

FORMAX[®]

FD 95
Rotary Perforator

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This manual presents several settings and replacements of important machine parts. All settings are completed by the manufacturer. Settings have to be adjusted only when the machine does not work properly or when its parts are replaced.

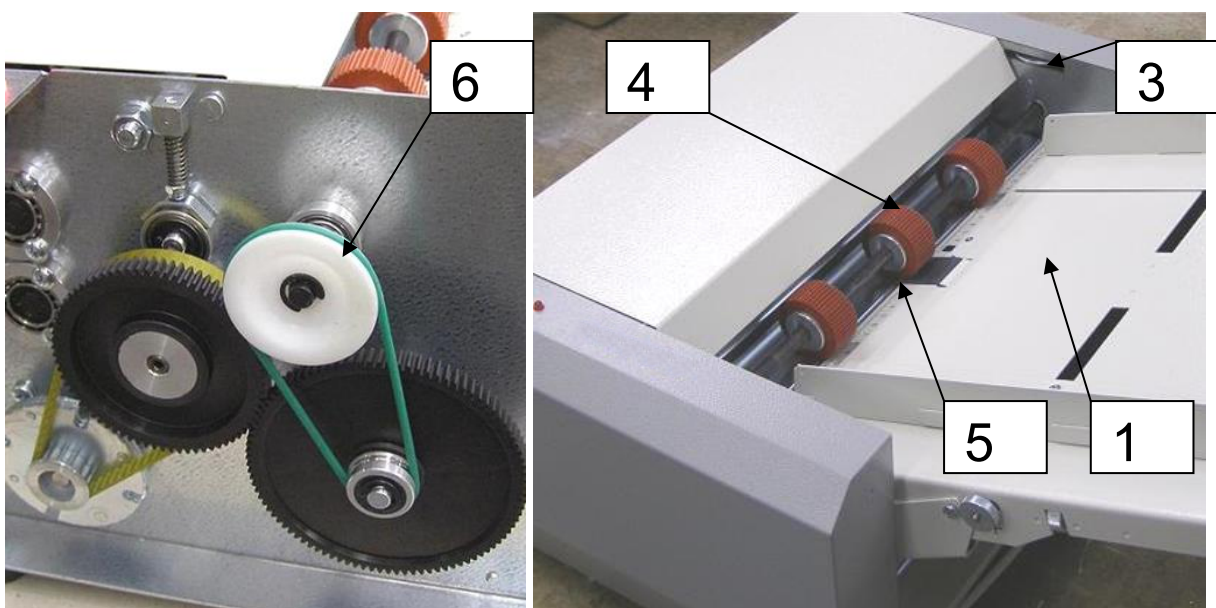
1 Separator pressure adjustment

1.1 Function:

The proper setting of the separator's (5) pressure imposed on the feeder wheel (4) is required for proper paper feeding.

1.2 Adjustment procedure:

- a) Dismount the front and back cover.
- b) Set the entry table (1) to a working position.
- c) Remove the belt (6) from the pulley and unscrew the position self-locking bolt from the pressure control (3).
- d) After dismounting the back cover turn the pressure control knob (3) to the left until the feeder wheel (4) gets loose. Then turn the button to the right until the feeder wheel (4) gently touches the separator (5).
- e) If set properly, the feeder wheel (4) can be manually turned in the direction of paper feeding while gently touching the separator (5).



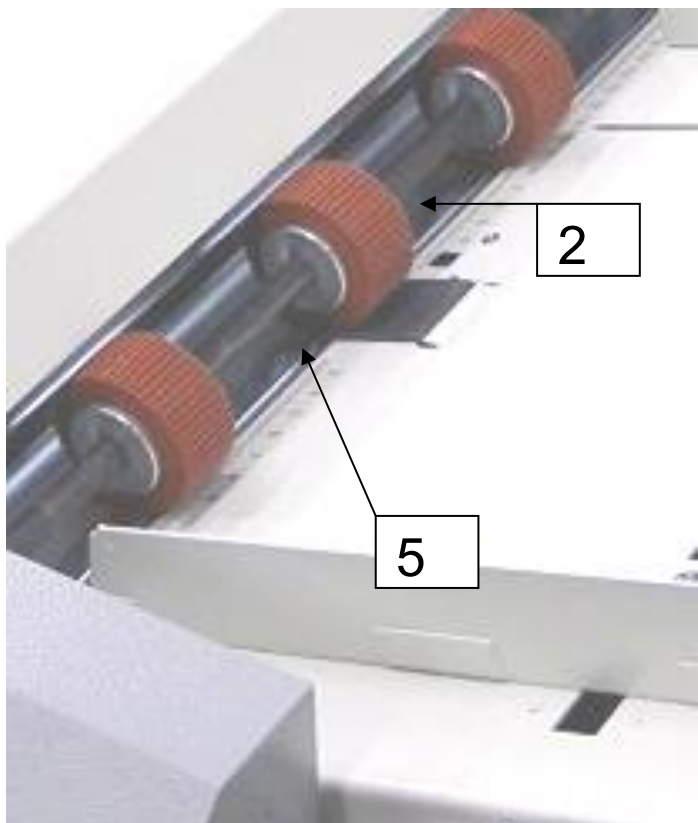
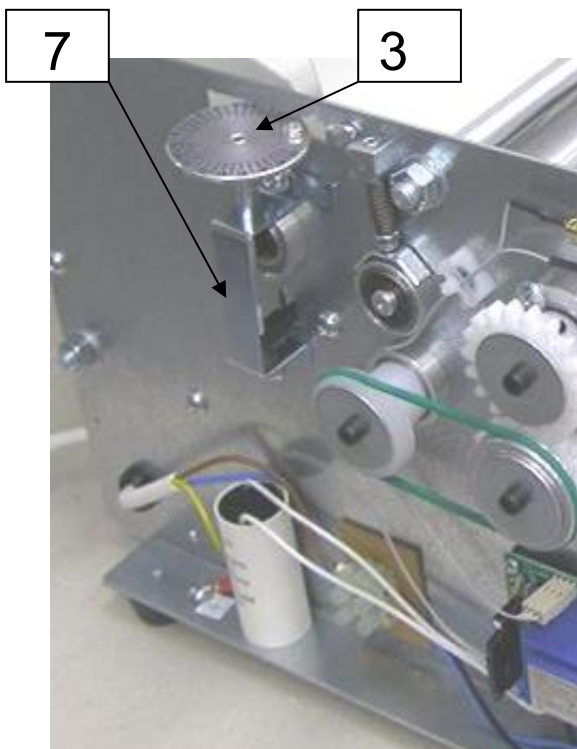
2 Adjusting screw console adjustment

2.1 Function:

To ensure proper paper feeding turn the console towards the feeder table.

2.2 Adjustment procedure:

- a) Unscrew console screws (7).
- b) Turn the console (7) towards the feeder table so that the separator (5) does not overhang the level of the separator plate (2).
- c) When all console screws have been tightened the pressure control adjustment screw (3) must move freely in the console.
- d) Separator pressure must be adjusted again (follow step No. 1).



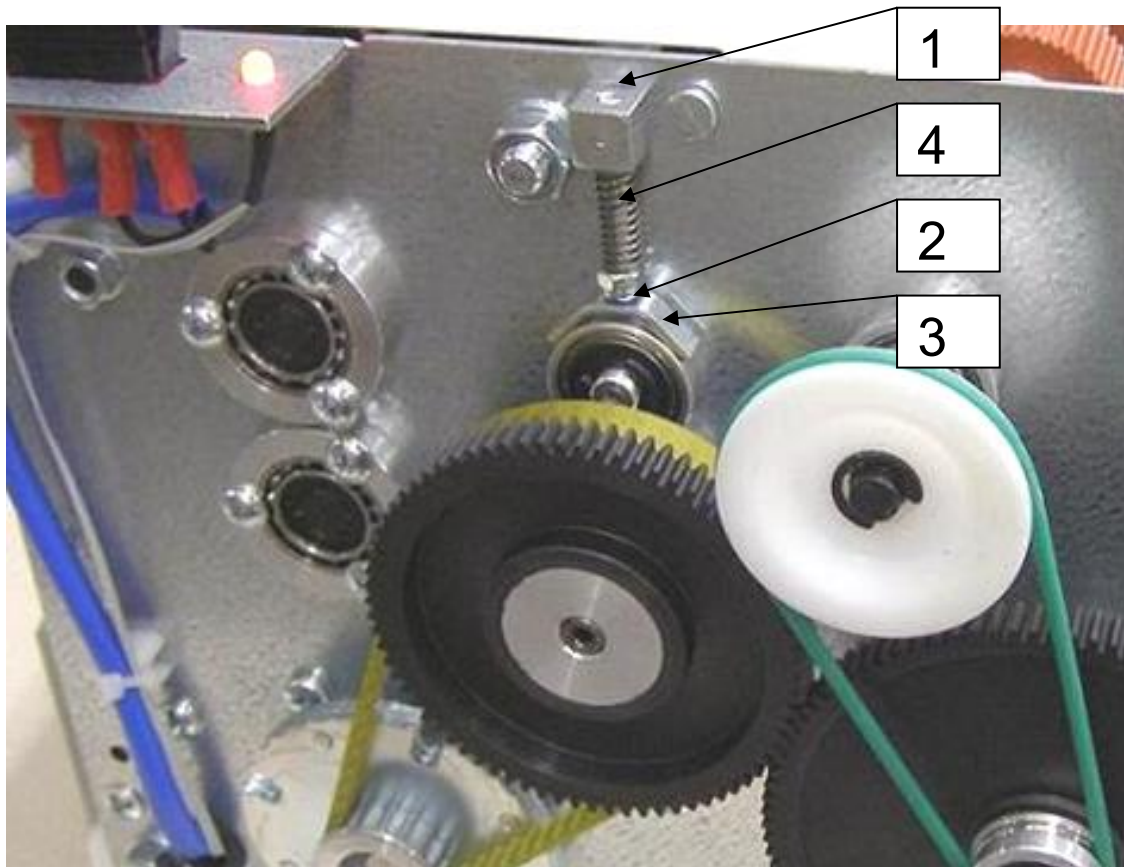
3 Setting the tension bolt nut for pressure between rollers

