Paperfox R-761 (R-760, R-760A, R-760AV)
Slitting- Grooving- and Perforating Machines

Instructions manual

Stand: 15.Jan.2016
Version: 2.0-E

Manufacturer: Fürcht Zoltán ev.
Trade mark: Paperfox
Address: H-2142 Nagytarcsa, Ganz Á. u. 3/7.
Tel.: +36 1 445-2327
e-mail: info@paperfox.eu

This manual mainly describes the Paperfox R-761 kisscutting, creasing perforating machine. The Paperfox R-760, R-760A, R-760AV are similar machines. The difference is described in the section „Other similar Slitting- Grooving- and Perforating Machines“.

Content

Brief description

The R-761 (R-760, R-760A, R-76AV) Slitting- Grooving- and Perforating Machine:

- For slitting the covering paper of self adhesive foils, or for cutting the foil.
- For grooving papers, cartons or other graphic materials
- For perforating papers, cartons or other graphic materials
- The R-761 may not be used for any other than its designated use.Die R-761 Schlitz- Rill- und

Safety instructions

Please read the operating instructions before you use the R-761 Slitting- Grooving- and Perforating Machine to prevent accidents and ensure the trouble-free operation.

- The R-761 Slitting- Grooving- and Perforating Machine may not be operated by anyone who does not The R-761 may not be used in wet or explosive environment.

- Always use a proper lighting.
- To ensure the easy unplugging always use a socket in a height between 0,6 and 1,9m.
- Always use a proper socket with a safety ground
- Never change the fuse to any other type as the designated value.
- Before beginning the maintenance, reparation or changing the fuses make sure that the R-761 is disconnected.
- Repairs should be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger for the user.
- Do not operate the machine without the safety coverage.
- Keep the feeding desk [2/11] and the environment clean and tidy.
- Keep enough space around the R-761.
- Do not wear loose clothing or jewellery, they can be caught in moving parts.
- Transport and fix the R-761 only as in part "Transportation of the R-761" described
- The feeding and unlading desks are made only for the processed sheets, do not overload it with other heavy objects.
- The machine can be moved with the help of wheels [2/2]. You can fix the machine with the brakes [2/3] but in case of steeper flour than 5 degrees it is not safe enough.
- Be cautious when removing the slitter wheels [4/10]. Raise the holders [4/12] up and fix them before this manipulation. The slitter wheels are very sharp, keep them in safe place.

Technical data:

Weight	85 kg
Dimensions (width/length/height):	85/88/122 cm
Place demand (for the safe operation)	200/200 cm
Max. sheet size	
- without guides:	76 cm
- with one guide:	72 cm
- with two guides:	68 cm
Roller speed	
- gear 1.	~ 100 rev./min
- gear 2.	~ 150 rev./min.
- gear 3.	~ 200 rev./min.
Operation speed:	~2000 (1000..5000) sheet/hour
Noise output	less than 70 dB(A)
Operational temperature	+5..+40°C
Store temperature	-25...+55°C (+70°C max. 24 hours)
Humidity	50% (max.+40°C)
Max. operating altitude (from the sea surface)	1000m
Voltage/Current	230V~/0,6A
Power	122W
Fuses	2 A and 200mA

Parts subjected to wear:

Slitting circular knife diameter:	44 mm
Bearing in the slitting knife:	607 ZZ
Max. eccentricity of the slitting knife:	0,02 mm
Roller diameter	62mm
Max. eccentricity of the roller:	0,02 mm
Bearings on the roller	6007 SZ
"o" belt diameter	ø3mm
Belt length	970 mm
Fuses	2 A, 200mA

