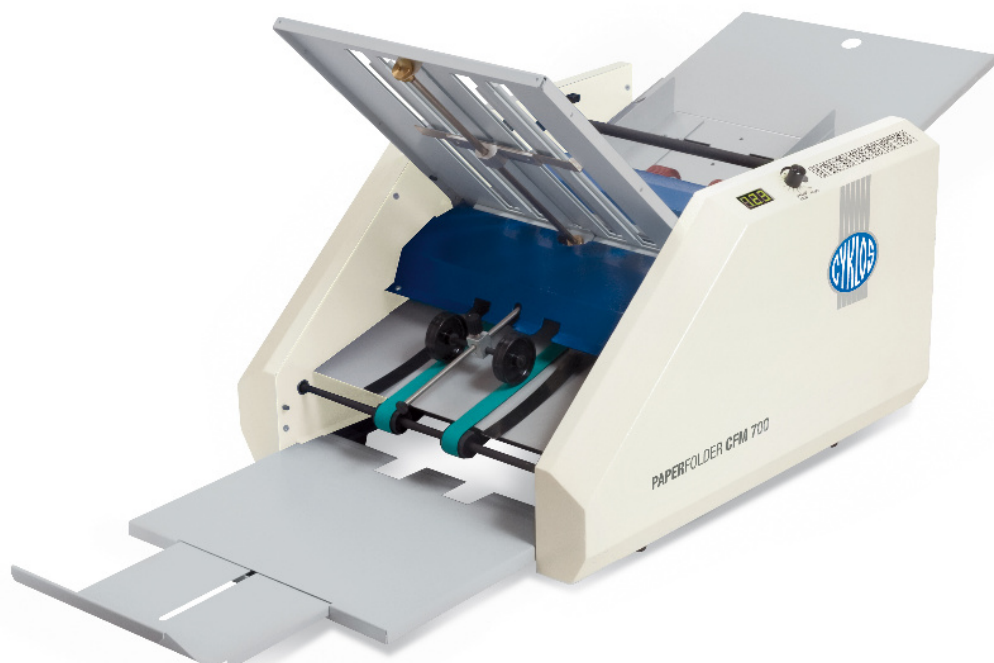
	Operating Manual	Issue no.	3
		No. of pages	11



