

Service Manual
multimaster CAS 52-B
setMATIC
Supplement to A-Version

Vorläufig / Preliminary

Datum / Date: 08/08/2001

Contents

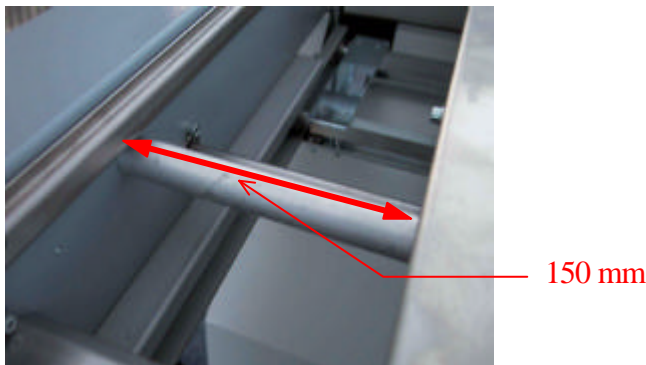
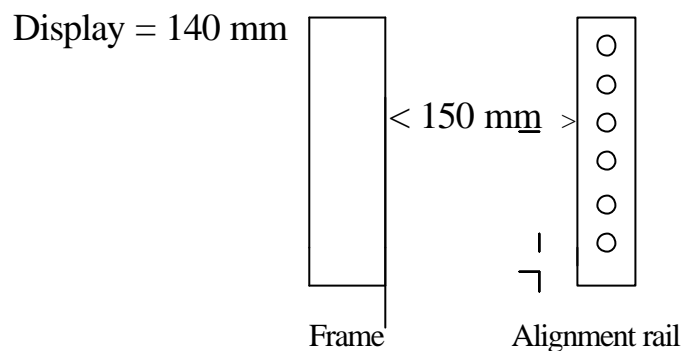
	Page
1 Potentiometer - Adjustment.....	3
1.1 Calibration Procedure of the Alignment Table Rail	3
1.2 Calibration Procedure of the Roller Table Rail	4
1.3 Calibration Procedure of the AM 52 Stop Rollers.....	5
1.4 Calibration Procedure of the Fold Rollers and Roller Potentiometers	6
1.5 Fold Rollers Re-calibration.....	8
2 System Konfigurationen / System Configurations	10
2.1 Optionen / Options	12
2.2 Limitierungen / Limitations	13
3 Spezifische Ersatzteilliste / Specific Spare Parts - B-Version	14
3.1 Ausrichttisch ART-B / Alignment table ART-B.....	15
3.2 Falzwerk Bedienungsseite (links) / Fold unit Operator side (left).....	16
3.3 Falzwerk Rückseite (rechts) / Fold Unit Rear side (right).....	18
3.4 Walzeneinstellung / Fold roller setting.....	20
3.5 Elektr. Schublade / Electr. Drawer CAS 52-B /38-B.....	21
3.6 Schrägrollentisch / Roller Table SRT 52-B	22
3.7 Schrägrollentisch / Roller Table SRT 52-B und/and SRT 38-B	23
3.8 Auslage AM 52-B / Delivery AM 52-B	25
3.9 Übergabebrücke / Transfer Bridge SRT 52-	27
3.10 Bedienpult CAS 52-B / Operator Panel CAS 52-B.....	28
4 Omron - Frequency Transformer.....	29
5 Schematics.....	30
5.1 Fold unit	30
5.2 Fold unit	31
5.3 Fold unit	32
5.4 Delivery AM 52.....	33
6 Voltage Reference Points.....	34

1.1 Calibration Procedure of the Alignment Table Rail

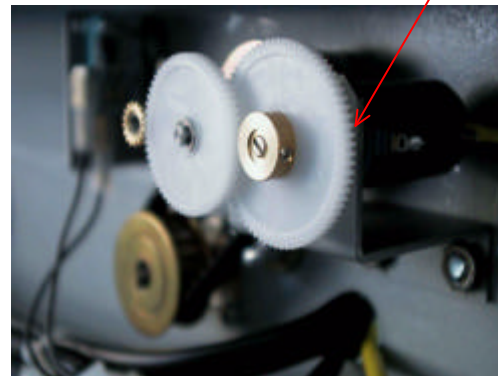
The automatically adjustable range (paper width) is:

min. = 75mm
max. = 260mm

- Put the gauge-bolt (length 150mm) between the frame and the alignment rail. The value shown on the display needs to be **.140mm** (Picture 2).
- Remove the side cover of the alignment table frame (on the operator side).
- With the potentiometer in the frame (on the operator side) the display value can now be changed now (Picture 2).



Picture 1



Picture 2

IMPORTANT!!!

After that ensure that after adjusting the min. paper width the infeed guide does not touch the cover of the vacuum drum.

Verify also the max. paper width. The minimum distance from the alignment rail to the safety switch (function: motor of the alignment table of) needs to be approx. 2-3mm.

The trigger point of the safety switch is adjustable via extended holes.

1.2 Calibration Procedure of the Roller Table Register Rail

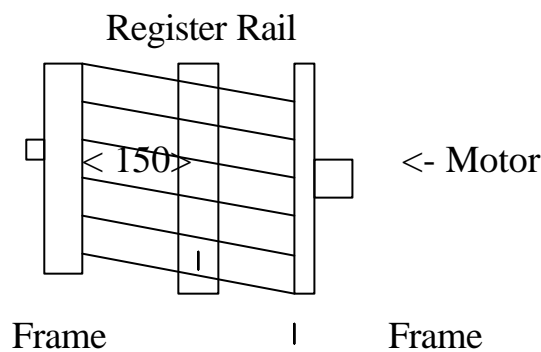
The automatically adjustable range (paper width) is:

min. = 120mm
max. = 500mm

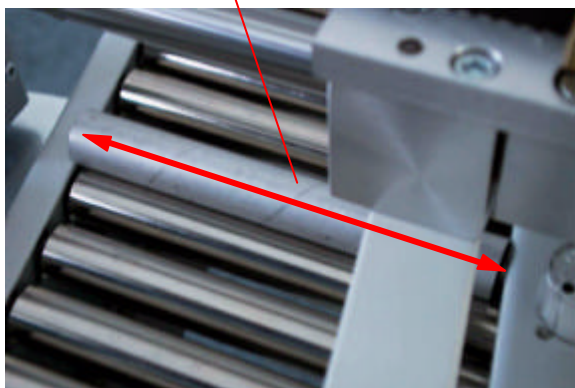
when using the 2nd fold unit in-line with the 1st (tandem):

min. = 0mm
max. = 260mm

- Put the gauge-bolt (length 150mm) between the frame and the roller register rail. Same procedure as for the alignment table (Picture 1).
- Move the rail to the 150mm dimension. The gauge bolt should not be movable anymore.
- The value shown on the display needs to be 362mm. Now the value (362mm) can be adjusted with the potentiometer.



150 mm



Picture 1



Picture 2

IMPORTANT!!!

Verify also in this case the min. and max. paper width.

The register rail should not touch any other part when adjusting the min. or max. value. When the max. value is adjusted, the sheet has to be moved into the folder symmetrically.

1.3 Calibration Procedure of the AM 52 Stop Rollers

The automatically adjustable range (paper length) is:

V 1.0.1.0
up V 1.0.2.x

min. = 60mm

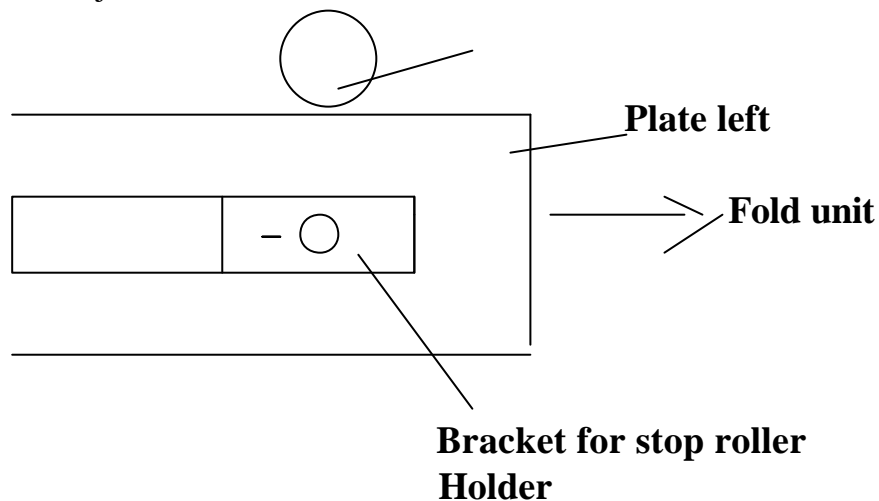
max. = 340mm

max. = 370mm

Remove the right cover of the delivery table, for the calibration of the stop rollers and the corresponding value in the display.

IMPORTANT!!!

- a) **First the stop rollers have to be moved forward to the mechanical stop position. This adjustment must be made by pushing the buttons of the small operator panel of the AM 52.**
- b) After that remove the stop roller including their mounting brackets.
- c) Remove the aluminum cover on the right side.
- d) On the right-hand/backside is the location of the potentiometer. With this potentiometer the display value can be adjusted.



If the brackets are moved to the mechanical stop position, the potentiometer value has to be adjusted to the display value of 000.

Test the min. and max. position of the stop rollers. While doing that, the brackets should not touch any mechanical stop.