3.1 Function:

Setting the tension bolt nuts on both machine sides sets the initial pressure forces imposed by the upper aluminum roller and by the rubber live roller.

3.2 Adjustment procedure:

- a) After dismounting the front and rear cover set the nut (2) so that it touches the prop (3) of the tension bolt (1).
- b) The spring (4) is thus preloaded to a minimum.
- c) Always perform this step for both tension bolts at the same time.



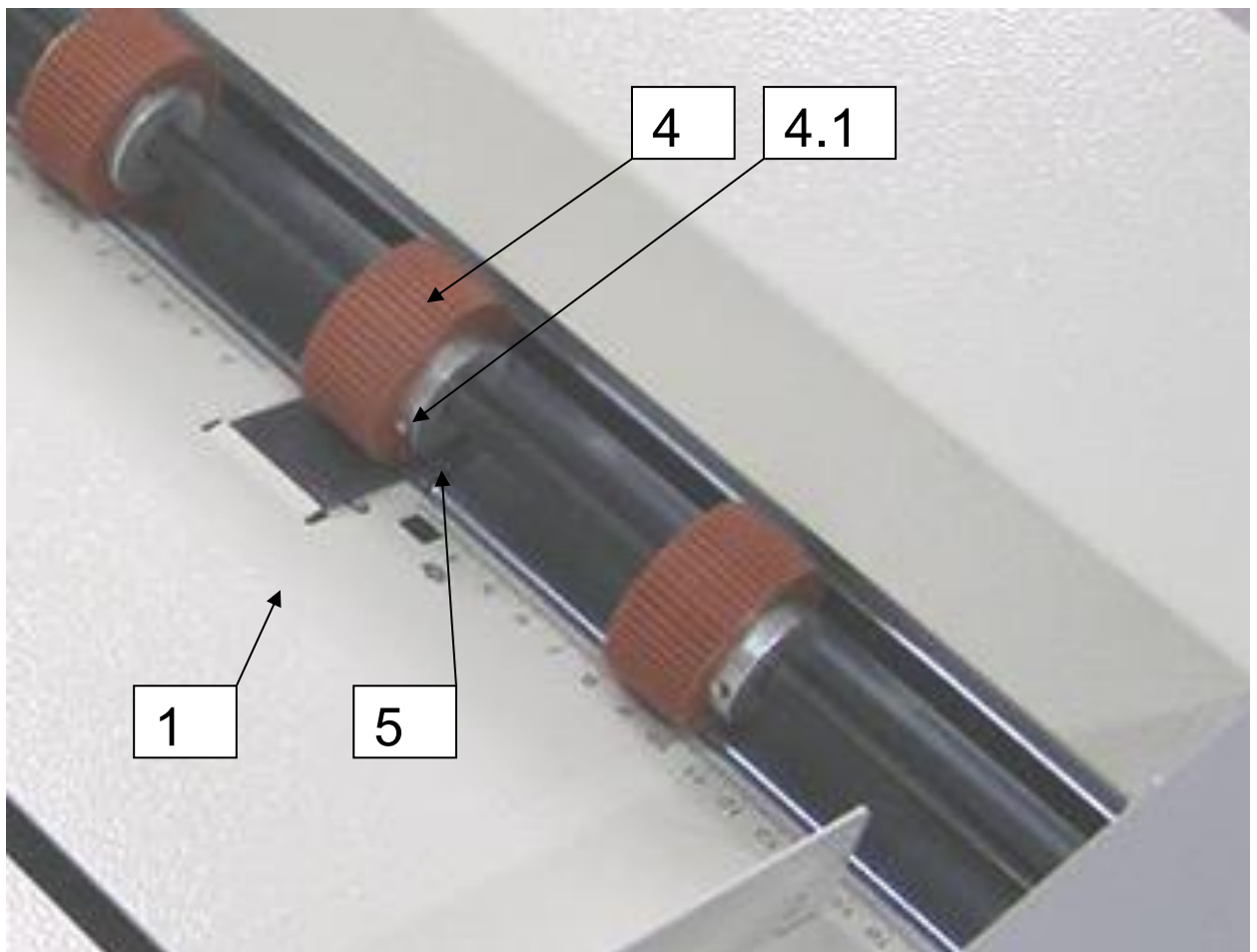
4 Separator replacement

4.1 Function:

The separator (5) and the feeder wheel (4) secure proper paper feeding.

4.2 Replacement procedure:

- a) Put the table (1) to the paper feeding position.
- b) Loosen the feeder wheel (4) by loosening the screw (4.1) and push it outside the separator.
- c) Push the separator (5) up and replace it with a new one.
- d) Return the feeder wheel (4) to its original position and secure it with the screw (4.1).
- e) Perform pressure adjustment according to point 1.



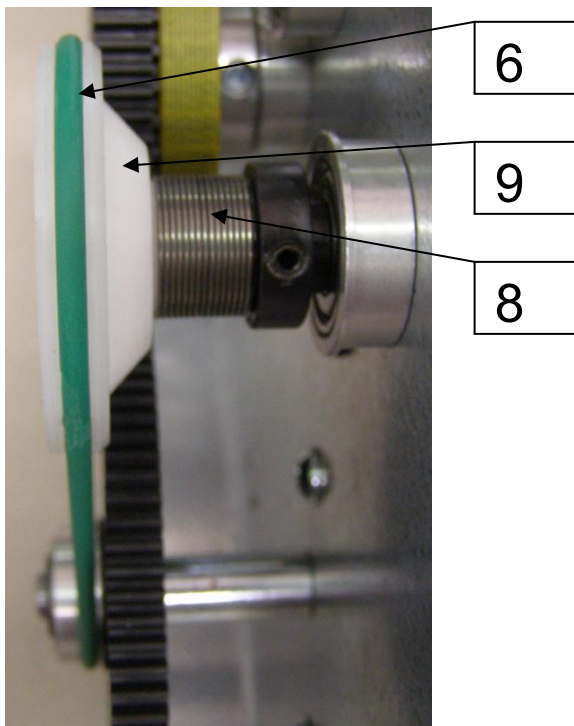
5 Torsion spring replacement

5.1 Function:

The torsion spring (8) works as a coupling between the pulley (9) and the feeder wheel shaft.

5.2 Replacement procedure:

- a) Dismount the front cover.
- b) Remove the round belt (6) and dismount the pulley (9).
- c) Replace the torsion spring (8). Their orientation must be the same as that of the lead of screw thread.



