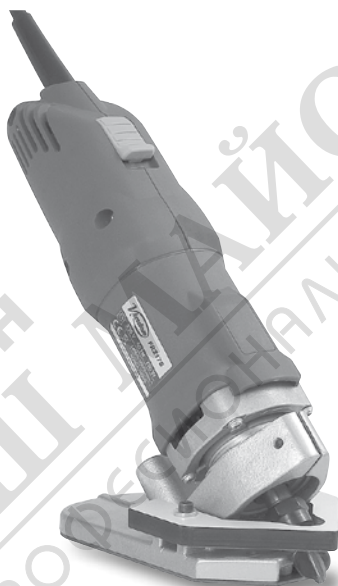


MANUAL DE INSTRUCCIONES  
OPERATING INSTRUCTIONS  
MODE D' EMPLOI  
GEBRAUCHSANWEISUNG  
MANUALE D'ISTRUZIONI  
MANUAL DE INSTRUÇÕES  
ИНСТРУКЦИЯ ПО ЭКСПЛУАТАЦИИ  
INSTRUKCJA OBSŁUGI

**Virutex**<sup>®</sup>



**FR217S**



**Fresadora para copetes**

**Angle trimmer**

**Affleureuse d'angle**

**Eckentrimmer**

**Fresatrice per angoli**

**Fresadora de topos**

**Угловой Фрезер**

**Frezarka kątowa**



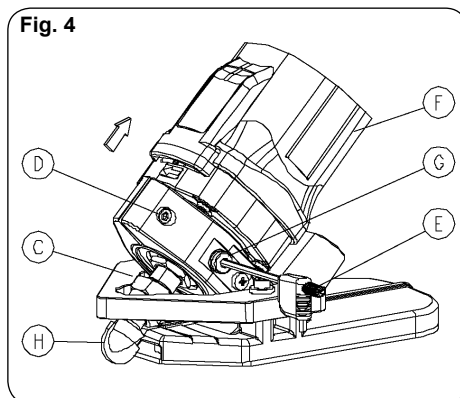
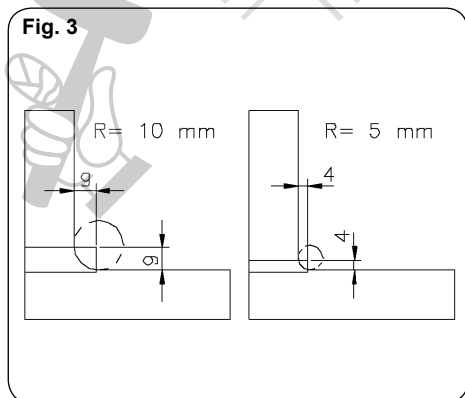
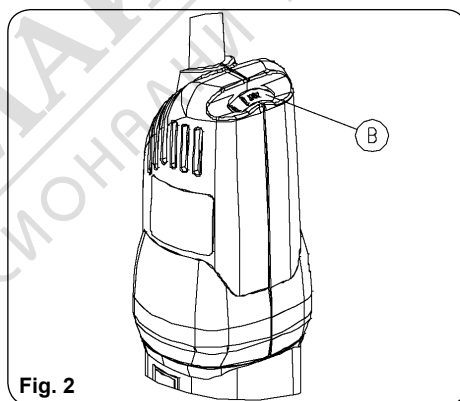
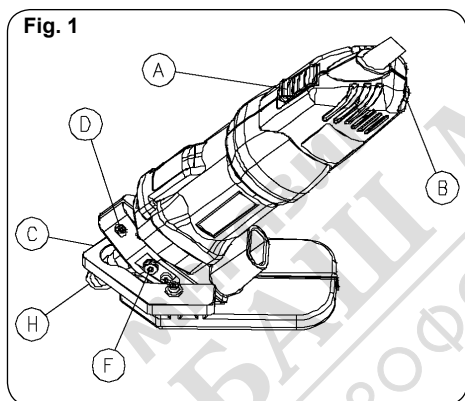