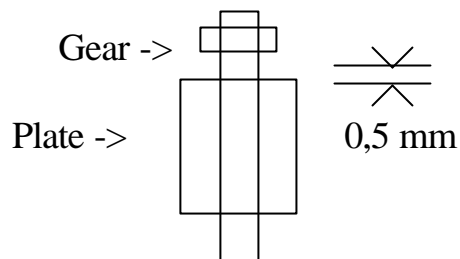


1.4 Calibration Procedure of the Fold Rollers and Roller Potentiometers

1.4.1 Adjustment of the Mounting Plates

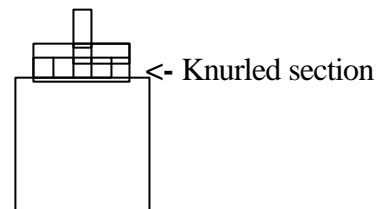
After exchanging the plates the following adjustments have to be made:

- a) Please note: All plates of the B-Version have threads (counter-clock-wise) and are *not* exchangeable with the plates of the A-Version.

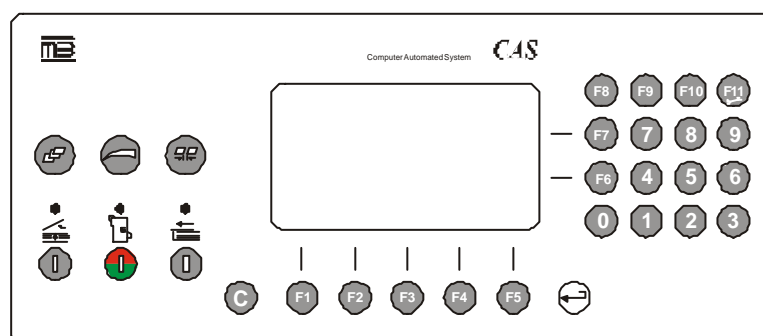


- b) Between gear and plate the distance has to be 0.5mm, this has to be verified with a caliper.
 c) Before mounting the potentiometer, turn it clockwise to its mechanical stop position.
 d) After that turn it 2 revolutions counter-clockwise. Then mount the potentiometer.
 e) On the operator panel the following buttons have to be pushed in this sequence:

- F11 (Serviceprogr.)
- F-6 Basic setting
- F1 Rollers
- Code 4277
- F3 Normal



- e) All potentiometers must be adjusted by turning the knurled section to the 0-position.
 f) The fold roller pressure has to be adjusted with the adjustment knob by using 30gsm („waxpaper“). Same procedure as valid for the A-Version.
 g) Now all the plates and potentiometer are in the same 0-position. This basic setting can be repeated also when parts are exchanged.



1.4.2 Calibration Procedure of the Fold Roller Display

a) On the operator panel the following buttons have to be pushed in this sequence:

F11 (Serviceprogr.)

F-6 Basic Setting

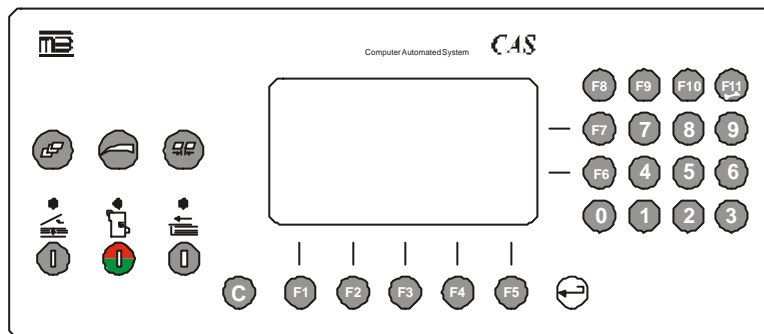
Measure the waxpaper strip with the thickness sensor

F-1 Rollers

Code - 4277 to be dialed in

b) Now dial in the value (paper thickness of the paper strip e. g. 0.03)!

c) The display will show: The momentarily adjusted values will be stored as the new 0-positions !
Confirm.



1.5 Fold Rollers Re-calibration

IMPORTANT!!!

With the new B-Version, a possible re-calibration of the fold roller pressure is done without turning the adjustment screw on the al-casting!

Procedure:

a) Measure the thickness of a paper strip:

- F11 - Service
- F6 - Basic setting
- Put the strip under the thickness sensor and read the value.

Caution: If the negative (-) basic value is shown, add this value to the one that's shown!

b) Set the fold rollers to the shown value.

c) Continue with the operator panel:

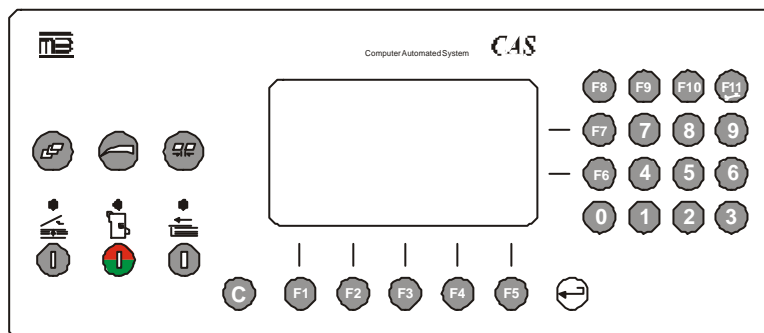
- F5 - Modify
- F5 - Roller gap
- F4 - Correction

Referring to the previously measured paper strip, set the roller pressure by using „side“ and with the +/- buttons.

Return to the main menu with the C button.

Store the new values:

- F11 (Serviceprogr.)
- F-6 Basic setting
- F-1 Rollers
- Code - 4277 to be dialed in



Now dial-in the measured value (paper thickness of the strip)!

The display shows:

The values adjusted at the moment are stored as the new 0-positions!

Confirm with the Enter-button.

The Display “ Normal“:

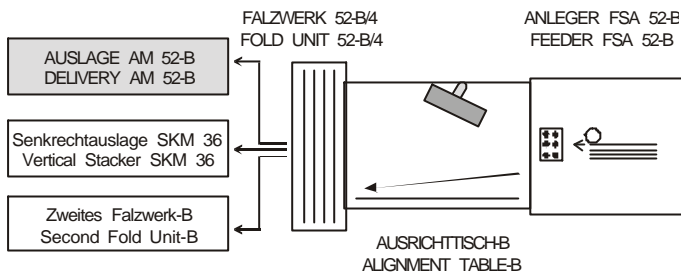
The Display “Normal“ shows the values of the potentiometer which are adjusted at the moment.
If the rollers are set to the 0-position, the display means the absolute 0-position of the potentiometer.
Only an informative value.

IMPORTANT!!!

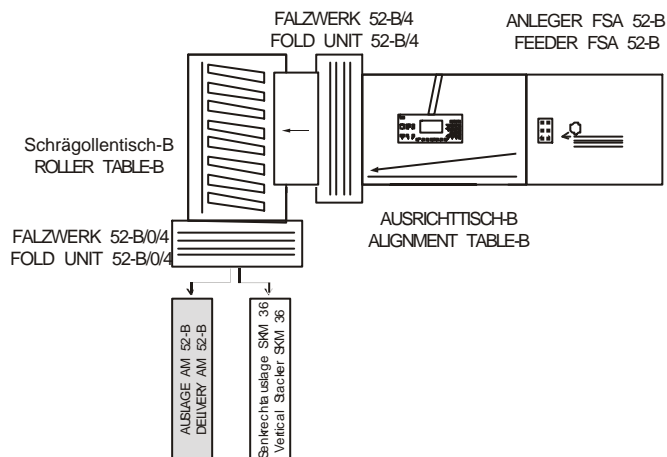
Before the RAM is replaced, all fold rollers have to be moved to their 0-position and if the new RAM is put in, the position has to be re-calibrated.

2 System Konfigurationen / System Configurations

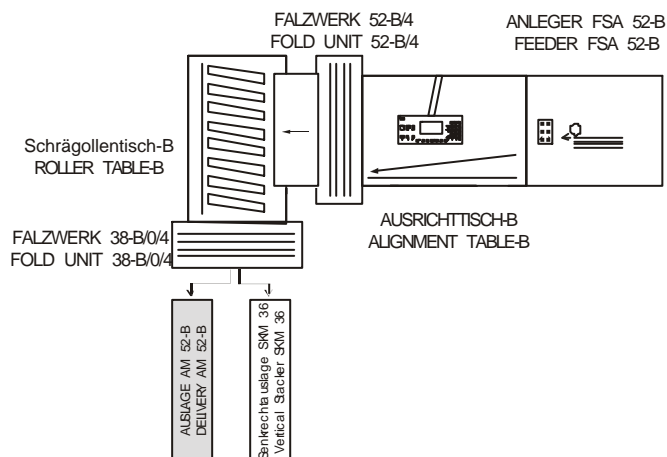
a) Parallel folding machine multimaster CAS 52-B/4 - FSA



