of the base, so it is important to:

- Wait for the machine to stop completely before leaving it on the base, on a flat surface which leaves the tool free.
- Cancel the locked depth and return to the normal conditions of locking by the knob J (Fig. 1) as soon as the task has been completed.

10. USE OF PARALLEL GUIDE

Parallel guide is used for edge trimming and cutting differently shaped grooves in accordance with various profile shapes.
Parallel guide S (Fig. 6) is placed in base grooves T (Fig. 6) and secured in place using the two knobs U (Fig. 6).
NORMAL SQUARE ADJUSTMENT – Loosen the base knobs, move the square to the required position and then tighten the knobs in this position.
PRECISION ADJUSTMENT – Once the square has been approximately positioned and held in place, a further fine adjustment may be made. To do this, loosen square fastening knob V (Fig. 6), turn the fine-adjustment knob on guide W (Fig. 6) to the required measurement, then tighten the square fastening knob V (Fig. 6) again in this position. A full turn of the knob moves the square by 1 mm, with a maximum distance of 10 mm. The gauged fine-adjustment indicator X (Fig. 6) can be moved separately from the knob, so that it may be set to zero from any position using the reference mark. When turning the knob W (Fig. 6) after adjusting the indicator X (Fig. 6), both elements will turn together, thereby indicating the degree to which the square has been moved, with each division representing an advance of 0.1 mm.

11. USE OF TEMPLATE GUIDES

Template guides are used for copy cutting of richly shaped patterns. Selected template guide Y (Fig. 7) is fixed to base T (Fig. 7) using the two screws Z (Fig. 7). When copying, a diffrence in size between the template and the routed item becomes apparent. The difference between the radius of the template guide and the radius of the tool must always be taken into account when preparing the template.

12. DUST COLLECTOR ATTACHMENT

To attach the dust collector connector A1 (Fig. 6), place it in the central recess in base T (Fig. 6), with the connection facing the back, and hold it in place with screws B1 (Fig. 6). If trimming dovetails with the Virutex PL11 model dovetailing attachment, guide and position the dust collector connector as desired so that the trimmer moves over the dovetailing attachment better.
The dust collector connector A1 may be attached either directly to the suction tubes of dust collectors AS182K, AS282K or by using the smaller diameter and lighter 6446073 standard dust collector attachment, C1 (Fig. 6), which can then be attached to AS182K, AS282K or any other industrial dust collector.

13. DUST COLLECTION NOZZLE SUPPLEMENT

To ensure that the suction of the machine is sufficient when working with trimmer bits of less than 30 mm in diameter, use the dust collection nozzle A1 (Fig. 6) with

the included supplement F1 (Fig. 6).
If you are using trimmer bits with a diameter of more than 30 mm and up to 40 mm, remove the supplement F1 (Fig. 6) from the dust collection nozzle A1 (Fig. 6) and work with only the nozzle. To re-attach the supplement, simply press it firmly into the nozzle slot.

14. CHANGING THE BRUSHES

Disconnect the machine from the mains before performing any maintenance operations.

The brushes must be replaced when they reach the minimum length of 5 mm. For this purpose, remove the switch box A (Fig. 6) by removing the screws which hold it in place. Remove plugs D1 (Fig. 8) which hold brushes E1 (Fig. 8) and replace them with new original VIRUTEX brushes, ensuring that they slide smoothly through the guides. We recommend running the unloaded machine for several minutes after changing the brushes. Take the opportunity to check the condition of the collector. If it shows signs of burning or wear and tear, we recommend bringing it to a VIRUTEX technical service centre for repair. When reassembling switch box A, take care to ensure that the cables are properly located inside it.

15. LUBRITATION AND CLEANING

The machine is delivered fully lubricated from the factory and does not require any special care during its working life. It is important to clean the machine carefully after use, using a dry air jet.
Maintain the supply cable in perfect operating conditions.