Paper Folding Machine CFM 700

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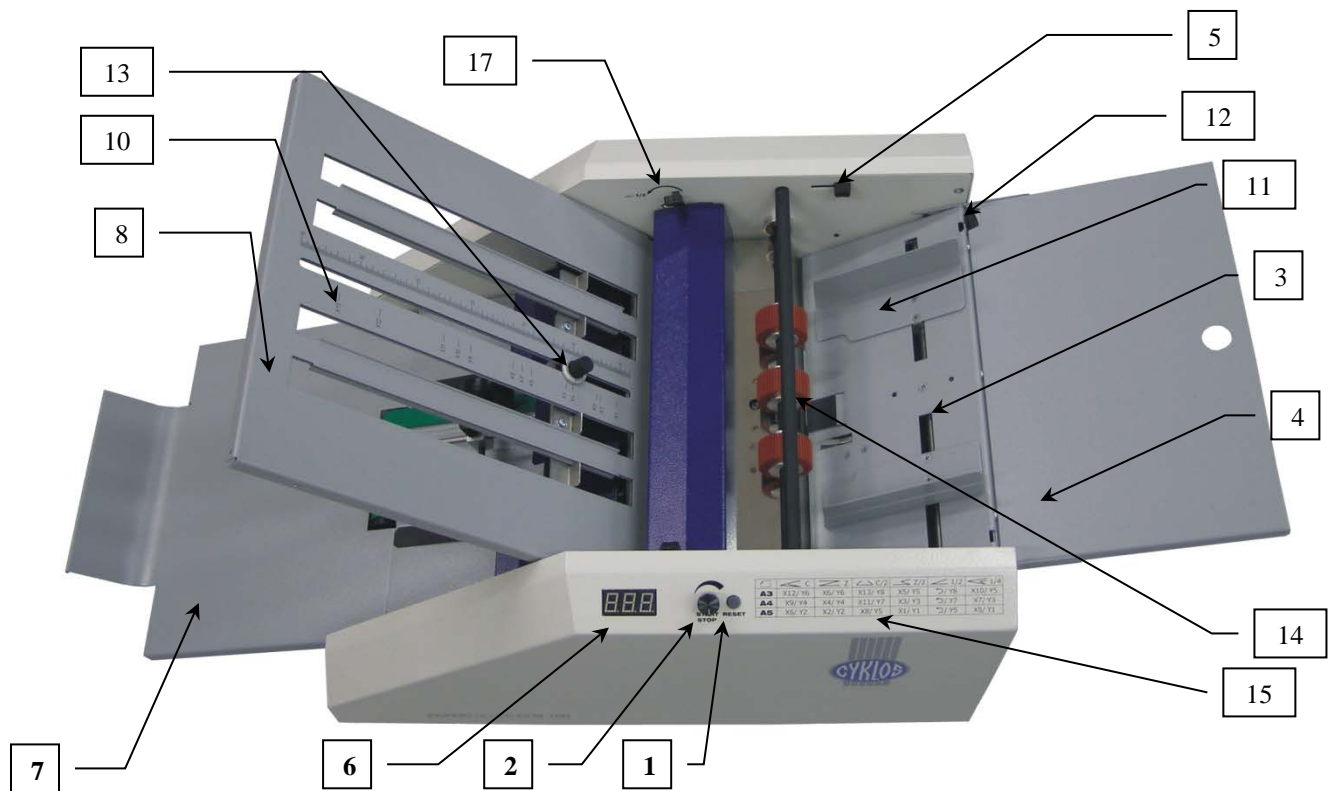
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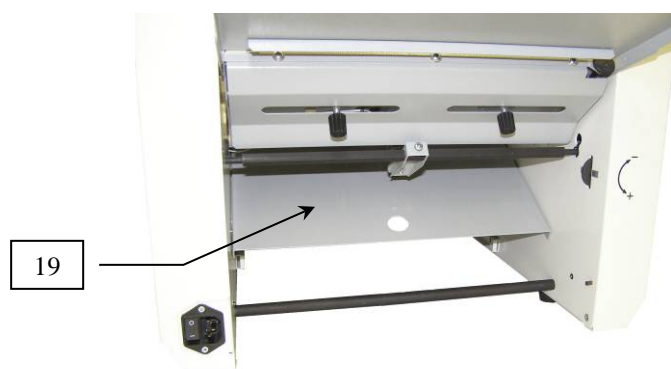
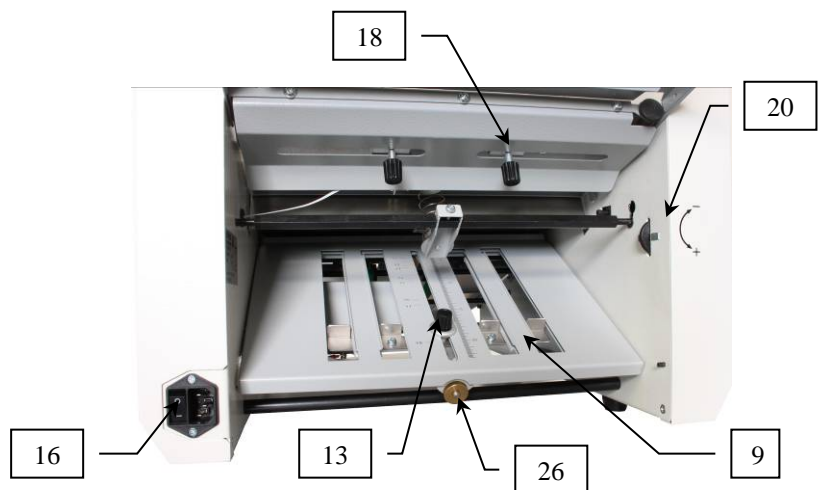
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1) Machine Description