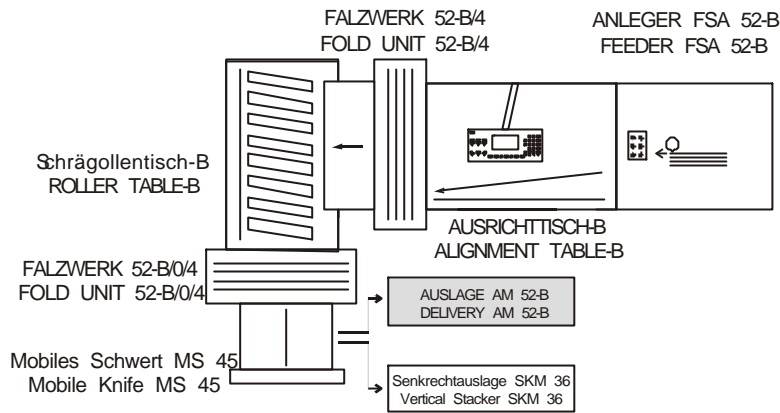
b) Cross folding machine multimaster CAS 52-B/4/4 - FSA



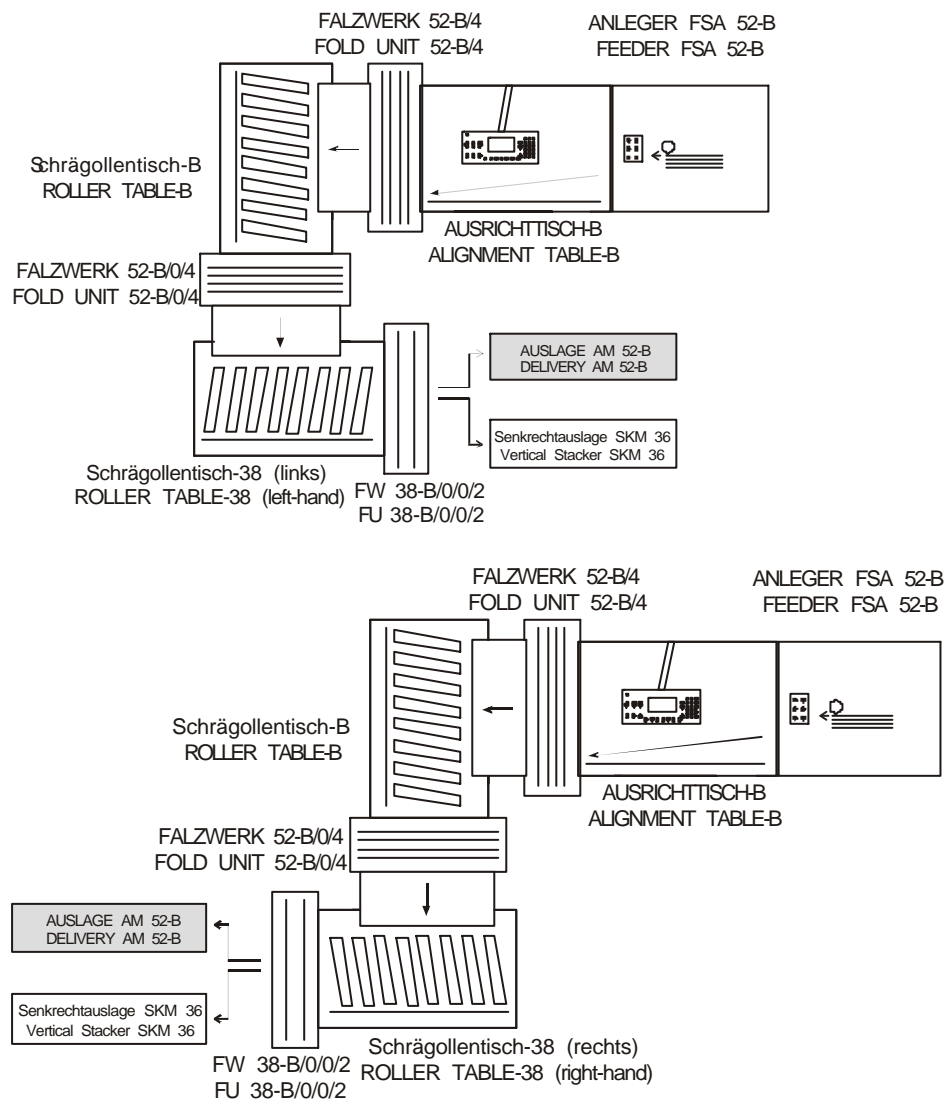
c) Cross folding machine multimaster CAS 52-B/4 - CAS 38-B/0/4 - FSA



d) Cross folding machine multimaster CAS 52-B/4/4-MS45 - FSA



e) Cross folding machine multima. CAS 52-B/4/4-38-B/0/02 - FSA (3rd fold unit no CAS-unit)



2.1 Optionen / Option

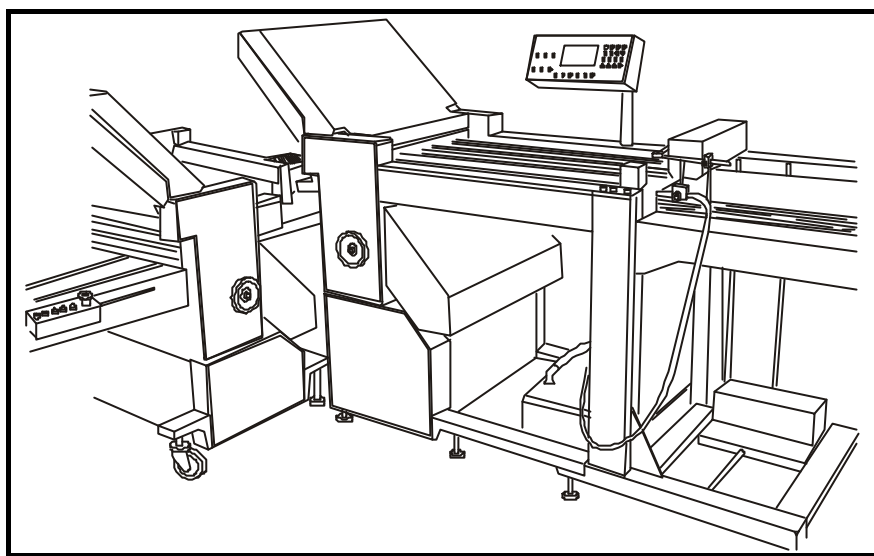
The following options and accessories are available at the moment in connection with the setMATIC (B-Version):

- a) Vertical stacker SKM 36 with Kicker (Option)
- b) Mobile knife folder MS 45. Please note:
That when using the KF 31 and the AM 52, the stop roller position of the AM 52 needs to be corrected individually. A fine adjustment is necessary
- c) Small fold attachment KF 31. Please note:
That when using the KF 31 and the AM 52, the stop roller position of the AM 52 needs to be corrected individually. A fine adjustment is necessary.
- d) Anti-static devices
- e) Gate fold plates FFT CAS 52 and FFT CAS 38
- f) Slitting, scoring- and perforating-devices, trimming, center-strip cut-out
- g) Compressing station Desta
- h) FSA-Single blower
- i) Kicker-Option for die AM 52

2.2 Limitierungen / Limitations

The following options and accessories are **not** available or only a **limited** version in connection with the setMATIC (B-Version):

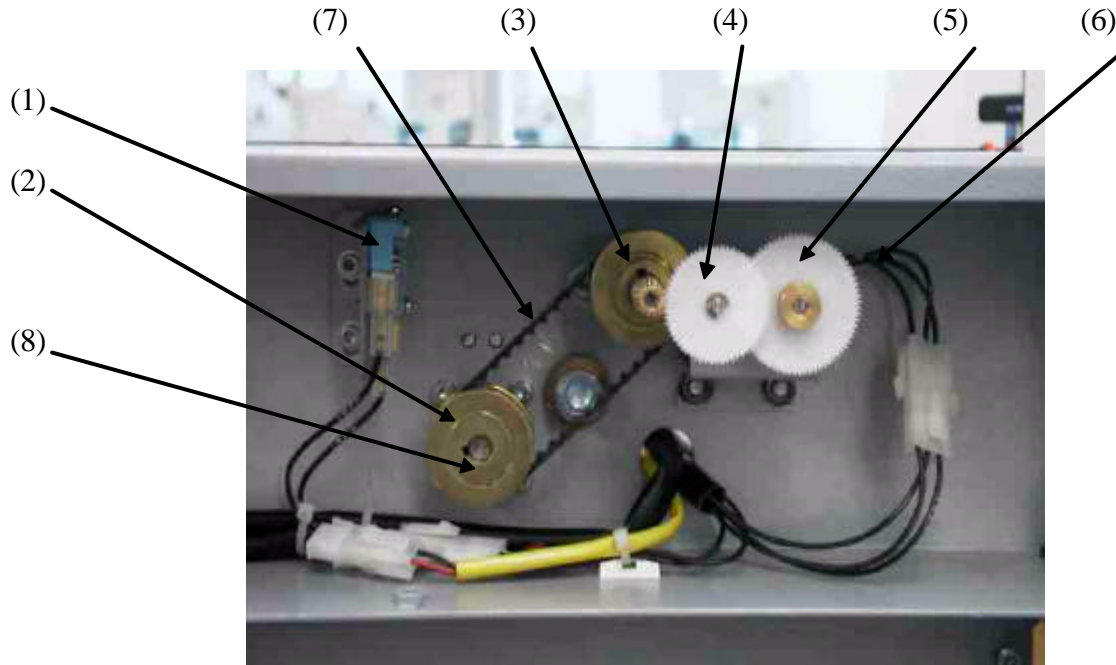
- a) hhs-Cold glue devices (Roller - setMATIC):
 - The setting of the fold rollers and the stop rollers (AM 52) is automated
 - The setting of the roller table and the alignment table has to be done manually.
- b) Pulsed perforation Palamides (Roller - setMATIC):
 - The setting of the fold rollers and the stop rollers (AM 52) is automated
 - The setting of the roller table and the alignment table has to be done manually.
- c) Steel roller for Hot-melt applications in front of the fold unit (Roller - setMATIC):
 - The setting of the fold rollers and the stop rollers (AM 52) is automated
 - The setting of the roller table and the alignment table has to be done manually.
- d) The delivery AMS 52 is not available.
- e) The turnover fold plate can only be used for flipping the documents. It can not be used in the deflect mode!
- f) The continuous forms folding systems are not available yet as (B-Version) setMATIC.
- g) The first fold unit CAS 38 (FSA and PBA) are not available yet as (B-Version) setMATIC.
- h) The second fold unit CAS 38/0/2 (with 2 plates) are not available yet as (B-Version) setMATIC.