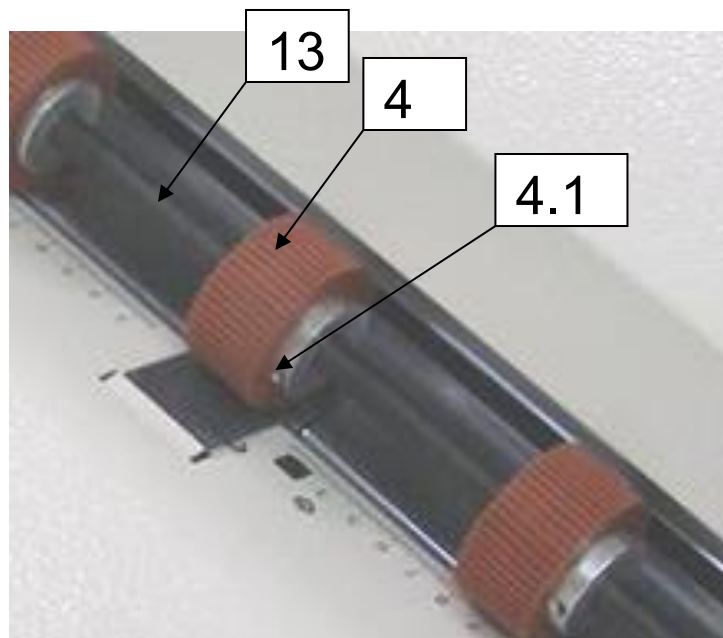
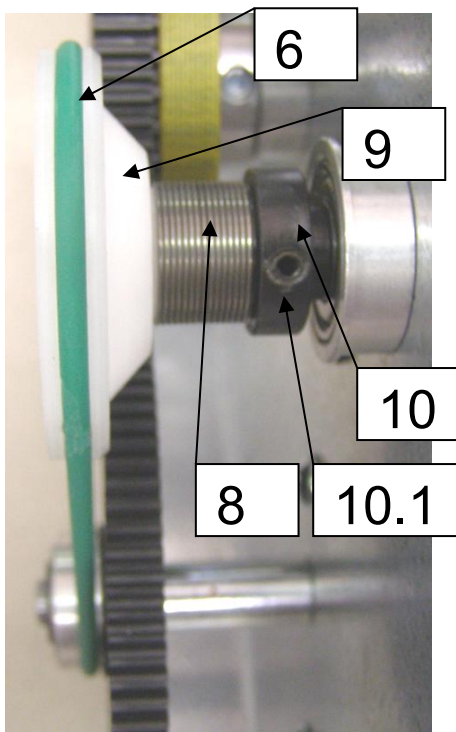
6 Feeder wheel shaft replacement

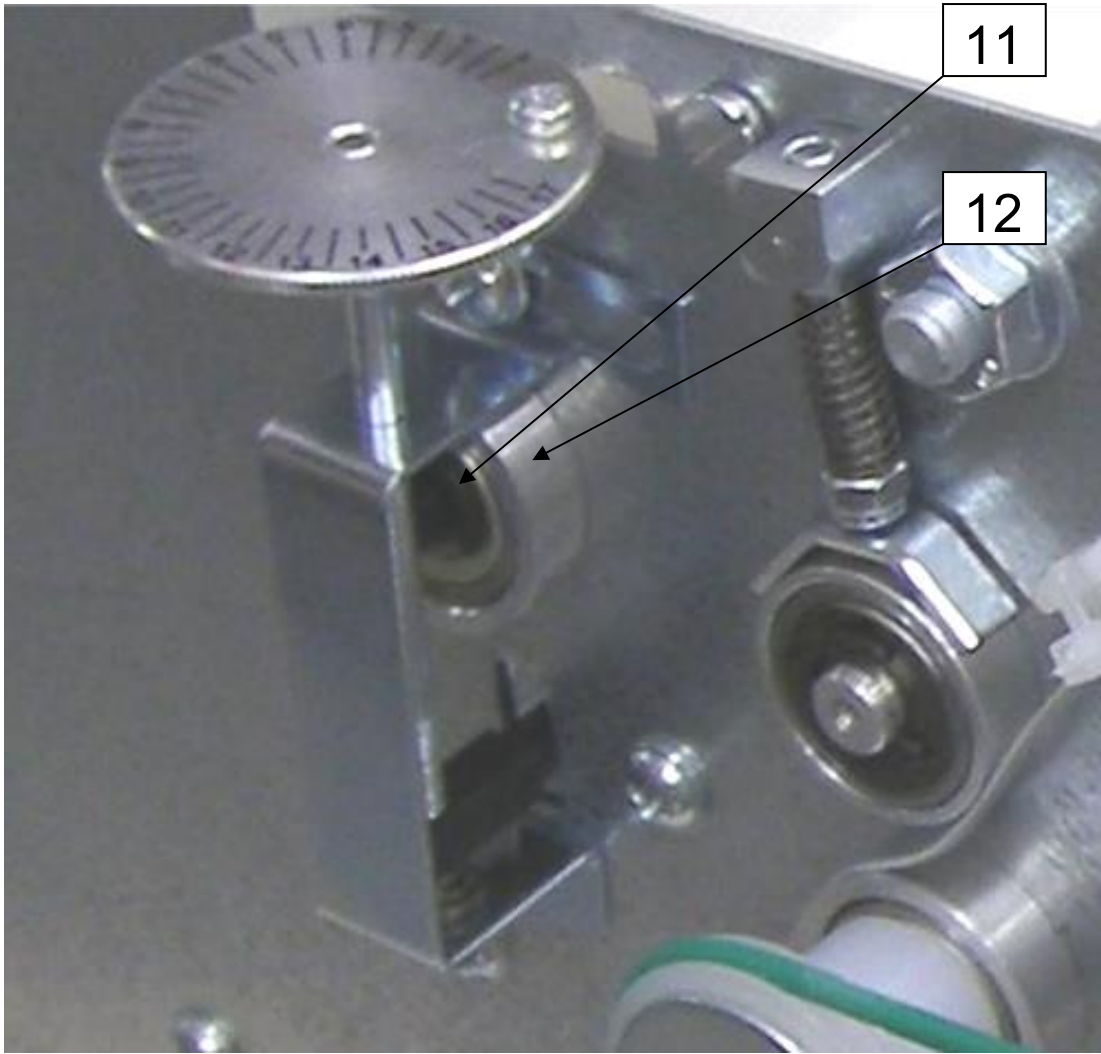
6.1 Function:

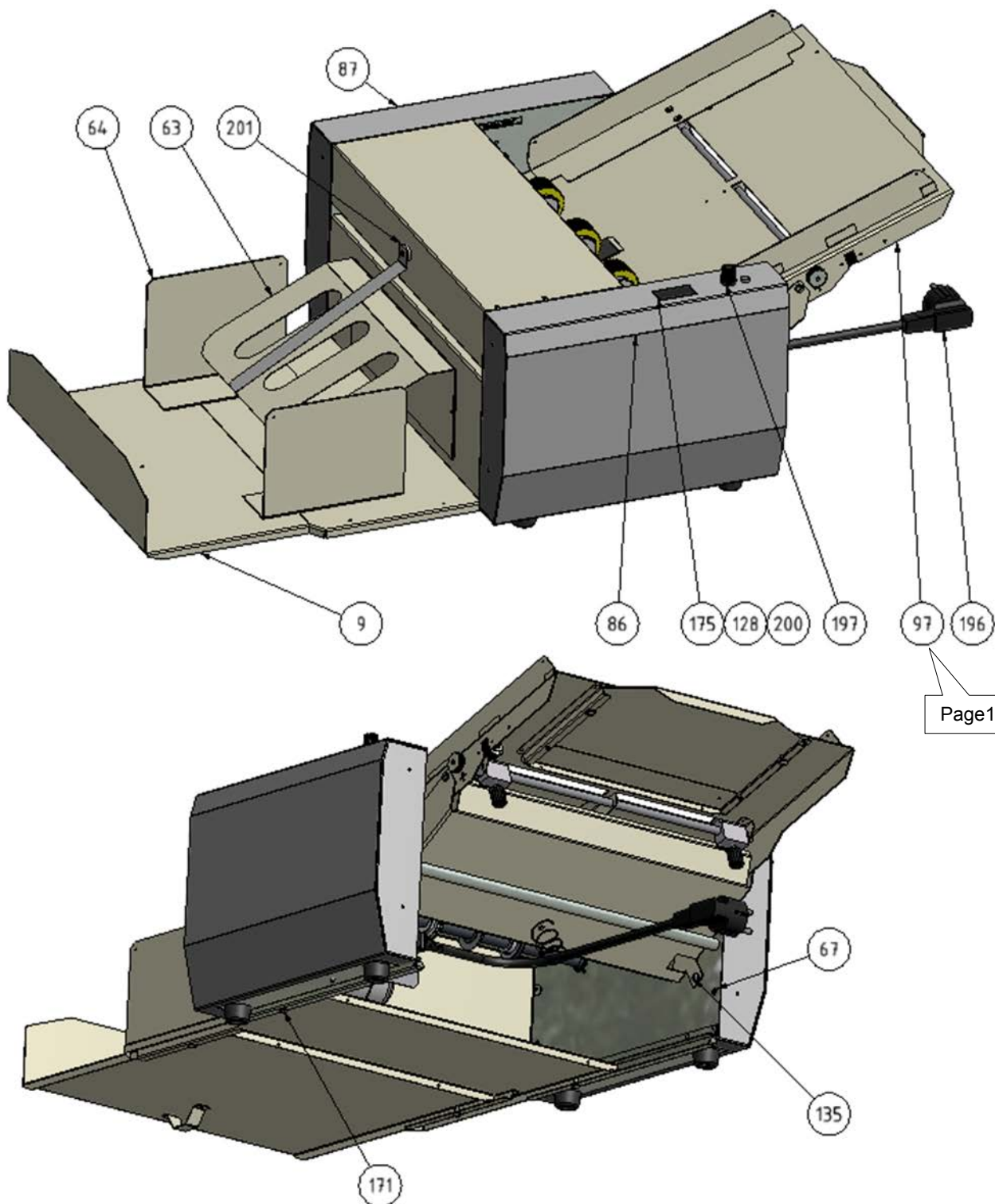
The feeder wheel and the separator secure proper paper feeding.