- 1 - Reset button
- 2 - Start/stop, speed regulation knob
- 3 - Tiltable table
- 4 - Feeding table
- 5 - Locking lever of tiltable table
- 6 - Display unit
- 7 - Delivery table
- 8 - X stop
- 9 - Y stop
- 10 - Stop setting scale
- 11 - Side guides
- 12 - Side guides skew regulation
- 13 - Stop slider
- 14 - Feeding wheel
- 15 - Table of paper folds
- 16 - Socket with electric switch
- 17 - Half-fold switch
- 18 - Locking bolt of the side guide
- 19 - Table for straight perforation
- 20 - Table thrust regulation
- 21 - Perforating wheel
- 22 - Cover of perforation unit
- 23 - Stripper
- 24 - Table of delivery modes
- 25 - Delivery wheels
- 26 - Stop wheel
- 27 - Bush
- 28 - Creasing wheel
- 29 - Support collar



2) Parameters

a) Folding speed	-	70 - 120 sheets/min \pm 15 % (A4)
b) Types of folding	-	standard letter concertina single double parallel brochure half concertina cross-fold
c) Straight perforation, creasing	-	80 - 120 g/m ² – all folds - 160 g/m ² – all folds without double parallel
d) Sheet size	-	(SRA3), A3, (B4), A4, (B5), A5
e) Input capacity	-	200 sheets (80 g/m ²)
f) Machine dimensions	-	Working position: l = 1130 mm w = 460 mm h = 480 mm Transport position: l = 660 mm w = 560 mm h = 450 mm
g) Paper grammage	-	80 - 160 g/m ²
h) Machine weight	-	28 kg
i) Voltage / frequency	-	230 V / 50 Hz
j) Power input	-	50 W
k) Sound pressure	-	69.9 dB

Warnings

- Only sheets of the size listed in the parameters can be folded in the folding machine.
- It is forbidden to fold foils, sheet metal or other similar materials.
- The machine can be only used in enclosed spaces (e.g. offices, shops).
- It is forbidden to use the machine outdoors.
- It is forbidden to use the machine when the electric cord is damaged.
- It is forbidden to use the machine if it makes strange sounds.

Installation and Operation Information

- a) It is forbidden to plug the machine into other voltage than indicated on producer's identification plate.
- b) Read all instructions before using the machine.
- c) It is forbidden for children to operate the machine.
- d) It is forbidden to put fingers or hands into the machine when the electric cord is plugged in.
- e) When the machine is jammed, it is necessary to unplug the machine first and then troubleshoot.
- f) When replacing a faulty fuse, it is forbidden to use a different type or different capacity fuse.

3) Operating Mode

- Tilt the tiltable table **3** down.
- Set the side guides **11** approximately for the width of the paper, then load required amount of paper on the tiltable table. Push the side guides close to paper and lock with the bolts **18**.
- By releasing the locking lever of the tiltable table **5**, the block of paper is lifted up to the feeding wheels **14**.
- When the electric switch **16** is on and the **X**, **Y** stops and paper on the table are in the correct position, there is **0** displayed on the display unit **6**. In case of incorrect position of stop **X**, **E-1** appears on the display. In case of incorrect position of stop **Y**, **E-2** appears on the display. If there is no paper on the feeding table, letter **P** is displayed continuously and the machine cannot be started up. If the paper jams inside the machine, the motor turns off automatically and letters **blc** (block) appears on display. In such case it is necessary to remove blocked paper and restart the machine. There are two ways how to do so: 1. turn off and on the machine by the main switch, or 2. hold the **RESET** button until the **blc** sign disappears. If everything is ok, there is a **0** on the display and the machine is ready to be started again.