Spezifische Ersatzteile der Specific Spare Parts of the CAS 52-B/4/4 setMATIC

Datum / Date: 31/08/2000

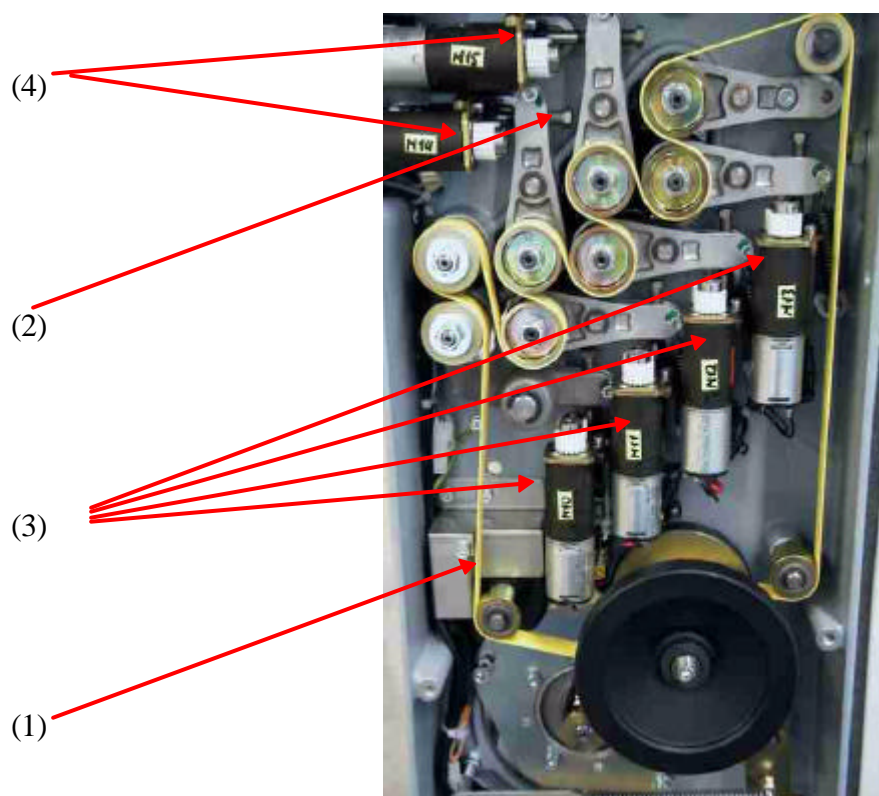
3.1 Ausrichttisch ART-B / Alignment table ART-B 4.007.761



Pos.	Teile-Nr.:	Bezeichnung / Description	Stück / Qty.
1	1.030.813	Mikroschalter / Microswitch	2
2	2.046.379	Zahnriemenscheibe / Timing belt pulley	1
3	4.005.236	Zahnriemenscheibe / Timing belt pulley	1
4	1.017.590	Zahnrad / Gear	1
5	1.017.610	Zahnrad / Gear	1
6	1.029.986	Potentiometer / Potentiometer	1
7	1.033.077	Zahnriemen / Timing belt	1
8	1.030.812	Getriebemotor / Gear motor	1

3.2 Falzwerk Bedienungsseite (links) / Fold unit Operator side (left)

- | | | |
|--------------------------|-------------------------------------|-----------|
| 1. Falzwerk CAS 52-B/4 | / 1 st Fold CAS 52-B/4 | 4.007.691 |
| 2. Falzwerk CAS 52-B/0/4 | / 2 nd Fold CAS 52-B/0/4 | 4.007.733 |

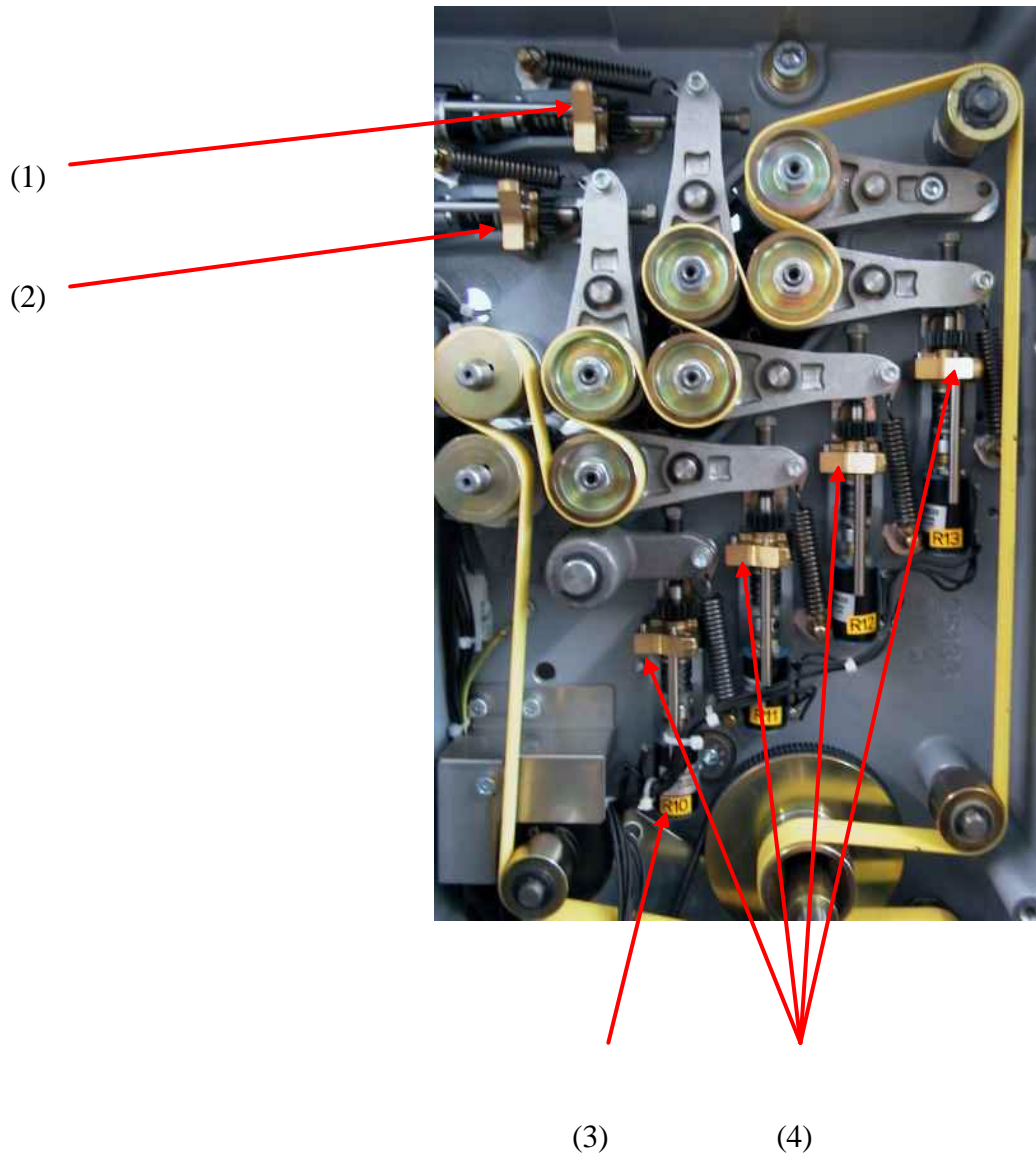


fgfg

	Teile-Nr.:	Bezeichnung / Description	Stück / Qty.
1	1.031.220	Flachriemen / Flat belt	1
2	2.041.162	Einstellschraube l = 30mm / Setting screw	6
3	2.023.272	Winkel / Bracket	4
4	2.023.271	Winkel / Bracket	2

Falzwerk Bedienungsseite (links) / Fold unit Operator side (left)

