FORMAX®

FD 6104
Low-Volume Tabletop Inserter

MAINTENANCE & PARTS MANUAL
First Edition

6/2019

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1 Introduction

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About this manual

Versioning

Version	Modifications
A1	Initial version at First Customer Shipment (FCS)

Audience

This manual is meant for service engineers.

Symbols

This manual uses the symbols listed below.

WARNING : indicates a human safety hazard.

ATTENTION : brings to your attention a risk for equipment or mail that could result froman action you may perform.

NOTE : remark that explains different cases or specificities.

TIP : advice to help save you time when processing your mail.

SUPERVISOR : indicates that you have to use the supervisor menu to perform the procedure.

Abbreviations

Abbrev.	**Explanation**	**Abbrev.**	**Explanation**
BCR	Bar Code Reading	LH	Left Hand
BRE	Business Reply Envelope	MMF/AF	Mixed Mail Feeder / Advanced Feeder
CCW	Counter Clockwise	MS	Mailing System
CW	Clockwise	NA	Not Applicable
DFC	Double Feed Control	OCR	Optical Character Recognition
DS	Document System	OMR	Optical Mark Recognition
FIFO	First In First Out	OLS	OnLine Services (if applicable)
FM	Franking Machine	PCB	Printed Circuit Board
GUI	Graphical User Interface	PPC	Postal Product Code
HMI	Human Machine Interface	RH	Right hand
IN	Inserter	UI	User Interface
INF	Insert'n Frank		

Terminology

Term	Description
Double Feed Control (DFC)	Double Feed Control is the sensor that measures the thickness of a sheet to check if the inserting system does not accidentally take more sheets than intended. DFC sensors exist on Feeders (double sheet detection). Currently DFC's on inserting systems perform relative measurements, which means that they need a cycle to 'learn' the thickness of a sheet. Also the length of the document is measured so partly overlapping sheets will be detected.
Leading	Situation in which the top of the sheet is closest to the separation unit in a document feeder.
Pane Cycle	The various documents of a set are fed from the feeders in such a way that these documents are partly overlapping each other. This pane-like overlapping ensures a higher throughput.
Sequential Cycle	Documents are transported along the vertical track without touching each other. Only after joining the set in the making they do touch each other.
Trailing	Situation in which the bottom of the sheet is closest to the separation unit in a document feeder.

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Safety

Warnings and precautions

Ensure you have read and fully understood the safety requirements in this section.

Warnings

- The machine should be used as provided and should not be tampered with or altered as the machine contains inbuilt safety systems, which could be compromised by any interference.
- Disconnect the mains power supply before performing any maintenance.
- Prior to cleaning of the exterior of the system, it should be disconnected from the power supply. When cleaning the system do not use liquid or spray cleaners but only a cloth dampened with water.
- The user must not attempt to service the appliance beyond that described in this operator manual. All other servicing must be carried out by qualified service personnel only.

Precaution

The general process of automated document handling can sometimes create a build up of static electricity. Therefore we recommend that the following measures are taken to reduce the side effects of any electrostatic charge.

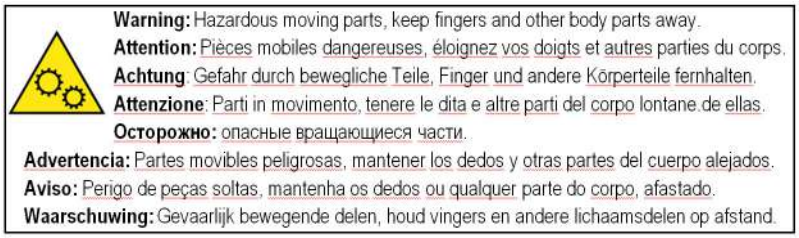
- Make sure that you operate the system within the recommended temperature and humidity conditions.
- Make use of antistatic mats where appropriate.
- If necessary, make use of an ionizer to reduce static charge build up in the room where the system is located.
- Make sure the envelope catch tray is grounded to system chassis (depending on the system).

Please contact your authorized distributor for further information.

Safety Precautions

This equipment is not suitable for use in locations where children are likely to be present.

In the event of an emergency, open any cover.



- To avoid damage, only use approved supplies.
- Only competent, trained personnel should operate this system. If non-trained personnel do operate this system, the manufacturer will not accept responsibility for any resulting accidents or injuries.
- Only skilled persons, who are aware of the risks involved, may open the protective covers. For safety reasons, the system will not function when the protective covers are open.
- Do not use this product on a wet floor or near water.

The covers and microswitches are fitted for your protection. Do not operate the machine if any fixed cover is damaged, removed and with a microswitch cheated, or a hazard to health will exist.

Risk of explosion if battery is replaced by an incorrect type.
Dispose of used batteries according to the instructions.

Power Connections

- Before connecting the system to the electrical supply, ensure that the system is suitable for the local mains voltage. Refer to the serial plate on your system for voltage requirements.
- To reduce the risk of fire, use only the power cord supplied with the System.
- Do not use ground adaptors.
- In case of liquid spillage, disconnect the power cord from the outlet and proceed with cleaning.
- Avoid using outlets controlled by wall switches or shared by other equipment.
- Make sure there is no strain on the power supply cord.
- Ensure safe storage/positioning of electrical cabling when not in use. Should the electrical cable become damaged do not operate the machine.
- The power connection must be easily accessible, preferably close to the system.
  For safety reasons, it is essential that the system is connected to a socket outlet that has a protective earth (ground) connection.
- Overcurrent protection in the equipment also relies on the branch circuit protection (max. 20 A).
- The following part(s) is (are) considered the equipment disconnect device(s):
  - Power supply cord plug or appliance coupler.
  - 12-pole connector, located on the right-hand side (depending on the system).

Should a fault occur with the system immediately isolate and disconnect the incoming power.

CAUTION: DOUBLE POLE / NEUTRAL FUSING
(this means that after operating of the fuse, parts of the equipment that remain energized, might represent a hazard during servicing.)

Symbols on the system

Warning

This symbol identifies situations where improper use of the machine can result in personal injury or permanent/catastrophic damage to the machine.

This symbol also indicates to consult the User Guide in relation to this action.

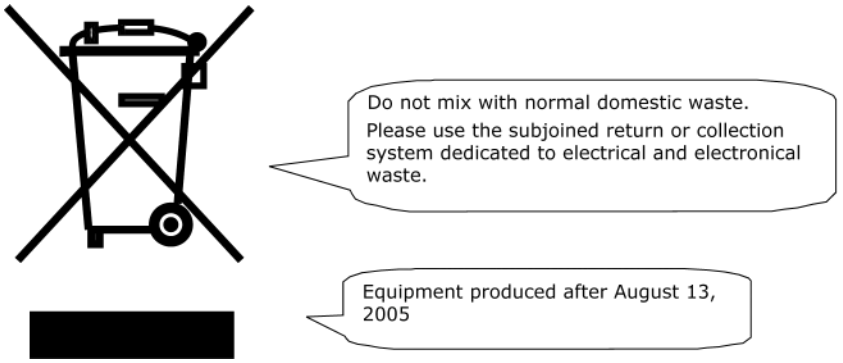
End of Life

The objectives of the European Community's environment policy are, in particular, to preserve, protect and improve the quality of the environment, protect human health and utilize natural resources prudently and rationally. That policy is based on the precautionary principle and principles that preventive action should be taken, that environmental damage should as a priority be rectified at source.

Separating waste during collection is the precondition to ensure reuse and recycling of waste. The proper disposal of electrical or electronic equipment is necessary to achieve the chosen level of protection of human health and the environment in the European Community.

More particularly, certain materials and components of waste electrical and electronic equipment need special treatment as improper handling or disposal on or into land, water or air would represent a major threat to the environment and human health.

In order to facilitate collection and treatment separated from normal domestic waste, electrical and electronical equipment is marked with the following logo:



By law, not only are you not allowed to dispose of the waste equipment via other waste channels, but we encourage you to actively contribute to the success of such collection and to the common good and better quality of life of present and future generations. For more information on the correct disposal of this product, please contact your local service organization.

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The system

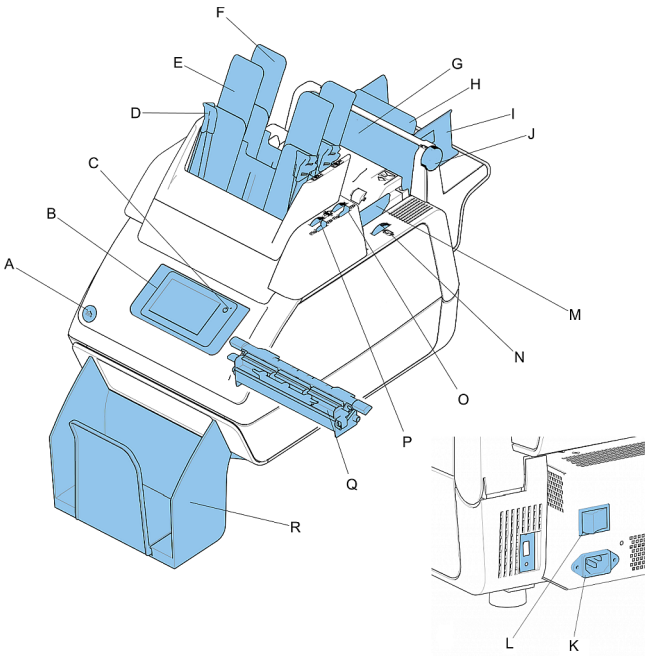
This compact folder-inserter system feeds, folds and inserts documents into envelopes and then seals and stacks the envelopes.

Serial number

The serial number of the system is printed on the type plate. To locate the type plate:

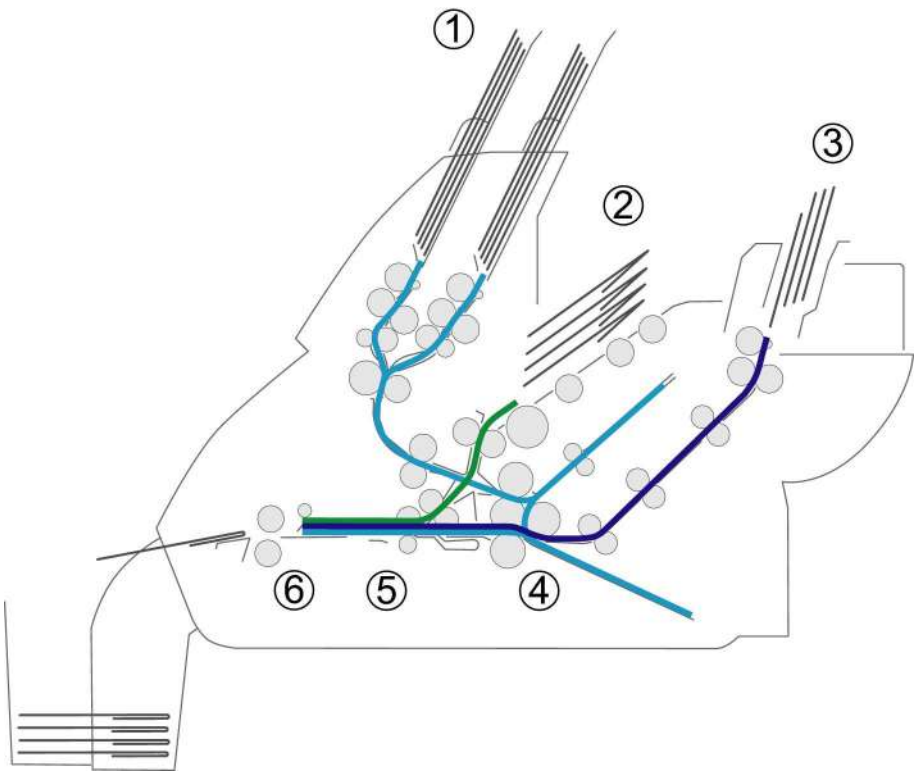
1. open the system (clamshell);
2. look underneath the upper unit;
3. you will easily locate the type plate with the serial number printed on it.

Operating Controls



A	button to open the system	J	thumb wheel to adjust side guides feeder 3
B	control panel with touch screen	K	power inlet
C	On/Off button	L	power switch
D	paper guides	M	side guides envelope hopper
E	document feeder 1	N	thumb wheel for adjusting side guides envelope hopper
F	document feeder 2	O	locking levers for side guides (document feeder trays)
G	flap, for access to document path of feeder 3	P	thumb wheels for adjusting side guides (document feeder trays)
H	support feeder 3	Q	sealing liquid reservoir
I	side guides feeder 3	R	catch tray

Paper flow



The documents are transported from the document feeders (1) into the folding area (4). The envelopes are transported from the envelope hopper (2). Optional enclosures are transported from feeder (3). The documents are folded and inserted into the envelope (5). The envelope is sealed and leaves the system (6).

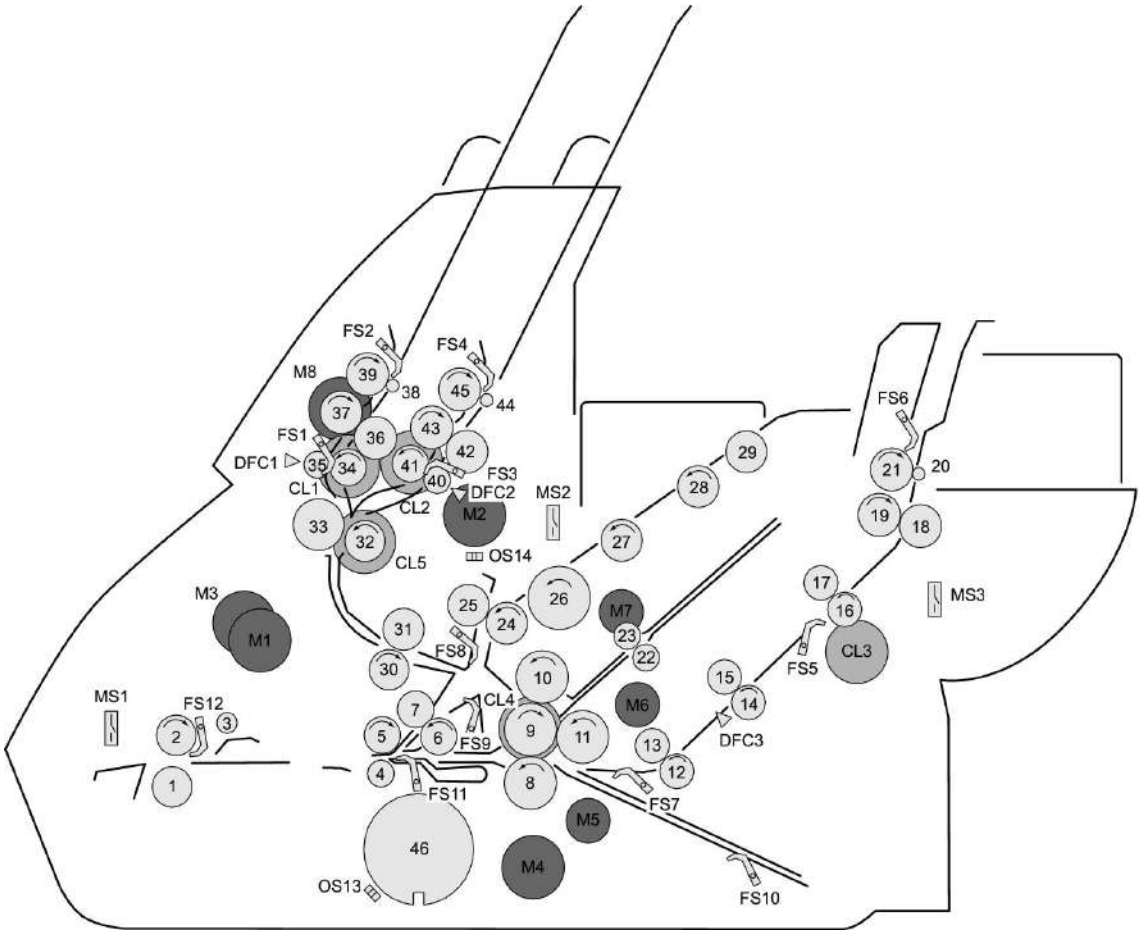
Rollers, clutches etc.

The processing of documents by the system can be divided into a number of separate processes:

1. Document feeding from feeder 1 and 2
2. Envelope feeding
3. Feeding at feeder 3
4. Document transport and folding
5. Insert into envelope, sealing and exit

The figure on the next page shows an overview of the system. All mechanical items that are strictly necessary to explain the process are projected on the left-hand side of the machine. Gears and belts are not shown.

See Mechanical description on page 41 and Section 9“Illustrated parts list” for more details on the mechanics.



Parts with an arrow are mechanically driven by a motor.

Rollers

No.	Description
1, 2	Exit rollers, driven by M3
3	Flap closing roller
4, 5	Insert rollers, driven by M1
6, 7	Envelope transport rollers, driven by M3; hold envelope flap during insert
8, 9, 10, 11	Folding rollers, driven by M1
12-17	Enclosure transport rollers, driven by CL4
18-21	Feeder 3 separation rollers, driven by CL3
22, 23	Top fold pocket support rollers
24, 25	Envelope transport rollers, driven by M3
26	Envelope separation roller, driven by M2
27-29	Envelope transport rollers, driven by M2
30, 31	Document transport rollers, driven by M1
32, 33	Document transport rollers, driven by CL5
34, 35	Transport rollers feeder 1, driven by M2 and CL1
36-39	Separation rollers feeder 1, driven by M2 and CL1
40, 41	Transport rollers feeder 2, driven by M2 and CL1
42-45	Separation rollers feeder 2, driven by M2 and CL2

Flag switches

No.	Description
FS1	Feeder 1 separation
FS2	Feeder 1 empty
FS3	Feeder 2 separation
FS4	Feeder 2 empty
FS5	Feeder 3 separation
FS6	Feeder 3 empty
FS7	Feeder 3 stop position
FS8	Envelope hopper separation
FS9	Envelope enters insert area
FS10	Document at fold stop bar of bottom fold pocket
FS11	Document is inserted
FS12	Exit
OS13	Cam disc 46 at original position
OS14	Feeder motor (M2) pulse disk

Motors

No.	Description
M1	Drives the folding area, document transport, feeder 3
M2	Drives feeder 1 and 2 when running in forward direction and the envelope hopper
M3	Drives the envelope transport and exit track
M4	CAM motor for insert process
M5	Moves the stop of the top fold pocket
M6	Moves the stop of the bottom fold pocket
M7	Locks the top fold pocket (in case of one fold)
M8	Removes the separation rollers of feeder 1 (in case of daily mail)

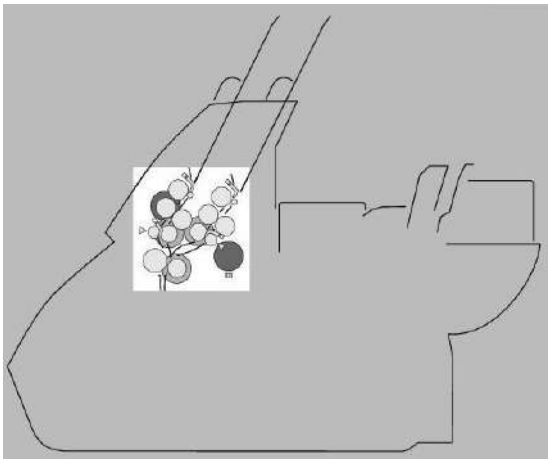
Clutches

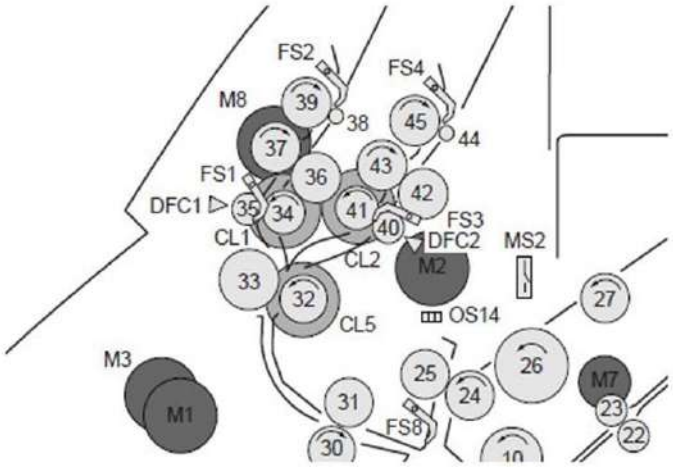
No.	Description
CL1	Feeder 1 clutch. Driven by M2. Drives rollers 34-39 (feeder 1 separation)
CL2	Feeder 2 clutch. Driven by M2. Drives rollers 40-45 (feeder 2 separation)
CL3	Feeder 3 clutch. Driven by M1. Drives rollers 19+21 (feeder 3 separation)
CL4	Transport from feeder 3. Driven by M1. Drives rollers 12-17
CL5	Document transport clutch. Driven by M1. Drives rollers 32 and 30

Solenoids

No.	Description
So1	Top fold pocket locking solenoid: locks the fold stop bar
So2	Bottom fold pocket locking solenoid: locks the fold stop bar

Document feeding





Feeder 1

- FS2 monitors if feeder 1 is empty.
- M2 (forward direction) drives rollers 34, 37 and 39 with CL1.
  These rollers separate the document for feeder 1.
- DFC1 measures the thickness of the document.

> The DFC determines the average thickness of the first 5 cm of the document. If accidentally the feeder feeds two documents with the upper document shifted more than 2.5 cm, the DFC does not see this double feed, because the average value is still within the acceptable range.

- FS1 sees the separated document. The motor continues running to transport the sheet between rollers 32 and 33.
- The document stops at the stop bar.

In case of daily mail, M8 retracts the pre-separation plate and detaches CL1 to open the separation gap. As soon as FS2 is triggered, M2 and CL1 drive the feeder rollers until the document stops at the stop bar.

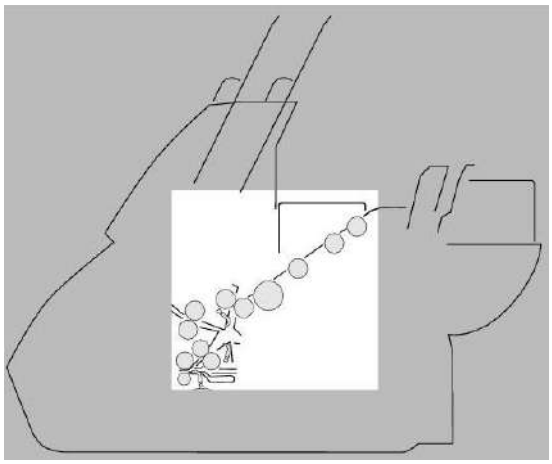
Feeder 2

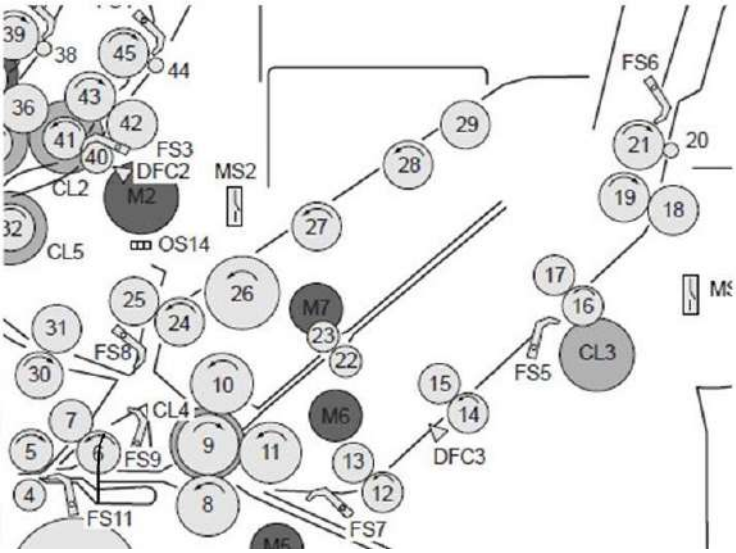
- FS4 monitors if feeder 2 is empty.
- M2 (forward direction) drives rollers 41, 43 and 45 with CL2.
  These rollers separate the document for feeder 2.
- DFC2 measures the thickness of the document.

> The DFC is only active during the first 5 cm of the document. If accidentally the feeder feeds two documents with the upper document shifted more than 2.5 cm, the DFC does not see this double feed, because the average value is still within the acceptable range.

- FS3 sees the separated document. The motor runs further for some pulses.
- The document stops at the stop bar.