Always use original spare parts

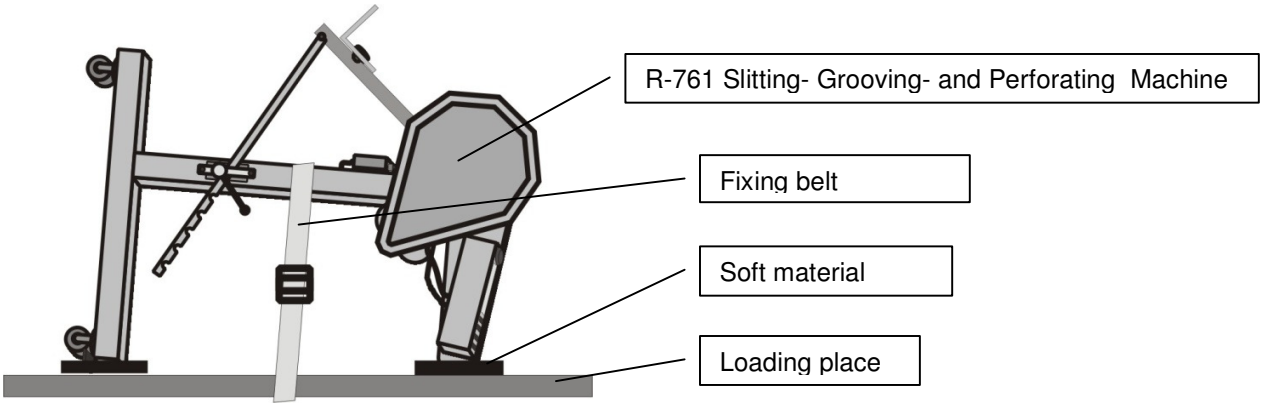
Primer fuse	2 A	normál
Seconder fuse	200mA	normál

den Meeresspiegel	1000 m	
Netzspannung / Stromaufnahme		230 V~/0,6 A

Transportation of the R-761

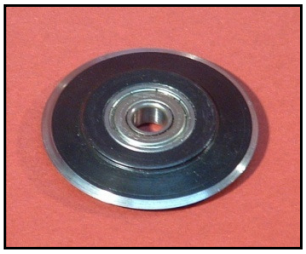
Always keep the following instructions when transporting the R-761

- Raise up the slitting circular knives [4/10] form the roller [4/1] before the transport and fix the screws [4/4], [4/13], [4/14], [4/15].
- To avoid the damage of the cord, wrap it up and fix it to the machine during transportation.
- The R-761 has a weight of 85 kg, so it needs two persons to carry.
- You can hold the R-761 by the side plates [2/19], by the crossbar [2/20], [4/9] or by the framework of the machine [2/1]. Do not carry the R-760 by the feeding desk [2/11] or by the unloading desk [2/12] or by the cord.
- Use a proper vehicle to transport the R-761, and fix it well.
- The R-761 can be transported laying on the front side (this is the recommended way) and to avoid the damage of the feeding desk lay it on a soft material and fix it. (picture 1.)
- The R-761 can be transported standing on its rollers too, but in this case you have to tie and fix the R-761 very well. (It is not enough to use the breaks).

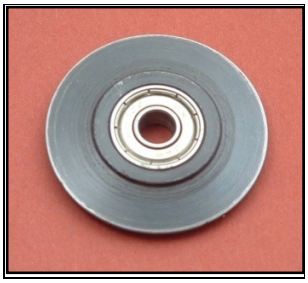


1. Transportation of the R-761

R-761 Acessories (Standard configuration)

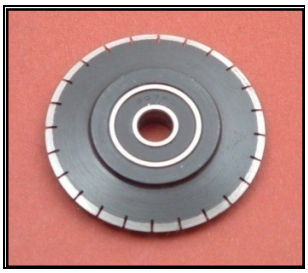


Slitting circular knife:(6pcs.)
The slitting circular knife is made of hardened and precisely sharp grinded steel.
The standard configuration contains 6 knives mounted in the device.
The lifetime of the knives depends on the processed material.
It may be resharped.