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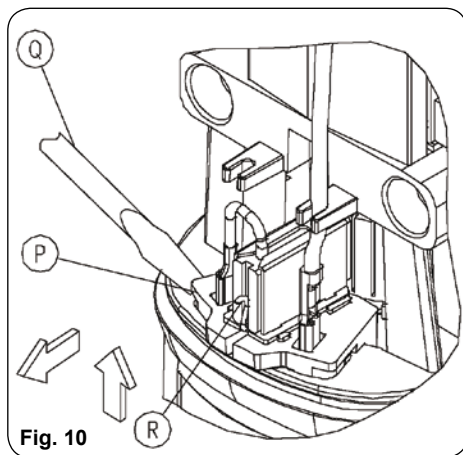
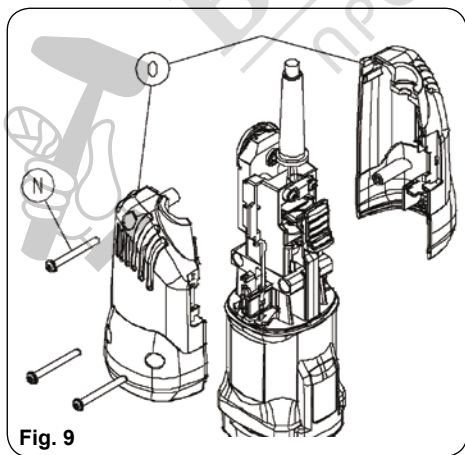
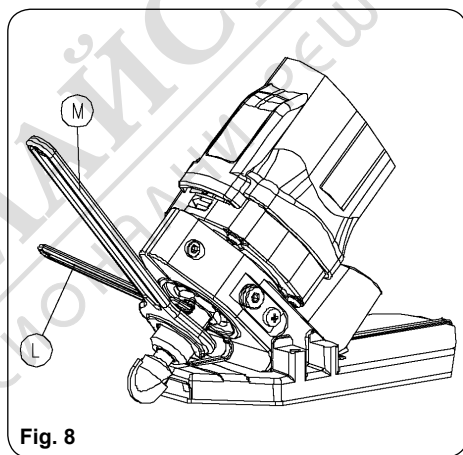
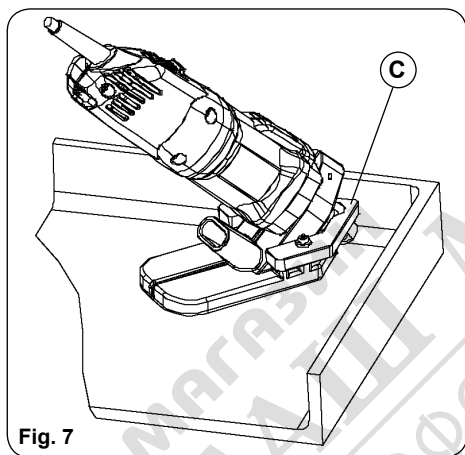
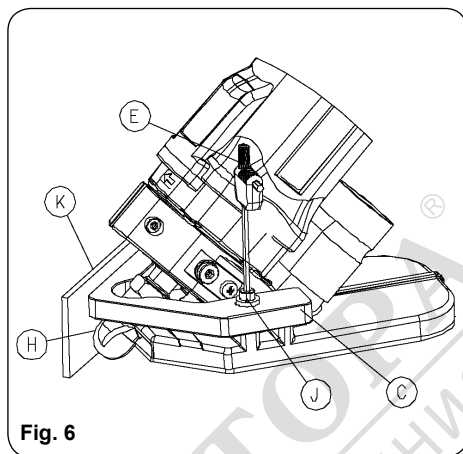
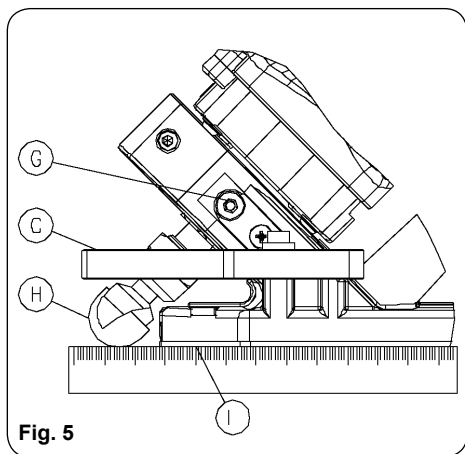