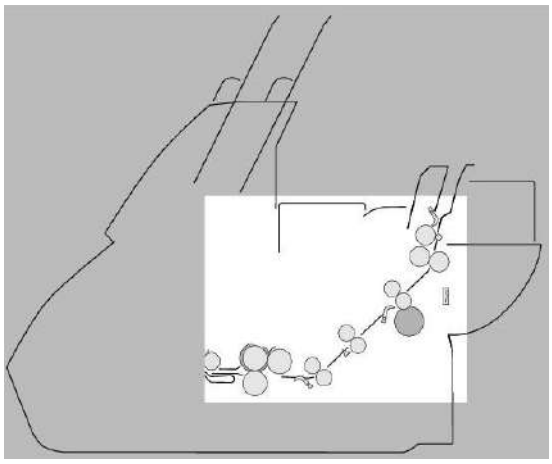
Envelope feeding

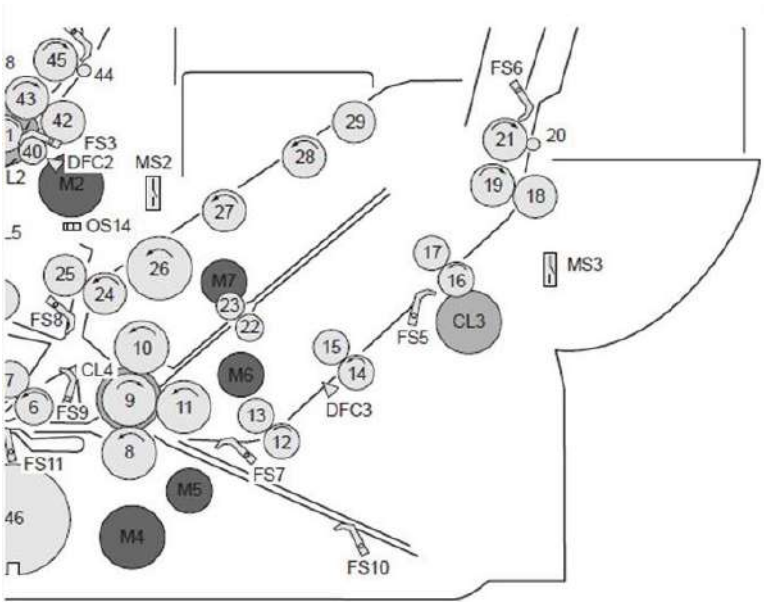




- M2 runs in reversed direction and drives rollers 26-29. Rollers 27-29 transport the envelope. Roller 26 and the rubber pads separate the envelope.
- FS8 sees the envelope and stops M2.
- M3 takes over the envelope transport. M3 drives rollers 24 and 6.
- The envelope passes the flap scraper that lifts the flap.
- The envelope stops some pulses after FS9 was triggered. The number of pulses depends on the envelope length. Rollers 6 and 7 hold the envelope flap.

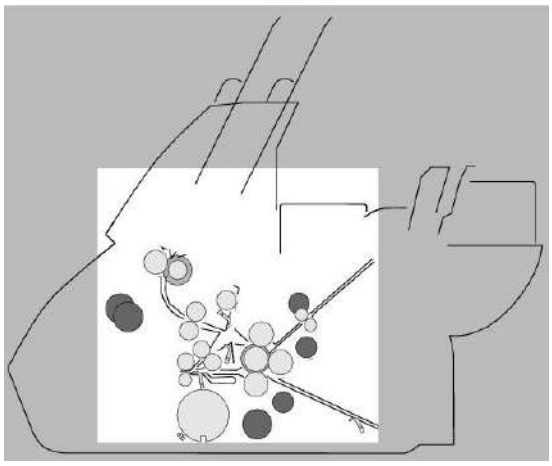
Enclosure feeding (feeder 3)

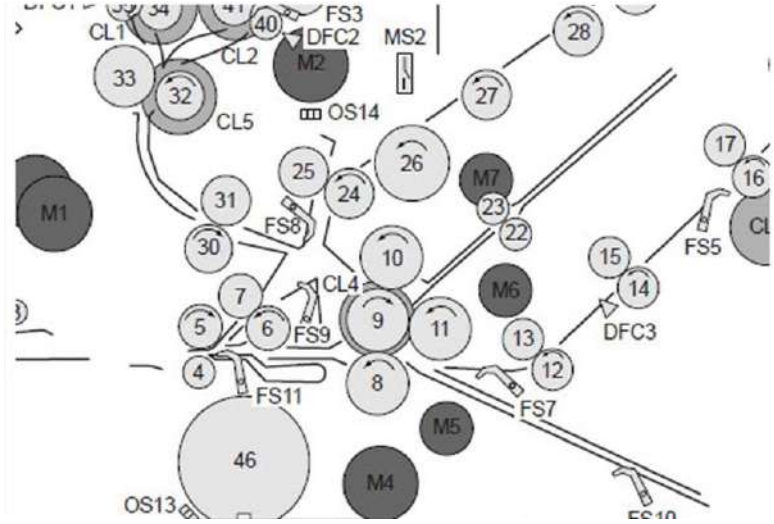




- FS6 monitors if feeder 3 is empty.
- M1 drives rollers 19 and 21 with CL3. These rollers separate the enclosures.
- FS5 monitors the separation.
- The enclosure passes DFC3 and stops at FS7.
- As soon as FS10 sees the document set, CL4 (driven by M1) transports the enclosure to the document set (with rollers 12, 14 and 16), before the set enters the last fold cycle.

Document transport and folding





- The stop bar is removed. This is triggered by M4 (see Insert into envelope, sealing and exit on page 19).
- The collator pinch (rollers 32 and 33) is closed and M1 with CL5 and rollers 32 and 30 transports the documents to the fold rollers.

No fold

- Feeder 3 feeds the document.
- The fold rollers 8 and 9 driven by M1 transport the document to the insert position.

V-fold (single fold)

- M7 closes the top fold pocket.
- The fold rollers 9 and 11 driven by M1 transport the document set into the bottom fold pocket.
- The fold stop bar (set with M6, locked by So2) blocks the documents from being transported further into the fold pocket. The fold rollers keep running and force the documents between the next fold rollers (8 and 9). This creates the V-fold (single fold).

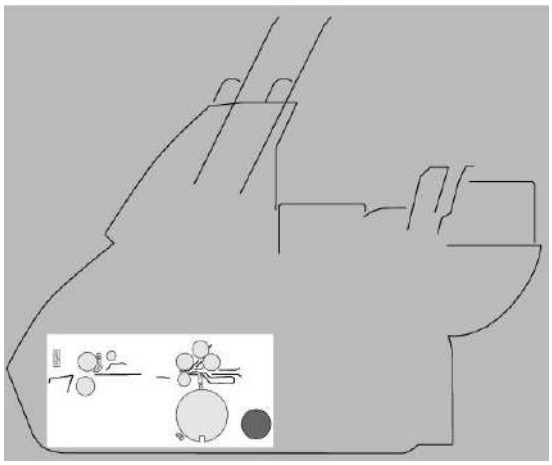
C-fold

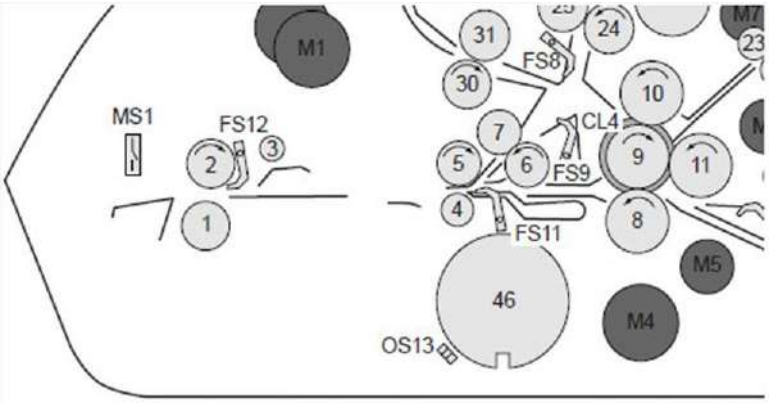
- Fold roller 9 and roller 10 driven by M1 transport the documents into the top fold pocket.
- The fold stop bar (set with M5, locked by So1) blocks the documents from being transported further into the fold pocket. The rollers keep running and force the documents between the fold rollers 9 and 11. This creates the first fold at about one third of the bottom of the documents.
- Fold rollers 9 and 11 transport the documents (with the fold leading) into to the bottom fold pocket.
- The fold stop bar (set with M6, locked by So2) blocks the documents from being transported further into the fold pocket. The fold rollers keep running and force the documents between the next fold rollers (8 and 9). This creates the second fold at about one third of the top of the documents.

Double V-fold (double parallel fold)

- Fold roller 9 and roller 10 driven by M1 transport the documents into the top fold pocket.
- The fold stop bar (set with M5, locked by So1) blocks the documents from being transported further into the fold pocket. The rollers keep running and force the documents between the fold rollers 9 and 11. This creates the first fold at the centre of the documents.
- Fold rollers 9 and 11 transport the documents (with the fold leading) into to the bottom fold pocket.
- The fold stop bar (set with M6, locked by So2) blocks the documents from being transported further into the fold pocket. The fold rollers keep running and force the documents between the next fold rollers (8 and 9). This creates the second fold.

Insert into envelope, sealing and exit



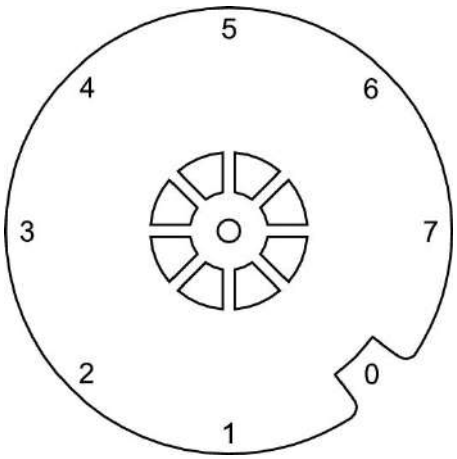


3

Cam motor M4 controls the following processes:

- Open and close the document feeder exit (collating pinch).
- Insert
- Seal
- Close
- Exit

The cam motor controls these processes in eight separated steps. The figure indicates which position corresponds to which step.



Step 0
- Envelope is fed to insert position.

Step 1
- Collating pinch is closed.
- Exit pinch is opened.
- Closing bar moves up.

Step 2
- Documents are fed from the document feeder into the folding area and folded.
- The fingers open the envelope.

Step 3
- Collating pinch is opened. Documents are blocked against the stop bar.
- The insert roller 4 is in upper position and transports the documents into the envelope. Roller 4 is driven by M1.

Step 4
- Fingers are retrieved.

Step 5
- Insert roller 4 moves down.
- Roller 1 moves up (exit pinch is closed). In case of no seal, roller 1 and 2 transport the envelope to the exit.

Step 6
- In case of sealing, rollers 1 and 2 move the envelope in exit direction.
- The moistening press bar moves down: the envelope flap is moistened.

Step 7
- The moistening press bar moves up.
- The closing bar moves down and pushes the envelope flap down.
- Envelope transport direction is changed (M3 runs in reverse direction).
- The envelope is transported to closing roller 3.
- The envelope transport direction changes and the envelope leaves the system.

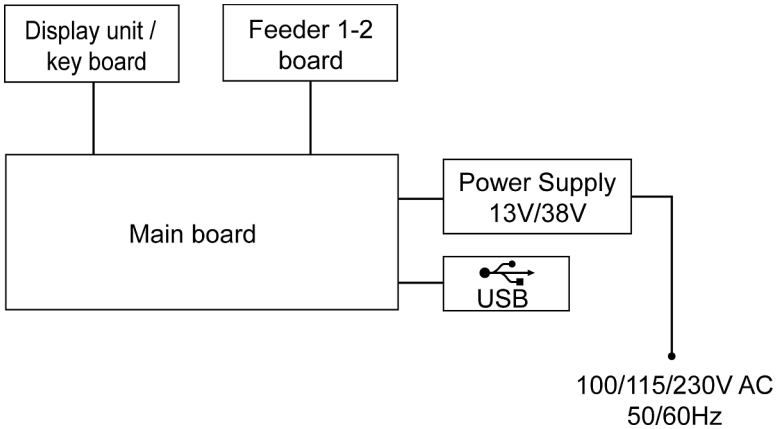
Electronics

PCB functions

The functions of the PCBs from the schematic overview can be described as follows:

Board name	Function
Display unit / keyboard	Converts received data into understandable data for the display. Contains the on/off button.
Feeder 1-2 board	Controls feeder 1 and 2.
Main board	Operates the device and controls the user interface.

See section “Electrical description on page 125” for the location of the PCBs in the system.



Tri-Fold option

Some applications require a fold setting where all three “panels” have the same dimensions, the so called “Perfect Fold”. In order to have those documents correctly transported to the exit an extra pair of transportation rollers have to be fitted in the system. By replacing the sealing liquid reservoir with the “Tri-Fold" transportation unit correct transportation to the exit is ensured.

Using the Tri-Fold option is only possible if this option has been set by the Service organization.

4 Service Interface

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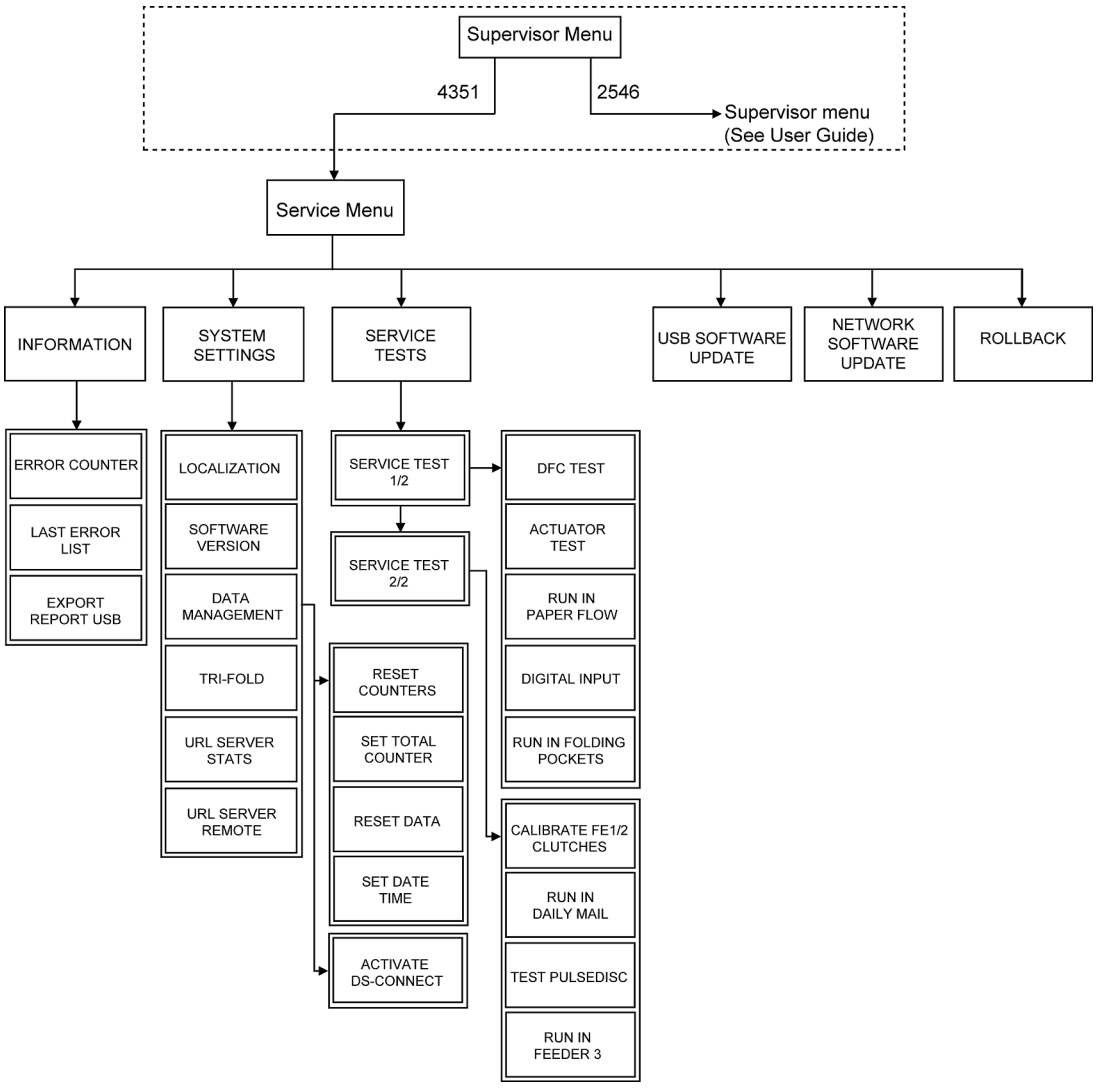
User and supervisor menus

Refer to the User Guide for an explanation of the User and Supervisor menus.

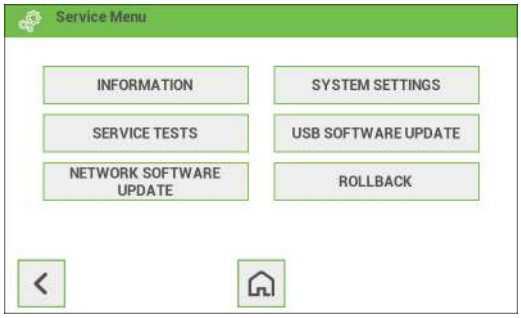
Service Menu

Service menu

See the following flowchart for an overview of the service menu:

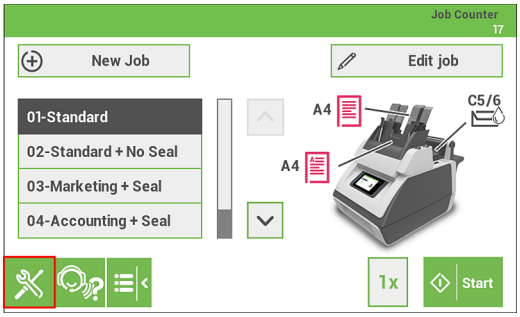


To access the Service menu, login as service. When logged in the Service menu is available and contains additional functions and menus.

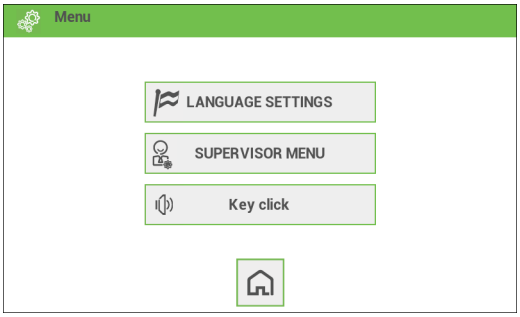


Login Service menu

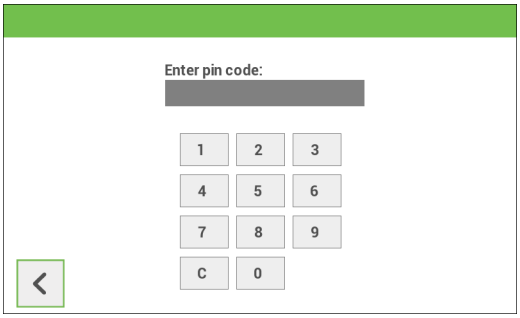
1. From the home menu fold out the side bar and tap the tools icon.



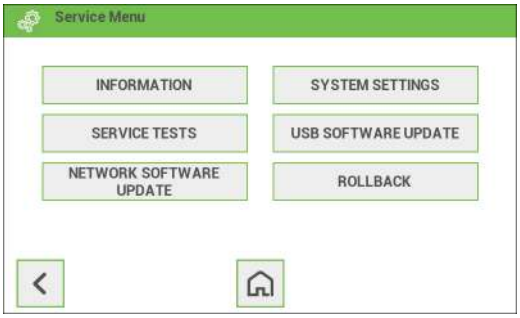
2. In this Operator Settings menu tap the Supervisor menu button.



3. Enter the Service pin code (4351).



4. When logged in the Service Menu is available and contains additional functions and menus.



Information

Information

The Information menu consists of three submenus. These submenus are:

- Error counters
- Last error list
- Export report USB

Error counters

The Error Counters screen gives a list of the top 40 occurred errors. The errors are sorted based on quantity. That means that the errors occurring most frequent are at the top of the list.

Refer to the "Event messages" list (online) or the chapter "Fault Finding" in this Service Guide for more information on the selected error.

Tap the dustbin icon to set all error counters to 0.

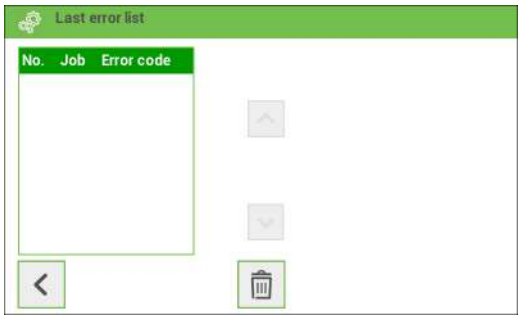
Last error list

This menu displays the last 50 errors that occurred. The list shows:

- The job number
- The error code

Refer to the "Event messages" list (online) or the chapter "Fault Finding" in this Service Guide for more information on the selected error.

Tap the dustbin icon to clear all error messages.



Export report USB

If you tap the [**Export report USB**] button information will be saved from the system to a USB flash drive (provided that a flash drive is connected).

System Settings

System settings menu

The System Settings menu consists of six items:

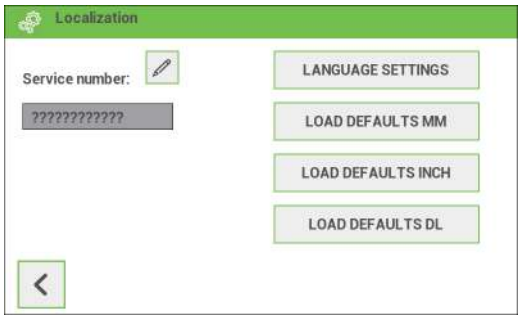
- Localization
- Software version
- Data management
- Tri-Fold
- URL server Stats
- URL server Remote

For more information refer to the relevant paragraph of the subject.

Localization menu

Use this menu if you want to:

- Set the Service telephone number.
- Change the language of the User Interface.
- Restore the default data in mm and ISO values; tap Load defaults mm.
- Restore the default data in inches; tap Load defaults inch.
- Restore the default data in DL; tap Load defaults DL.



After changing the Service telephone number or the language setting you have to tap the button with the disk symbol to save the setting.

The changes made by loading defaults are irreversible! All changes made on the previous factory settings will be lost.

Software version

The "Software version" screen shows the serial number of the system and information about the installed software.

Data management menu

The Data management menu consists of two screens. In the first screen you can:

- Reset counters; tap [Reset Counters] to reset the job counters.
- Set total counter; this allows you to set a new total counter value in case you replaced the main board.
- Reset data; There may be situations in which it is necessary to restore the system settings to their states at the beginning of the system's operational life. To this purpose the menu item Reset Data is present. Tap [Reset Data] to start the reset process. This results in clearing all the data in the FRAM memory of the system. The settings return to factory settings.
- Set date time; this allows you to change the date, time and timezone.

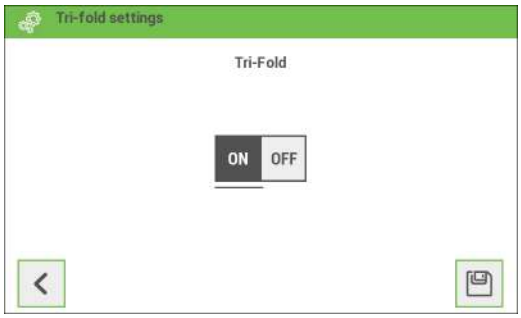
If you tap the arrow in the RH lower corner the second screen of the Data management menu appears. This screen allows you to activate the so-called DS-Connect feature. Refer to DS-Connect for more information about this subject.

The changes made by Reset Data operation are irreversible! All changes made on the previous factory settings will be lost.

All counter values are lost when you replace the main board.

Tri-Fold setting

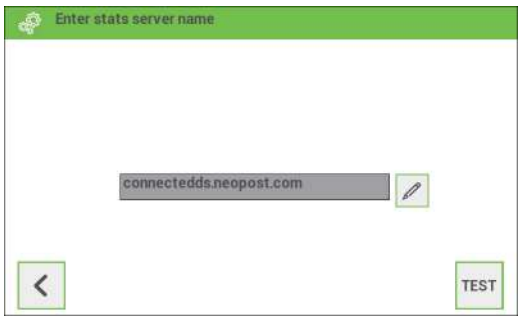
In this Tri-Fold setting screen you can activate the Tri-Fold option when it is mechanically installed. Save the setting by tapping the button with the disk symbol.



The [**ON**] or [**OFF**] button is selected when the button becomes black and underlined.

URL server Stats

The URL server Stats screens allows you to enter the web address of the Stats server. If you tap on the [**Test**] button the system checks whether there is a correct connection with the server.



URL server Remote

The URL server Remote screens allows you to enter the web address of the Remote server. If you tap on the [**Test**] button the system checks whether there is a correct connection with the server.