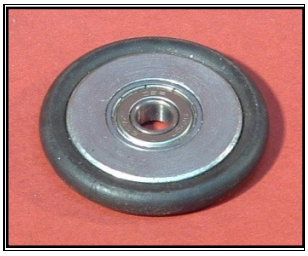
Grooving circular knife:(1pc.)
The grooving circular knife is made of simple steel and grinded flat. The standard configuration contains 1 knife enclosed to the device. This knives don't needs any maintenance. The grooving circular knives are available in different width:

Typ:	Width:
BK-5	0,5 mm
BK-7	0,7 mm
BK-10	1,0 mm

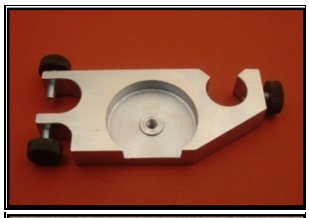


Perforating circular knife: (1pc)
The perforating circular knife is made of hardened and precisely sharp grinded steel. The standard configuration contains 1 knife. It made with different pitches and may be resharped.

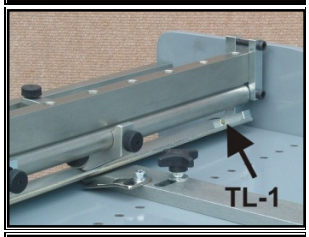
Typ:	Teeth:	Gap
PK 24-5	24	0,5 mm
PK 24-10	24	1,0 mm
PK 40-5	40	0,5 mm
PK 40-10	40	1,0 mm



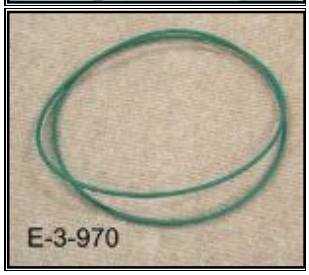
Feeding roll: (2pcs – with R-761)
The feeding roll is made of steel with a rubber "o" ring. The standard configuration contains two feeding rolls enclosed to the R-761.
This is an extra acessory by R-760, R-760A, R-760AV
Using only one circular knife, the straight feed of the foil is not guaranteed without using this rolls.



KT-1 Knife holder (6 pcs)
You can fix the circular knives to the R-761, R-760, R-760A and R-760AV with this part.