6.2 Replacement procedure:

- a) Dismount the front and back cover.
- b) Loosen the screws (4.1) on all feeder wheels (4) so that they move over the shaft easily.
- c) Remove the round belt (6) and dismount the pulley (9) and the torsion spring (8).
- d) Unscrew the screws (10.1) and dismount the carrier (10).
- e) Dismount the outer retaining ring (11) from the shaft behind the bearing.
- f) Push out the bearing (12) and then the shaft (13). Both can be pushed out simultaneously.
- g) Mount the new shaft in the opposite way.
- h) When mounting back all parts, make sure that there is no play between the pulley (9) and the carrier (10) and that a wire cannot be pressed in a gap between (9) and (10).
- i) Complete pressure adjustment according to point 1.

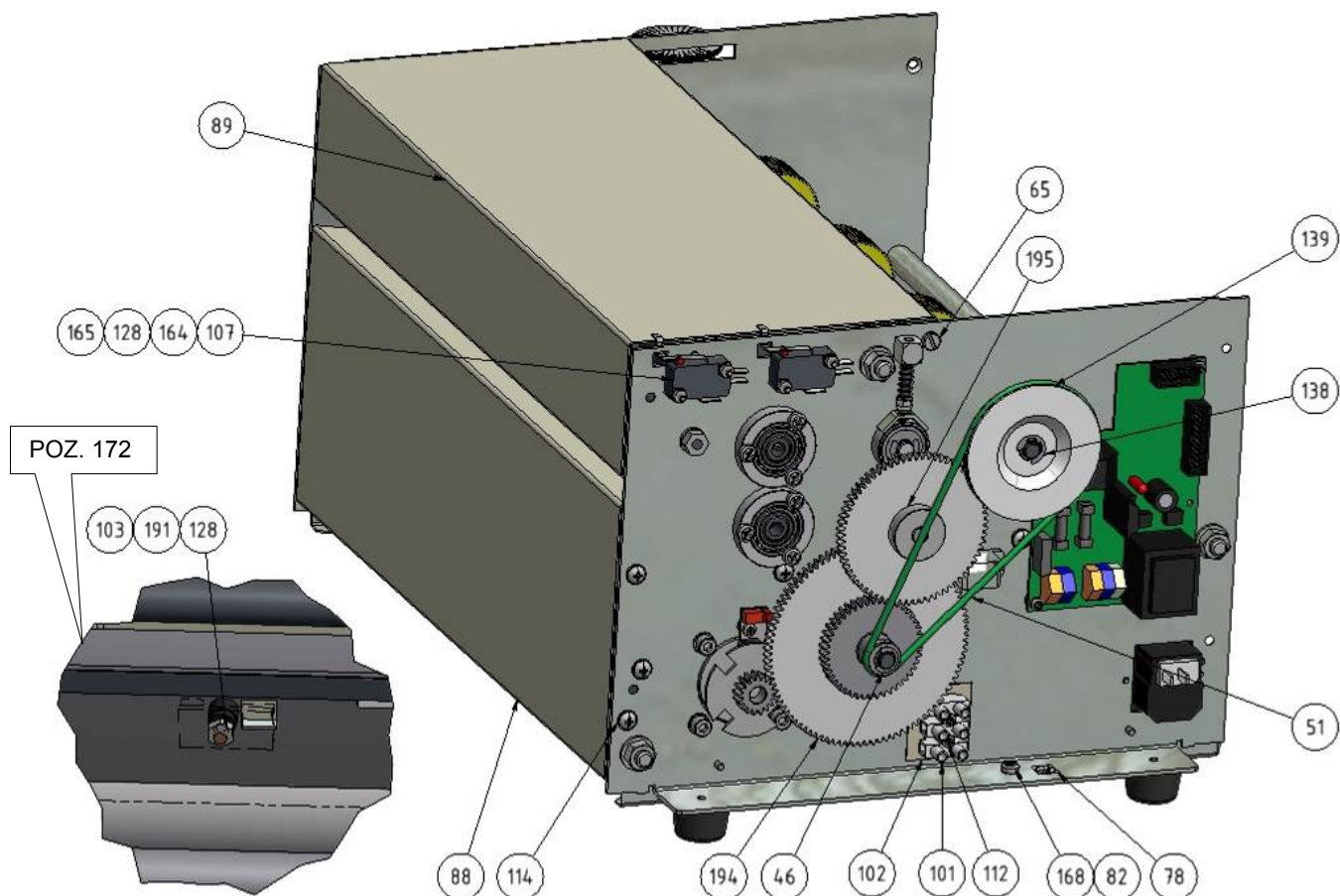






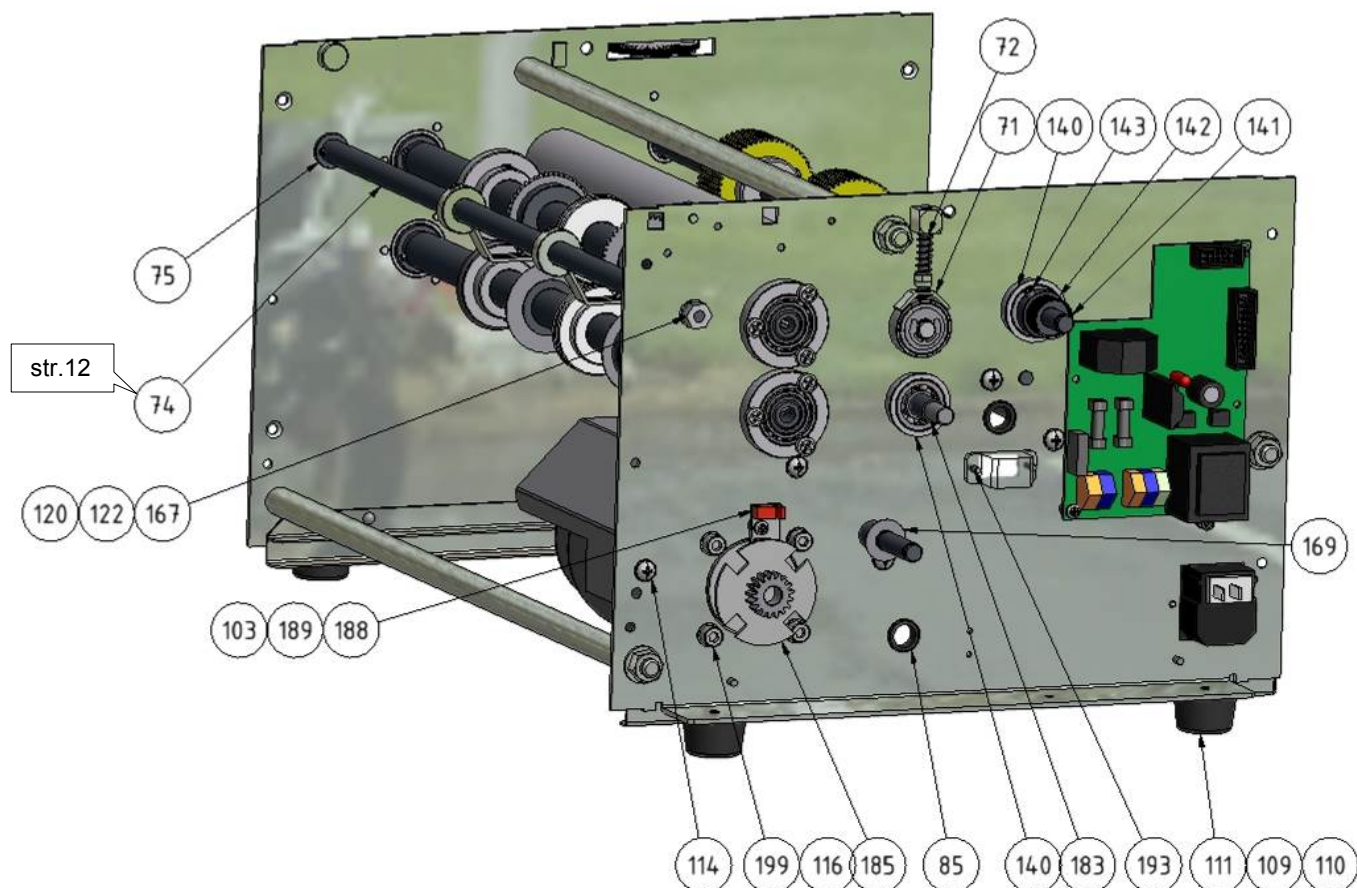
PART 1				
Pos.	Pcs	Catalogue Number	Name	
9	1	241 49 373	DELIVERY TABLE ASSEMBLED	
63	1	241 49 441	BRIDGE B	
64	2	243 59 153	T-SQUARE	
67	8	309 11 206/2	SCREW M4x6 K	
86	1	242 59 481	FRONT COVER	
87	1	242 59 056	BACK COVER	