Go to chapter 3.1 Reading of display for more information.

- Pushing the "start/stop" button **2** starts to feed paper automatically and to fold it on to the delivery table.
- If the feeding is not regular, set the tiltable table thrust using the regulation **20** (lower paper grammage needs less thrust, higher paper grammage needs more thrust).
- The speed knob **2** regulates the folding speed. When the machine is in operation, paper must be continuously taken away from the delivery table to prevent overflow.
- When the last paper is folded, the machine turns off automatically. If the last paper remains in the machine, hold the button **2** and let the cycle finish.

3.1 Reading of display



Symbol "P" appears, if there is a missing paper on the feeding table.



Symbol "blc" appears if rollers are blocked and the motor is overloaded.



Symbols "E-1" (E-2) appears if stop X (Y) is missing or inserted incorrectly.



Diagnostics



Initial screen of diagnostics.

Appears when RESET button is being held for more than 3 secs.

3 dots on display are shining if:

- 1) There is no paper loaded on feeding table.
- 2) Sensor of the paper is not blocked (no paper inside machine).
- 3) Sensor of motor is blocked by screen placed on driving pulley.



Left dot shows correct function of sensor, which defines revolutions of motor. Slowly move the pulley. If everything is ok, left dot stops shining always when sensor is not blocked by screen.



Middle dot shows correct function of sensor of counter.

To find out if sensor of counter works correctly, outshine it by piece of paper. If everything ok, the middle dot stops shining. Once the paper has been removed, the dot starts shining again. Sensor is placed under the blue cover in the middle between left and middle feeding table.



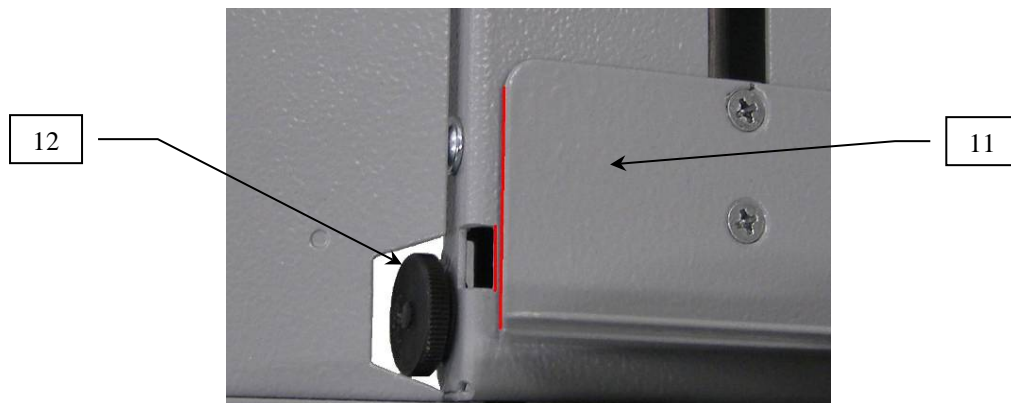
Right dot shows correct function of sensor of feeding table.
To find out if the sensor works correctly, we push the metal pin
of the switch. If the switch is ok, right dot stops shining.
Once released, the dot starts shining again.

4) Types of Folding, Adjustment of the Stops, Adjustment of the perforating wheels, Creasing

Types of Folding



To get the required folding of paper, the stop slider **13** for **X, Y** stops must be set into the position according to the table of paper folds **15** and relevant type of paper. The position of stop slider must be adjusted for different paper grammage by turning the stop wheel **26** to the corresponding side according to the mm scale. It is also necessary to adjust the side folding accuracy by skewing the side guides **11** using the control wheel **12**. The initial position of the side guides must be set so that the front edge of the side guide **11** is parallel to the edge of the tiltable table opening. See the picture.