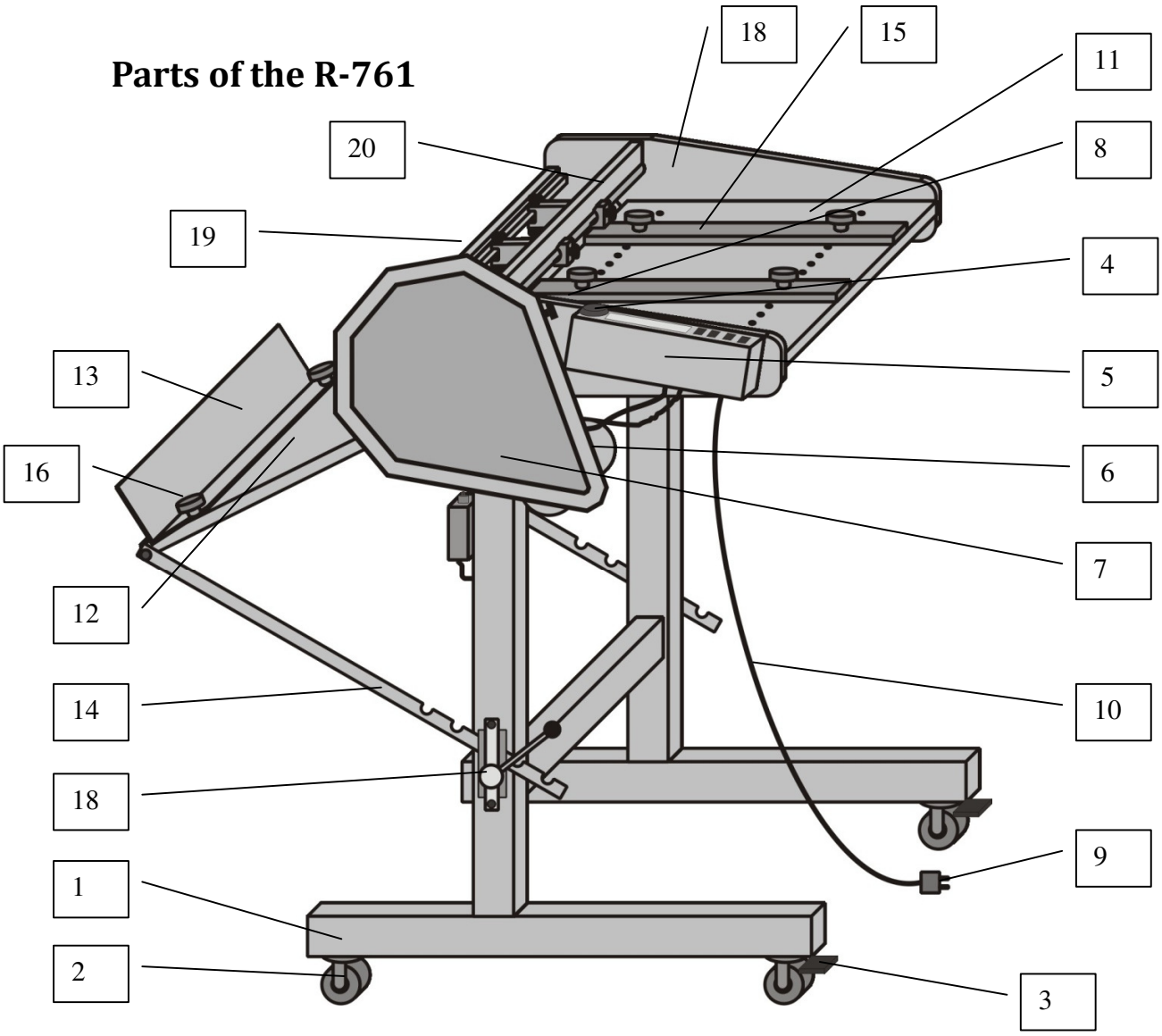


TL-1 Paper guide (1 pc – with R-761)
The Paperfox TL-1 paper guide is a standard acessorie oft he R-761 and can be used in Paperfox R-760, R-760A, R-760AV, R-761 kisscutting machines to secure the height movement of the paper passing true the machine.



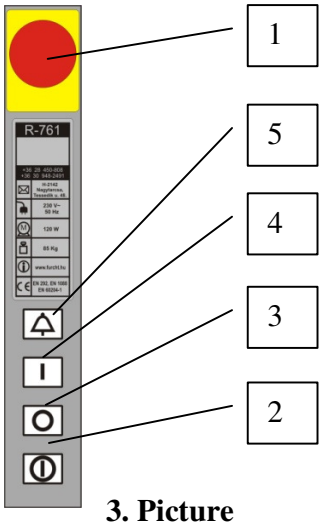
E-3-970 Ersatz Rundriemen (1 Stück)
Durchmesser 3mm, Länge 970 mm, endlos.

Imbus tool: (1pc)
5mm tool to fix or remove the circular knives.