97	1	243 59 156	FEEDING TABLE ASSEMBLED	
128	14	311 11 384/2	NUT M3	
135	2	309 09 327/2	SCREW M4x10 KP	
171	2	309 09 229/2	SCREW M4x8 KP- BN 4825	
175	1	374 80 049/0	DISPLAY WITH POTENCIOMETER	
196	1	345 00 226/1	CORD 863077/N5-3-2/2	
197	1	345 31 150/1	KNOB (OF POTENTIOMETER	
200	4	227 21 447	COLUMN	
201	1	243 59 159	STRAP	



PART 2

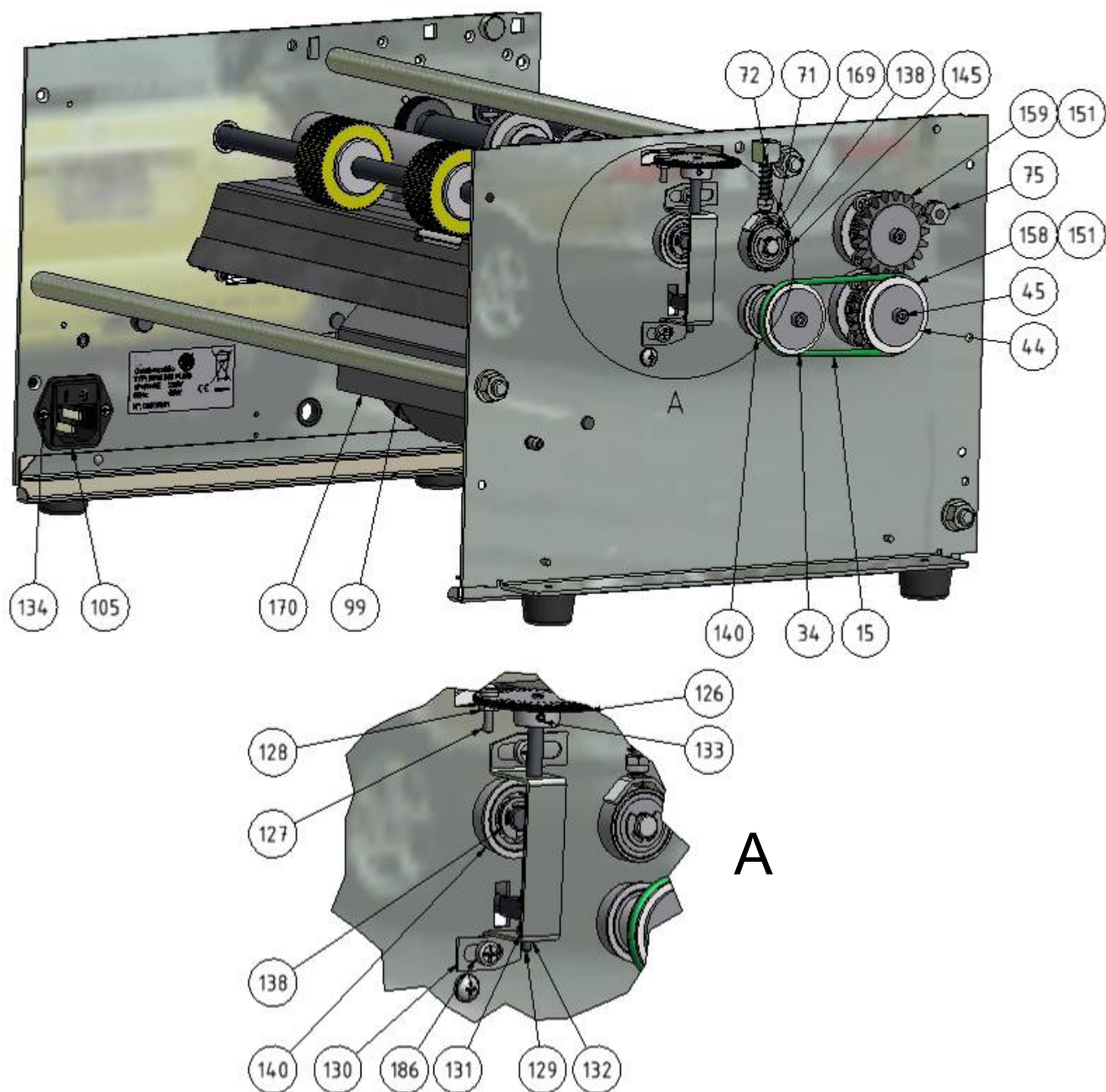
Pos.	Pcs	Catalogue Number	Name	
46	1	311 42 450/0	RETAINING RING 6	
51	1	272 01 026/0	BELT 3, LENGTH 260 mm	
65	2	309 22 338/2	SCREW M4x3 DIN 923	
78	1	548 00 135/0	SYMBOL 011 - GROUNDING	
82	1	311 24 437/2	TOOTHED WASHER 4,2	
88	1	241 65 835	LOWER COVER	
89	1	241 65 836	UPPER COVER	
101	1	345 60 224/0	TERMINAL BLOCK	
102	1	220 38 167	PAPER WASHER	
103	5	321 00 299/0	PLASTIC COLUMN 4MM	
107	2	242 59 042	MICROSWITCH	
112	2	309 11 243/2	SCREW M3x14 K	
114	11	309 09 312/2	SCREW M4x6 KP	
128	5	311 11 384/2	NUT M3	
138	4	311 42 443/0	RETAINING RING 7	
139	1	241 49 304	BELT PULLEY ASSEMBLED	
164	4	309 11 276/2	SCREW M3x18	
165	4	311 21 406/5	FLAT WASHER 3,2x7x0,5	
168	1	309 11 209/2	SCREW M4x6 K- DIN 7985A	
191	1	321 00 191/0	PLASTIC COLUMN 2MM	
194	1	242 59 095	INSERTED WHEEL ASSEMBLED 1	
195	1	242 59 096	MAIN WHEEL ASSEMBLED 2	



PART 3

Pos.	Pcs	Catalogue Number	Name	
71	2	241 49 385	TENSION SCREW ASSEMBLED	
72	2	315 70 170/0	COMPRESSION SPRING 220 24 089	
74	1	241 49 384	AXIS OF STRIPPER COMPLETE	
75	1	241 49 412	PIN	
85	1	345 00 251/0	BUSHING	
103	5	321 00 299/0	PLASTIC COLUMN 4MM	
109	4	309 11 211/2	SCREW M4x12 K	
110	4	311 21 412/2	FLAT WASHER B 4,3x9x1	
111	4	273 00 005/0	RUBBER FOOT	
114	11	309 09 312/2	SCREW M4x6 KP	
116	4	311 21 407/2	WASHER 5,3x10x1	
120	1	241 23 921	PIN	
122	1	311 21 414/2	FLAT WASHER B 6,4	
140	4	220 29 861	BEARING 2	
141	1	315 70 159/0	TORSION SPRING	
142	1	241 23 846	DRIVER	
143	2	309 05 238/2	SETTING SCREW M4x6 VS	
167	1	311 11 378/2	NUT M6	
169	5	200 06 265	SPRING WASHER	
183	1	242 22 910	SPACING TUBE	
185	1	242 59 094	PINION	