Fig. 11

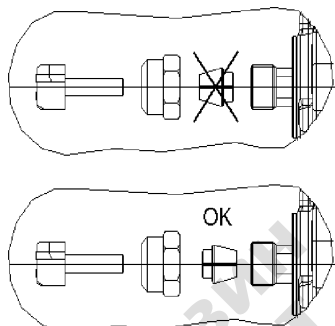
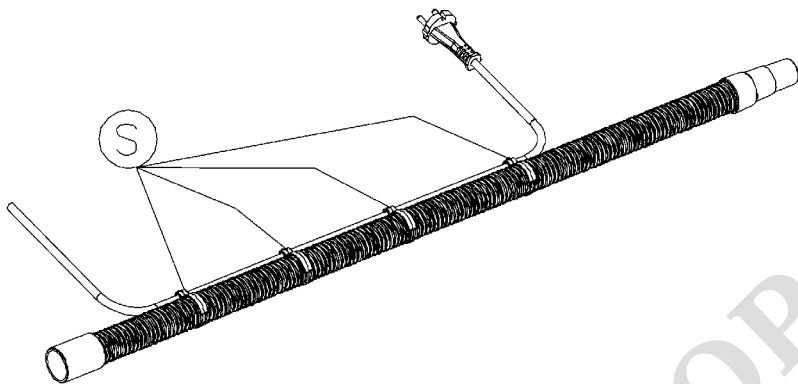


Fig. 12

## ESPAÑOL

### FRESADORA PARA COPETES FR217S

#### Importante:



Antes de utilizar la máquina lea atentamente este MANUAL DE INSTRUCCIONES y el FOLLETO DE INSTRUCCIONES GENERALES DE SEGURIDAD que se adjunta. Asegúrese de haberlos comprendido antes de empezar a operar con la máquina. Conserve los dos manuales de instrucciones para posibles consultas posteriores.

#### 1. INSTRUCCIONES DE SEGURIDAD PARA EL MANEJO DE LA FRESADORA

- Asegúrese antes de conectar la máquina, que la tensión de alimentación, corresponda con la indicada en la chapa de características.
- Mantenga siempre las manos alejadas del área de corte y sujete siempre la máquina por el cuerpo central de la misma.
- Es recomendable trabajar con aspiración de la viruta para prolongar la vida de la fresa y evitar posible roturas de la misma.
- Desconecte la máquina de la red eléctrica antes de realizar cualquier operación de mantenimiento.
- Use siempre recambios originales VIRUTEX.
- Utilizar únicamente fresas con el diámetro de la caña adecuado a la pinza a utilizar y adaptadas a la velocidad de la fresadora.



Conforme a la Directiva Europea 2002/96/CE los usuarios pueden contactar con el establecimiento donde adquirieron el producto, o con las autoridades locales pertinentes, para informarse sobre cómo y dónde pueden llevarlo para que sea sometido a un reciclaje ecológico y seguro.

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

## ENGLISH

### FR217S ANGLE TRIMMER

#### 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. SAFETY INSTRUCTIONS FOR OPERATING THE TRIMMER

- Before plugging in the machine, ensure that the power supply voltage corresponds to what is stated on the machine's characteristics plate.
- Always keep your hands away from the cutting area and grip the machine by its main body
- It is recommended to use the machine attached to a dust collector in order to prolong the life of the bit and prevent possible damage to it.
- Unplug the machine from the electrical outlet before performing any maintenance operations.
- Always use original VIRUTEX spare parts.
- Use only bits of diameter suitable for the chuck to be used, and adapted to the router speed.

#### 2. SPECIFICATIONS

Input power.....1,000 W  
Universal motor.....50/60 Hz  
No-load speed.....14,000-30,000/min  
Chuck collet.....8 mm

Weight.....1.6 Kg

Weighted equivalent continuous

acoustic pressure level A.....88 dBA

Acoustic power level A.....99 dBA

Uncertainty.....K = 3 dbA



**Wear ear protection!**

Vibration total values..... $a_{hv}$ : <math>2.5\text{ m/s}^2</math>

Uncertainty.....K:  $1.5\text{ m/s}^2$

#### 3. STANDARD EQUIPMENT

Inside the box you will find the following items:

1. FR217S Angle trimmer
2. H.M. Bit for rims R.5
3. H.M. Bit for rims R.10
4. Feeler R.5
5. Feeler R.10
6. 11-mm a/f key for motor shaft
7. 19-mm a/f key for the chuck collet
9. 3-mm Allen key
9. Dust collection pipe
10. Cable - dust collection tube brackets
11. Operating instructions

#### 4. GENERAL DESCRIPTION AND APPLICATIONS

Specially designed for trimming the concave radiuses in the joints between rims and work tops made of materials such as Corian or Rausolid. Fitted with a front feeler that prevents the rim from becoming damaged and allows for quick, easy trimming, giving a perfect finish.