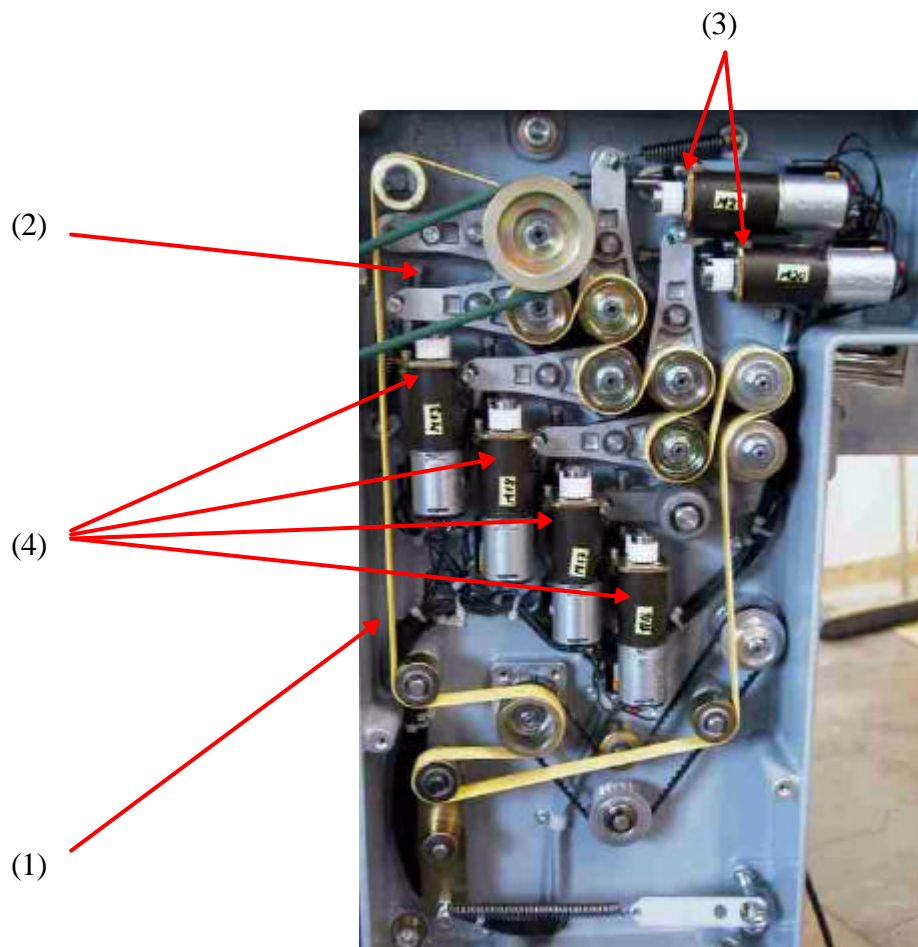
- 1. Falzwerk CAS 52-B/4 / 1st Fold CAS 52-B/4 4.007.691
- 2. Falzwerk CAS 52-B/0/4 / 2nd Fold CAS 52-B/0/4 4.007.733



Pos.	Teile-Nr.:	Bezeichnung / Description	Stück / Qty.
1	4.007.775	Baugr. Platte mit Spindel re. / Assy. plate with spindle ri.	1
2	4.007.774	Baugr. Platte mit Spindel li. / Assy. plate with spindle le.	1
3	1.029.986	Potentiometer / Potentiometer	6
4	4.007.773	Baugr. Platte mit Spindel re. / Assy. plate with spindle ri.	4

3.3 Falzwerk Rückseite (rechts) / Fold Unit Rear side (right)

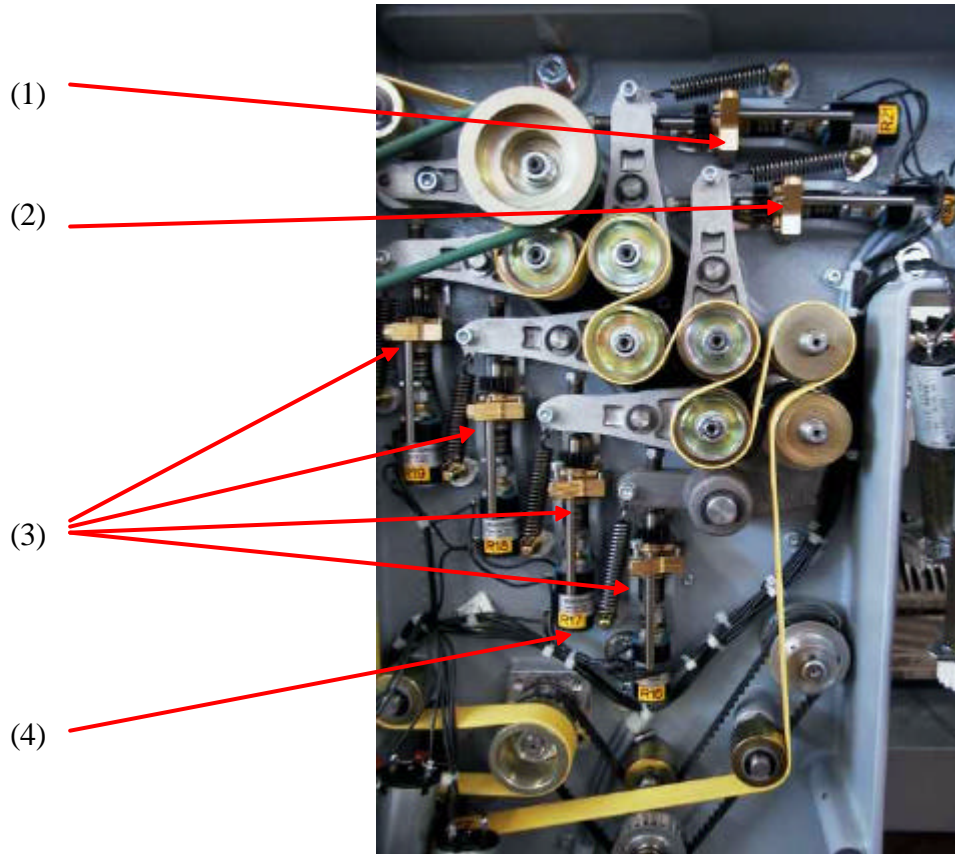
- | | | |
|--------------------------|-------------------------------------|-----------|
| 1. Falzwerk CAS 52-B/4 | / 1 st Fold CAS 52-B/4 | 4.007.691 |
| 2. Falzwerk CAS 52-B/0/4 | / 2 nd Fold CAS 52-B/0/4 | 4.007.733 |



Pos.	Teile-Nr.:	Bezeichnung / Description	Stück / Qty.
1	1.031.220	Flachriemen / Flat Belt	1
2	2.041.162	Einstellschraube l = 30mm / Setting Screw	6
3	2.023.272	Winkel / Bracket	2
4	2.023.271	Winkel / Bracket	4

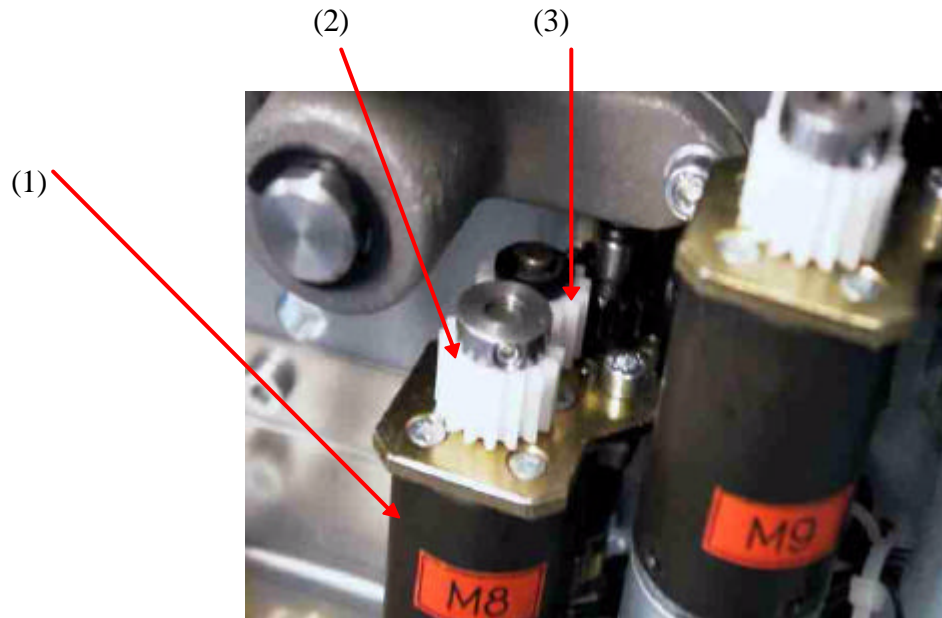
Falzwerk Rückseite (rechts) / Fold Unit Rear side (right)

- 1. Falzwerk CAS 52-B/4 / 1st Fold CAS 52-B/4 4.007.691
- 2. Falzwerk CAS 52-B/0/4 / 2nd Fold CAS 52-B/0/4 4.007.733