Service Tests

Service tests menu

The Service Tests menu is devided over two screens. The Service Tests 1/2 screen consists of the following items:

- DFC Test
- Actuator Test
- Run in Paper flow
- Digital Input
- Run in Folding pockets

The Service Tests 2/2 screen consists of:

- Calibrate FE1/2 clutches
- Run in Daily mail
- Test Pulsedisc
- Run in Feeder 3

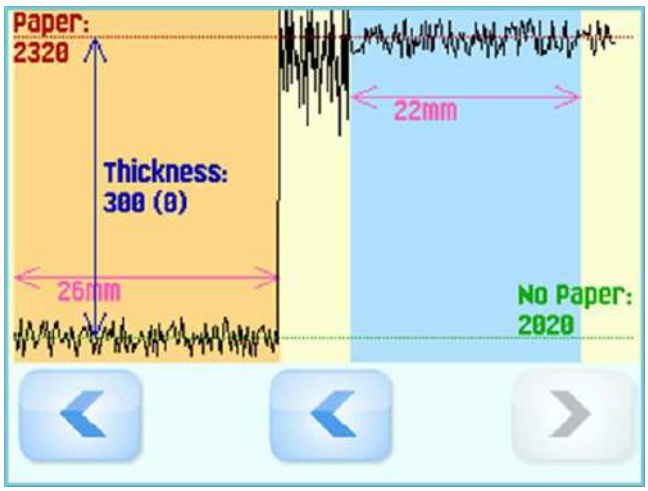
Service tests 1/2

DFC test

The DFC screen shows the real-time DFC output voltage, expressed in millivolt.

During normal operation the system automatically recalibrates. The DFC calibrates itself based on the first sheet. In the service menu DFC test menu, the voltage can be verified.

When you press the DFC data FE-x buttons, you get an overview of the DFC data when a sheet passes the DFC of that feeder.



The three areas indicate the following:

- Orange: no sheet
- Yellow: the sheet touches the DFC, which causes vibrations
- Blue: one sheet below the sensor

The screen also shows the length of the paper and an indication of the thickness (in millivolt).

It is recommended to clean the moving parts of the DFC to make sure that dust or paper particles are not affecting the DFC functioning.

Actuator tests

From this menu you can select an actuator and activate it.

The following tests are possible:

- Feeder 1 separation (clutch 1): Motor M2 runs and clutch CL1 is activated
- Feeder 2 separation (clutch 2): Motor M2 runs and clutch CL2 is activated
- Feeder 3 separation (clutch 3): Motor M1 runs and clutch CL3 is activated
- Feeder 3 transport (clutch 4): Motor M1 runs and clutch CL4 is activated
- Folder transport (clutch 5): Motor M1 runs and clutch CL5 is activated
- Top fold pocket lock solenoid: So1 locks the top fold pocket
- Bottom fold pocket lock solenoid: So2 locks the bottom fold pocket
- Folder motor M1: M1 runs as long as the Test button is pressed, fold rollers rotate
- Feeder motor M2 forward: M2 runs and feeder 1 and 2 are activated
- Feeder motor M2 reverse: M2 runs and the envelope hopper is activated
- Envelope transport motor M3: M3 runs
- Inserter motor M4: every time you press the Test button, the motor runs for one step (see Insert into envelope sealing and exit on page 19)
- Top fold pocket motor M5: top fold pocket moves up and down
- Bottom fold pocket motor M6: bottom fold pocket moves up and down
- Close fold pocket top: M7 moves the fold deflector
- Feeder 1 to daily mail: M8 moves feeder 1 in daily mail mode
- Feeder 1 to standard: M8 moves feeder 1 in standard mode

Run in paper flow

This screen has a counter (with default value of 0) that shows the number of process cycles that will be executed, without paper or envelopes present in the machine.

After pressing the Start/Stop key, the run in test will start/stop. The machine stops automatically if the counter value is zero.

If some covers are removed (but not the safety covers!), you can watch the sequence of the various mechanical actions, which reflect the sequence of events during normal operation.

Never execute the run in test with any documents present in the machine.

Digital inputs

The digital input screens show:

- The status of all 12 flag switches.
- If the cam disc is at the start position (step 0 in Insert into envelope, sealing and exit on page 19)
- Status of the main pulse disc (M1)
- The status of the three safety switches: MS1 (main cover switch), MS2 (switch at the feeder block) and MS3 (switch at feeder 3).

  The status is real time: a change is reflected in the displayed status. This allows you to easily check the correct operation of the three microswitches.
- Status of the three buttons at the display. If you press a button, the status should change.

Run in folding pockets

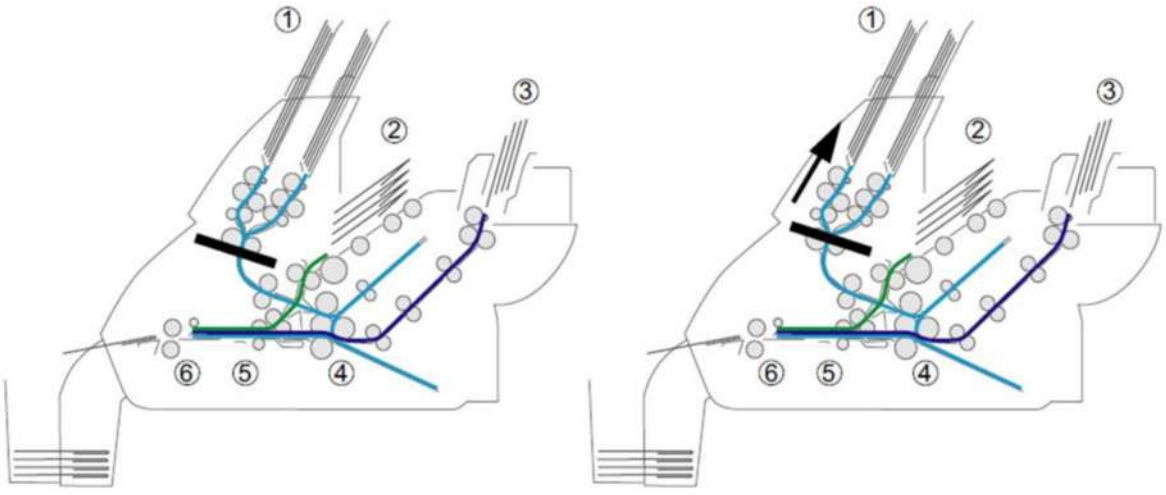
All mechanical parts in the fold pockets move up and down.

Service tests 2/2

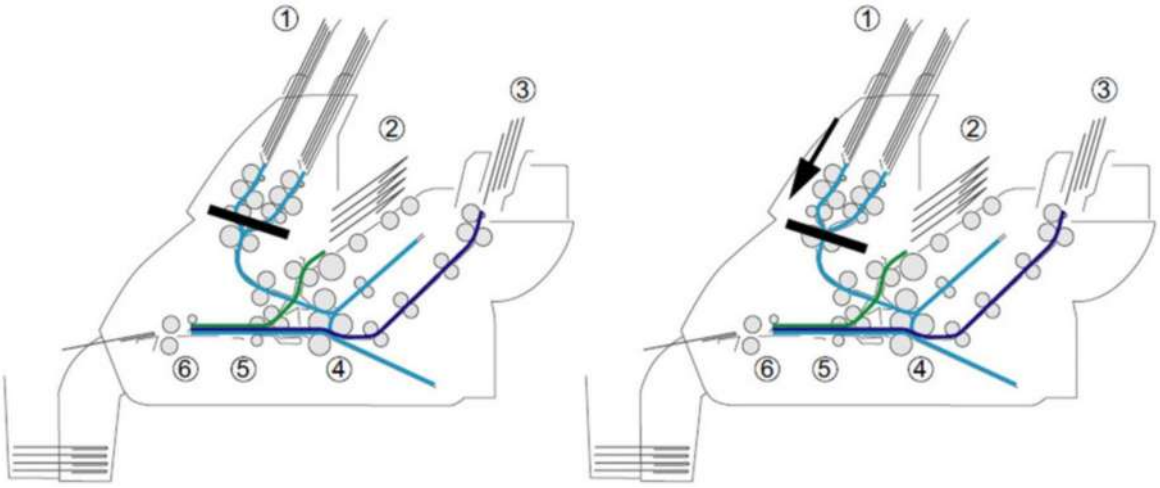
Calibrate FE1/2 clutches

The clutch timing is critical for the alignment of sheets from feeder 1 and 2. You can adjust the clutch timing in this menu.

When a document is fed from feeder one, clutch CL1 stops after some time (ms). The paper is then in the between rollers 32/33 of the collator pinch (see the solid black line in the figure).



The calibration procedure feeds new sheets and decreases the clutch timing in small steps. The paper stops a higher position.



After some steps the paper does not reach rollers 32/33. It is not transported into the system anymore. The clutch timing is set to the previous successful value. This the optimum value for paper feeding.

Next, the same procedure is repeated for feeder 2.

Run in daily mail

All mechanical parts used for daily mail move up and down.

Test pulse disc

Test of the pulse disc at the document feeder.

Run in Feeder 3

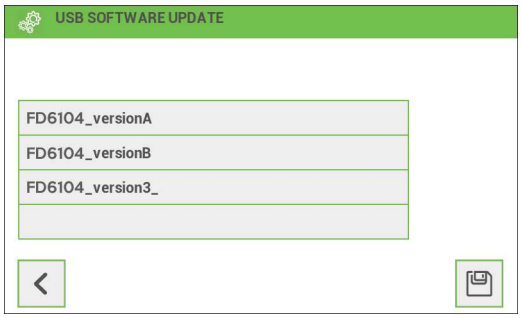
All mechanical parts used for Feeder 3 will move.

USB Software Update

USB Software Update

The system software can be updated using a USB flash drive. On the USB flash drive create in the root a folder with a name that begins with: FD6104i_ (FD6104+ underscore) and preferably followed by the software package number (but in fact it can be any kind of name). Copy the software package file (this is a .bin file) into that folder.

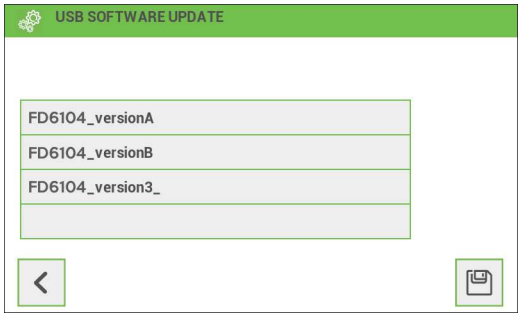
If you want to copy more software packages (.bin files) onto the flash drive you have to create for each package a different folder. They all have to start with FD6104_ but in that case followed by different names.



4

Updating

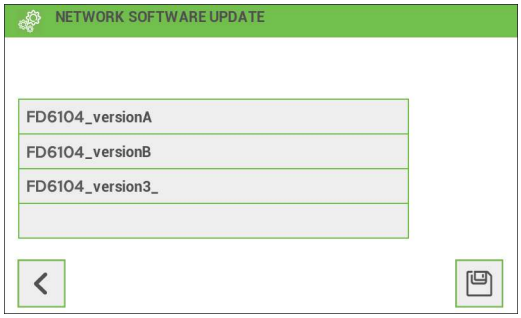
If a USB flash drive has been inserted the "USB Software Update" screen shows the software packages that are available on the flash drive. Select the required package and tap the [**disk**] button.



Network Software Update

Network Software Update

Software can be updated when the system is connected to the internet. If you open "Network Software Update" the screen shows the software packages that are available on the server. Select the required package and tap the [**disk**] button.

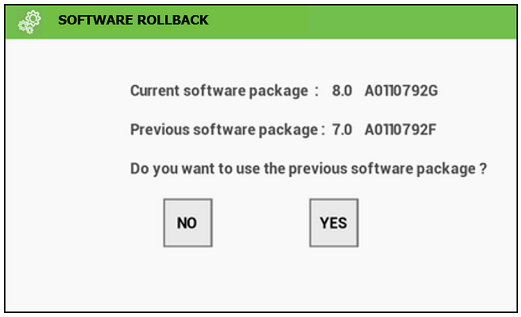


Rollback

Rollback

Via the [**Rollback**] button it is possible to revert to a previous software version. If you tap the [**Rollback**] button information about the current installed software package will be shown as well as information about the previous software package.

If you tap [**Yes**] the previous package will be installed and the current software package will be removed.



5 Transport, Storage and Installation

5 Transport, Storage and Installation 38

Transport 39

Storage 39

Unpacking and Installation instruction 39

Transport

The system, including all accessories, is transported in one box. The box is attached onto a pallet. Handle the package with care.

- Do not turn the box on its side.
- Prevent the box from falling over.
- Prevent the box from shaking.

Storage

The system needs to be stored under the following conditions:

• Storage temperature:	10 to 40 °C (50 to 104 °F)
• Humidity:	30 to 80%

Unpacking and Installation instruction

See the online video how to unpack and to install the system.

To download the video click your right mouse button here and select "save (link) as ..".

6 Mechanical Description

6 Mechanical Description 40

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Sensors 107
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Mechanical description

General

Disconnect the mains supply before performing any maintenance.

The covers and microswitches are fitted for your protection. Do not operate the system with any cover removed and with a microswitch cheated, or a hazard to health will exist.

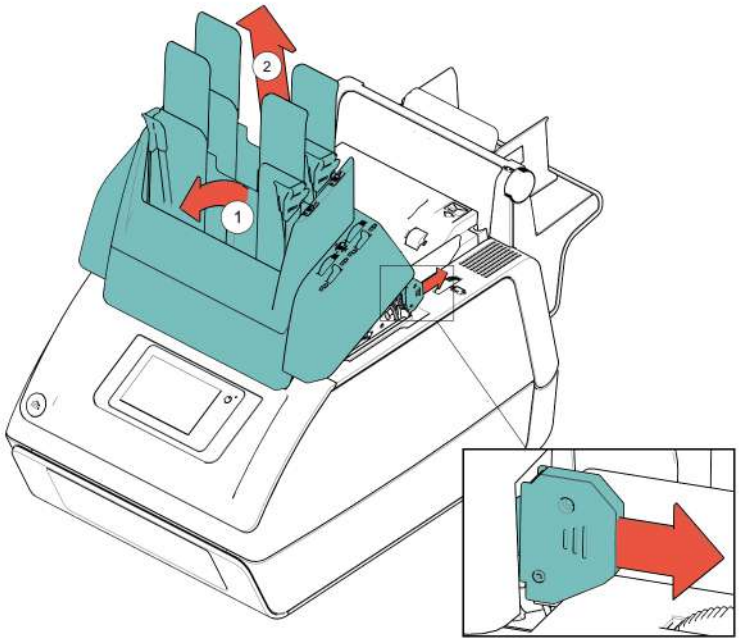
Throughout this manual the terms left and right-hand side and front and rear side of the system are used. The front side is the side with the control panel and exit. Left and right is defined when standing in front of the system.

Covers operating levers and dampers

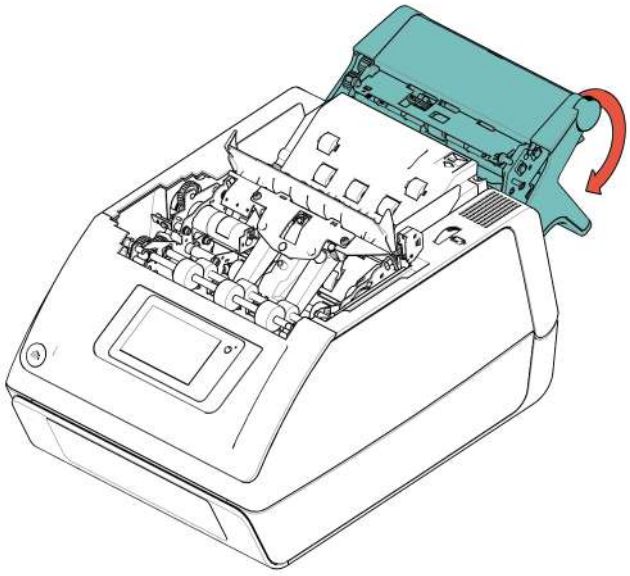
Top cover

To remove the top cover:

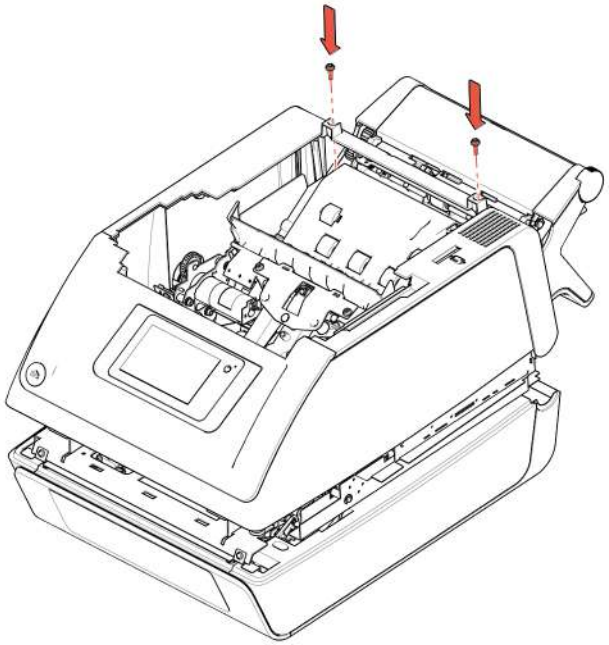
1. Tilt the feeder 1/2 block in the direction of (1), disconnect the connector. Lift (2) and remove the feeder 1/2 block.



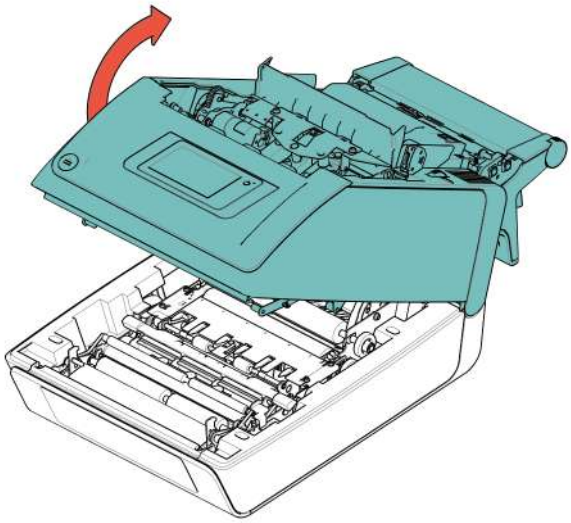
2. In case of a 2,5 station system open feeder 3.



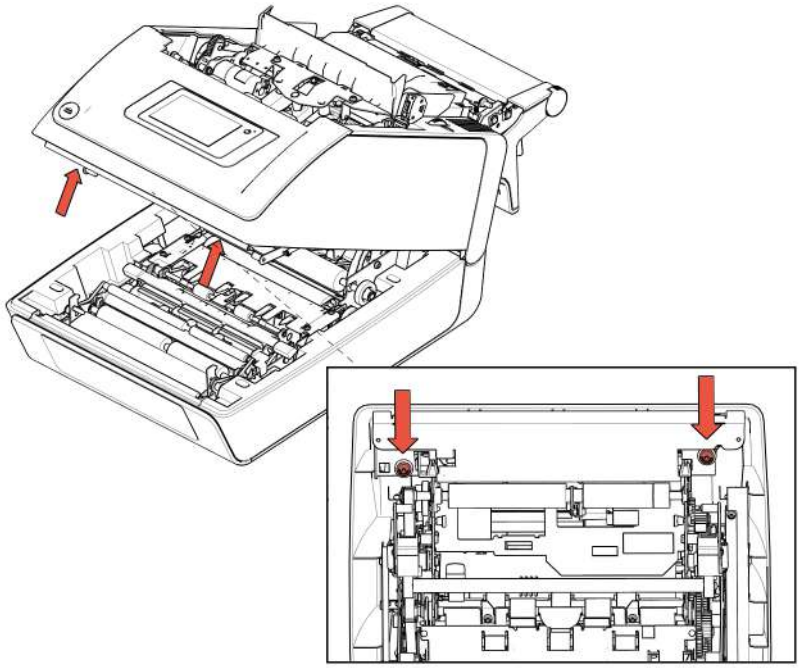
3. Remove two screws as indicated.



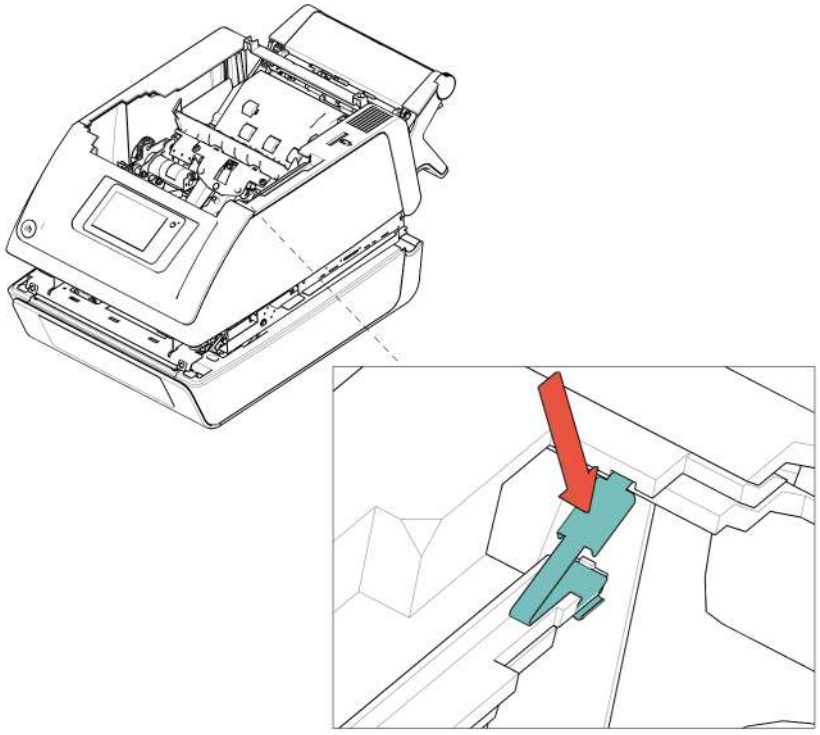
4. Open the system.



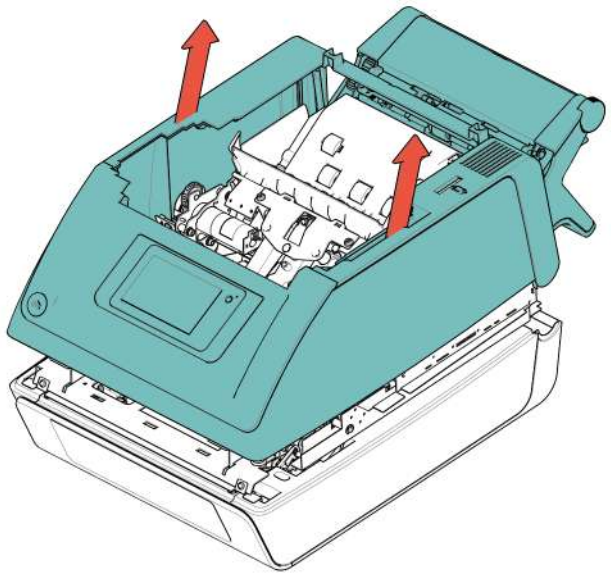
5. Remove two screws as indicated securing the top cover.



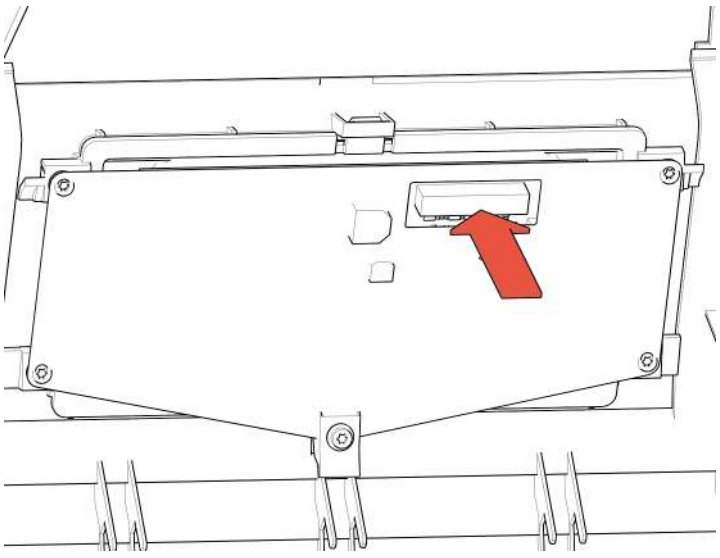
6. Carefully guide the feeder 1/2 block wiring over the cable bracket.



7. Carefully remove the top cover in the direction as displayed.



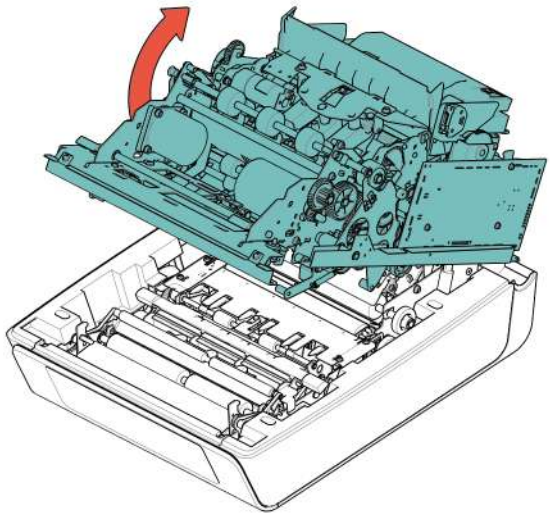
8. Disconnect the wiring from the display.