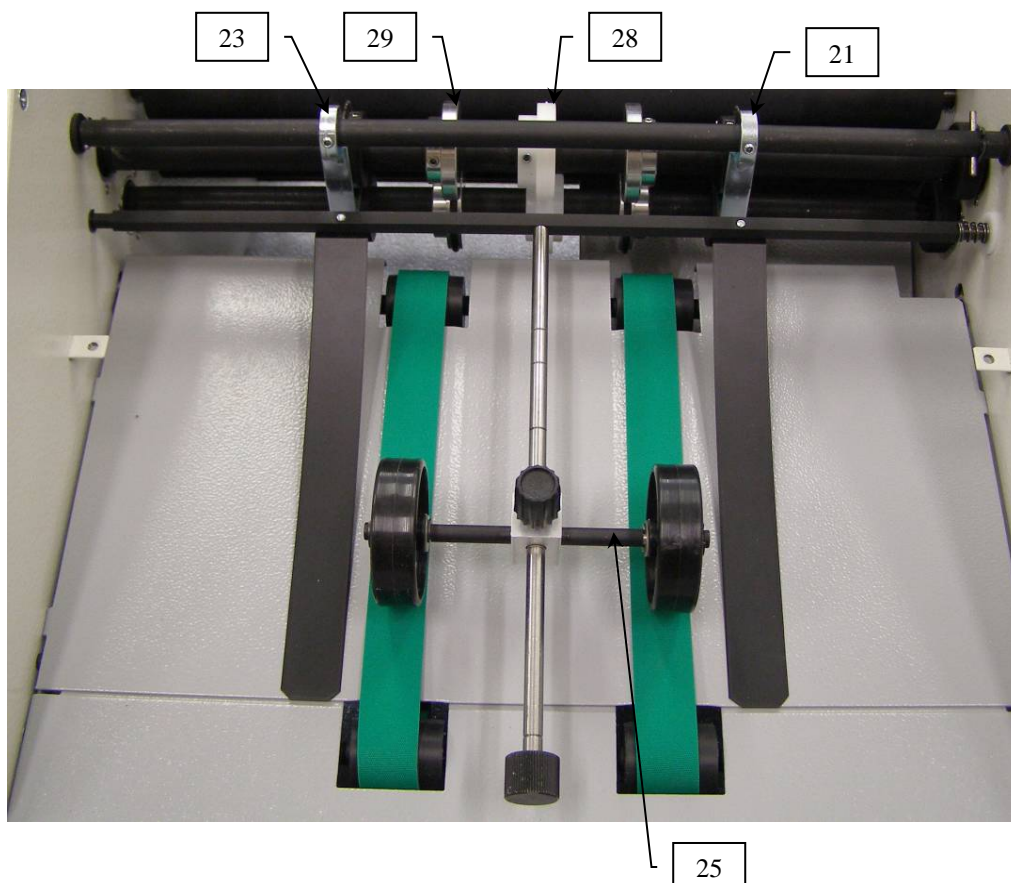
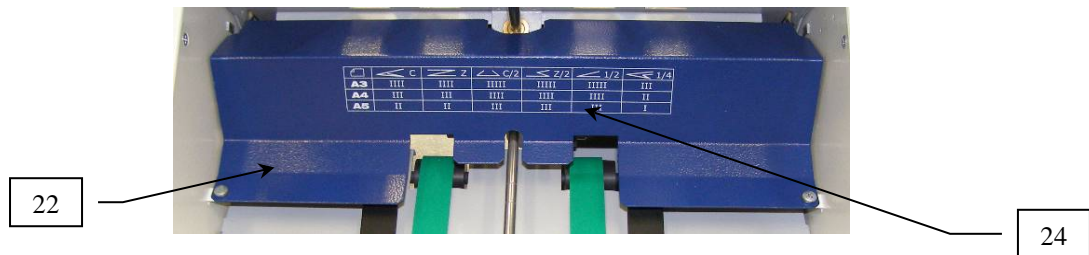
When setting the slider of the Y stop, it is necessary to remove this stop. Removal of stops will turn the machine off automatically for the safety reasons.