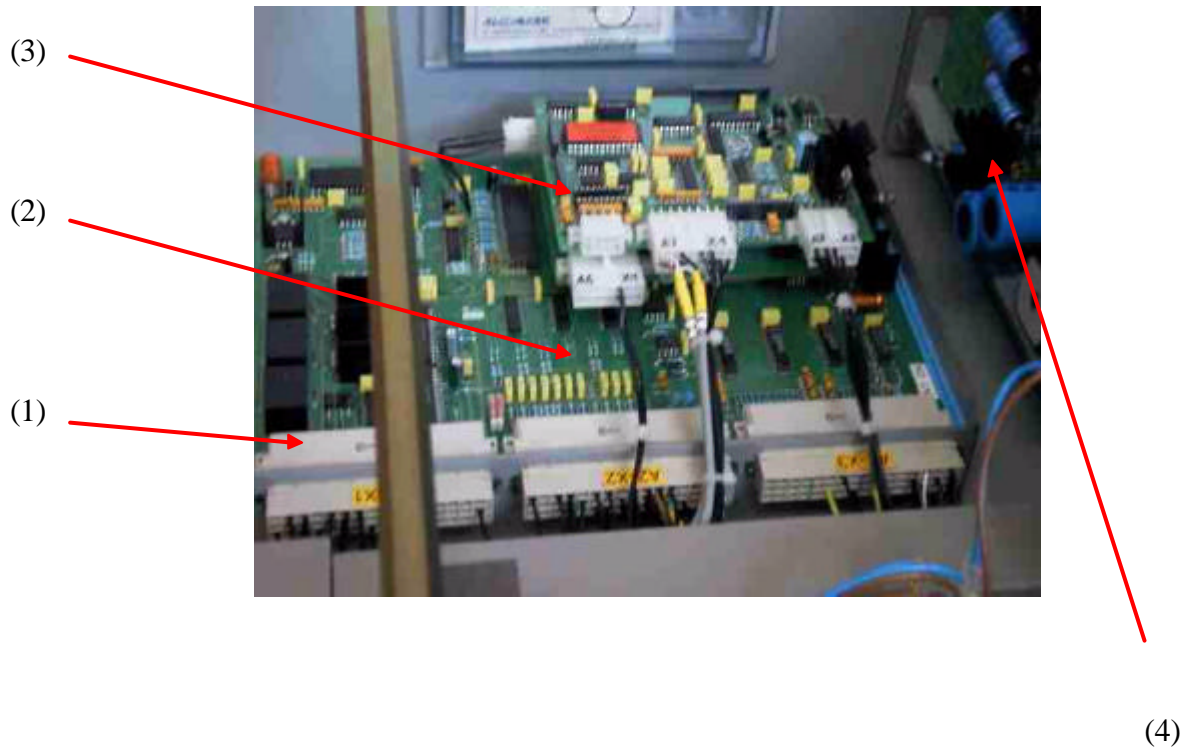
Pos.	Teile-Nr.:	Bezeichnung / Description	Stück / Qty.
1	4.007.776	Baugr. Platte mit Spindel li. / Assy. plate with spindle le.	1
2	4.007.773	Baugr. Platte mit Spindel re. / Assy. plate with spindle ri.	1
3	4.007.774	Baugr. Platte mit Spindel li. / Assy. plate with spindle le.	4
4	1.029.986	Potentiometer / Potentiometer	6

3.4 Walzeneinstellung / Fold roller setting



Pos.	Teile-Nr.:	Bezeichnung / Description	Stück / Qty.
1	1.030.103	Getriebemotor / Gear Motor	12
2	1.017.714	Zahnrad / Gear	12
3	1.017.715	Zwischenzahnrad / Gear (small)	12

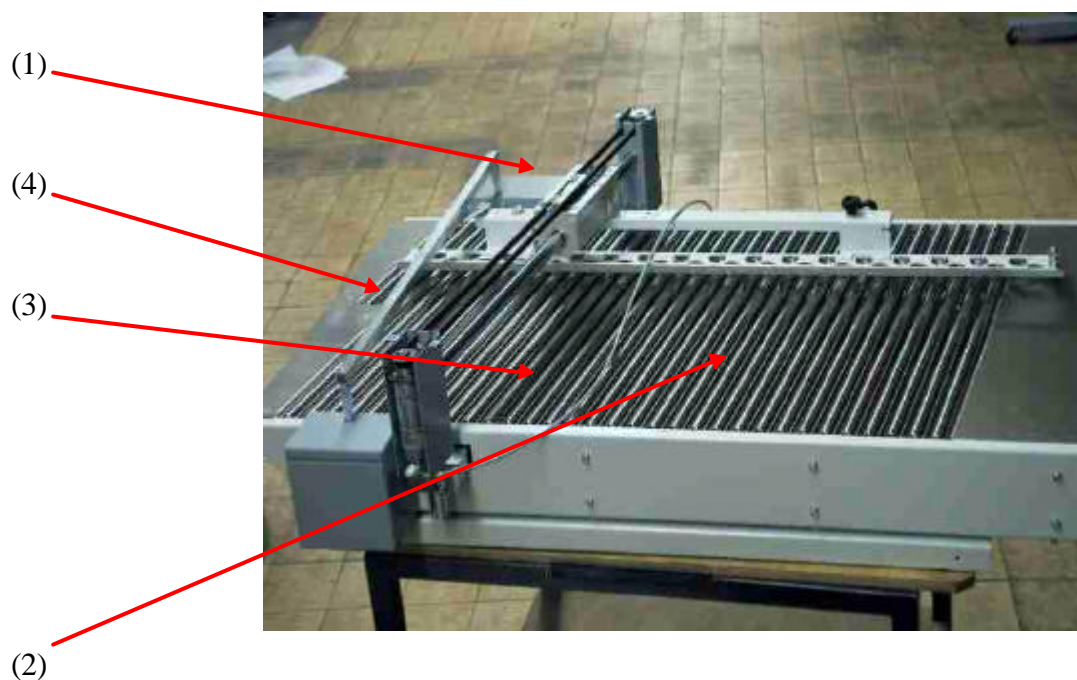
3.5 Elektr. Schublade / Electr. Drawer CAS 52-B /38-B



Pos.	Teile-Nr.:	Bezeichnung / Description	Stück / Qty.
1	4.007.411	Slaveboard / Slaveboard	1
2	4.007.685	Zusatzplatine 2 / Additional board 2	1
3a	4.007.686	Zusatzplatine 3 für 1. FW / Additio. board 3 for 1 st FU	1
3b	4.007.681	Zusatzplatine 3 für 2. FW / Additio.board 3 for 2 nd FU	1
4	4.006.488	Netzteilkarte / PC-Board	1

3.6 Schrägrollentisch / Roller Table SRT 52-B

4.007.707



Pos.	Teile-Nr.:	Bezeichnung / Description	Stück / Qty.
1	1.033.070	Zahnriemen FW-SRT / Timing Belt	1
2	1.031.221	Flachriemen / Flat Belt	1
3	2.018.011	Transportrolle lang / Steel roller (long)	33
4	2.018.017	Transportrolle kurz / Steel roller (short)	2

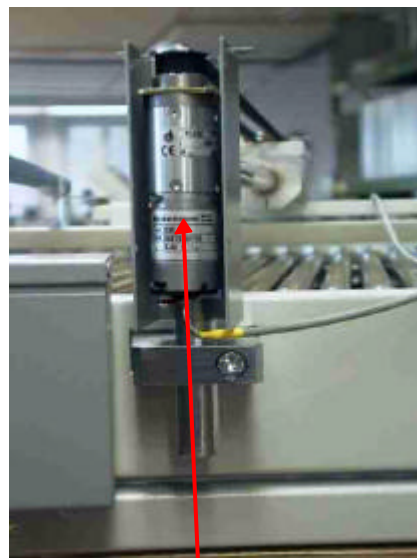
3.7 Schrägrollentisch / Roller Table SRT 52-B
Schrägrollentisch / Roller Table SRT 38-B

4.007.707

4.007.797



(1)



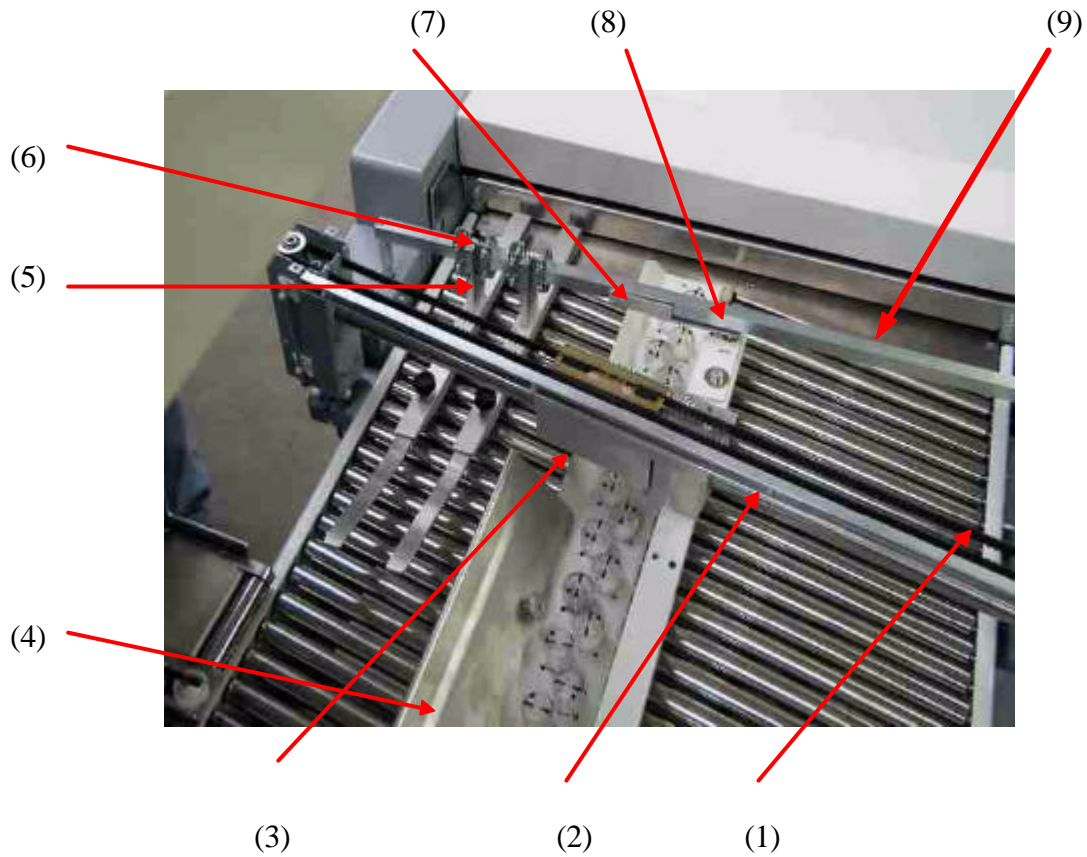
(2)