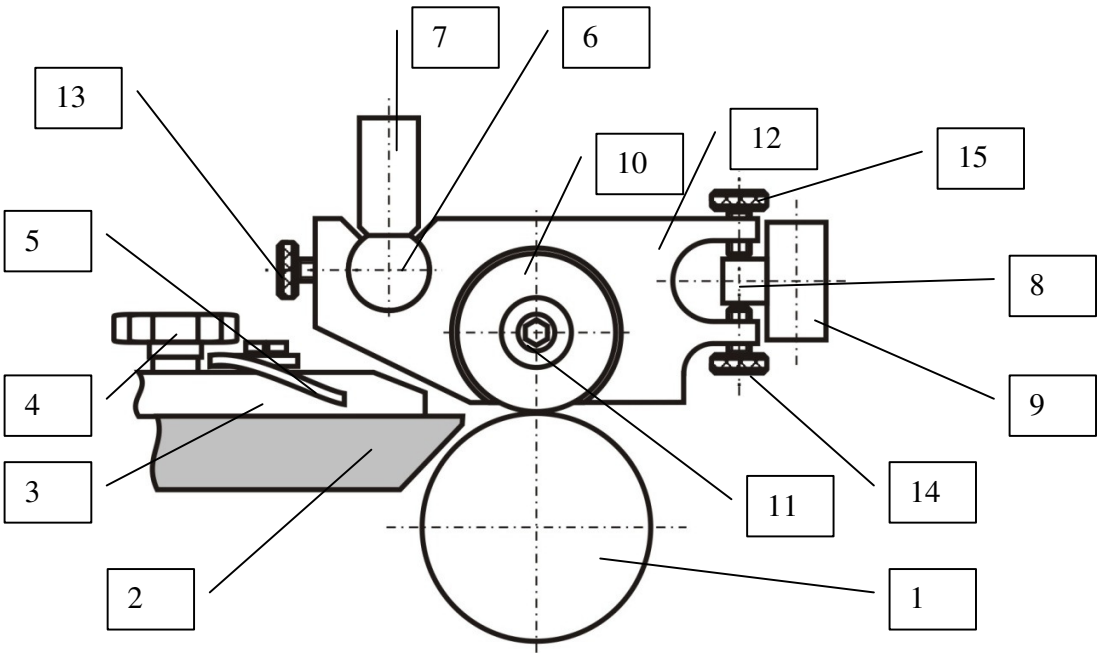
2. Parts of the R-761

1. Framework
2. Wheels
3. Breaks
4. Safety switch of the lid of the belt disks
5. Switch case
6. electromotor
7. Lid of the belt disks
8. Opening pushbuttom of the lid
9. Plug
10. Mains cabel
11. Feeding desk
12. Unloading desk
13. Back suport of the unloading desk
14. Holders of the unloading desk
15. Guides
16. Screws of the guides
17. Screws of the back support of the unloading desk
18. Fixing arm of the unloading desk
19. Side plates
20. Crossbar
21. Shaft and shaft holder



1. Emregency stop pushbuttom
2. Main switch
3. Motor stop switch
4. Motor start switch
5. Buzzer switch

3. Picture



4. Picture

1. Roller
2. Feeding desk
3. Guide
4. Guide screw
5. Sheet guiding plate
6. Acse
7. Acse holder
8. Setting rood
9. Crossbar
10. Circular knife
11. Fixing screw of the knife
12. Knife holder
13. Fixing screw of the knife holder
14. Upper setting screw of the knife holder
15. Lower setting screw of the knife holder

Setting up and operating the R-761

You should took a great care on the setting up, because it determinates the accuracy of the work, and the wrong setting even can damage the R/761.

Setting up for slitting self-adhesive foils:

Position a guide [2/15] at right angles to the roller [4/1], and fix it with the screws [2/16]. Mark the position of the slitting(s) on a sheet of paper, and lay it on the feeding desk [2/11] touching the guide. Set the other guide to the other side of the paper and fix it. Screw a slitting circular knife [4/10] in a knife holder [4/12] and fix it with the fixing screw of the knife [4/11]. Make sure that the lower setting screw of the knife holder [4/14] is loose, and the upper setting screw of the knife holder [4/15] is in a position that the circular knife not to reach the roller. Check the circular knife, if you can turn it easily. Loose the fixing screw of the knife holder [4/13] and set the knife above the mark on the paper. Fix the knife holder with its fixing screw. Do this with the other knife holders too. Switch on the buzzer switch [3/5]. (If you can hear a beep sound raise the knife holders up.) Loose the upper setting screw of the knife holder [4/13] and push it to the roller. Now you can hear a beep sound. Raise the knife holder with the upper setting screw up, until the beep tone ceases and a bit upper. Fix the knife holder in this position with the lower setting screw [4/14]. Do this with the other knife holders too. Make a test slitting: switch on the motor, and feed a sheet in the R-761. Check the position and depth of the slitting and if it is required adjust the knife holders. (You can increase the depth with losing the upper setting screw, and fixing with the lower setting screw.)
An other way of testing if the knife reach the roller that you try to turn the circular knife in the holder.