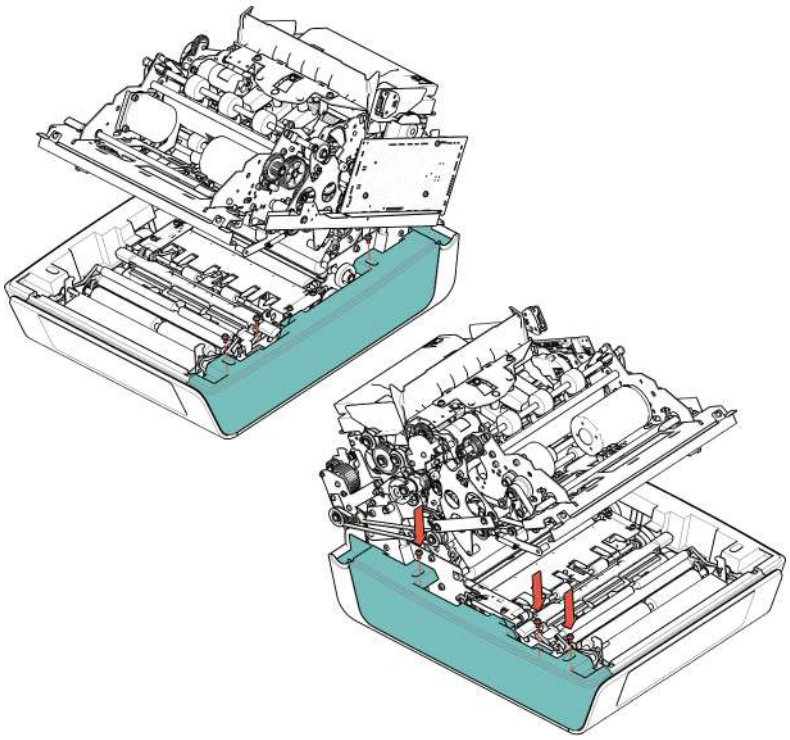
Side covers

To remove the side covers:

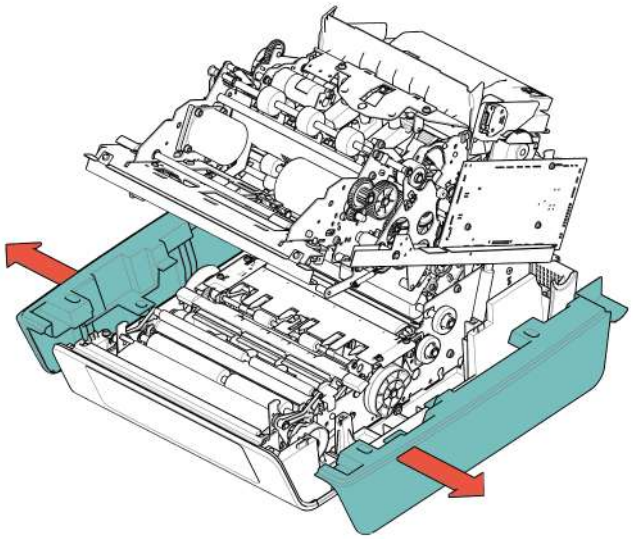
1. Open the system.



2. Remove the screws (three on each side) from the side cover. The screws are fitted at the same location for either the LH or the RH side cover.



3. Carefully withdraw (pull) the side covers from the system.



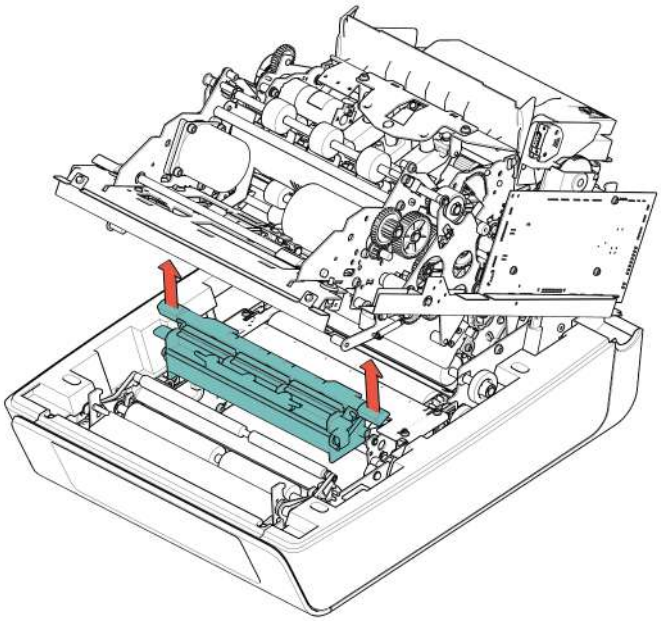
Bottom cover

Disassembling and re-assembling can be a bit rough, make sure the snap connections at side (a) are loosened and fastened correctly.

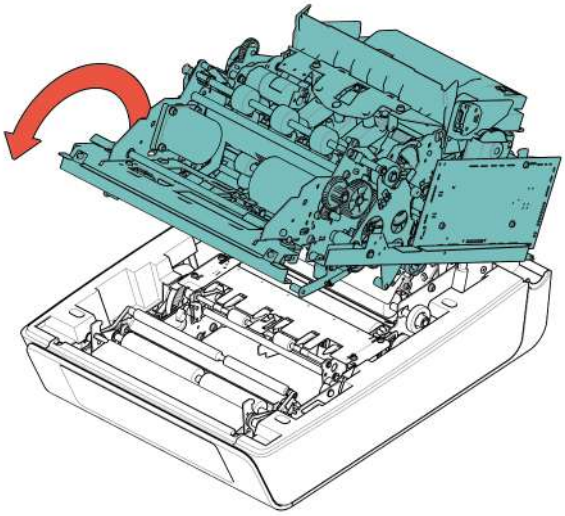
On replacement of the bottom cover make sure the USB cable does not get stuck between other parts.

To remove the bottom cover:

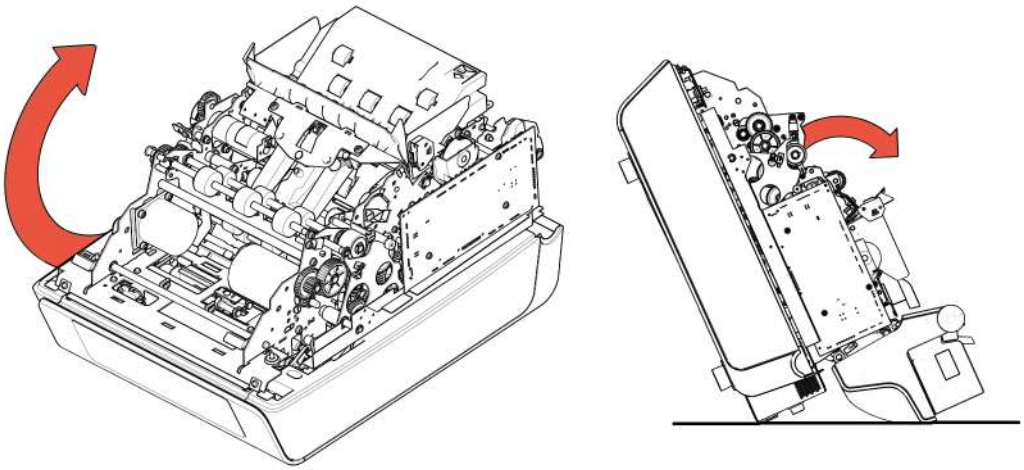
1. Open the system and remove the sealing liquid tray.



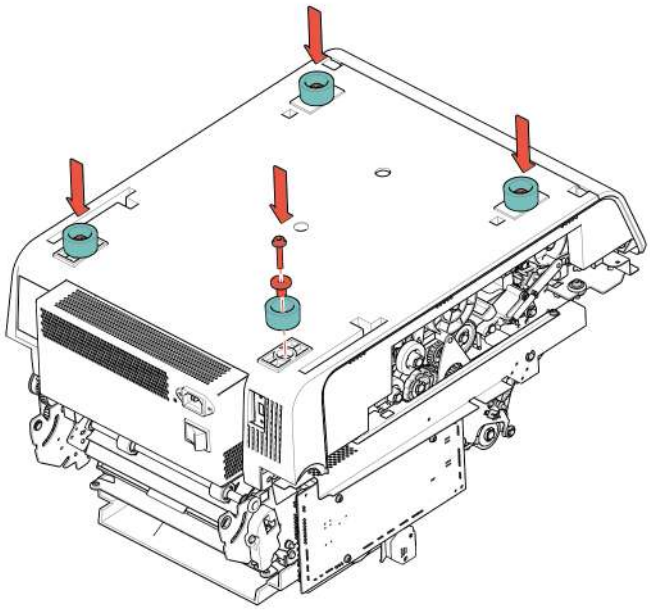
2. Close the system (and feeder 3 in case of a 2,5 station).



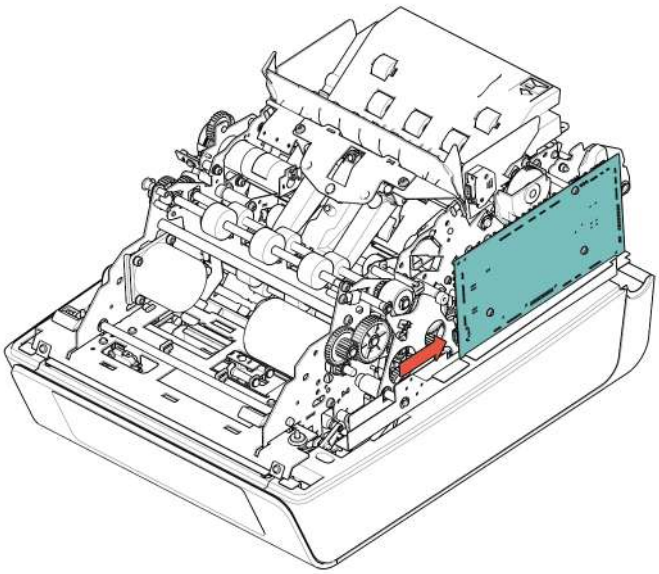
3. Carefully turn the system backwards until it rests on the envelope feeder (or feeder 3).



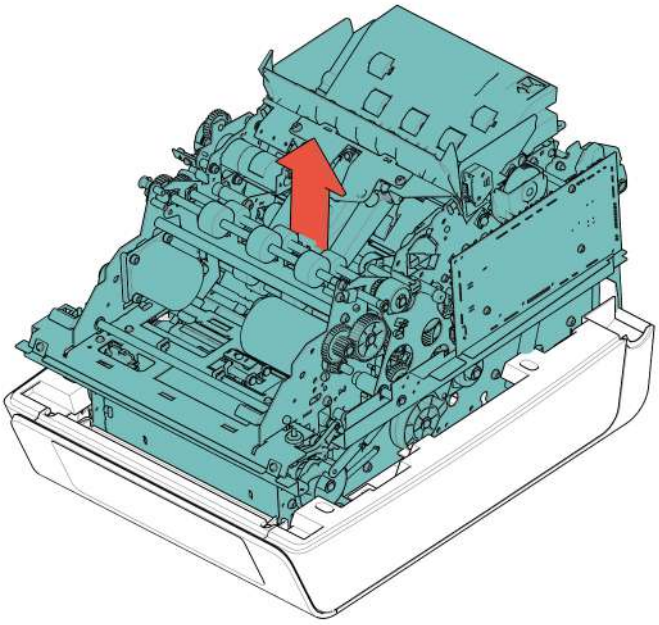
4. Remove the screws with spacers in order to remove the four feet. **Note**: do not turn the system upside down as shown in the picture. This is only for better visualization.



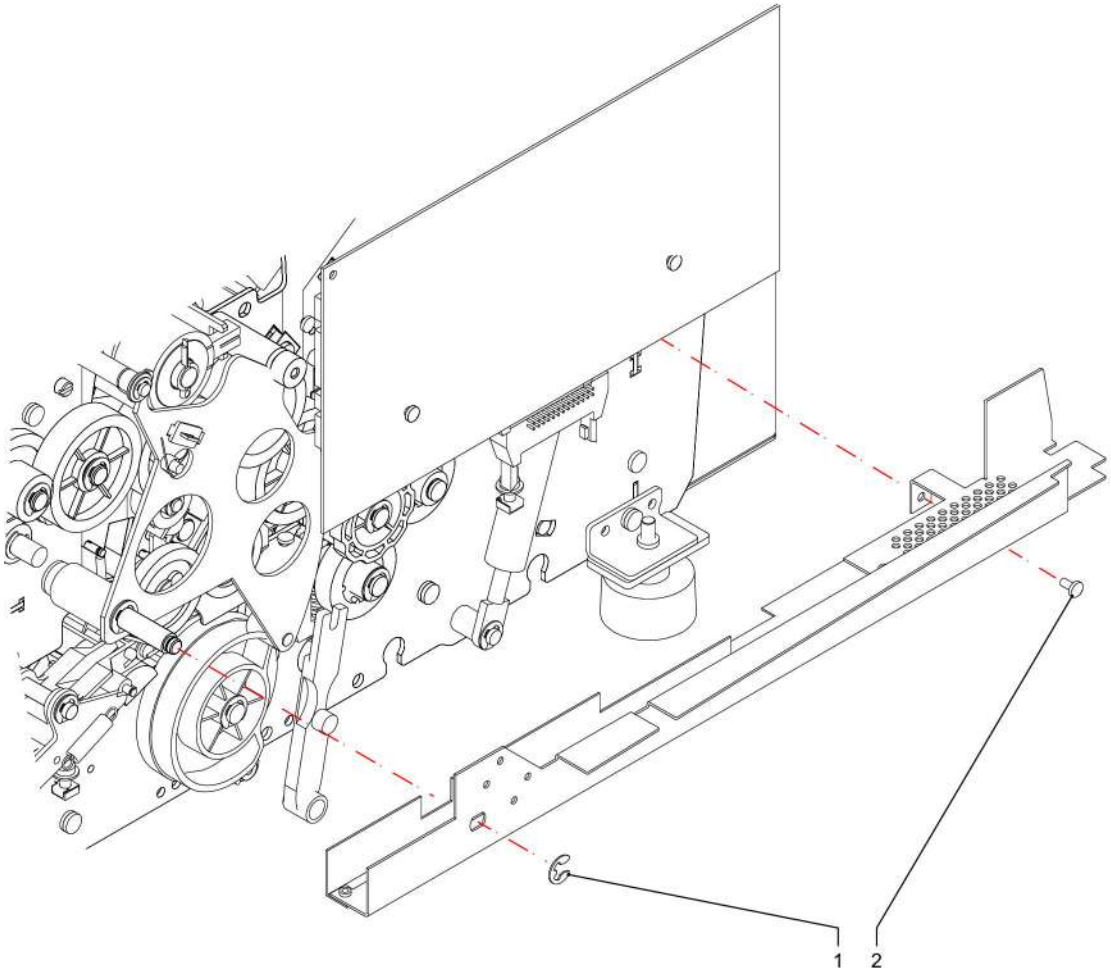
5. Rotate the system back onto its bottom and disconnect the USB cable (J40) from the main board.



6. Lift the system out of the bottom cover. Carefully guide the USB cable through when doing this because the cable will remain mounted in the system.



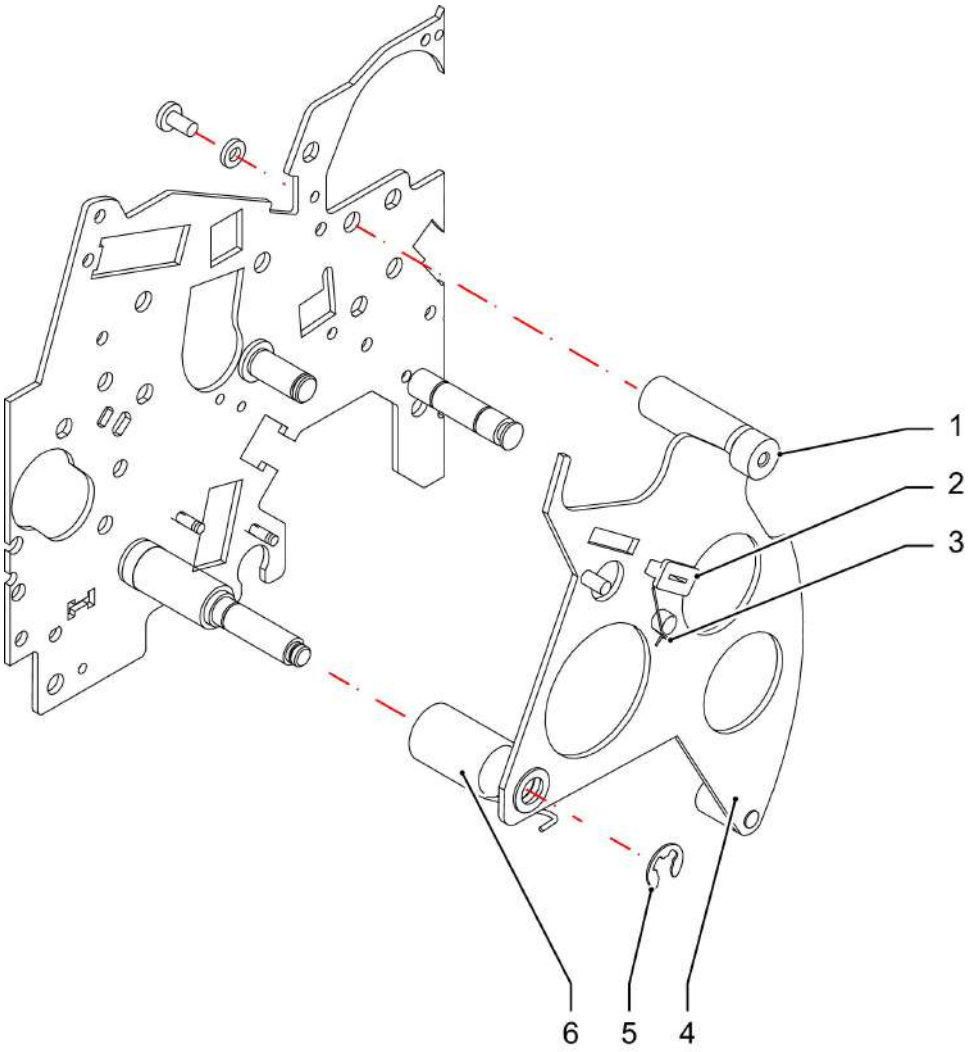
Ribbon cable holder



To remove the ribbon cable holder:

1. Remove spring clip 1.
2. Remove screw 2.
3. Disconnect the connectors of the cables (in the cable holder) from the main board.
4. Remove the ribbon cable holder.

Right hand operating lever



To remove the right hand operating lever (4):

1. Remove spring clip 5.
2. Detach spring 6.
3. Detach and remove spring 3.
4. Remove small guide block 2.
5. Remove the screw that holds bush 1.
6. Rotate the plate until you can remove it from the system.

Left hand operating lever

To remove the left hand operating lever:

1. Loosen the bar that is in front of the operating lever: remove the right spring clip.

See the description of Right hand operating lever on page 53 for the next steps.

Dampers (gas springs)

1. Remove the top cover, bottom cover, side covers and main board.
2. Open the system.
3. Remove the spring clips that hold the dampers.
4. Remove the dampers.

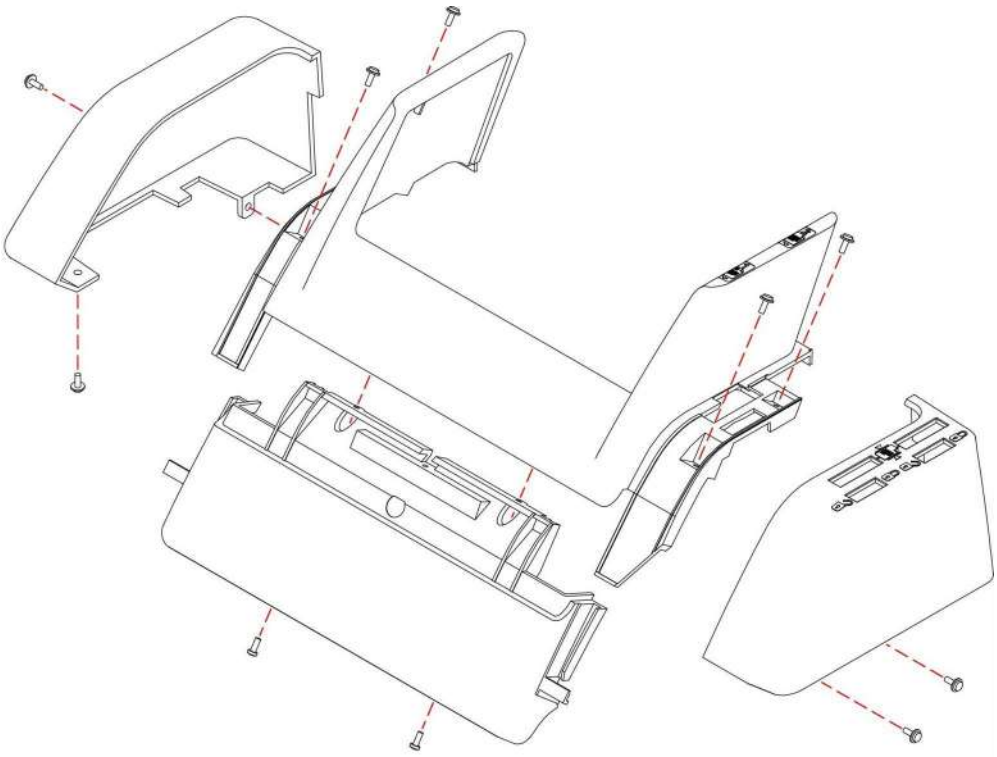
Document feeders 1 and 2

Document feeders 1 and 2

1. Remove the feeder 1/2 block from the system.

Covers

LH side cover



1. Remove both screws that hold the side cover.
2. Remove the side cover.

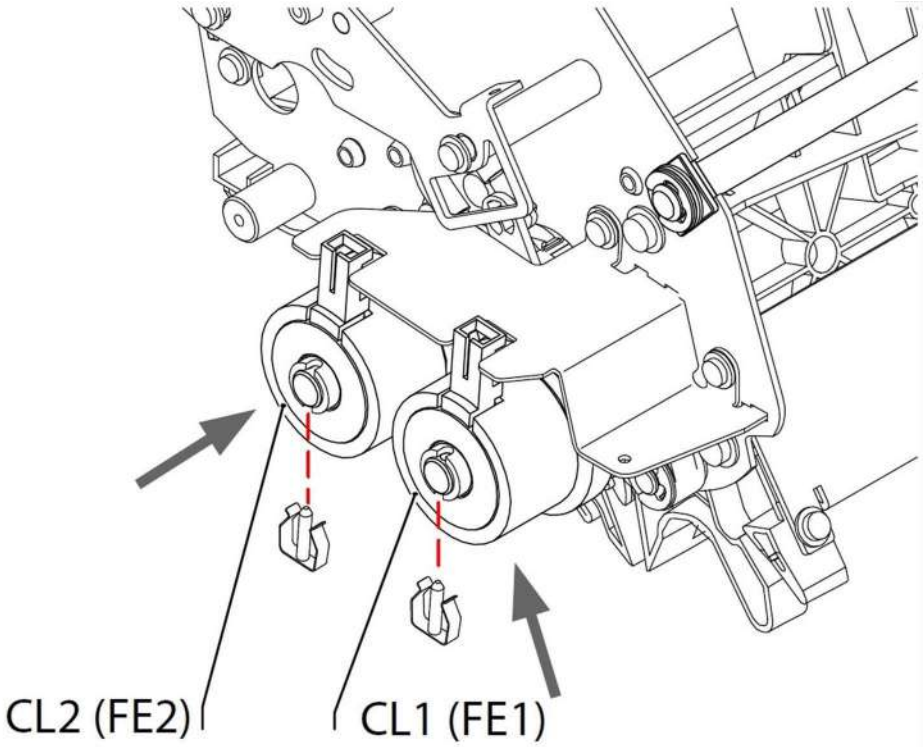
RH side cover

1. Remove both screws that hold the side cover.
2. Remove the side cover.

Top cover

1. Remove both side covers.
2. Remove the four screws that secure the top cover.
3. Remove the top cover.

Clutch feeder 1 CCW (CL1) and clutch feeder 2 CW (CL2)



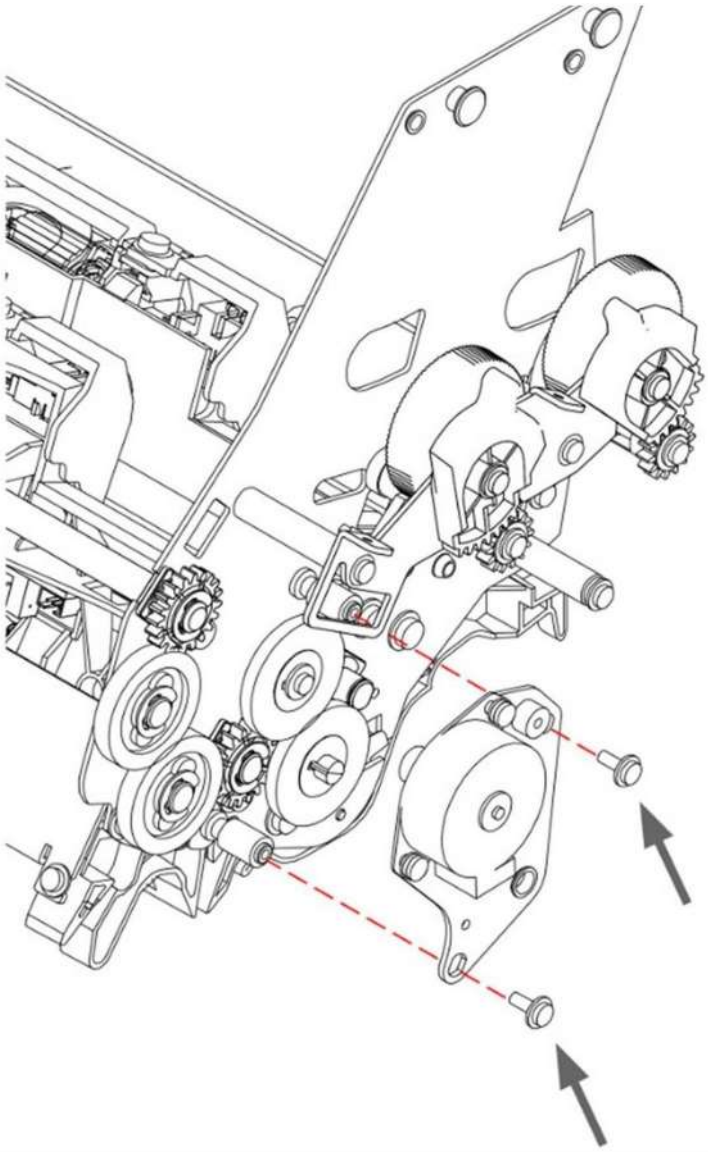
1. Remove the LH side cover.
2. Remove the clip that secures the clutch.
3. Disconnect the clutch and remove it from the axle.