16. OPTIONAL ACCESSORIES

The following optional accessories may be supplied:
5000000 Dovetailing template PL11
6027020 Chuck Ø 6
6727020 Chuck Ø 1/4"
6446073 2.25 m Standard dust collector attachment.
Template guides:
7722168 External Ø 10 mm for 6 mm bits.
7722120 External Ø 12 mm for 8 mm bits.
7722121 External Ø 14 mm for 10 mm bits.
7722122 External Ø 16 mm for 12 mm bits.
7722169 External Ø 18 mm for 14 mm bits.
7722118 External Ø 20 mm for 16 mm bits.
7722119 External Ø 27 mm for 23 mm bits.
7722114 External Ø 30 mm for 26 mm bits.
Dovetailing template guides:
7722161 For bit Ø 9.5 and dovetail pitch 16
7722123 For bit of Ø 15 and dovetail pitch 26
7722162 For bit of Ø 20 and dovetail pitch 34
7722160 AGB template guide for bottom-hung fittings.
7722342 Guide for air template AGB 11-12
6640125 Bit for AGB template.

17. NOISE AND VIBRATION LEVEL

The noise and vibration levels of this device have been measured in accordance with European standard EN 60745-2-17 and EN 60745-1 and serve as a basis for comparison with other machines with similar applications. The indicated vibration level has been determined for the device's main applications and may be used as an initial value for evaluating the risk presented by exposure to vibrations. However, vibrations may reach levels that are quite different from the declared value under other application conditions, with other tools or with insufficient maintenance of the electrical device or its accessories, reaching a much higher value as a result of the work cycle or the manner in which the electrical device is used. Therefore, it is necessary to establish safety measures to protect the user from the effects of vibrations, such as maintaining both the device and its tools in perfect condition and organising the duration of work cycles (such as operating times when the machine is subjected to loads, and operating times when working with no-load, in effect, not in use, as reducing the latter may have a considerable effect upon the overall exposure value).

18. WARRANTY

All VIRUTEX power tools are guaranteed for 12 months from the date of purchase, exlcuding any domage which is a result of incorrect use or of natural wear and tear on the machine. All repairs should be carried out by the official VIRUTEX technical assistance service.

VIRUTEX reserves the right to modify its products without prior notice.

FRANÇAIS

DÉFONCEUSE FR66P

(Figures en page 29)

Important

Avant d'utiliser la machine, lisez attentivement ce MANUEL D'INSTRUCTIONS et la BROCHURE D'INSTRUCTIONS GÉNÉRALES DE SÉCURITÉ qui vous sont fournis avec cette machine. Assurez-vous de bien avoir tout compris avant de commencer à travailler sur la machine.
Gardez toujours ces deux manuels d'instructions à portée de la main pour pouvoir les consulter, en cas de besoin