Pos.	Teile-Nr.:	Bezeichnung / Description	Stück / Qty.
1	1.029.986	Potentiometer / Potentiometer	1
2	1.030.810	Getriebemotor / Gear motor	1

Schrägrollentisch / Roller Table SRT 52-B
Schrägrollentisch / Roller Table SRT 38-B

4.007.707

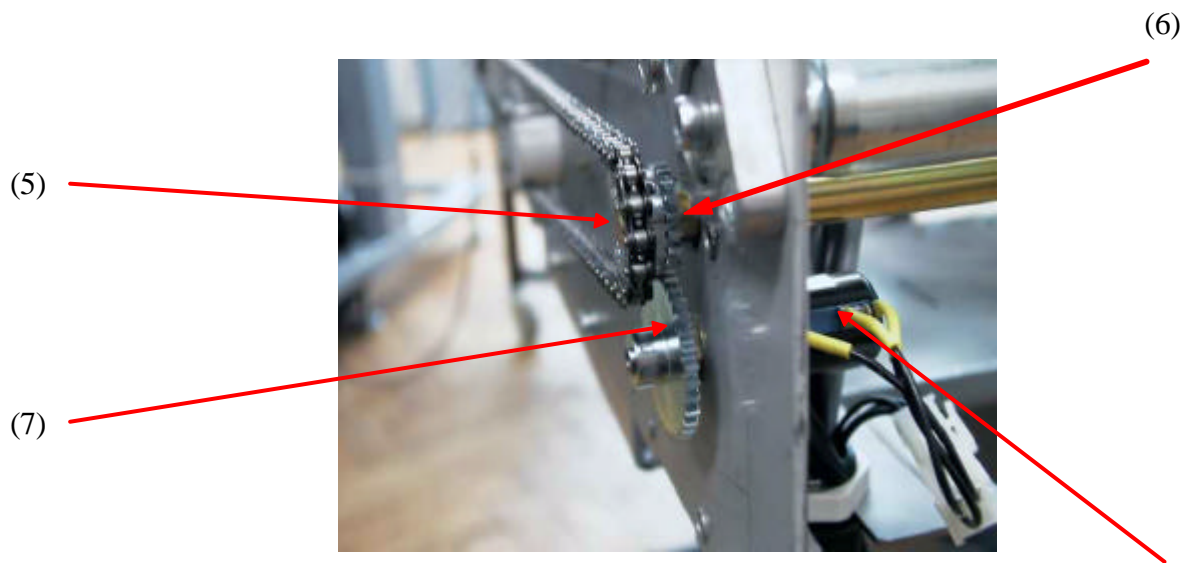
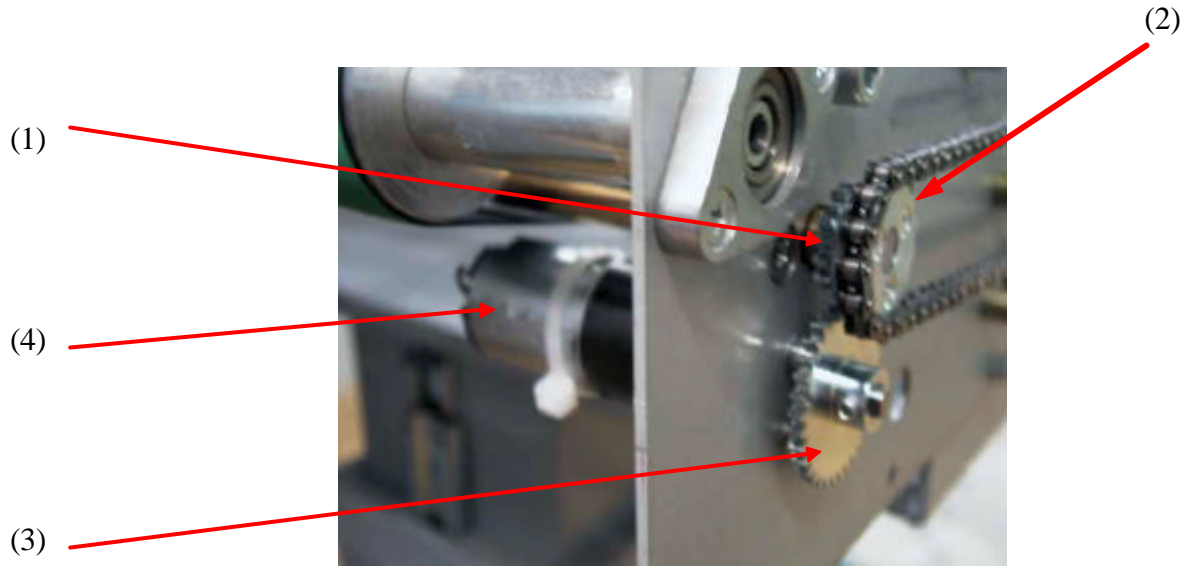
4.007.797



Pos.	Teile-Nr.:	Bezeichnung / Description	Stück / Qty.
1a	0.064.001	Zahnriemen 52-B (l=1,6 m) / Timing belt 52 (l=1,6 m)	1
1b	0.064.001	Zahnriemen 38-B (l=1,3 m) / Timing belt 52 (l=1,3 m)	1
2a	1.027.706	Führungssachse für SRT 52 / Guide Shaft for SRT 52	1
2b	1.027.707	Führungssachse für SRT 38 / Guide Shaft for SRT 38	1
3	1.027.705	Kugelumlaufbuchse / Bushing	1
4	2.031.808	Leitblech / Paper guide	1
5	2.052.189	Klotz / Mounting Block	2
6	2.031.807	Haltewinkel / Bracket	2
7	2.052.175	U-Profil / U-Bracket	1
8	2.023.470	Lasche / Bracket	1
9a	2.052.161	Vierkantachse für 52er / Square Shaft for 52	1
9b	2.052.168	Vierkantachse für 38er / Square Shaft for 38	1

3.8 Auslage AM 52-B / Delivery AM 52-B

4.007.747



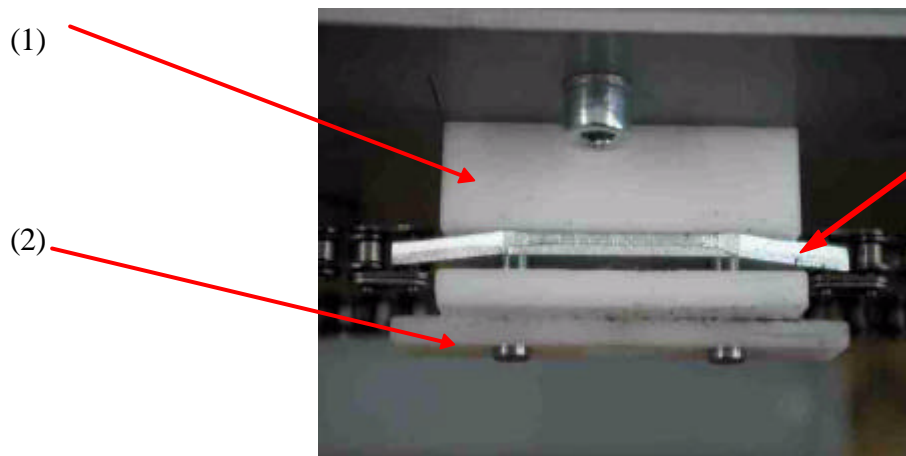
(8)

Pos.	Teile-Nr.:	Bezeichnung / Description	Stück / Qty.
1	2.046.374	Zahnrad / Gear	1
2	1.013.065	Kettenrad / Sprocket	1
3	4.007.677	Zahnrad / Gear	1
4	1.030.103	Getriebemotor / Gear motor	1
5	1.013.065	Kettenrad / Sprocket	1
6	2.046.380	Zahnrad / Gear	1
7	4.007.674	Zahnrad / Gear	1
8	1.029.986	Potentiometer / Potentiometer	1