On replacement:

Reconnect the wiring of the clutches as follows:

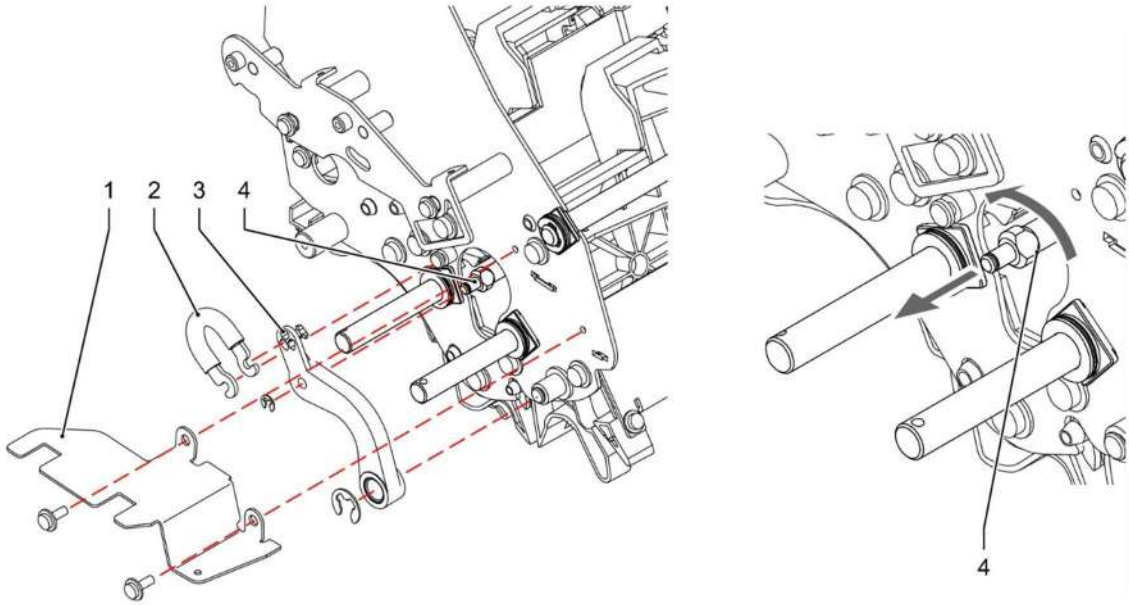
- CL1 (=FE1): blue + brown wiring
- CL2 (=FE2): black + green wiring

Stepping motor M8 assembly (4149879Q)



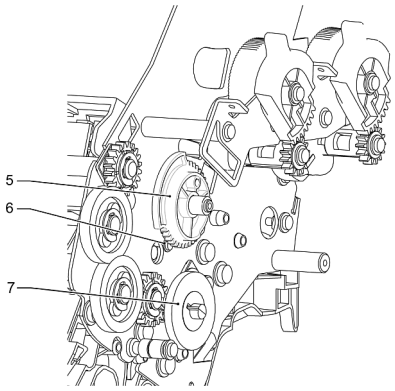
1. Remove the RH side cover.
2. Disconnect the stepping motor connector from the PCB.
3. Loosen the PCB assy. and put it aside.
4. Remove the two screws that secure the stepping motor assy.

Separation axle assy daily mail (4149871G)



Removal

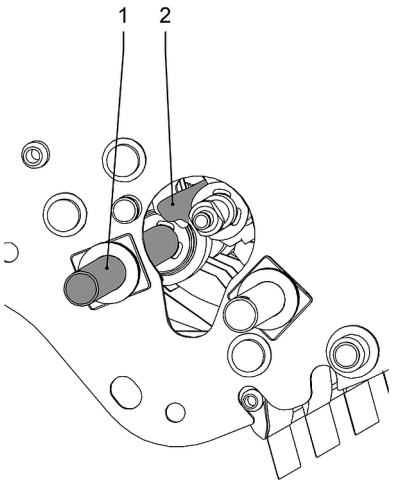
1. Remove the clutches on the LH side (see Clutch feeder 1 CCW (CL1) and clutch feeder 2 CW (CL2) on page 56).
2. Remove the gears on the LH side.
3. Remove bracket 1.
4. Remove spring 2.
5. Remove the two clips securing lever 3.
6. Remove lever 3.
7. On the RH side remove the stepping motor M8 assembly (see Stepping motor M8 assembly (4149879Q) on page 57).
8. Shift the locking lever for the side guides of feeder 1 to the "unlock" position.
9. Remove gear 5.



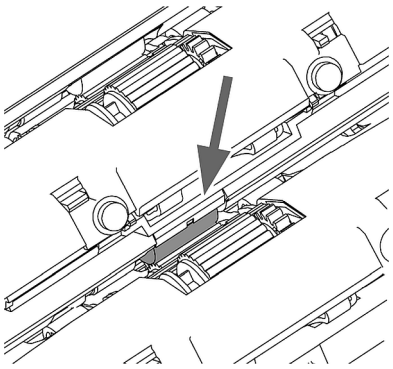
10. Remove locking screw 6.
11. Go back to the LH side; turn separation axle 4 counter clockwise to unlock it from the frame. If necessary use a pair of pliers to unlock the axle.
12. As soon as the axle is unlocked, you can pull it out of the feeder unit.

Assembly procedure:

1. Insert the new separation axle and position lip 2 above axle 1 (the axle that is behind the separation axle).

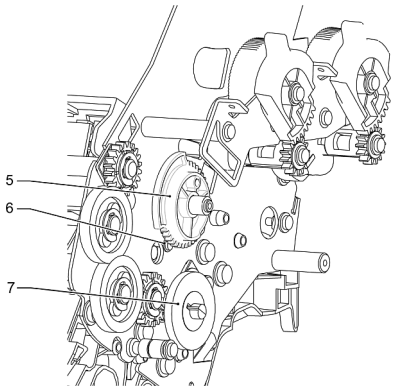


2. Make sure that the separation roller is located in front of the separation module. Look into the top of the feeder unit to verify this (see figure).

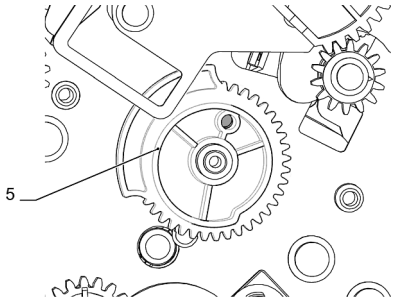


3. Replace the locking screw 6 (M3x6).

4. Rotate gear 7, that is attached to the daily mail lever, completely counter clockwise.



5. Replace gear 5. Position the hole in this gear over the hole in the frame.



6. Shift the locking lever for the side guides of feeder 1 back to the "lock" position. Ensure that the hole of gear 5 is still at the same position (refer to the previous step: "hole over hole").

7. Mount the stepping motor M8 assembly.

8. Mount the PCB and reconnect the wiring of the stepping motor assembly.

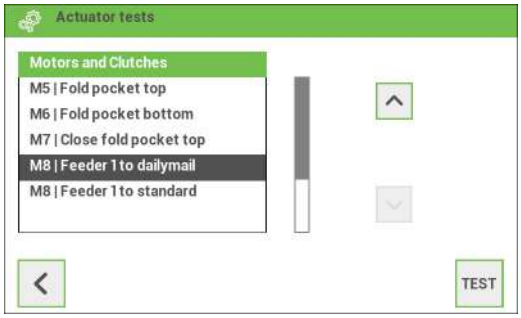
9. Re-assemble the LH side of the document feeder.

Check operation

1. Switch on the system.

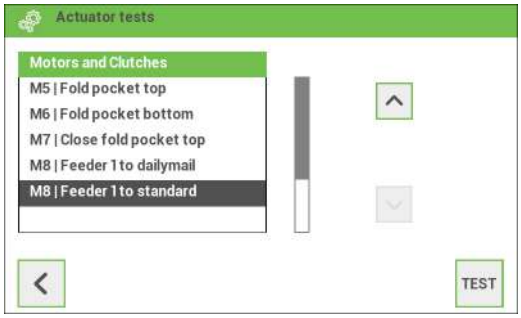
2. Open the service menu/service tests 1-2/actuator test.

- go to "M8 | Feeder 1 to daily mail" and tap test. Check visual if the feeder is prepared for daily mail; separation (roller) is opened and the document hopper is lowered.



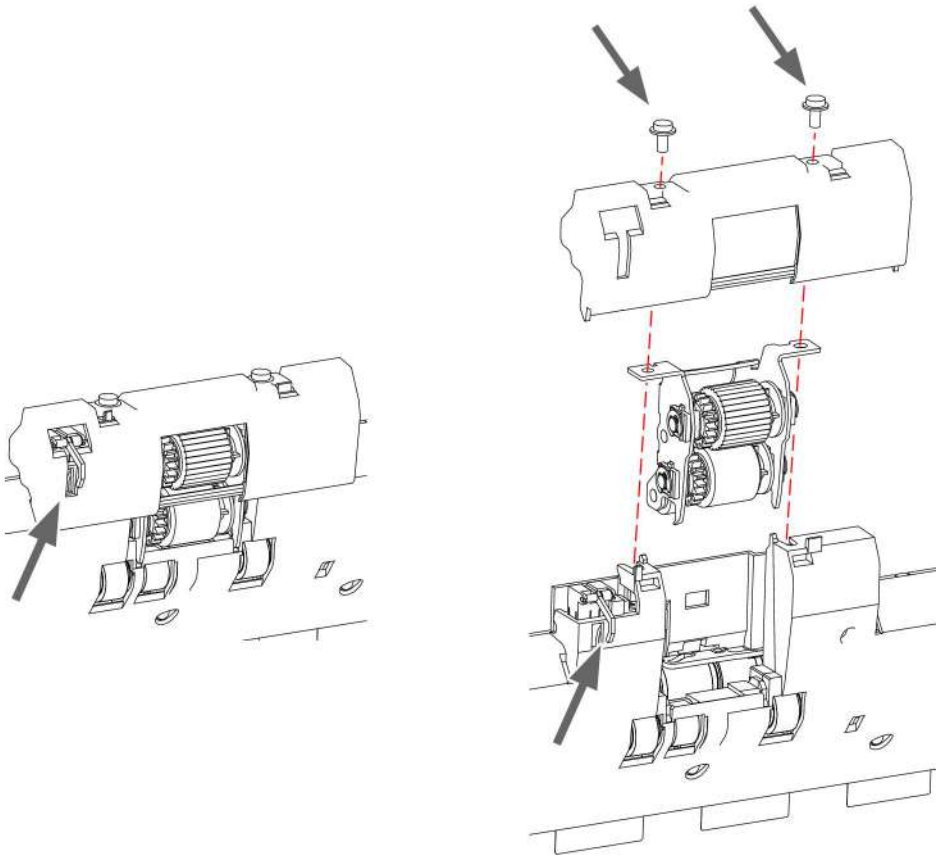
3.

- go to "M8 | Feeder 1 to standard" and tap test. Check visual if the feeder is reset to standard operation; separation (roller) is closed again and the document hopper is lifted.



4. If this is not OK check if the hole of gear 5 is still correctly in position. If not check and repeat step 4 and 5 of the assembly procedure.

Separation module assy (4149874K and 4151616Z)



The separation module assy for feeder 1 differs from the module for feeder 2.

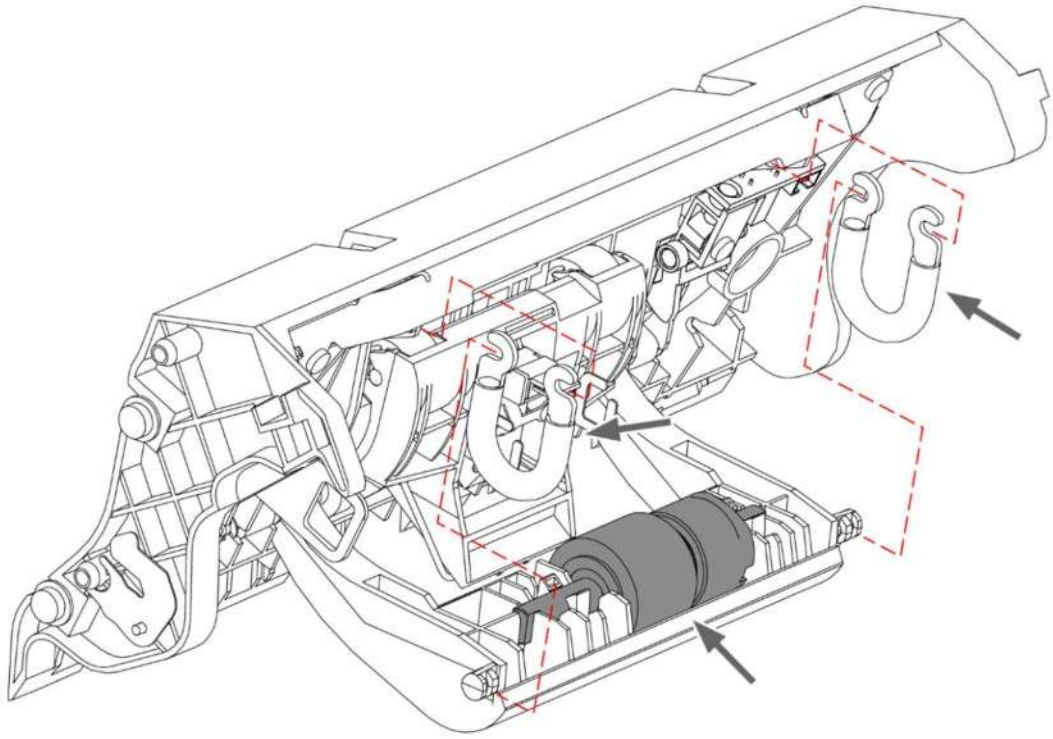
- Separation module 1 assy (4151616Z) is for feeder 1.
- Separation module 2 assy (4149874K) is for feeder 2 and has an extra gear.

1. From the top of the feeder unit remove the two screws that secure the cover of the separation module.

2. Pull the cover out of the feeder unit. Take care of the flag switch.

3. Pull the separation module out of the feeder unit.

Separation roller feeder 2

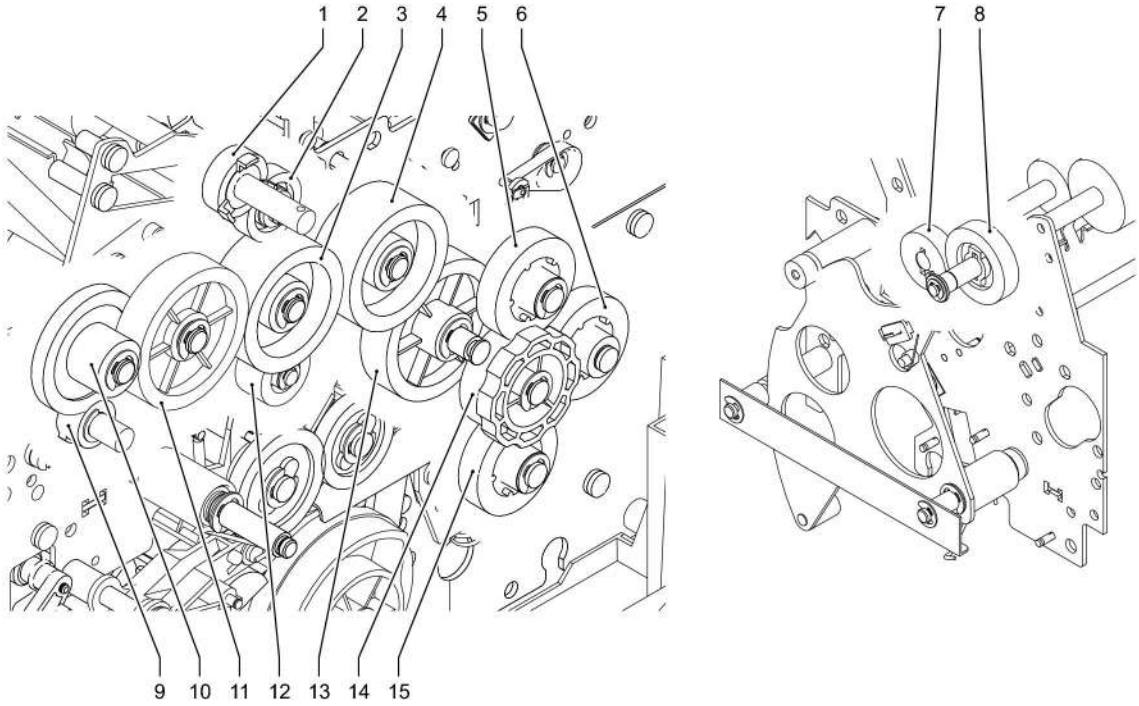


1. Remove the DFC of feeder 2 (see section "Feeder 2" in DFC unit on page 109)
2. Release the two springs that secure the separation roller with the axle.
3. Lift and rotate the separation roller.
4. Pull the axle with the separation roller out of the system.
5. Slide the separation roller from the axle.

On assembly position the clutch and roller correctly. The clutch is a one way clutch. Make sure the roller can run in the correct direction.

Document transport

Gears, document transport



To remove a gear, remove the spring clip and any gears that are in front of it. If necessary remove the ribbon cable holder, both operating levers and main board.

In case of gear 1:

1. Remove the document transport clutch (see Document transport clutch CL5 on page 65).
2. Remove gear 1.

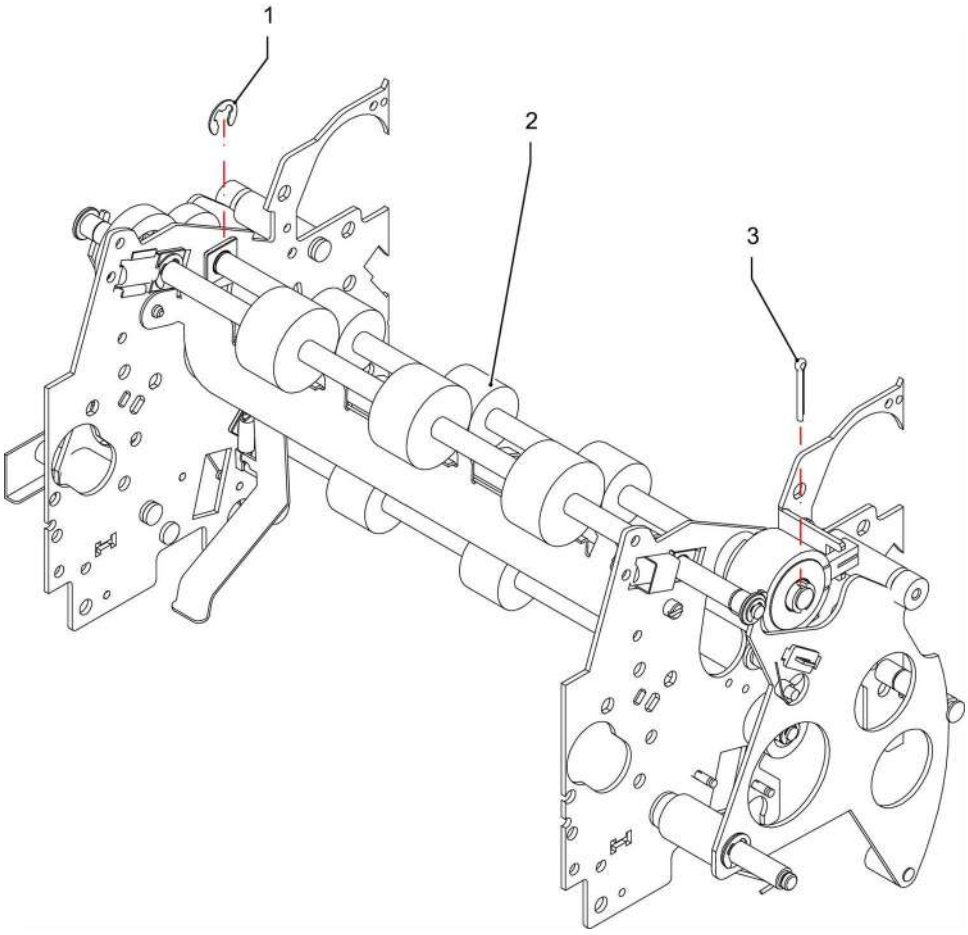
In case of gear 7:

1. Remove the document transport clutch.
2. Slide the axle to the left.
3. Push gear 7 from the cyl. pin.
4. Remove the pin and the gear.

In case of gear 8:

1. Remove the bearing and spring clip from the left side of the axle.
2. Remove the spring clip at the left side from the back of the plate.
3. Slide the axle to the left.
4. Push gear 8 from the cyl. pin.
5. Remove the pin and the gear.

Document transport clutch CL5



1. Remove the top cover.
2. Remove the pin 3 that secures the clutch.
3. Remove the spring clip 1 on the opposite site of the axle.
4. Slide axle 2 to the left.
5. Disconnect the clutch and remove it.