The machine comes equipped with a dust collector connection, and using the dust collector attachment, it can be connected to our AS182K and AS282K dust collectors, or to any other industrial dust collector.

The power cable can be fed through the brackets S (Fig. 11) on the dust collection tube to make the machine easier to handle.

#### 5. PREPARING THE MOULDING

To trim concave radiuses, a plate must be fitted between the base of the work top and the rim. The size of the plate depends on the desired radius, as shown in (Fig. 3). The maximum trimmer radius that can be fitted on the machine is 10 mm and the minimum is 5 mm.

#### 6. STARTING AND STOPPING THE MACHINE

To start the machine, press button A forward (Fig. 1) to the "on" position. To stop the machine, simply press the back of the switch and it will return to the "off" position. The electronic control enables you to work at the ideal speed for each type of job and cutter bit. To do this, use button B (Fig. 1 and 2).

## 7. ADJUSTING THE BIT HEIGHT



**Disconnect the machine from the mains before making any adjustments to the machine.**

Protector C does not need to be removed in order to adjust the bit height (Fig. 4).

Loosen screw D (Fig. 4) using key E (Fig. 4) until the motor body F can move. Turn the eccentric G (Fig. 4) using the same key E (Fig. 4) until the edge of the cutter bit with radius H (Fig. 5) is level with the base I (Fig. 5) and firmly tighten screw D (Fig. 4) in this position.

## 8. ADJUSTING THE FEELER

The machine includes feeler C (Figs. 5, 6 and 7) which acts as a support guide and determines the depth of same. We advise routing the desired radius in two or three cuts in order to prevent vibrations and marks on the finished radius. The feeler must be adjusted for each cut.

### First cut:

To adjust the feeler for the first cut, loosen screws J (Fig. 6) with spanner E (Fig. 6) and move the feeler forward until it can go no further.

### Last cut:

To adjust the feeler for the last cut, loosen screws J (Fig. 6) and move the feeler until the edge of bit H (Fig. 6) is level with the feeler. Since the bit is spiral, you will have to turn it 360° in order to check this (Fig. 6).

To ensure that the edge and the feeler are accurately aligned, use support ruler K (Fig. 6). Once the correct position of the bit has been established, tighten screws J again (Fig. 6).

### Intermediate cut:

Should you wish to make the radius in 3 cuts, place the feeler in an intermediate position, between the two positions explained above.

Before routing radius (Fig. 7) on the work top, do a test trim to check that the height of the cutter bit and the position of the feeler are correctly set.

## 9. CHANGING THE BIT



**Make sure you place the chuck collet in the correct position, otherwise vibrations may occur or the part itself may come loose (Fig. 12).**



**Disconnect the machine from the mains before performing this operation.**

To change the cutter bit, first remove the feeler C (Fig. 6), removing the screws J (Fig. 6). Block the motor shaft using key L, unscrew the nut with the key M (Fig. 8), remove the worn bit and insert a new one. Hold it in position by tightening the nut with key M and let it slide until the edge rests on the support surface.

Adjust the height of the bit, as explained in the corresponding section (Fig. 5).

## 10. MAINTENANCE. CARBON BRUSHES AND COMMUTATOR



**Disconnect the machine from the power supply before any maintenance operation.**

Remove the screws N (Fig. 9) that hold the side covers O (Fig. 9) and separate them. Remove the brush-holder P (Fig. 10) with small screwdriver Q, using one of the brush-holder side tabs to lever it out. Push back the end of spring R. Keep it in this position to remove the brush and replace it with a new genuine Virutex brush. Reinsert the brush-holder, ensuring that it is firmly positioned in the casing and that each of the brushes exerts a small amount of pressure on the collector. Re-attach the covers O with the corresponding screws, making sure that no wires get caught in the process. It is advisable to leave the machine running for 15 minutes after the brushes have been changed.