For the folding marked "1/2" the half-fold switch **17** must be set into the operating position according to the arrow. See the picture. Set the switch using both hands.



Perforation, Creasing

To set the perforating wheels **21** or creasing wheel **28**, it is necessary to unplug the machine. The cover of perforation unit **22** must be dismantled, the delivery wheels holder removed, the screws in the hubs of the strippers **23** loosened by the allen key and the strippers tilted away. Possibly, the whole axle with the strippers can be removed.

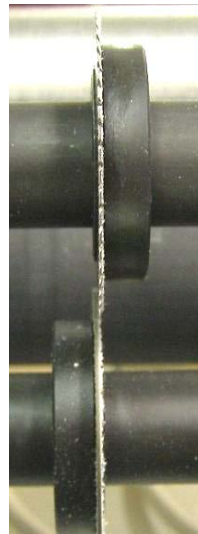


All the screws in the hubs of the wheels that need to be adjusted must be loosened. The wheels should be loose on the shafts. When adjusted, the position of the wheels must be locked by tightening the screws (be careful with the creasing wheel and tighten it gently as it is plastic!) and the strippers must be set back into the operating position near the perforating wheels. The cover of the perforation unit must be mounted back!

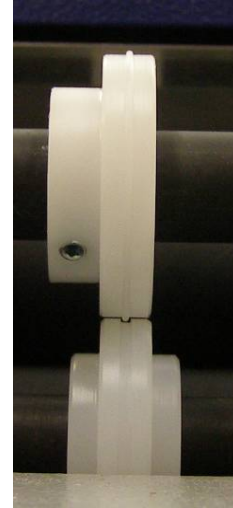
Position of
the stripper



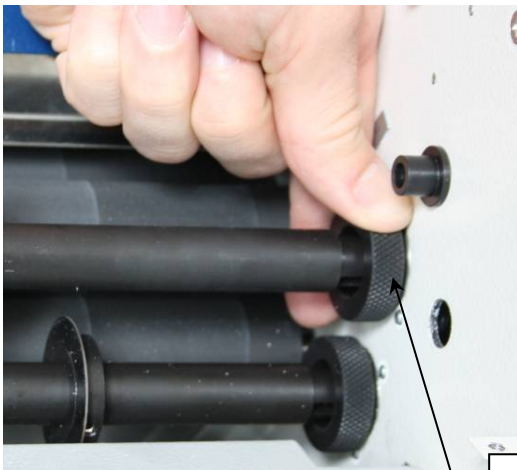
Perforating
wheels



Creasing
wheels

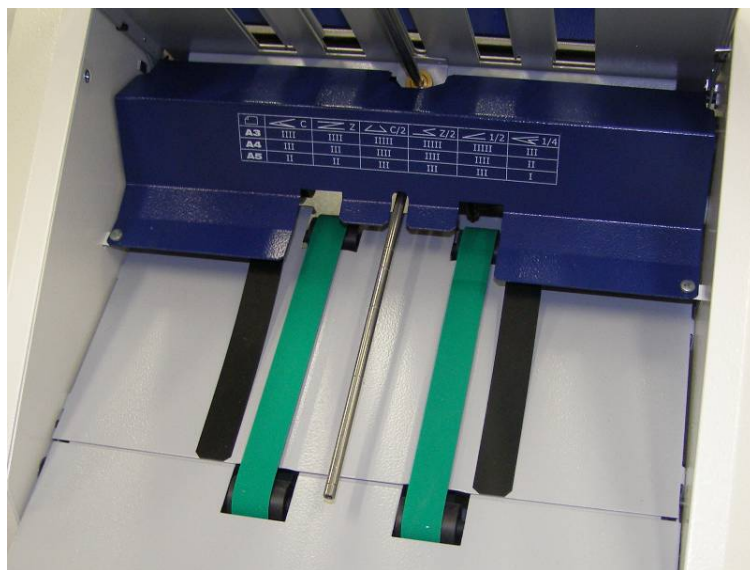


If only folding is required, the perforating (creasing) wheels must be set out of the operating position or removed completely. When the perforating wheels or the creasing wheel are removed, it is necessary to take out the shaft of the perforation unit. The shaft can be removed by holding the bush **27** and pulling it through the spring into the extreme position. Then the whole shaft can be moved back together with the bush, which must be still held in the extreme position, and taken out of the machine. See the picture.