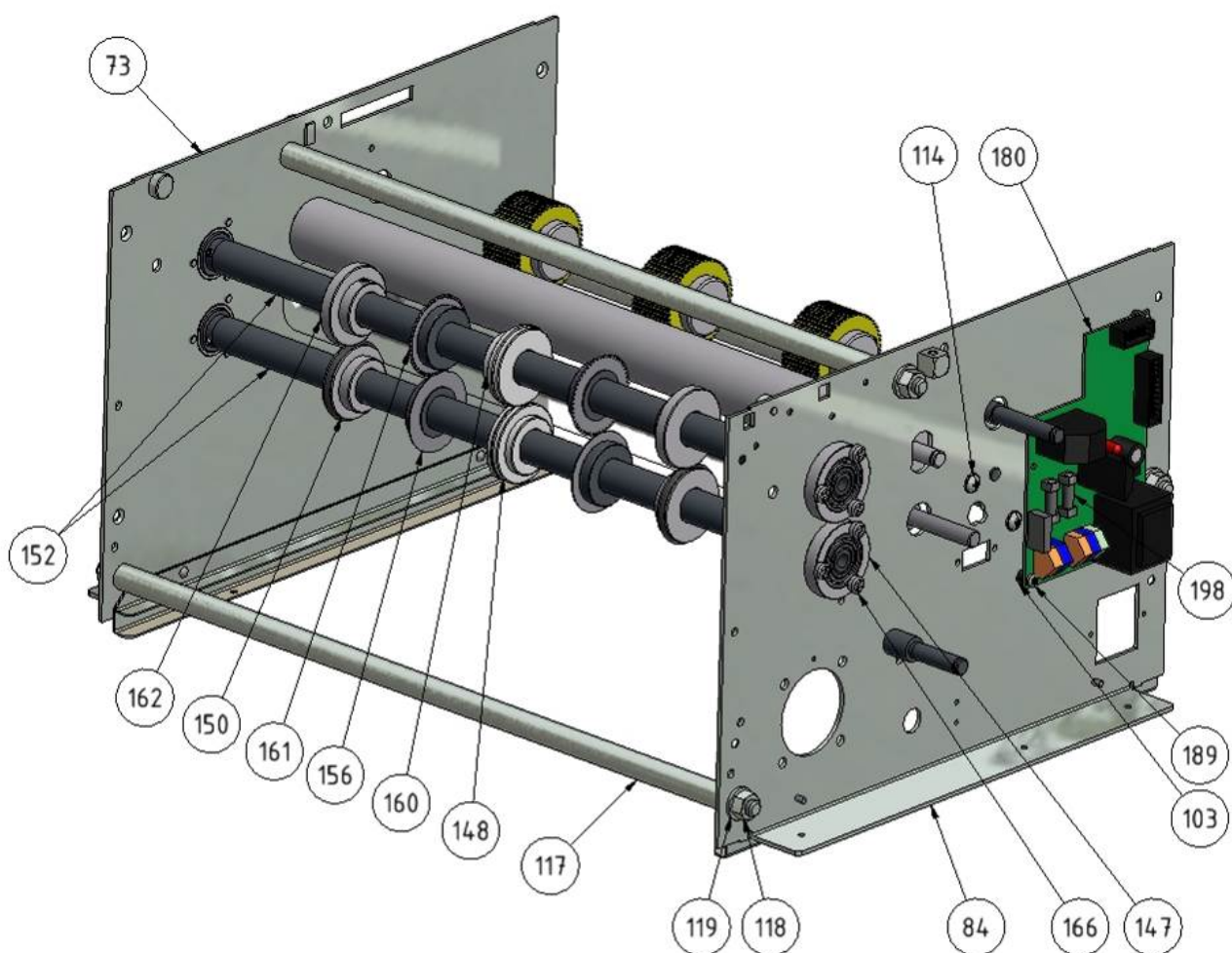
188	1	242 48 904	CABLING	
189	4	309 11 264/2	SCREW M3x8 K	
193	2	309 23 034/1	SCREW UNC 4-40 9,53mm	
199	4	309 10 194/2	HEXAGON SCREW M5x10	



PART 4

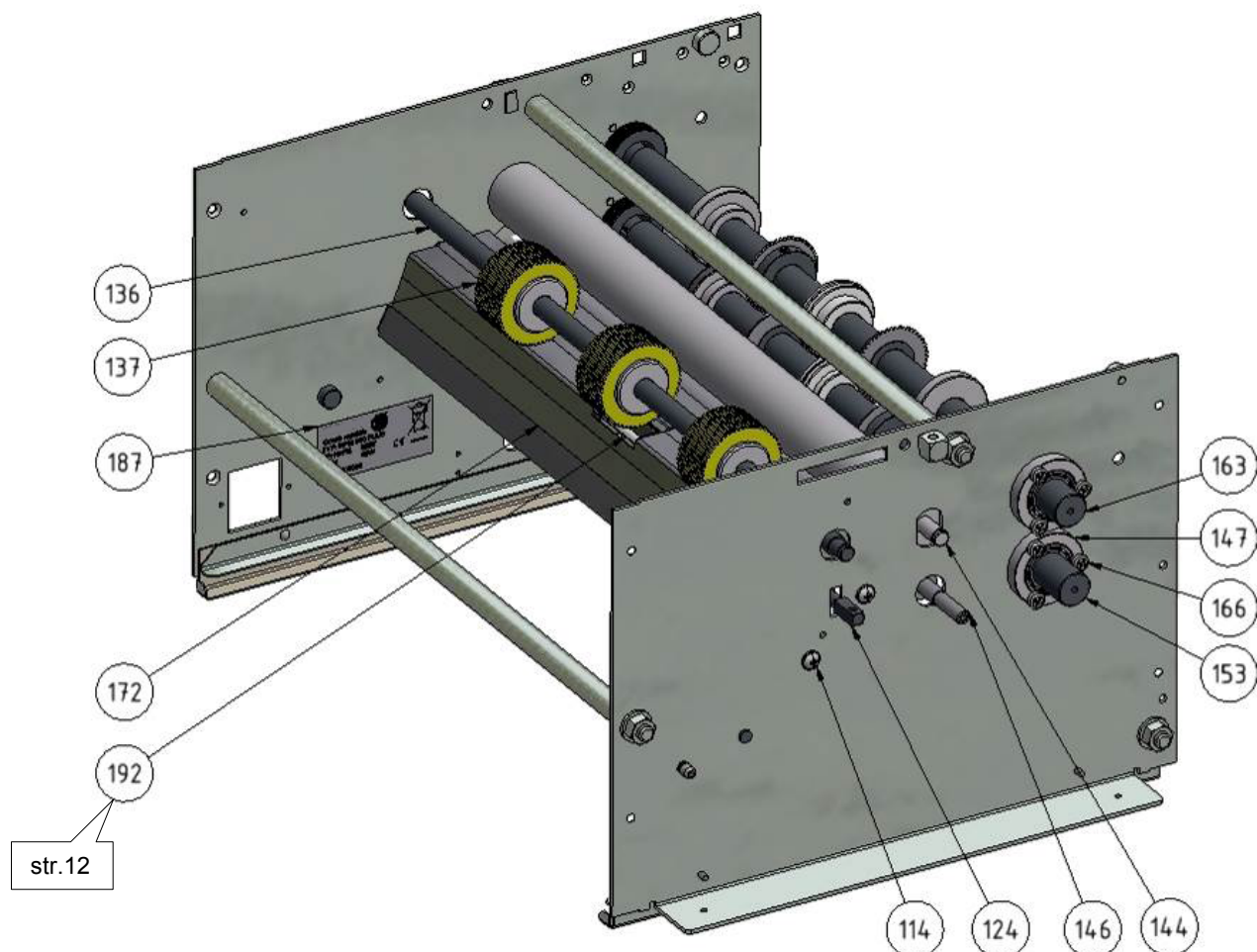
Pos.	Pcs	Catalogue Number	Name	
15	1	272 01 025/0	BELT 3, LENGTH 221 mm	
34	1	241 49 386	BELT PULLEY	
44	3	311 29 682/2	WASHER 5,4X30	
45	3	309 10 180/0	SCREW M4 x 10	
71	2	241 49 385	TENSION SCREW ASSEMBLED	
72	2	315 70 170/0	COMPRESSION SPRING 220 24 089	
75	1	241 49 412	PIN	
99	1	359 60 013/0	MOTOR NK2G7P 110V	
105	1	345 50 247/0	POWER SWITCH	
126	1	241 23 845	SETTING BUTTON	
127	1	309 11 207/2	SCREW M3x12 K	

128	5	311 11 384/2	NUT M3	
129	1	242 21 434	SETTING ROD	
130	1	242 75 578	BRACKET OF ADJUSTING SCREW	
131	1	315 30 109/0	COMPRESSION SPRING L=13	
132	1	311 42 468/0	RETAINING RING 2,3	
133	1	309 10 279/2	SETTING SCREW M3x6 VS	
134	2	309 11 175/2	SUNK SCREW M3x6 K	
138	4	311 42 443/0	RETAINING RING 7	
140	4	220 29 861	BEARING 2	
145	2	220 29 860	HOUSING 1	
151	2	309 14 185/2	SETT SCREW M4x6 VSH	
158	1	241 49 674	TOOTHED WHEEL OF PERFORATION	
159	1	241 23 857	TOOTHED WHEEL	
169	5	200 06 265	SPRING WASHER	
170	1	241 65 963	COVER OF MOTOR	
186	2	309 11 071/2	SCREW M4x4 K	