If the collector burns or juts out, it should be serviced by a VIRUTEX technical service. Always keep the cable and plug in good service condition.

## 11. LUBRICATION AND CLEANING

The machine comes fully lubricated from the factory and does not require special care during its working life. It is important to always clean the machine carefully after use with a dry air blower.

Keep the power cable in perfect working condition.

## 12. NOISE LEVEL AND VIBRATIONS

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).

### 13. WARRANTY

All VIRUTEX power tools are guaranteed for 12 months from the date of purchase, excluding any damage 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.

### 14. RECYCLING ELECTRICAL EQUIPMENT

Never dispose of electrical equipment with domestic waste. Recycle equipment, accessories and packaging in ways that minimise any adverse effect on the environment. Comply with the current regulations in your country.

**Applicable in the European Union and in European countries with selective waste collection systems:**

If this symbol appears on the product or in the accompanying information, at the end of the product's useful life it must not be disposed of with other domestic waste.



In accordance with European Directive 2002/96/EC, users may contact the establishment where they purchased the product or the relevant local authority to find out where and how they can take the product for environmentally friendly and safe recycling.

VIRUTEX reserves the right to modify its products without prior notice

## FRANÇAIS

### FRAISEUSE D'ANGLE FR217S

#### 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.**

### 1. INSTRUCTIONS DE SÉCURITÉ POUR LE MANIEMENT DE L'AFFLEUREUSE

- Vérifier avant de brancher la machine si la tension d'alimentation correspond à celle indiquée sur la plaque des caractéristiques.
- Maintenir toujours les mains éloignées de la zone de coupe et tenir toujours la machine par le corps central.
- Il est recommandé de travailler avec un aspirateur de copeaux pour prolonger la durée de vie de la fraise et éviter d'éventuelles cassures de celle-ci.
- Débrancher la machine du secteur, avant toute opération d'entretien.
- Utiliser toujours des pièces de rechange d'origine VIRUTEX.
- N'utiliser que des fraises ayant un diamètre de tige adapté à la pince à utiliser et que correspondent à la vitesse de la défonceuse.

### 2. CARACTÉRISTIQUES TECHNIQUES

Puissance absorbée.....	1.000 W
Moteur universel.....	50/60 Hz
Tr/min à vide.....	14.000-30.000/min <sup>-1</sup>
Pince fraise.....	8 mm
Poids.....	1,6 Kg

Niveau de pression acoustique continu équivalent pondéré A.....	88 dBA
Niveau de puissance acoustique A.....	99 dBA
Incertitude.....	K = 3 dbA



**Porter une protection acoustique!**

Valeurs totales des vibrations.....	a <sub>v</sub> : <2.5 m/s <sup>2</sup>
Incertitude.....	K: 1,5 m/s <sup>2</sup>

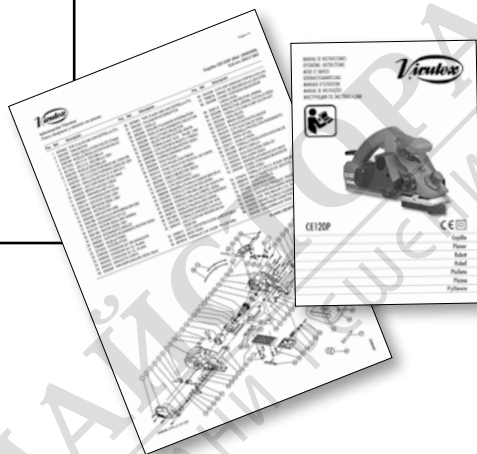
### 3. ÉQUIPEMENT STANDARD

La mallette contient les éléments suivants:



<http://www.virutex.es/registre>

Acceda a toda la información técnica.  
Access to all technical information.  
Accès à toute l'information technique.  
Zugang zu allen technischen Daten.  
Accedere a tutte le informazioni tecniche.  
Aceso a todas as informações técnicas.  
Dostęp do wszystkich informacji technicznych.  
Доступ ко всей технической информации.



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**Virutex**<sup>®</sup>

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