For the machine to work correctly, it is necessary to always place the guide pulleys **28** on the shafts correctly!

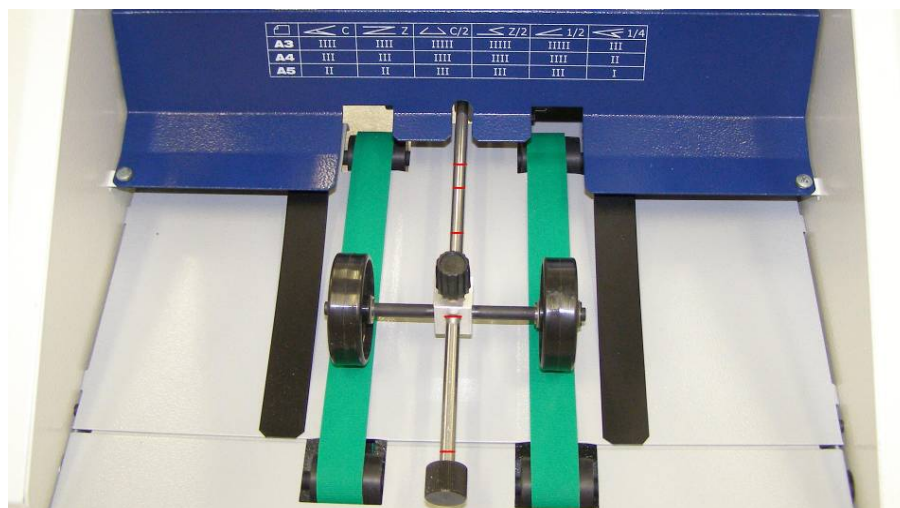
If only straight perforation or creasing is required, it is necessary to set the switch **17** to the half-fold position, remove the stop **9** and insert the table for continuous perforation in place of the stop. Also, the delivery wheels **25** must be removed to let the paper pass freely.



Removal of the delivery wheels for the straight perforation.

5) Adjustment of the Delivery Wheels

Move the delivery wheels **25** into the required position according to the table of delivery modes **24** (see an example in the picture). For the C/2 fold for all the paper grammages it is necessary to remove the delivery wheels from the axle!



Example: The delivery wheels position for 1/2 fold of the A4 sheet size.

6) Troubleshooting

Paper jam:

Sign **blc** appears on display, the engine is off. Unplug the machine from electric supply. Remove both stops (X and Y), possibly also remove the cover of perforating wheels and take out the jammed paper. Once the paper has been released, we put the covers and stops back. After turning on, there is a 0 on the screen and the machine is ready to work again. If the paper has been removed without removing the stops and cover (without unplugging), it is necessary to restart the machine by either RESET button (hold until blc disappears) or turn off and on again the machine by the main switch.

E-1 appears on display – wrong position of paper stop X (8)

E-2 appears on display – wrong position of paper stop Y (9)

P displayed continuously – paper missing on feeding table

More information in chapter 3.1 Reading of display

7) Dismounting covers

Covers can be only dismounted by a trained technician when the machine is unplugged.

8) Machine Disposal

When the lifetime period is over, it is forbidden to dispose of the machine into the common waste. The machine must be disassembled and metallic, non-metallic, plastic, rubber and electronic parts sorted. These parts are disposed of in the relevant points of recycling. Some parts of the machine can contain dangerous substances that are harmful to the environment and health.