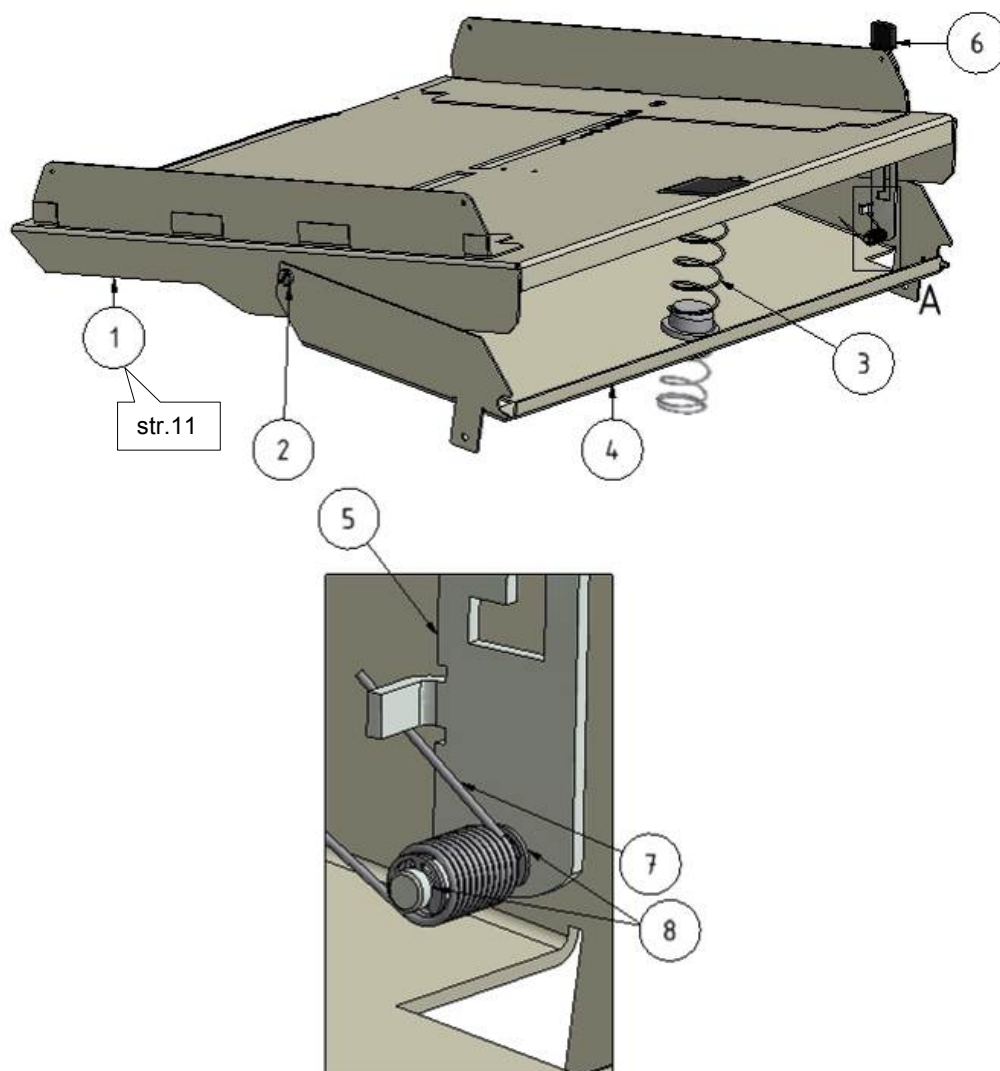
PART 5

Pos.	Pcs	Catalogue Number	Name	
73	1	242 59 039	BACK SIDE RIVETED	
84	1	243 59 058	FRONT SIDE RIVETED	
103	4	321 00 299/0	COLUMN	
114	11	309 09 312/2	SCREW M4x6 KP	
117	3	241 22 748	CROSSBAR	
118	6	311 11 379/2	NUT M8	
119	6	311 21 409/2	FLAT WASHER B 8,4	
147	4	241 49 368	BEARING	
148	1	227 33 117	LOWER SCORING WHEEL	
150	2	241 49 315	GUIDE WHEEL WITH RUBBER RING	
152	2	242 59 031	SHAFT	
156	2	241 49 317	LOWER PERFORATING WHEEL	
160	1	227 49 836	UPPER SCORING WHEEL	
161	2	241 49 316	UPPER PERFORATING WHEEL	
162	2	241 49 369	GUIDE WHEEL	
166	12	309 11 210/2	SCREW M4x10 K	
180	1	374 80 054/1	PC BOARD	
189	4	309 11 264/2	SCREW M3x8 K	
198	2	371 80 326/0	FUSE 1,25A	



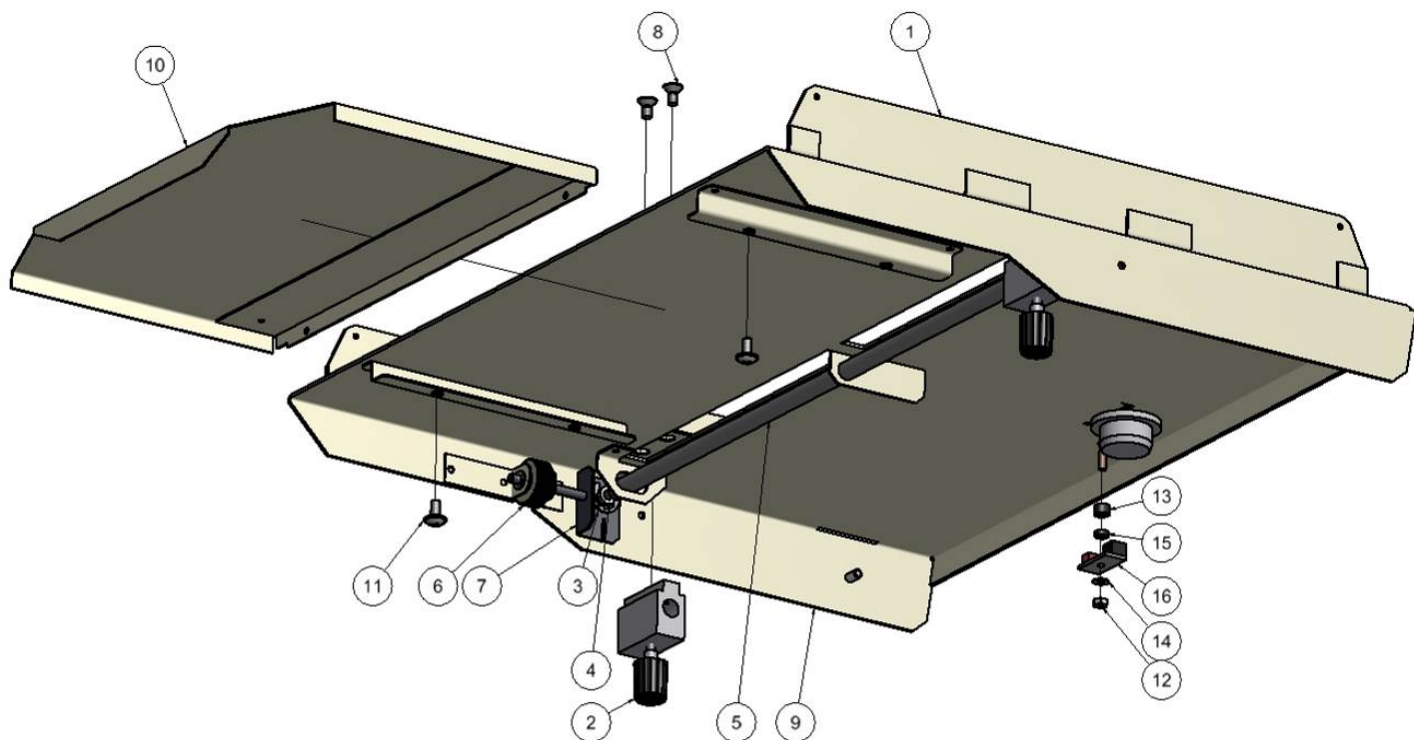
PART 6

Pos.	Pcs	Catalogue Number	Name	
114	11	309 09 312/2	SCREW M4x6 KP	
124	1	242 59 033	SHAFT OF PAPER SEPARATOR	
136	1	241 22 747	PRESSURE AXIS	
137	3	220 39 630	FEEDING WHEEL ASSEMBLED	
144	1	241 23 850	ALUMINIUM ROLLER	
146	1	241 49 312	RUBBER ROLLER	
147	4	241 49 368	BEARING	
153	1	242 59 032	GUIDE AXIS ASSEMBLED	
163	1	227 49 827	CUTTING AXIS ASSEMBLED	
166	12	309 11 210/2	SCREW M4x10 K	
172	1	242 59 059	PAPER SEPARATOR ASSEMBLED	
187	1	242 58 175	PRODUCT LABEL	
192	1	220 29 959	PAPER SEPARATOR	