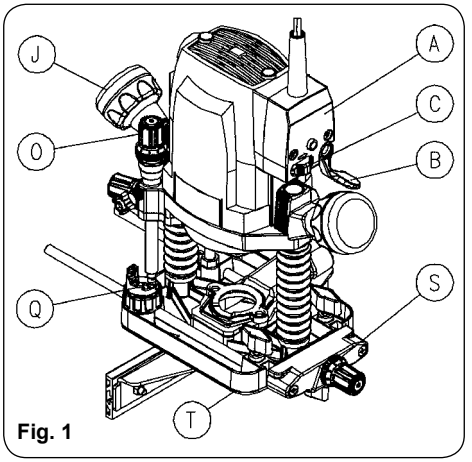


Fig. 1

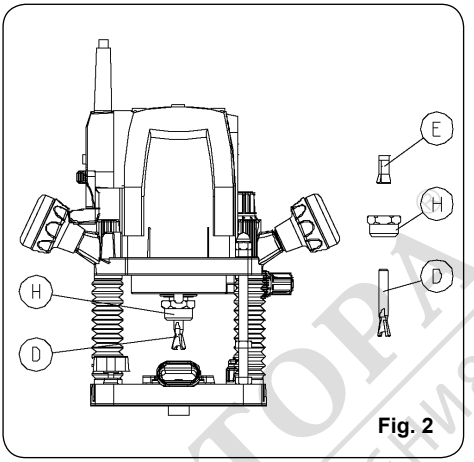


Fig. 2

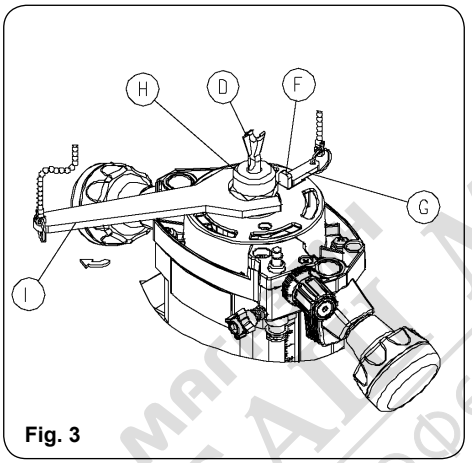


Fig. 3

Fig. 4

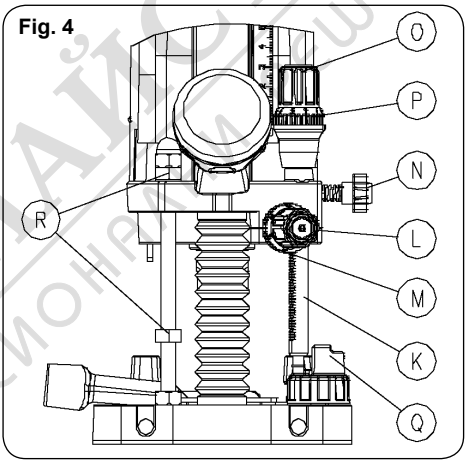
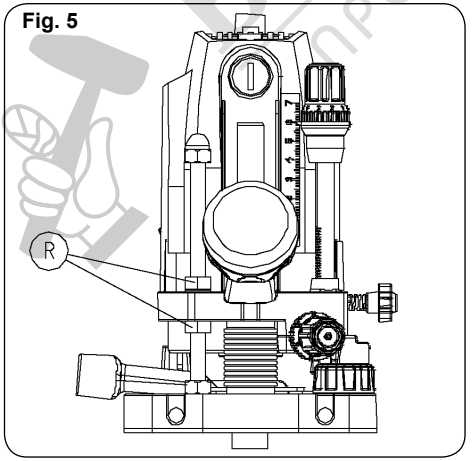


Fig. 5



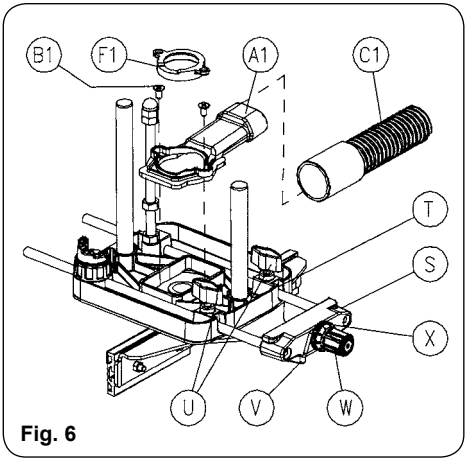


Fig. 6

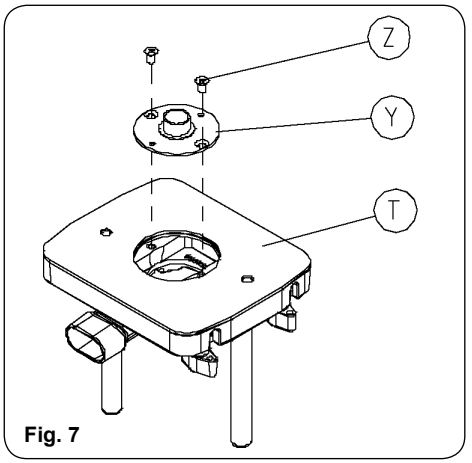


Fig. 7

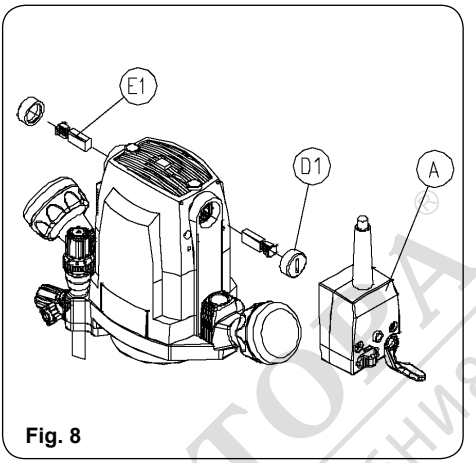


Fig. 8

http://www.virutex.es/registre

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