Document transport axles

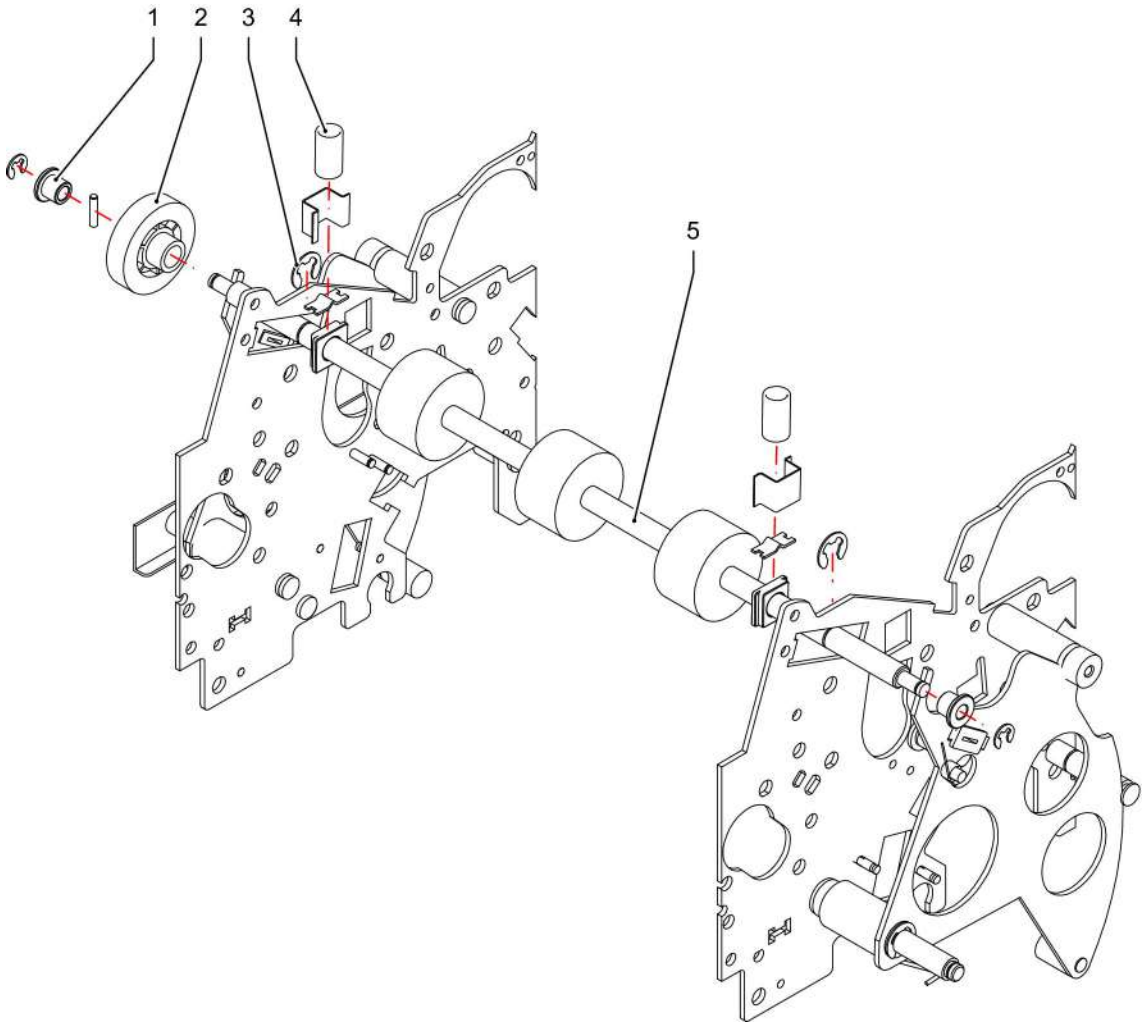
The document transport axles concerns the following axles (see Process description on page 12):

- 33, upper transport axles, front axle
- 32, upper transport axles, back axle
- 30, lower transport axles, front axle (not described)
- 31, lower transport axles, back axle (not described)

For (dis-)assembly of these axles:

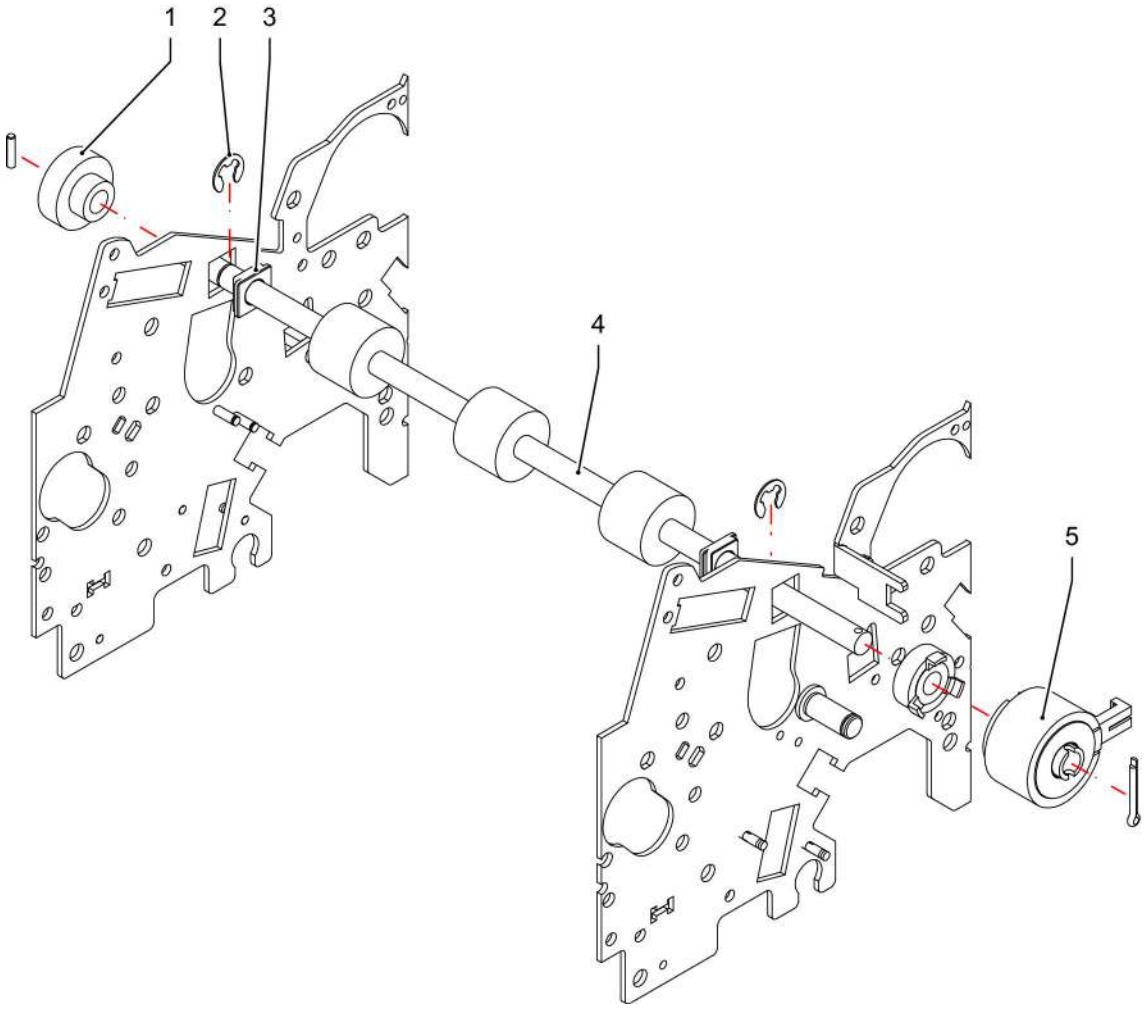
1. Remove the top cover.

Upper transport axles, front (33)



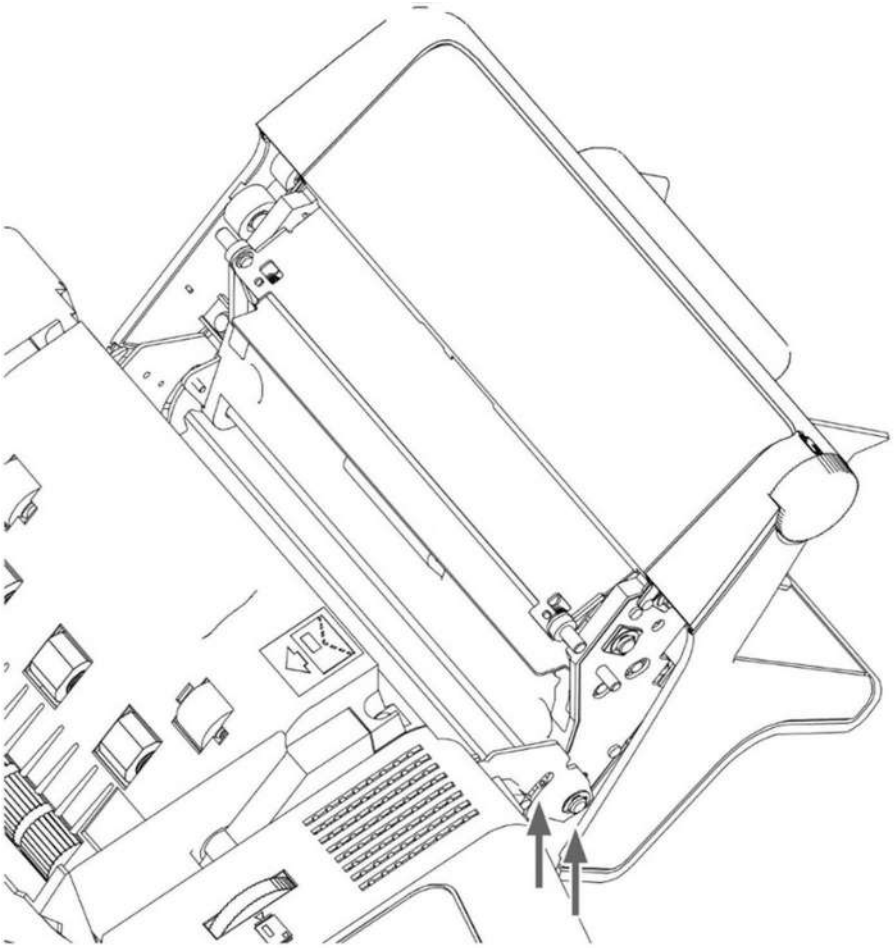
1. Remove spring clips and bearings 1 from the axle ends.
2. Remove springs 4 and spring holders from the axle bearings.
3. Remove the spring clips at the inside.
4. Slide the axle with bearings to the left.
5. Remove gear 2 on the left side.
6. Slide the axle out of the system.

Upper transport axles, back (32)



1. Remove clutch 5 from the right side of the axle (see Document transport clutch CL5 on page 65)
2. Remove the spring clips 2 at the inside.
3. Slide the axle to the left.
4. Remove gear 1 on the left side.
5. Push the bearings 3 out of the frame.
6. Slide axle 4 out of the system.

Feeder 3 (4149839Y) and insert transport

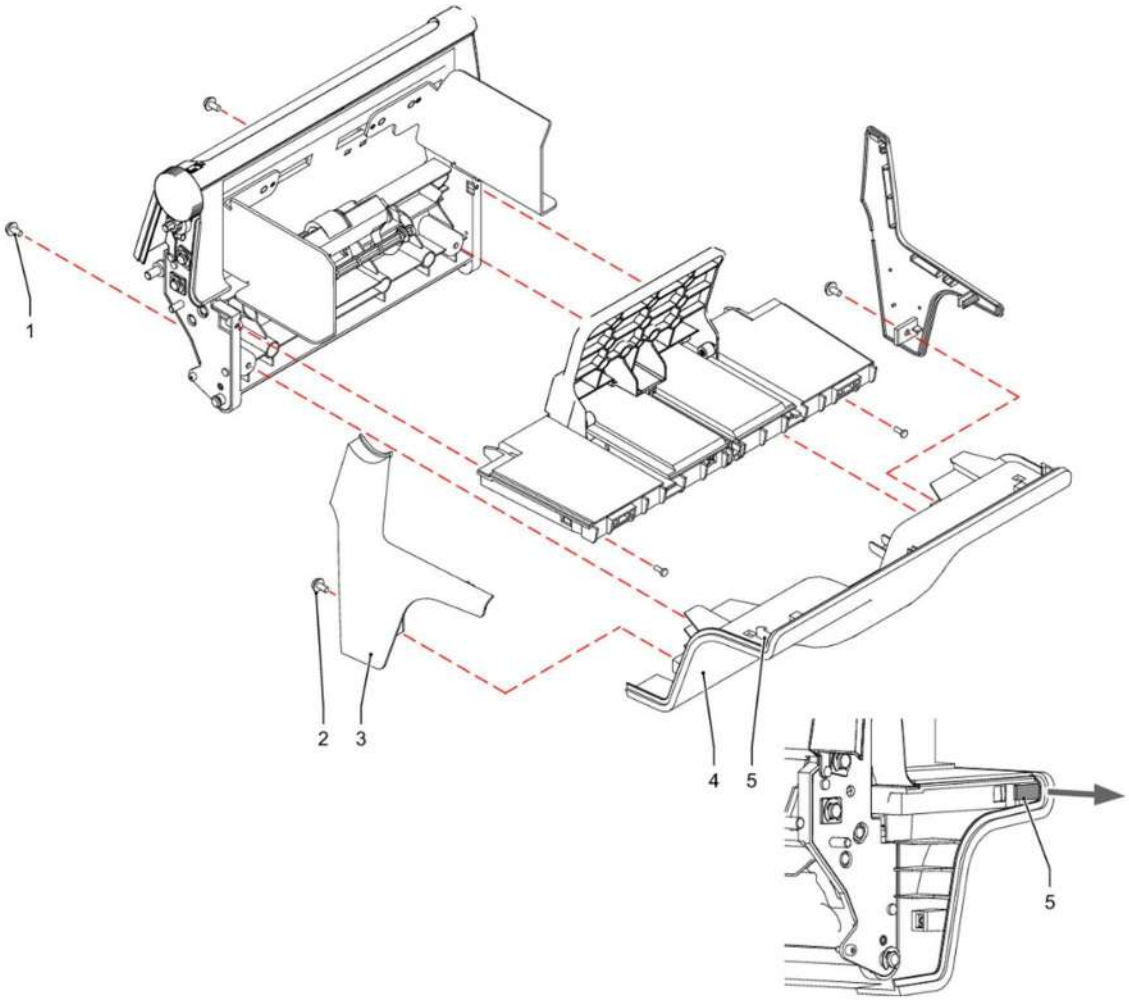


To remove feeder 3:

1. Open and turn down the feeder unit.
2. Disconnect the feeder connector and microswitch 3 from the main board.
3. Remove microswitch 3 (Microswitches (4149858T) on page 107).
4. Remove the spring clips on both side of the axle.
5. Remove one of the guiding screws (left or right).
6. Hold the feeder 3 unit and shift the axle out of the system.
7. Remove feeder 3.

Covers

Side covers

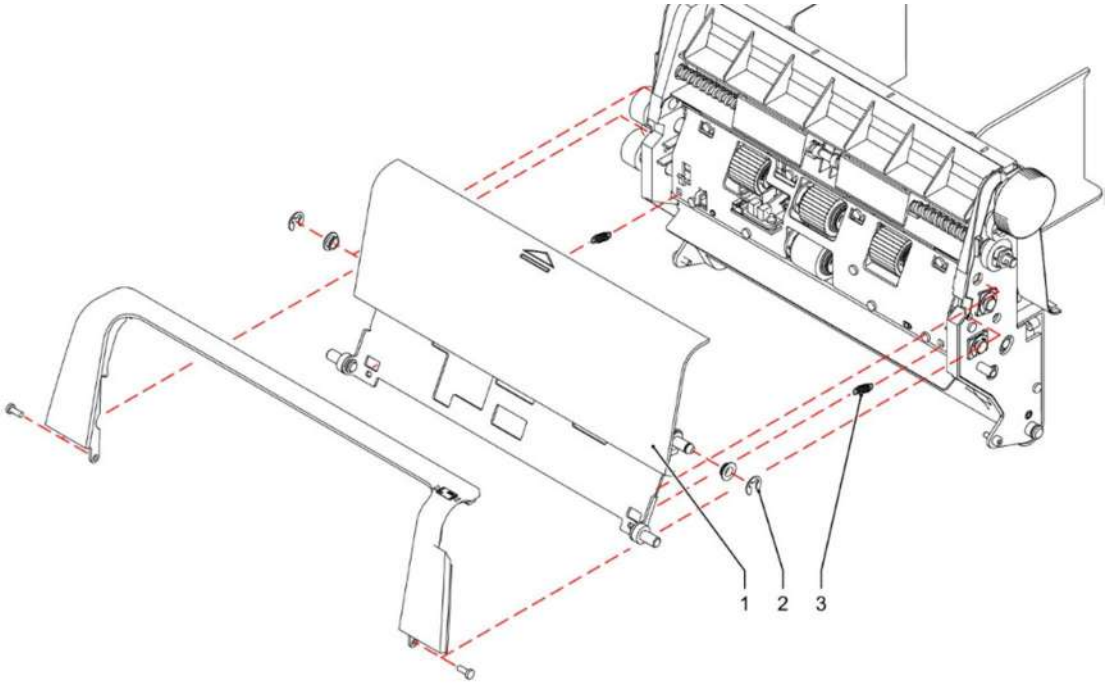


1. Remove screw 2 that secures side cover 3.
2. Pull the side cover out of the feeder unit.

Bottom cover

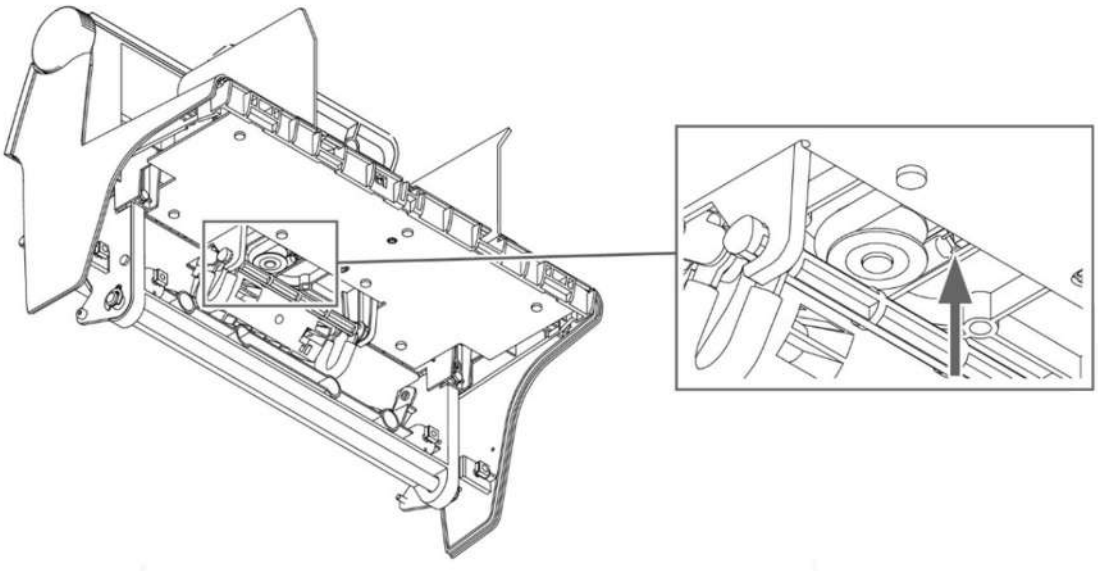
1. Remove two screws 1 that secure bottom cover 4 on the front side.
2. Pull the lips 5 on both sides and lift the bottom cover from the feeder unit.

Flap



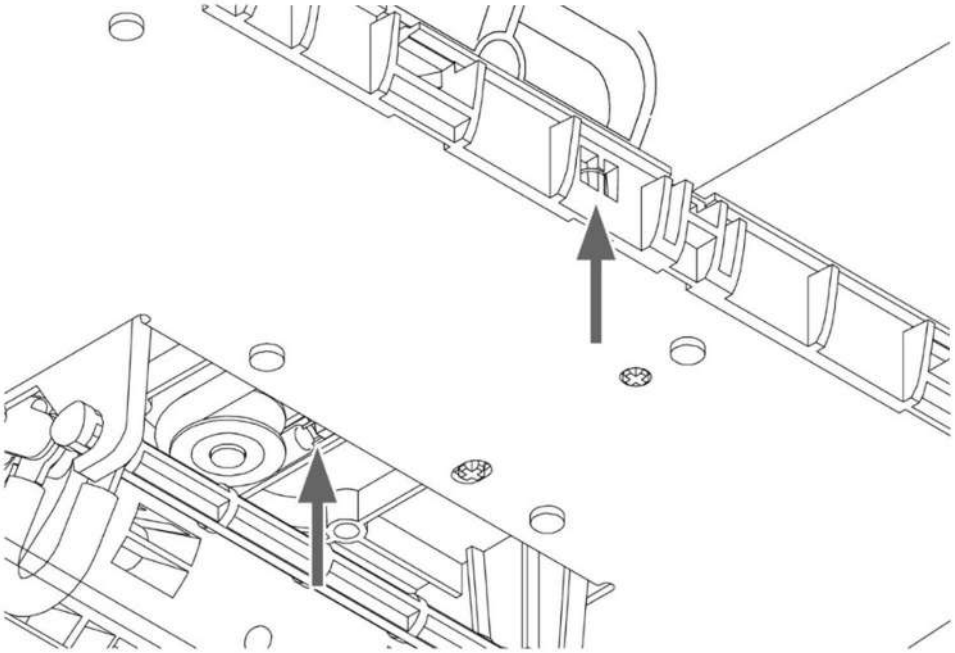
1. Remove one spring clip 2 from the axle.
2. Slide the axle out of the feeder unit.
3. Unhook the two springs 3 from the flap.

Pusher assy (4149864Z)



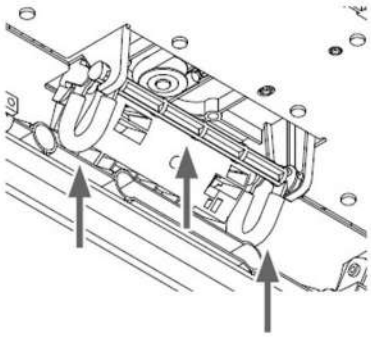
1. From the bottom side pull the spring that secures the pusher assy from the hook.
2. Slide the pusher assy from the feeder unit.

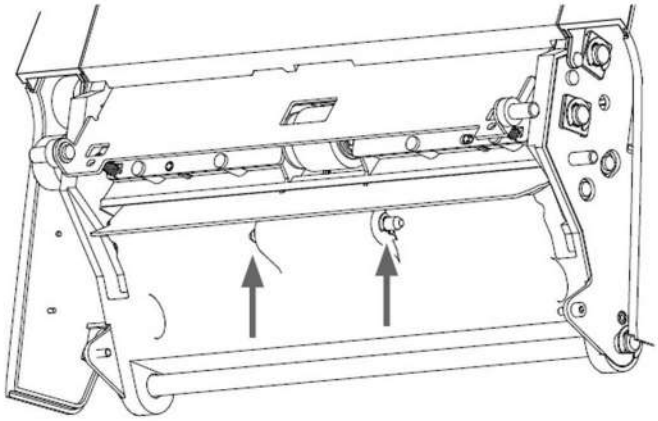
Pusher spring

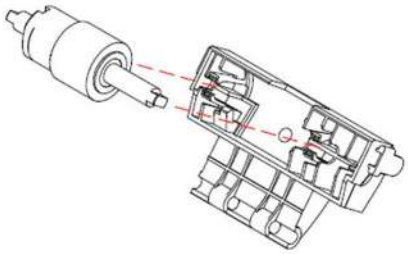


1. Remove the bottom cover.
2. Unhook both sides of the spring.

Separation roller



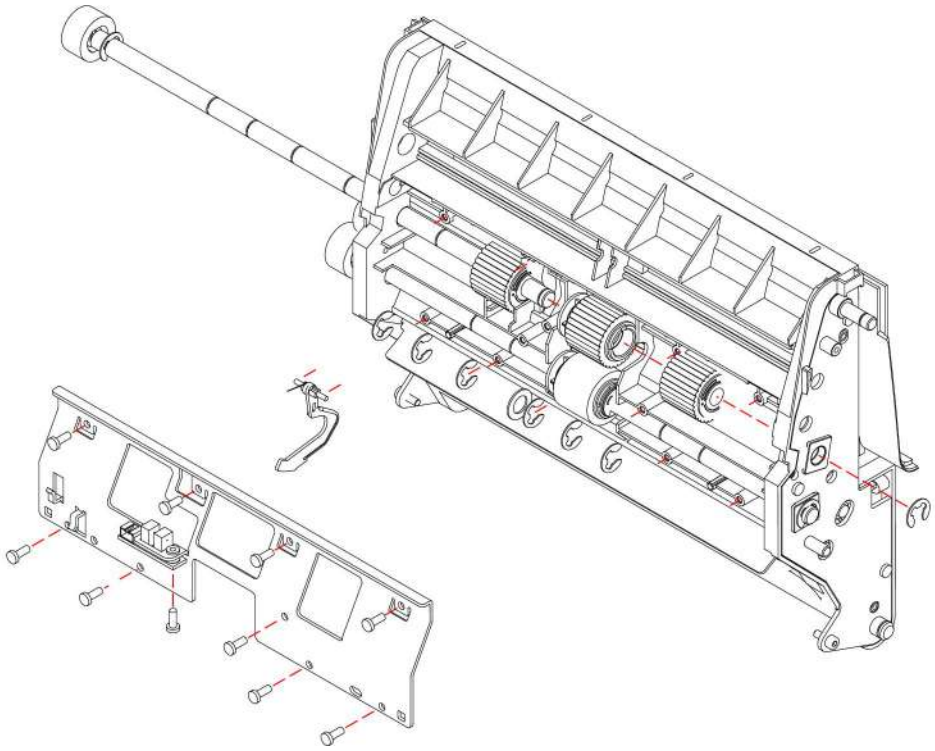




1. Release the two springs that secure the separation roller cover.
2. Remove the plastic axle.
3. From the bottom side remove the two clips that secure the separation roller cover.
4. Remove the cover with separation roller from the feeder unit.
5. Pull the axle with the separation roller out of the system.
6. Slide the separation roller from the axle.

On assembly position the clutch and roller correctly. The clutch is a one way clutch. Make sure the roller can run in the correct direction.

Rollers and sensor assembly (FS6, 4149869E)



1. Remove the flap (see section "Flap" in Covers on page 68).
2. Remove the 10 screws that secure the cover plate.
3. Remove the spring clips from both sides of the roller.
4. Remove the clip from the RH side of the axle.
5. Pull the axle to the left.
6. Now you shift the roller and the washer from the axle.