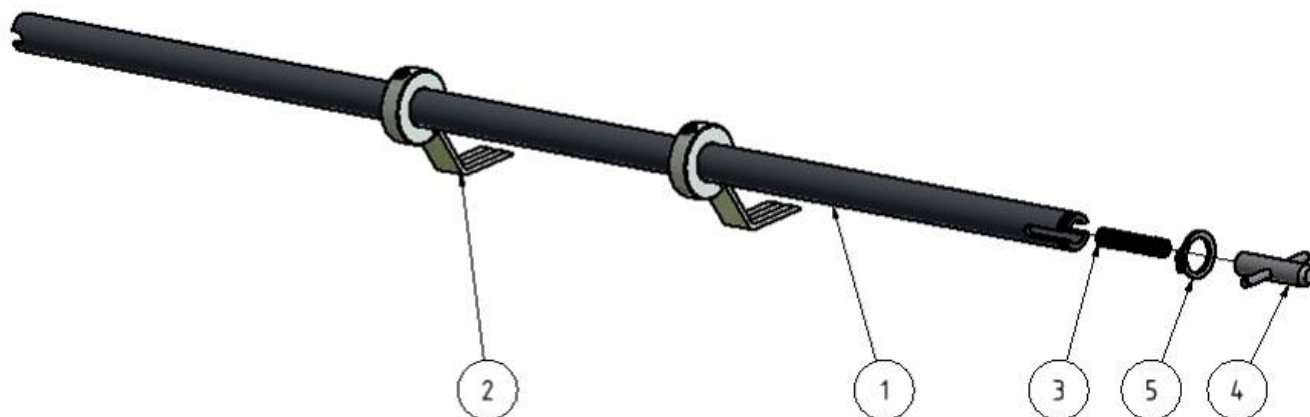
242 59 156 FEEDING TABLE ASSEMBLED

Pos.	Pcs	Catalogue Number	Name	
1	1	242 59 157	FEEDING TRAY	
2	2	309 22 338/2	SCREW M4x3x6	
3	1	315 40 150/0	COMPRESSION SPRING 215 24 067	
4	1	242 59 034	BASE PLATE ASSEMBLED	
5	1	241 65 816	LEVER	
6	1	321 00 232/2	KNOB	
7	1	315 70 160/0	TORSION SPRING	
8	2	311 42 469/2	RETAINING RING 3,2	

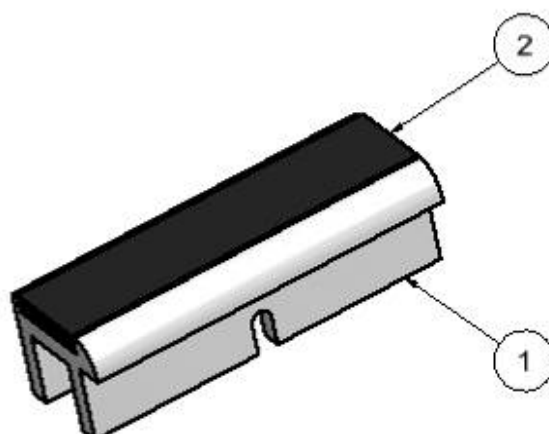


242 59 157 FEEDING TRAY

Pos.	Pcs	Catalogue Number	Name	
1	2	242 59 037	T-SQUARE	
2	2	241 49 378	STONE GUIDE ASSEMBLED	
3	1	311 42 443/0	RETAINING RING 7	
4	1	241 23 848	BUTTON OF T-SQUARE SETTING	
5	1	241 22 750	AXIS OF FEEDING TABLE	
6	1	241 23 929	BUTTON OF T-SQUARE SKEW SETTING	
7	1	241 49 311	SETTING AXIS	
8	4	309 02 284/2	SCREW M4x8 - DIN 965A	
9	1	242 59 158	PLATE OF TABLE (WELDED)	
10	1	241 49 309	SLIDING FEEDING TABLE	
11	2	309 09 229/2	SCREW M4x8 KP- BN 4825	
12	1	311 11 384/2	NUT M3	
13	1	321 00 299/0	COLUMN	
14	1	311 21 406/5	WASHER 3,2x7x0,5	
15	1	321 00 191/0	PLASTIC COLUMN 2mm	
16	1	243 48 895	SENSOR WITH CABLE	

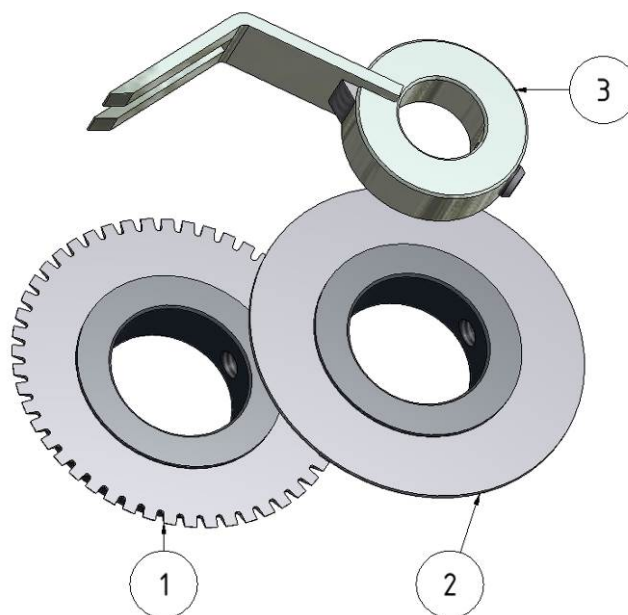


242 49 384 AXIS OF STRIPPER COMPLETE				
Pos.	Pcs	Catalogue Number	Name	
1	1	241 22 749	AXIS OF STRIPPERS	
2	2	241 49 343	STRIPPER	
3	1	315 70 185/0	COMPRESSION SPRING	
4	1	241 49 408	SLIDING PIN	
5	1	311 43 446/0	RING 10	



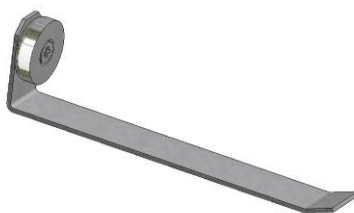
220 29 959 PAPER SEPARATOR				
Pos.	Pcs	Catalogue Number	Name	
1	1	220 27 229	STONE	
2	1	220 28 611	RUBBER	

OPTIONAL ACCESSORIES

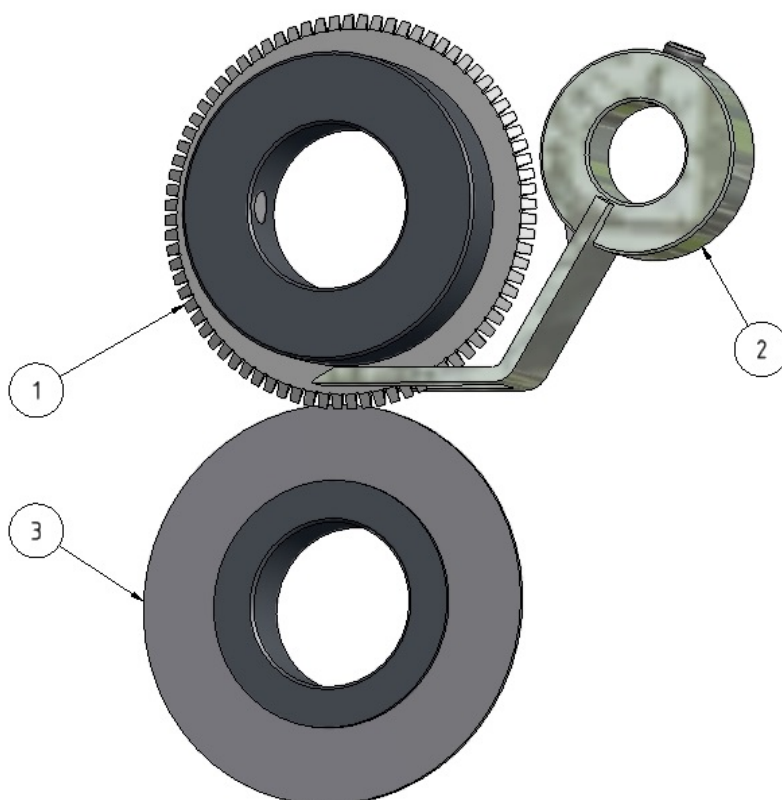


241 49 425 PERFORATING SET

Pos.	Pcs	Catalogue Number	Name	
1	1	241 49 316	UPPER PERFORATING WHEEL	
2	1	241 49 317	LOWER PERFORATING WHEEL	
3	1	241 49 343	STRIPPER	



Pos.	Pcs	Catalogue Number	Name	
1	1	241 49 758	STRIPPER FOR 60 GSM.	



243 59 142 MICROPERFORATING SET				
Pos.	Pcs	Catalogue Number	Description	
1	1	243 59 135	UPPER PERFORATING WHEEL	
2	1	241 49 317	LOWER PERFORATING WHEEL	
3	1	241 49 343	STRIPPER	