Auslage AM 52-B / Delivery AM 52-B

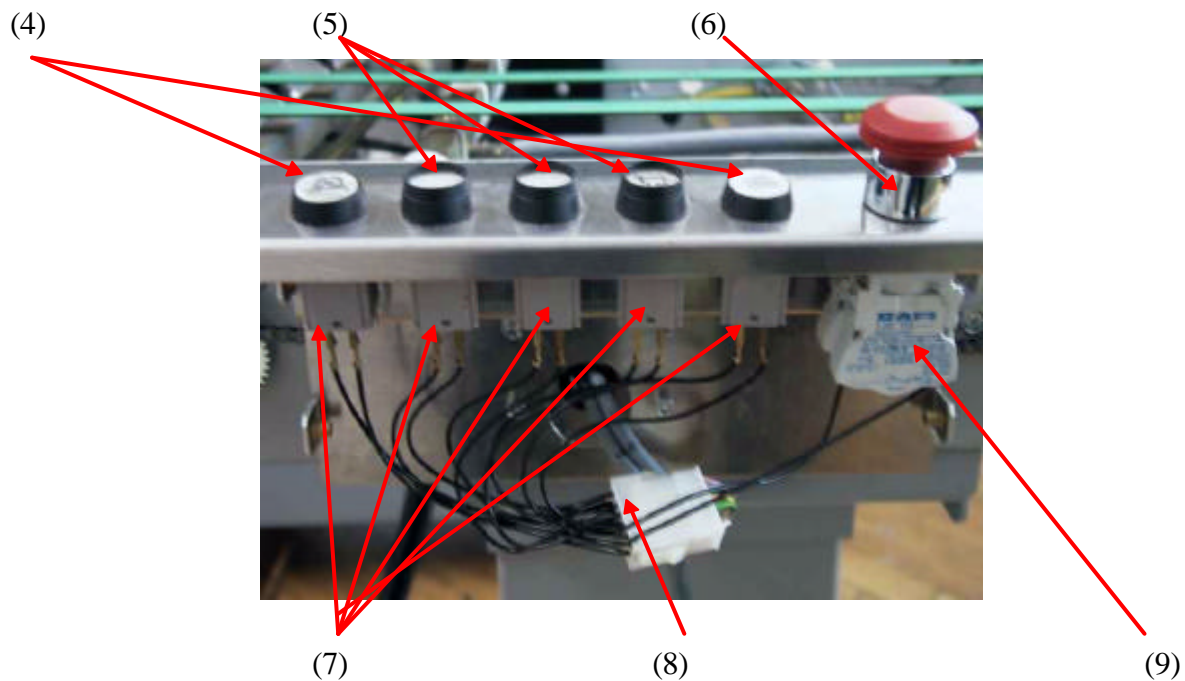
4.007.747

(3)



Zusatz-Bedienpult AM 52-B / Small Operator Panel AM 52-B

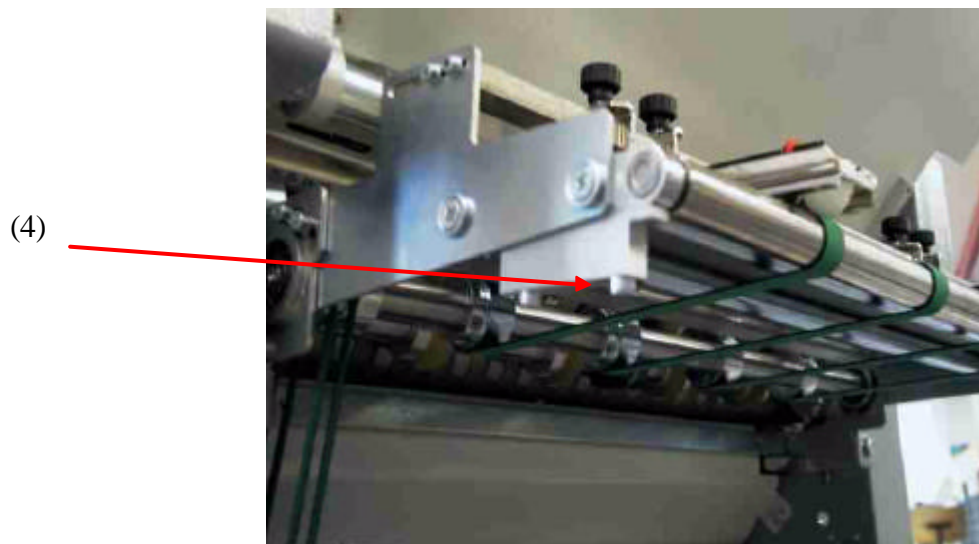
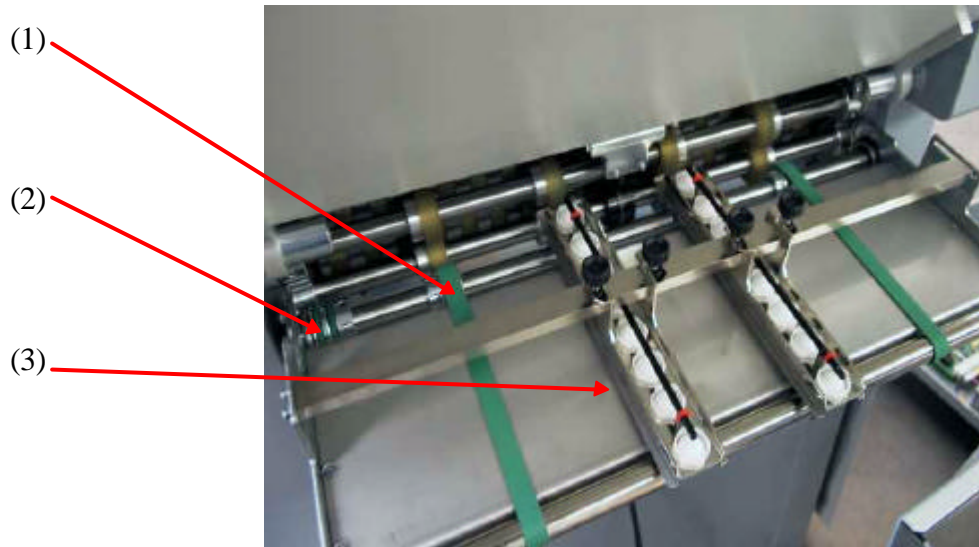
4.007.706



Pos.	Teile-Nr.:	Bezeichnung / Description	Stück / Qty.
1	2.054.150	Distanzplatte / Spacer	2
2	2.054.149	Führungsplatte / Guide Plate	2
3	2.023.468	Platte / Plate	2
4	1.030.410	Lichtdrucktaster / Push-Button	2
5	1.030.411	Lichtdrucktaster / Push-Button	3
6	1.029.904	Pilztaste / Mushroom Button	1
7	1.030.414	Schaltelement / Switch Element	5
8	1.030.694	Steckergehäuse / Connector Housing	1
9	1.030.421	Kombi-Schaltelement / Switch-Element	1

3.9 Übergabebrücke / Transfer Bridge SRT 52-B

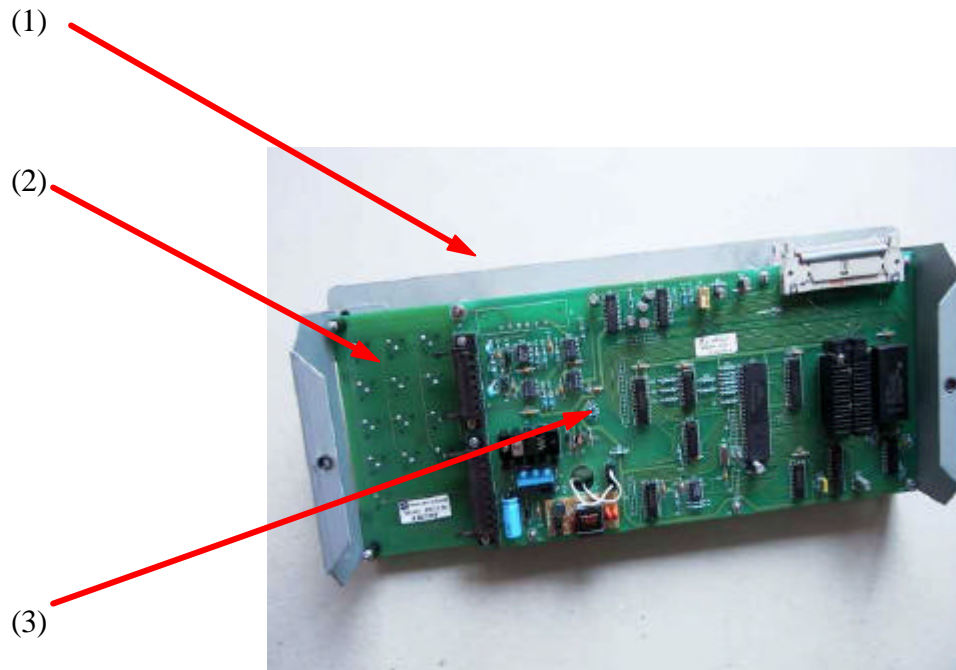
4.007.692



Pos.	Teile-Nr.:	Bezeichnung / Description	Stück / Qty.
1	1.031.152	Flachriemen / Flat belt	4
2	1.033.098	Rundriemen / Round Belt	2
3	4.007.469	Kugelschiene / Marble Rack	2
4	1.017.729	Anschlag / Alignment Block	2

3.10 Bedienpult CAS 52-B / Operator Panel CAS 52-B

4.007.760



Pos.	Teile-Nr.:	Bezeichnung / Description	Stück / Qty.
1	4.007.760	Bedienpult kompl. / Operator Panel cpl.	1
2	4.007.687	Keyboard CAS 52B / Keyboard CAS 52B	1
3	4.006.388	Masterboard CAS 52 / Masterboard CAS 52	1
4			
5			

4 Omron - Frequency Transformer

Frequency transformer - type : Omron SYSDRIVE 3G3JV

4.1 Error message

In the display the following error message can be shown.

„Error frequency change fault unit 1, turn off main switch for 5 seconds“

The cause may be :

- > Current overload (short circuit)
- Thermo-contact (motor) triggered.
- No delivery table attached.

The frequency transformer shows: red LED is on and the display shows „EF1“.