Setting up for perforation:

Similar than the setting up for slitting self-adhesive foils. Especially when you perforating thin papers it is recommended to wrap up one or two round of isolating band on the roller, under the positioned circular knives.

Setting up for grooving:

Similar than the setting up for slitting self-adhesive foils. If the grooved sheet cant be folded along the groove, you should increase the depth of the grooving, if it breaks along the groove you should decrease it. If you are not satisfied with the result then wrap one or two round of isolating band on the roller, under the positioned grooving knife.

Adjusting the unloading desk (only R-761):

The precise setting of the unloading desk [2/12] can increase the speed of the work on the R-761, because in this case the work with the unloaded papers is easier.

You can change the steepth of the unloading desk after turning the fixing arm of the unloading desk. After you achieved the required position release the arm and move the unloading desk a little up and down, until it fixed. You can set the back support of the unloading desk [2/13] after losing the screws of the back support [2/17]. After the setting up fix the back support with its screws.

Attention! You should turn the fixing arm of the unloading desk [2/12] only when the unloading desk is empty! Setting the unloading desk under heavy weight is not recommended.

Set the back support [2/13] so that the side of the unloaded sheets do not reach the roller, but don't be to far from it either. The steepth of the unloading desk should be aligned steep enough that the sheets can slide to the back support, but do not so steep that the sheets would turn over.

Feeding the sheets:

Do not put more sheets on the feeding desk than the height of the guides. (It is 12mm in the standard model.) Slide on each other the sheets, so that the upper one is closer to the roller. (Hold the bunch of sheets at a side, bend it and hold the other side. Release the first side then straighten the bunch. The sheets are sliding on each other. You can repeat this if it is necessary.)
Switch on the motor, and push the upper sheet among the roller and the circular knives. You can process even 2000 sheets pro hours. (The record is above 5000 sheets/hour.)

Setting the roller speed:

The device has 3 different rpm speeds which can be set by simply adjusting the "O" belt. To set the speed firs open the lid of the belt disks [2/7] pushing down the opening knob of the lid [2/8]. Working with longer sheets use highest speed (slide the belt on the bigger disk), and for smaller sheets use a slowest speed (slide the belt on a smaller disk). After setting the speed of the R-761 close the lid of the belt disks.
Attention! After switching off the motor the belt disks may continue turning for about 2 seconds.

Frequent troubles

When slitting the self-adhesive foil, the covering paper split too.
- The slitting is too deep. Loose the lower setting screw of the knife holder, and tighten the upper one.

The self-adhesive foil is not slitted well.

- The slitting is not deep enough. Loose the upper setting screw of the knife holder, and tighten the lower one.

The slitting (groove or perforation) in not in the required position.
- Loose the fixing screw of the knife holder and the lower setting screw of the knife holder then slide the knife holder into the desired position. After tightening the fixing screw you can set the depth of the slitting wit the setting screws. (You cant set the depth until the fixing screw is not tightened, because the knife holder can move on it axle.)
The slitting (grooving or perforation) is not parallel to the side of the sheets.
- The guide is not perpendicular to the roller. Check the setting of the guides. If you want to make a diagonal slitting on the sheet then use only one guide and set is so that the sheets would move of from the guide sliding in to the R-761. (Otherwise when the sheet would move towards the guide it would crease.)

The position of the slitting (growing or perforating) changes
- If the distance between the guides is greater than the size of the sheets, then the position of the slitting is not defined exactly. Set the guides directly to the sides of the sheets.
- The width of the sheets is different. You can use one or two guides, but you should choose one to position the sheets to. Slitting printed materials choose the side to which was positioned the sheet during the printing process.

The slitting (grooving, perforation) is not straight
- If the distance between the guides is greater than the size of the sheets, then the position of the slitting is not defined exactly. Set the guides directly to the sides of the sheets.
- One (or more) of the circular knives cant turn easily in the knife holder, and obstacles the moving of the sheets.
- Using only one circular knife the straight moving of the sheets is not guaranteed. Use feeding rolls.
-When grooving or perforating and using insulator band under the circular knives and the thickness of the band is different this difference may cause a difference in moving speed, and that may slant the sheets. Use same quantity of insulator band under the knives.

The sheets creased to the lower setting screw of the knife holder.
- Buckle the corner of the sheets down before sliding them into the R-761.

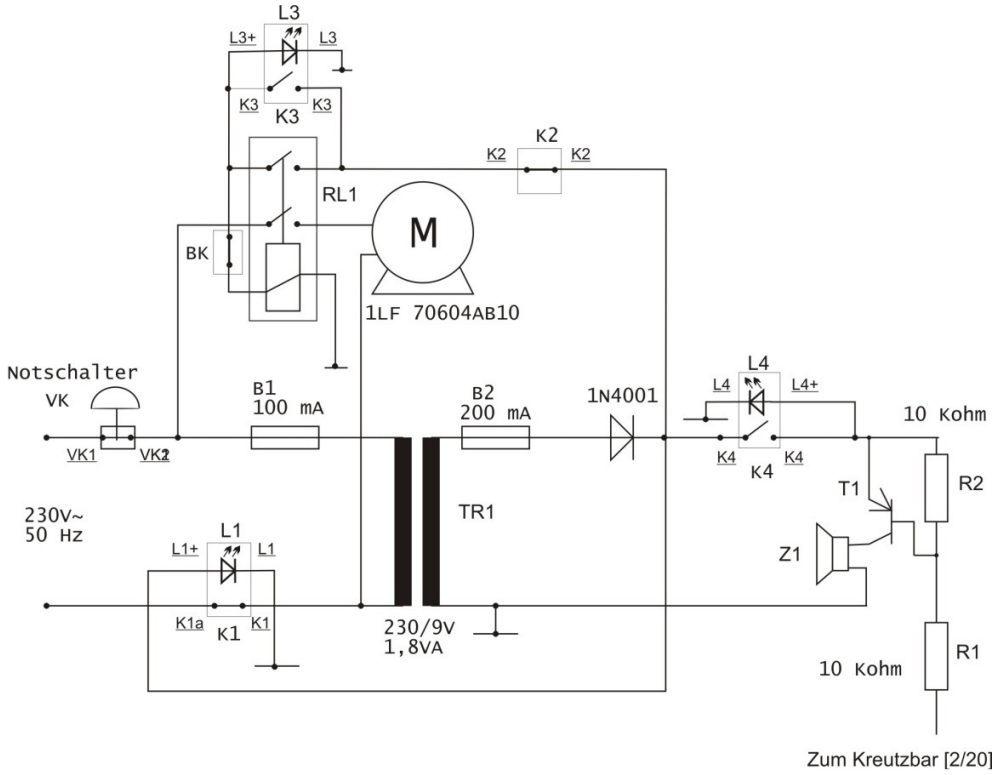
When slitting, the knife once cuts the sheet to deep thereafter it cutting not deep enough. It repeated in about 10 cm.
- The knife or the roller damaged. Check it.
- There are self-adhesive particles or other remainder on the roller. Clean it.
- You forget to remove the insulator band from the roller.

The knife holders are raised up by the sheets. Working with strong foils is it possible that the top side (foil) is not slitted but the bottom (covering paper) is broken.
- The circular knives are not sharp enough. Change or resharp them.

- Use less knives at once.
- At lower temperature some foils become hard. Keep the foil in a warm place.

The sheets creases in the unloading desk
- Set the position of the back support, and the steepth of the unloading desk.
und Befestigung der unteren Einstellschraube erhöht.)

Electrical wiring



D1	1N4001
C1	100uF/16V
T1	BC 212
R1	10 kOhm
R2	10 kOhm
Z1,2	Summer

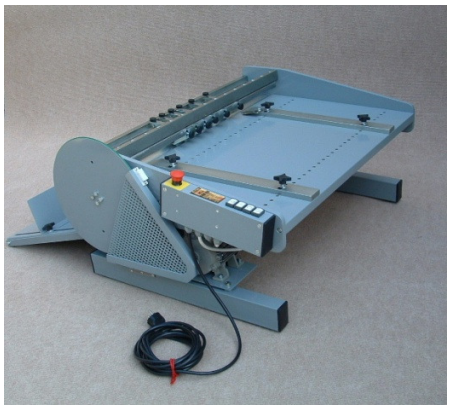
Other similar Slitting- Grooving- and Perforating Machines

Paperfox R-760 Slitting- Grooving- Perforating machine

Differences compared to R-761:

- The belt pulley is not entirely closed
- The delivery tray can't be adjusted, but can be removed
- The TL-1 paper guide is extra acessory
- The GK-1 rubber roller is extra acessory

Paperfox R-760A Slitting- Grooving- Perforating machine



Differences compared to R-761:

- The belt pulley is not entirely closed
- The delivery tray can't be adjusted, but can be removed
- The TL-1 paper guide is extra acessory
- The GK-1 rubber roller is extra acessory
- The R-760A is a tabletop device

Paperfox R-760AV Slitting- Grooving- Perforating machine

Differences compared to R-761:

- The belt pulley is not entirely closed
- The delivery tray can't be adjusted, but can be removed
- The TL-1 paper guide is extra acessory
- The GK-1 rubber roller is extra acessory
- The R-760A is a tabletop device
- No electric sensor helps to adjust the knives
- This device is driven by a cheap sewing machine motor which is not so reliable as the robust assincron motors
- You can regulate the speed with a foot switch

Declaration of conformity

This product is in accordance to directive:

EC-Machinery directive 98/37 EG
EC-directive regarding electromagnetic compability 89/336/EWG
EC-directive regarding lov/voltage equipments 73/23 EWG

Data of the machine

Produced by: **Name:** **Fürcht Zoltán ev.**
Address: **2142 Nagytarcsa, Ganz Á. u. 367.**
Telefon: **+36 1 4452327**

Type: **R-761 Slitting- Grooving- and Perforating Machine**

The following standerds are applied :

EN 292-2/A1:1995, Safety of machinery.
EN 60204-1:1997, Electronics of machinery.
EN 1088 Safety of machinery. Electical control of machinery.
EN 50081-2:1993 Electromagnetic compability.
EN 50082-2:1993 Electromagnetic defence.

Budapest, 05.10.2002.

Fürcht Zoltán

Fürcht Zoltán
FÜRCHT ZOLTÁN
1211 BUDAPEST, TÁN-
CSICS M. U. 65. FSZ. 2.
ADÓSZÁM: 41052059 2-43

Z E R T I F I K A T

TÜV

Konformitätsbescheinigung
Richtlinie 98/37/EG
Maschinen

Registrier Nr.: AM 60002976 0001

Bericht Nr.: 02192194 002

Inhaber:
Fürcht Zoltán
Táncsics M.u.65.

1211 Budapest
Magyarország

Produkt:
Papierschneidevorrichtung
Schlitzmaschine

Identifikation:
Typ: R-761
Nennspanung: 230 V, 50 Hz
Schutzklasse: I

Die Konformitätsbescheinigung bezieht sich auf das oben beschriebene, überprüfte Muster. Es wird bescheinigt, dass dieses Muster dem Anhang I der Maschinenrichtlinie (98/37/EG) entspricht. Das Zertifikat stellt kein allgemein gültiges Urteil über die Serienfertigung des Produkts dar und berechtigt nicht zur Nutzung eines TÜV Rheinland Prüfzeichens. Der Inhaber ist berechtigt, diese Bescheinigung im Rahmen seiner EG-Konformitätserklärung gemäß Anhang II der Richtlinie zu verwenden.

Zertifizierungsstelle

Köln, den 18.07.2002

TÜV Rheinland Product Safety GmbH
TÜV Rheinland
Zertifizierungsstelle

G. Bereczky

TÜV Rheinland Product Safety GmbH - Am Grauen Stein - D-51105 Köln

CE Die CE-Kennzeichnung darf bei Einhaltung aller zutreffenden EG-Richtlinien angebracht werden. CE