> On assembly take care of the direction of the roller. The roller runs only in one direction.

To remove FS6

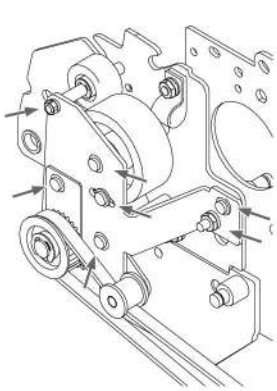
1. Remove the screw that secures the sensor.
2. Remove the sensor.

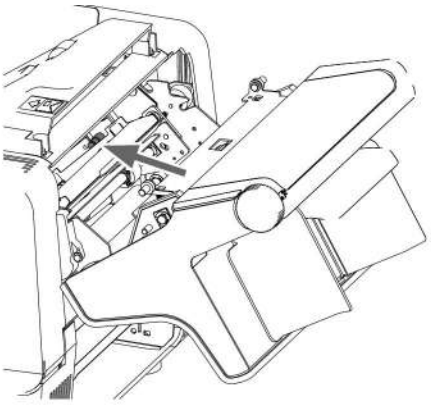
> On assembly connect the connector before you install the cover plate.

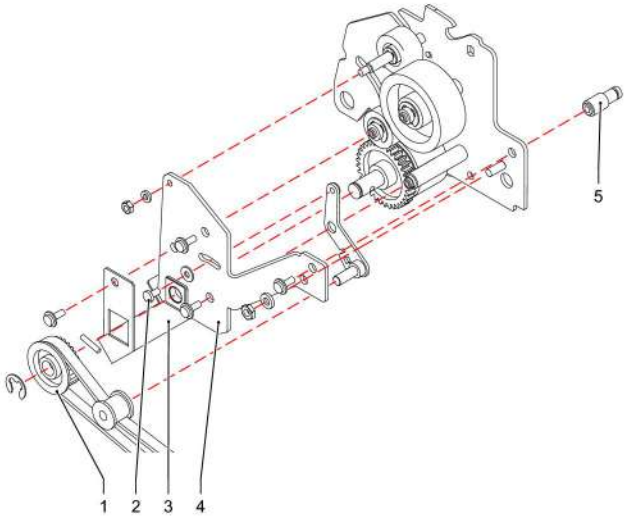
To remove the flag

1. Pull the flag out of the feeder unit.

Drive







1. Release the belt tension (screw 2).
2. Remove spring clip and gear 1 from the axle.
3. Remove the screw that secures the top bracket 3.
4. Remove the bracket.
5. On the inside of the system remove the spring from pin 5.
6. Remove the three screws and two nuts that secure bracket 4.

Take care of the screw that secures the ground wire. On the back of the frame plate pin 5 is attached. Hold this pin when you remove the screw.

Now you can remove all gears, the clutch and the tensioner.

Clutch CL3

See Drive on page 74 for the removal of the brackets that are in front of the clutch.

Folding

Folding

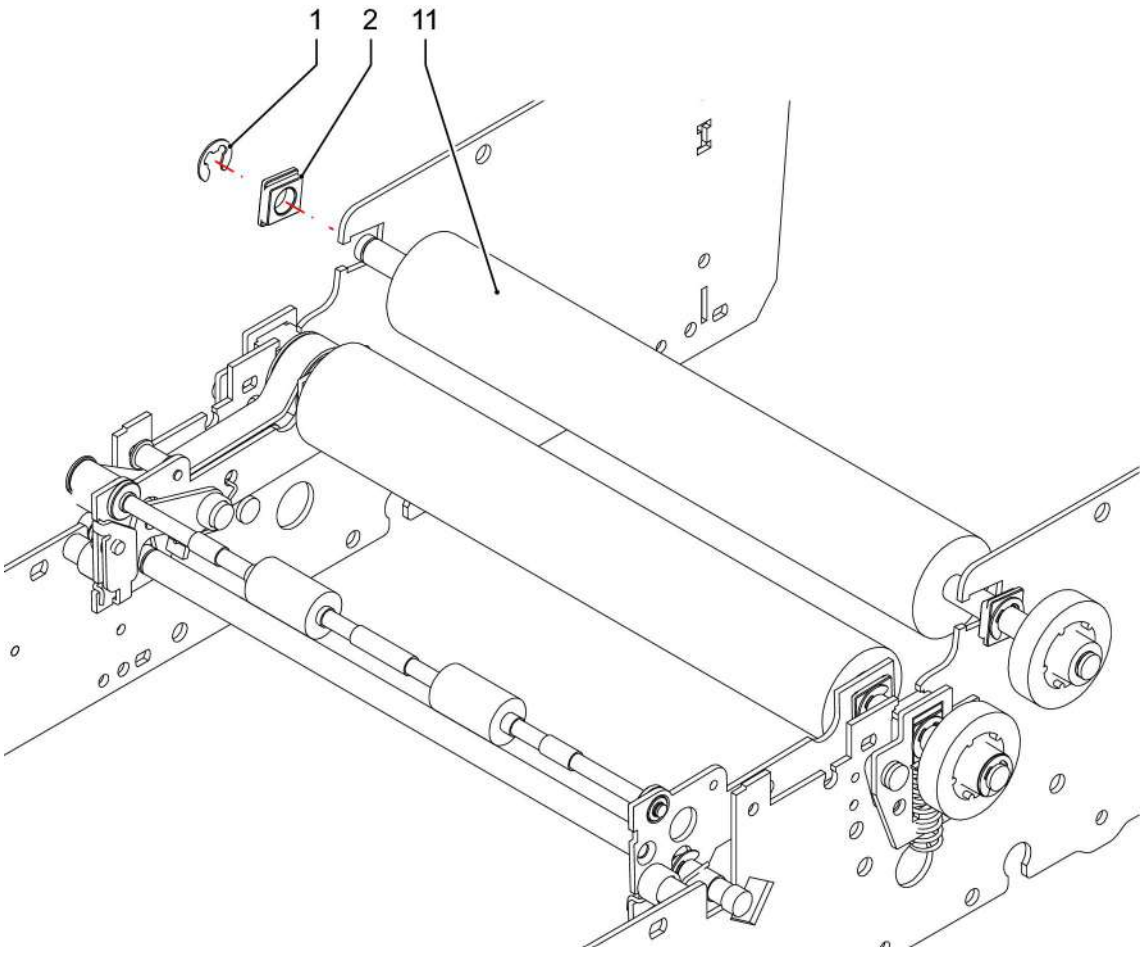
Folding rollers

There are four folding rollers (see Process description on page 12):

- Rollers 8 and 11, positioned in the lower part of the system
- Rollers 9 and 10, positioned in the upper part of the system

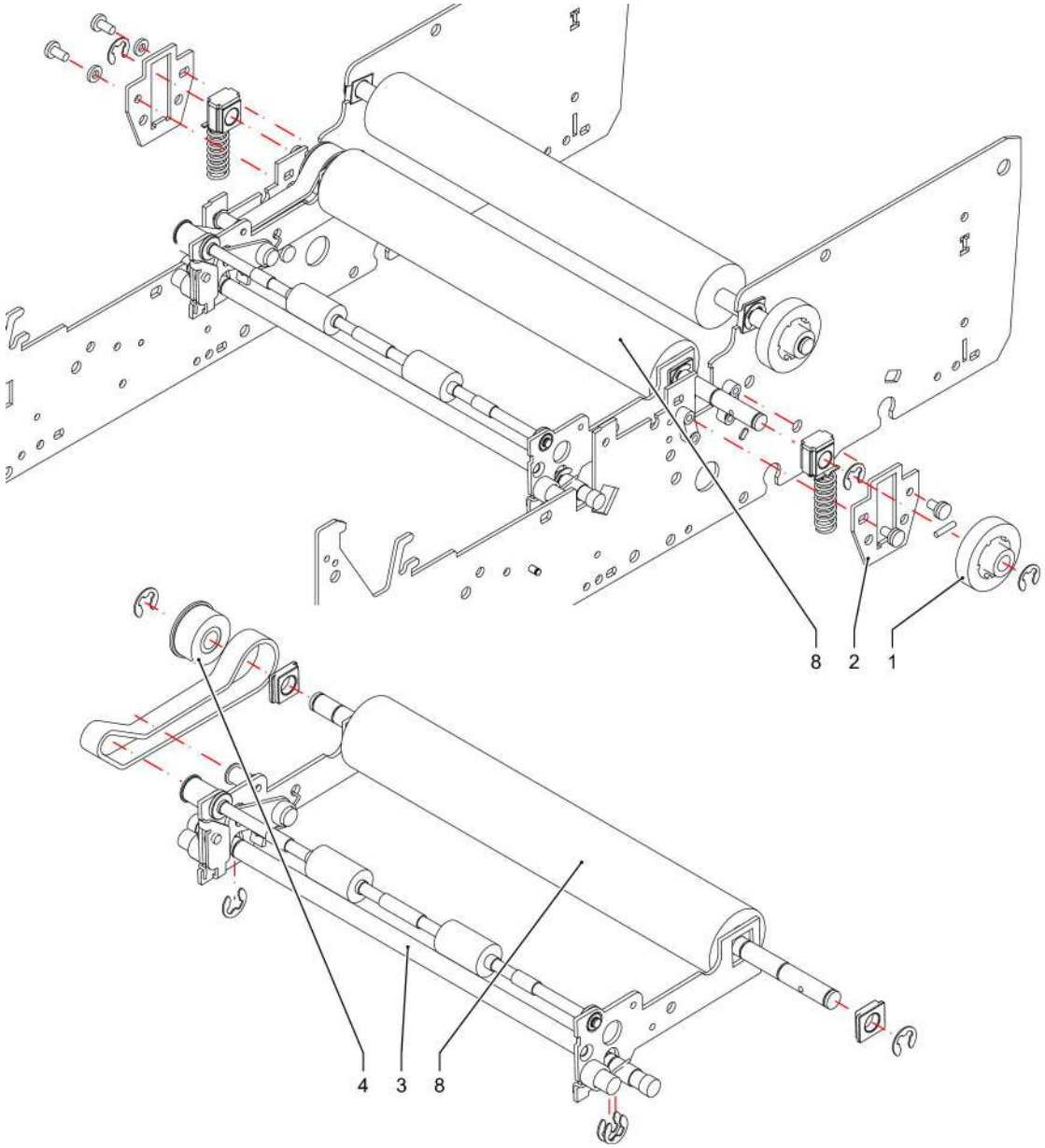
To remove roller 11:

1. Remove the spring clip 1 on the left of the axle.



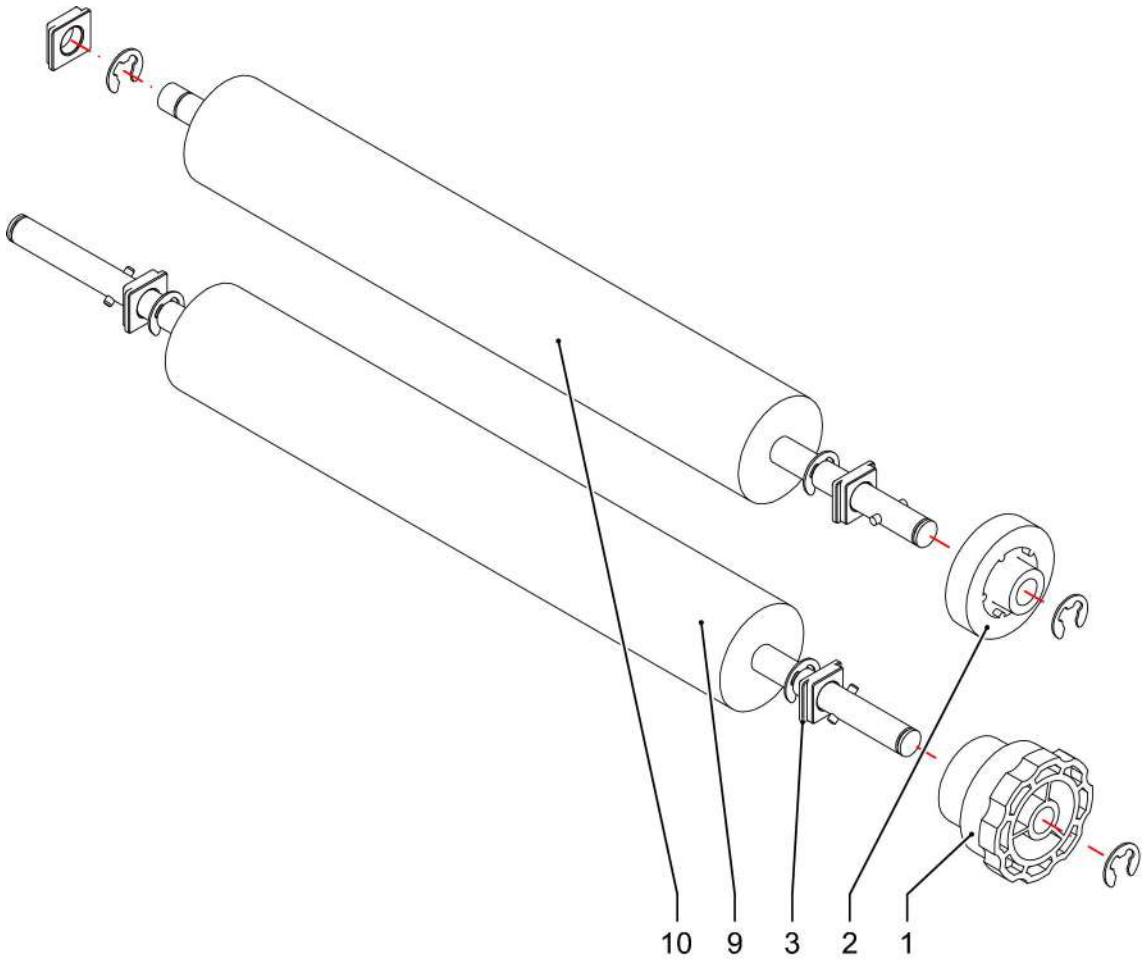
2. Release the bearings from the holes in the frame.
3. Shift the roller out of the system.

To remove the lower folding roller (8):



1. Remove the insert plate (see Inserting plate assy (4149850K) on page 94).
2. Remove the insert fingers (see Insert fingers assy (4149883U) and fingers on page 95).
3. Remove gear 1 from the RH side of the folding roller axle.
4. On both sides remove plates 2 that hold the bearing and spring, from the folding roller axle.
5. Remove the assy that contains folding roller 8 from the system.
6. Remove clips, bearings and pulley 4 from the folding roller axle.
7. Remove the clips that secure the lower axle 3 at the RH side.
8. Shift axle 3 to the left.
9. Rotate the side plates until you can remove the folding roller.

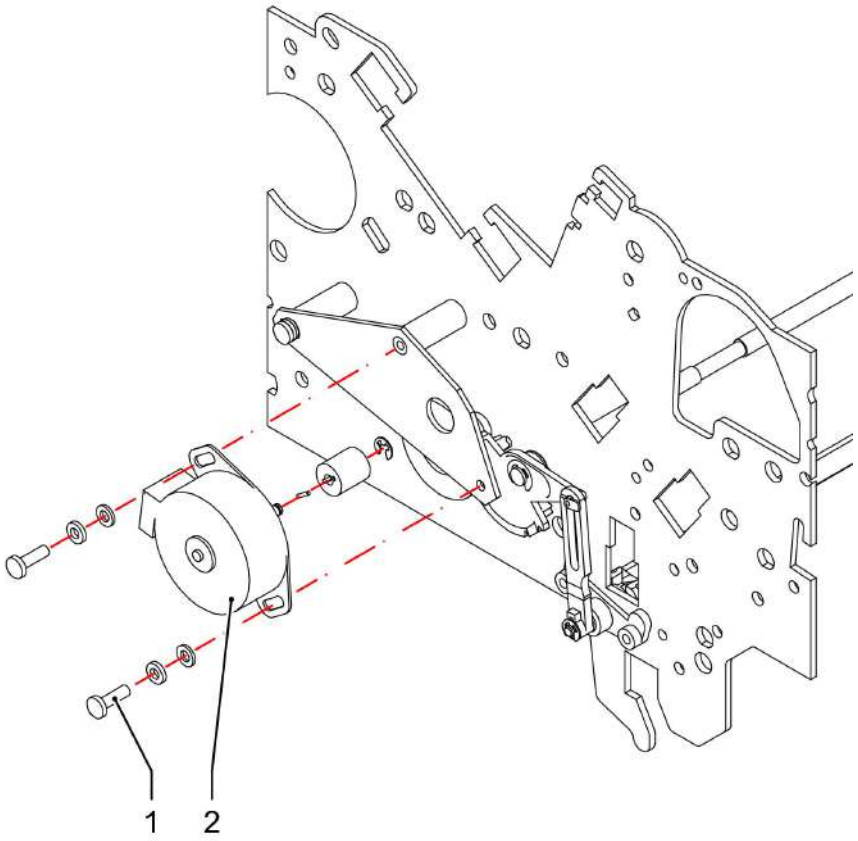
To remove folding roller 9:



1. Release the tension of the drive belt on the left hand side of the axle.
2. Remove the driving belt.
3. Remove the spring clips 3 at the inside.
4. Disconnect the clutch CL5.
5. Push the bearings out of the frame.
6. Remove axle 9 from the frame.

When you replace the axle in the system, make sure to position the clutch that it is blocked.

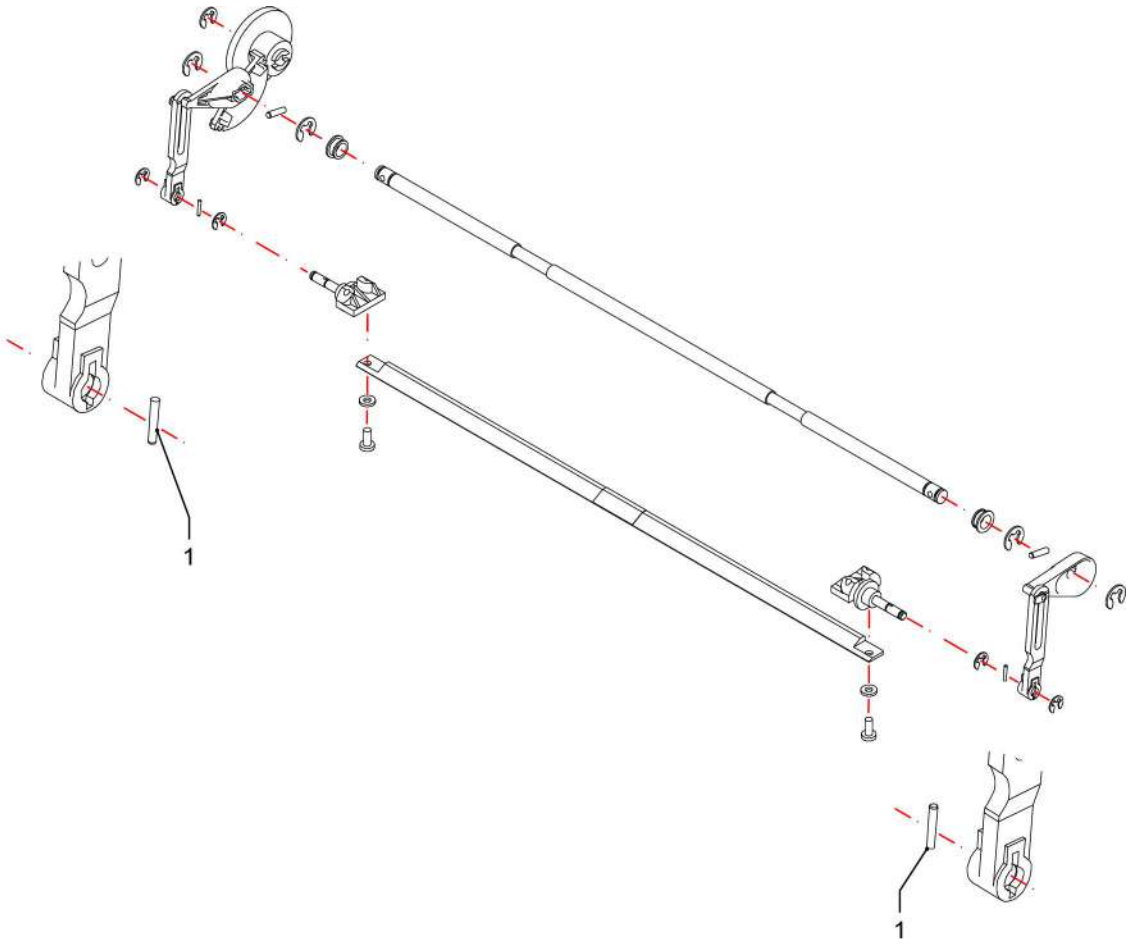
Closing mechanism fold pocket A



Remove the stepping motor:

1. Remove the screws 1 that secure the stepping motor.
2. Remove the stepping motor connector from the main board.

The wire is positioned above the upper fold pocket.

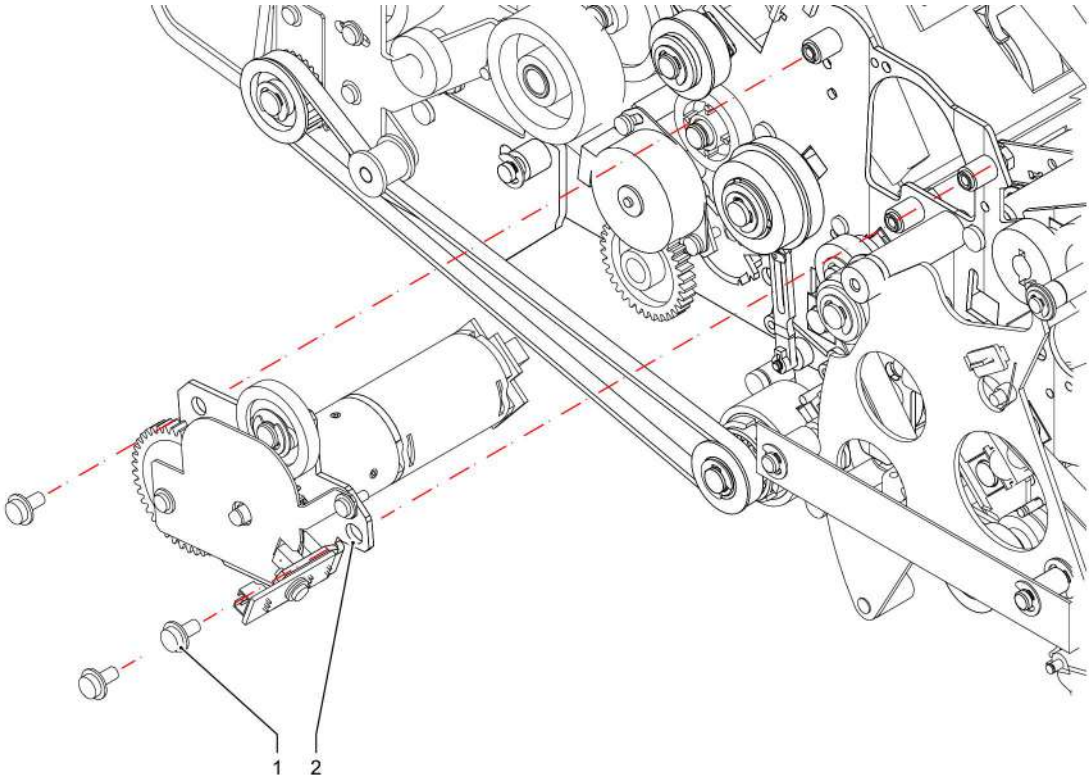


Other parts of the fold pocket closing mechanism:

1. Remove spring clips and screws to remove these parts. Take care of the small cylindric pins 1.

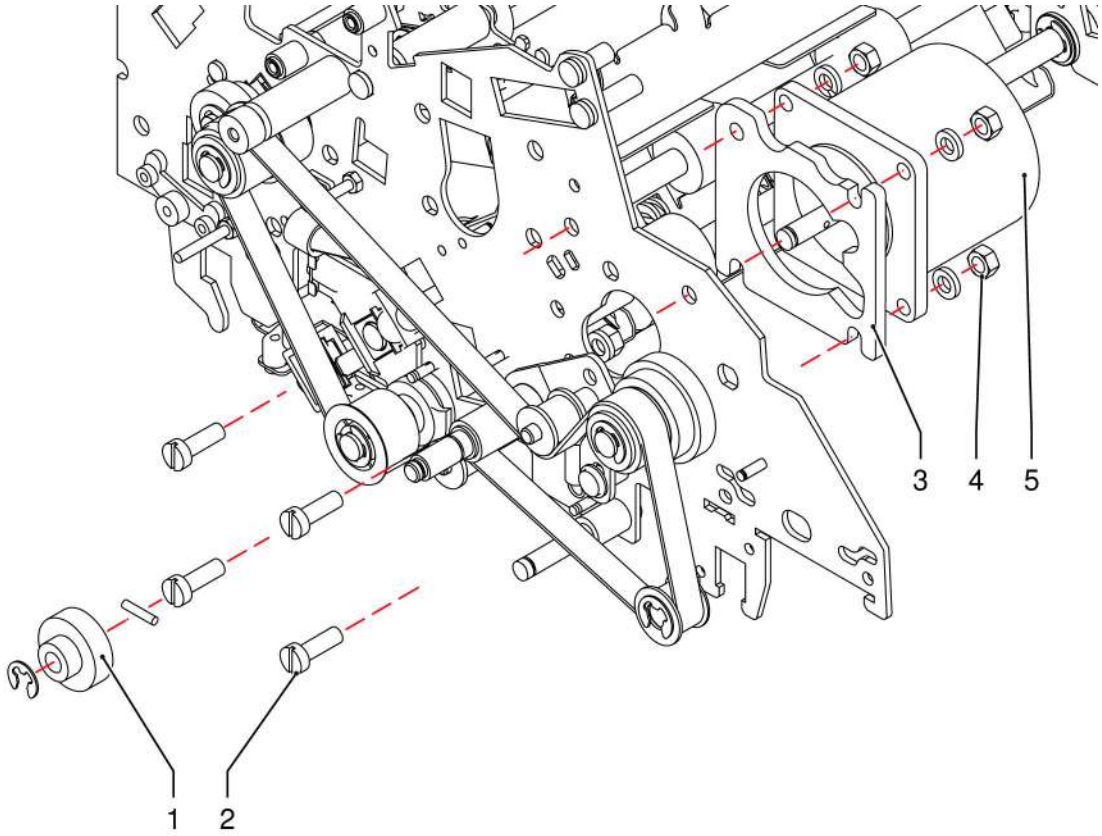
Envelope hopper and transport

Motor assembly envelope hopper (M2) (4149861W)



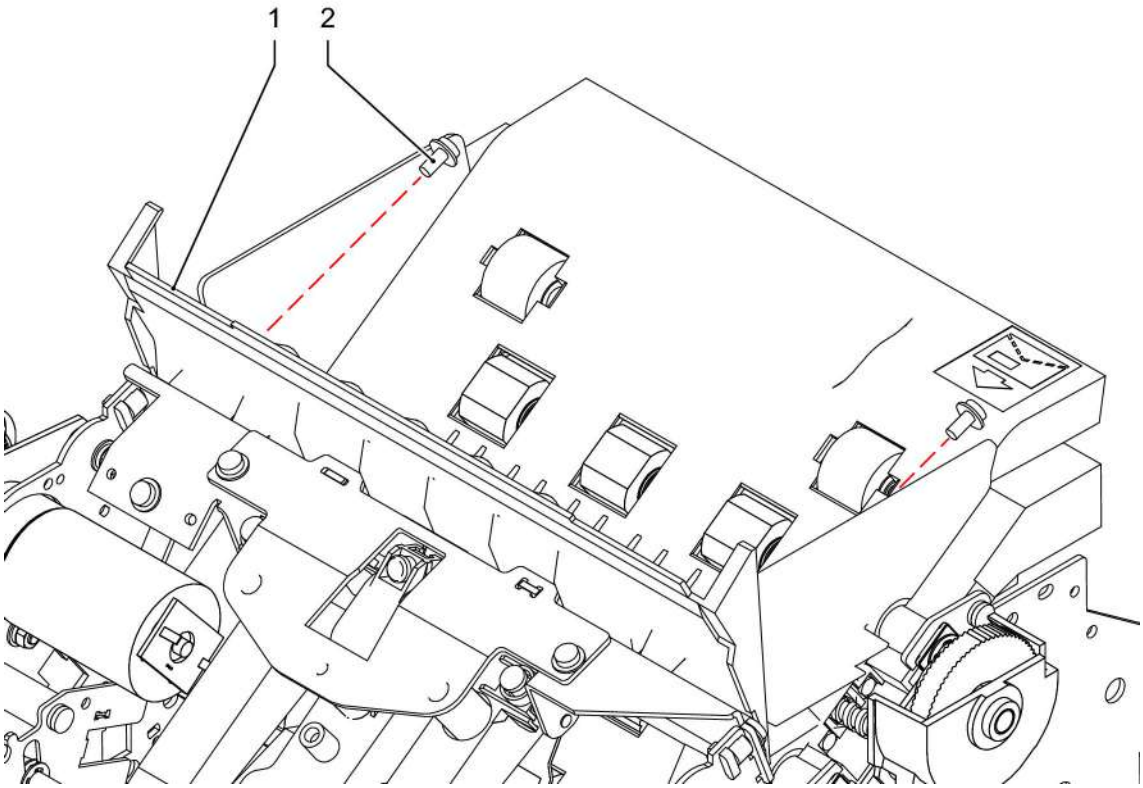
1. Remove the top cover.
2. Remove the three screws 1 from plate 2 that supports the motor.
3. Disconnect the motor connector from the main board.
4. Disconnect the slotted photocell.
5. Remove the motor assembly from the system.

Envelope transport motor M3



1. Remove the top cover.
2. Remove the LH operating lever (see Left hand operating lever on page 54).
3. Release the drive belt tension and remove the belt from the pulley.
4. Remove gear 1 (next to the motor axle).
5. Remove the tensioner (one screw).
6. Remove the spring clip and gear from the motor axle.
7. Remove four screws 2 that secure the motor. Take care of nuts 4.
8. Disconnect the connector from motor 5.
9. Remove the motor from the system.

Side guide left hand envelope hopper

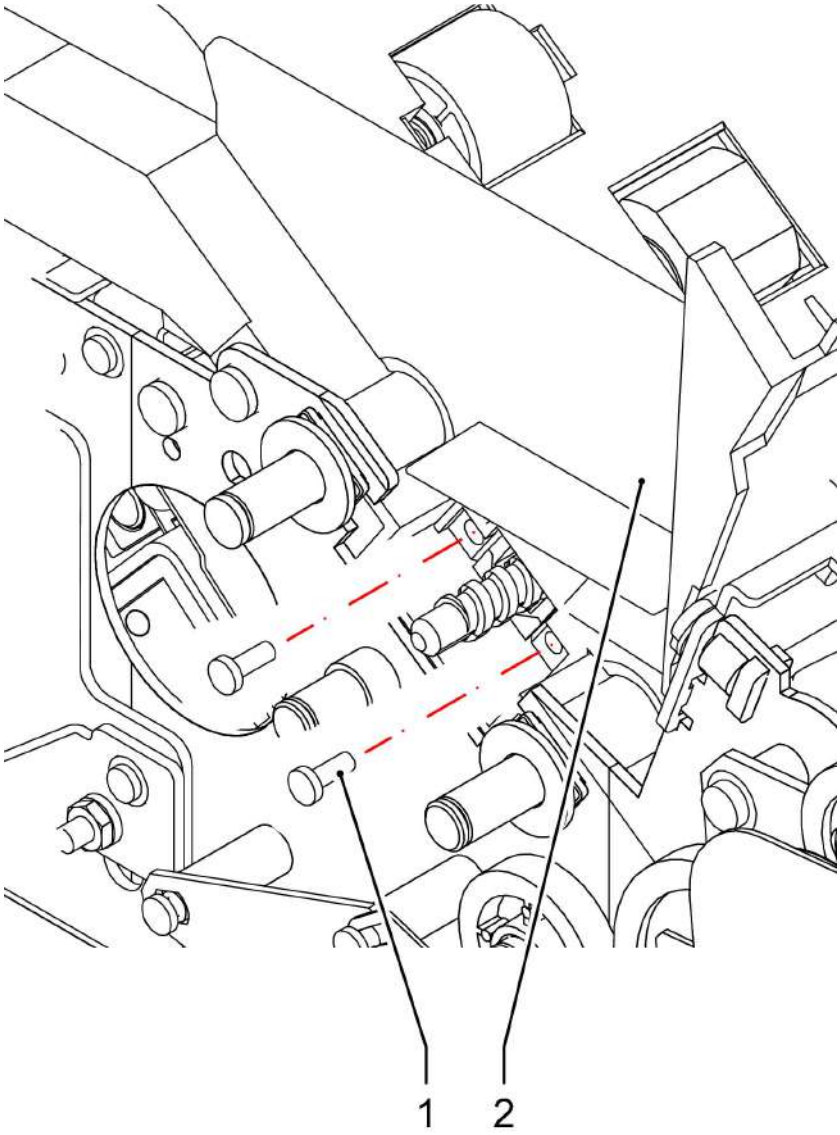


1. Remove the top cover.

2. Remove front plate 1 of the envelope hopper (secured with two screws 2).

3. Remove the envelope separation assy.

4. Move the side guides as far as possible to the centre of the envelope hopper.



5. Remove screws 1.
6. Pull side guide 2 out of the system.

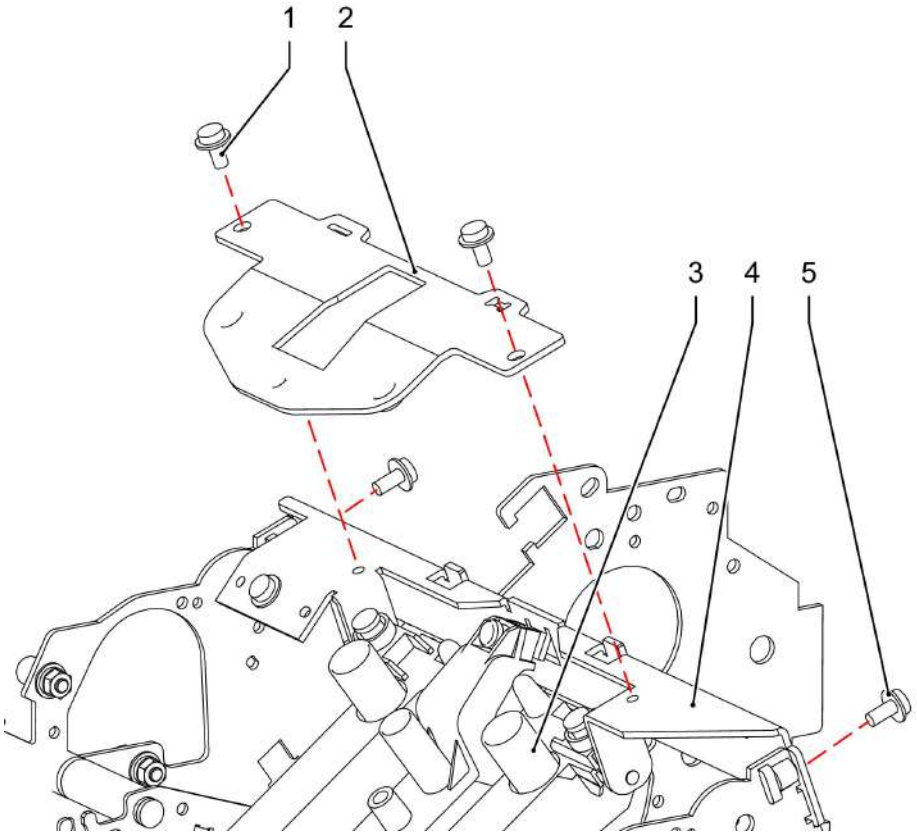
Side guide right hand envelope hopper

Same as the left side guide.

Separation kit (4149873J)

1. Remove the top cover.

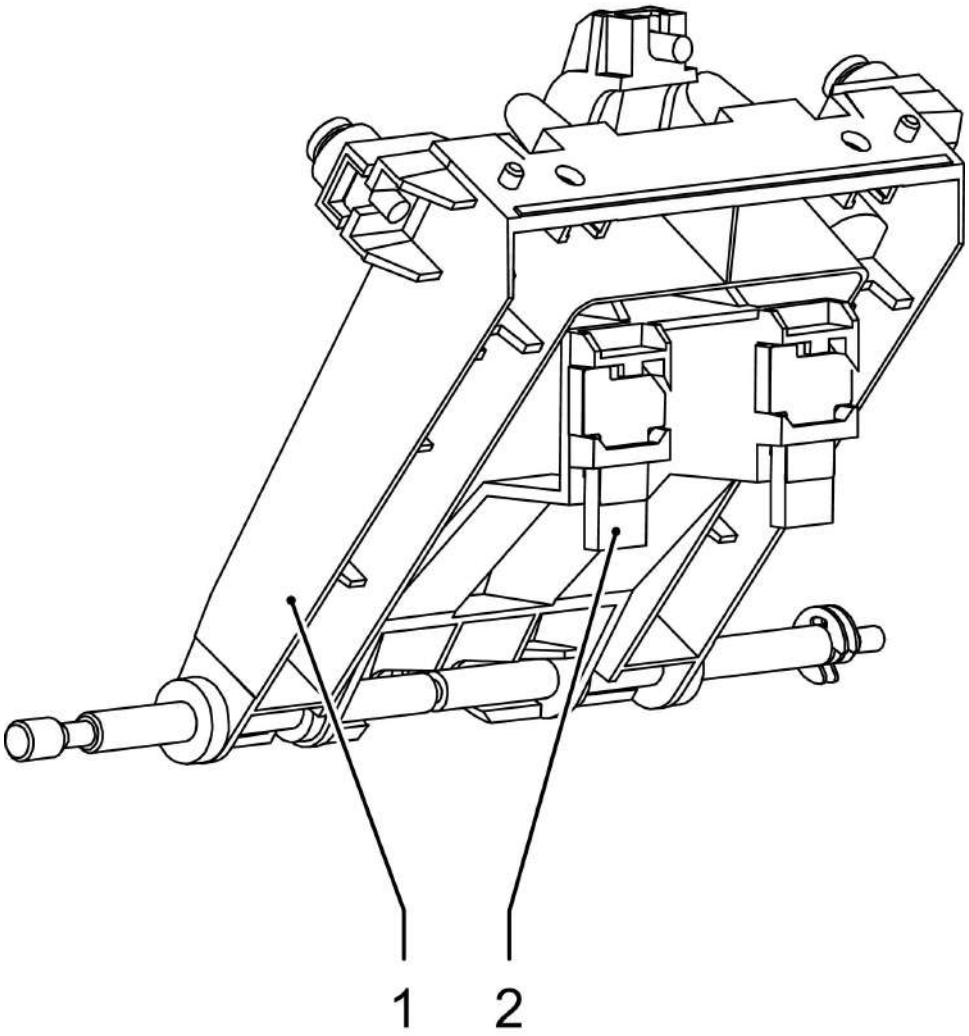
Separation springs (4149876M)



1. Loosen screws 1 that secure the cover plate.

2. Remove the three springs.

Separation plate



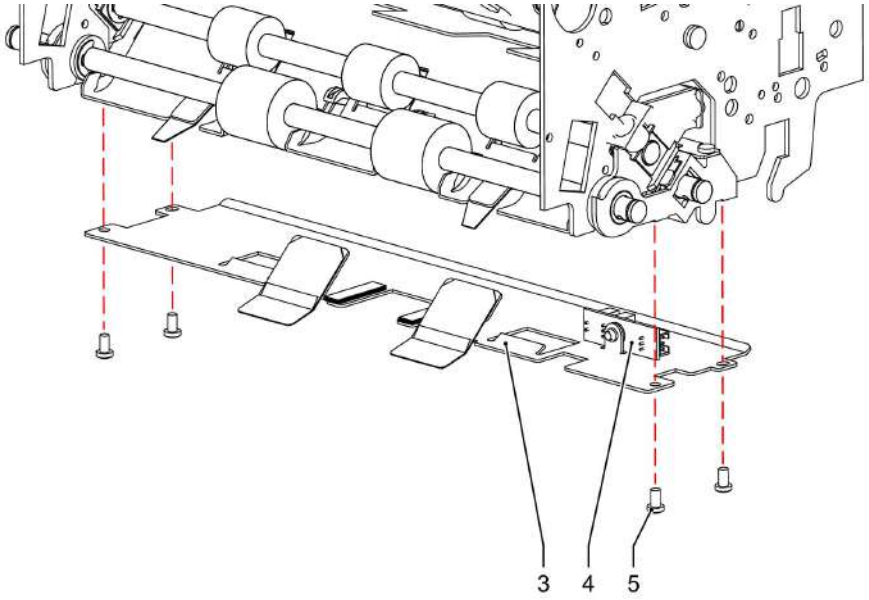
1. Remove two screws 5.
2. Rotate the cover of the separation assy.
3. Remove the screws that secure separation plate 4.
4. Remove the separation plate.

Separation strips

1. Lift and rotate the centre part of the separation assy (1).
2. Pull out the separation strips 2.

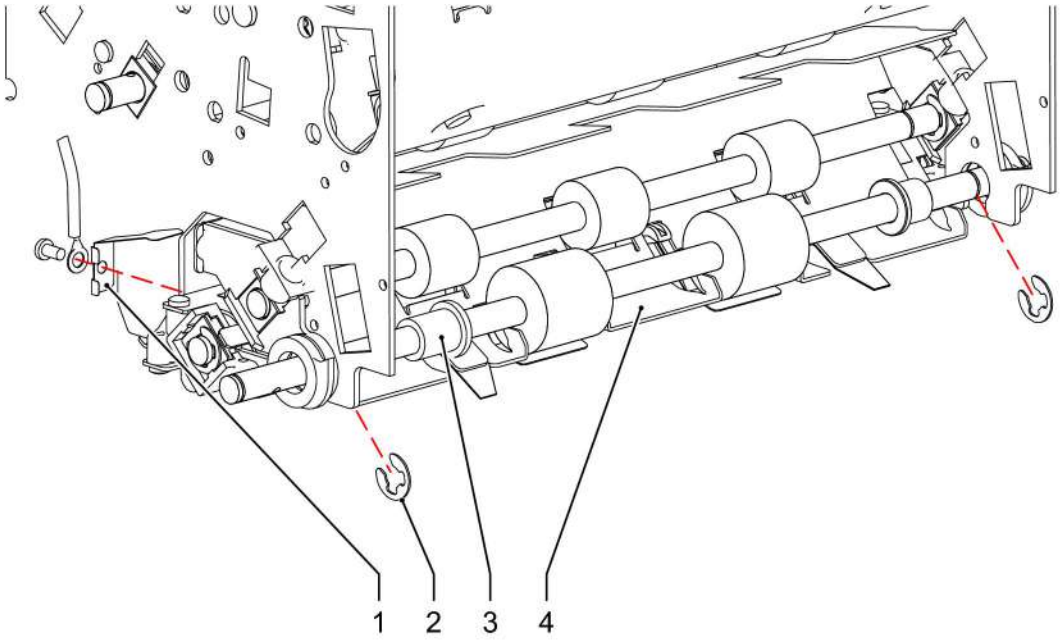
Envelope transport assy

Lower deflector plate assy (4149854P)



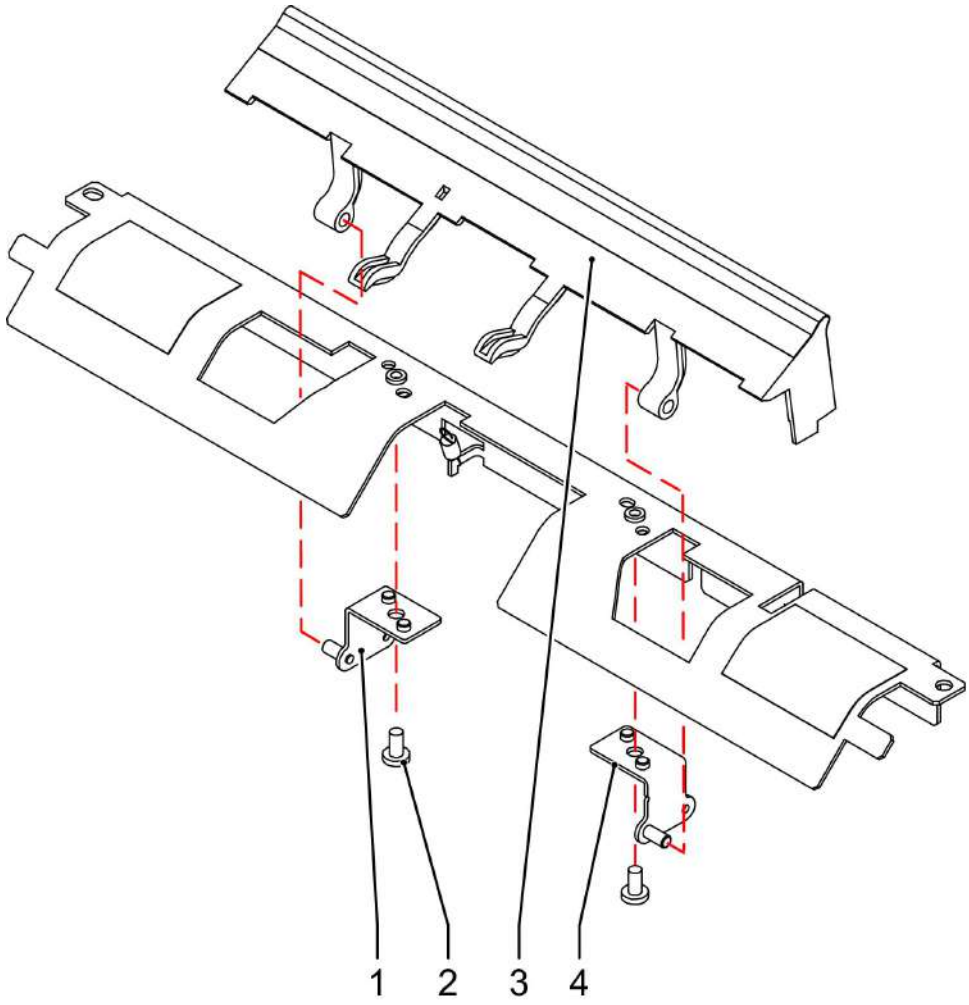
1. Open the system.
2. Remove the four screws 5 that secure the envelope plate 3.
3. Disconnect sensor 4.
4. Remove the plate from the system.

Flap scraper assy (4149843C)



1. Remove two spring clips 2.
2. Pull bushes 3 to the inside.
3. Remove the spring and wire 1and remove envelope transport assy 4.
4. Open the assy.

5. Remove the screws 2 that secure flap scraper 3.

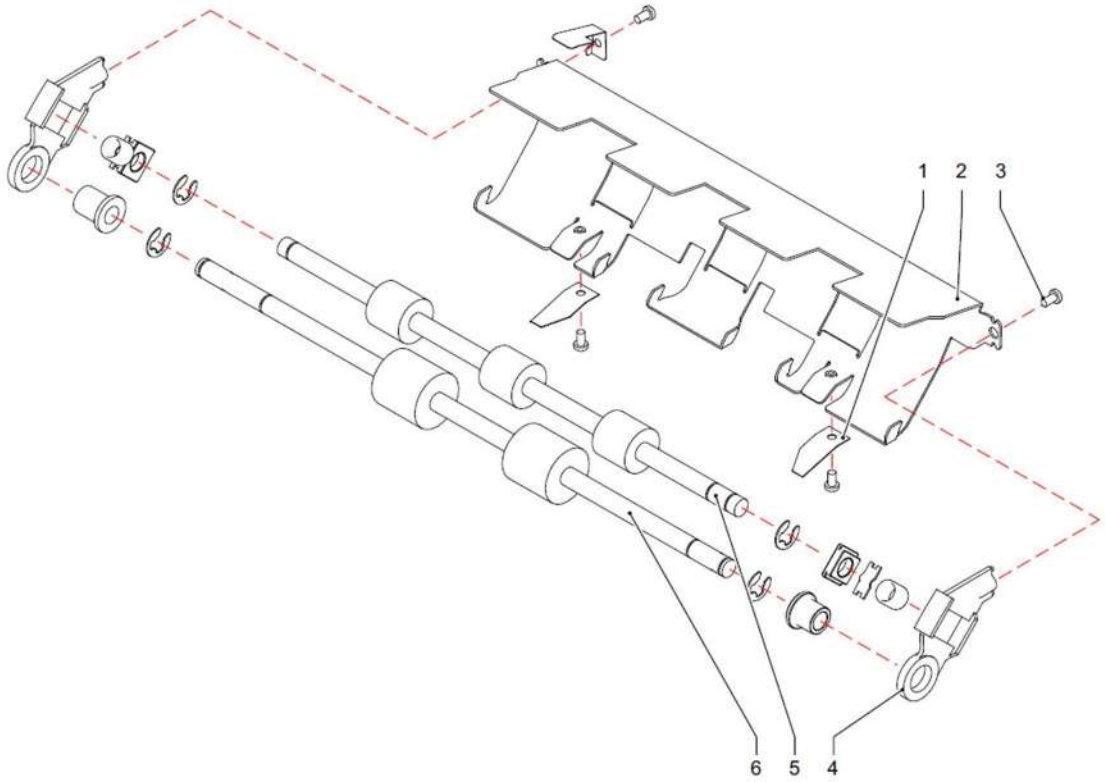


6. Remove brackets 1 and 4.

7. Disconnect the spring from the plate.

8. Remove flap scraper 3.

Other parts of the envelope transport



1. Disassemble the envelope transport.

Now you can remove the following parts:

- Axles envelope stop (5 and 6)
- Brackets envelope stop (4)
- Tongue left and right (1, 4149880R)

Maintenance kit envelope hopper (4149857S)

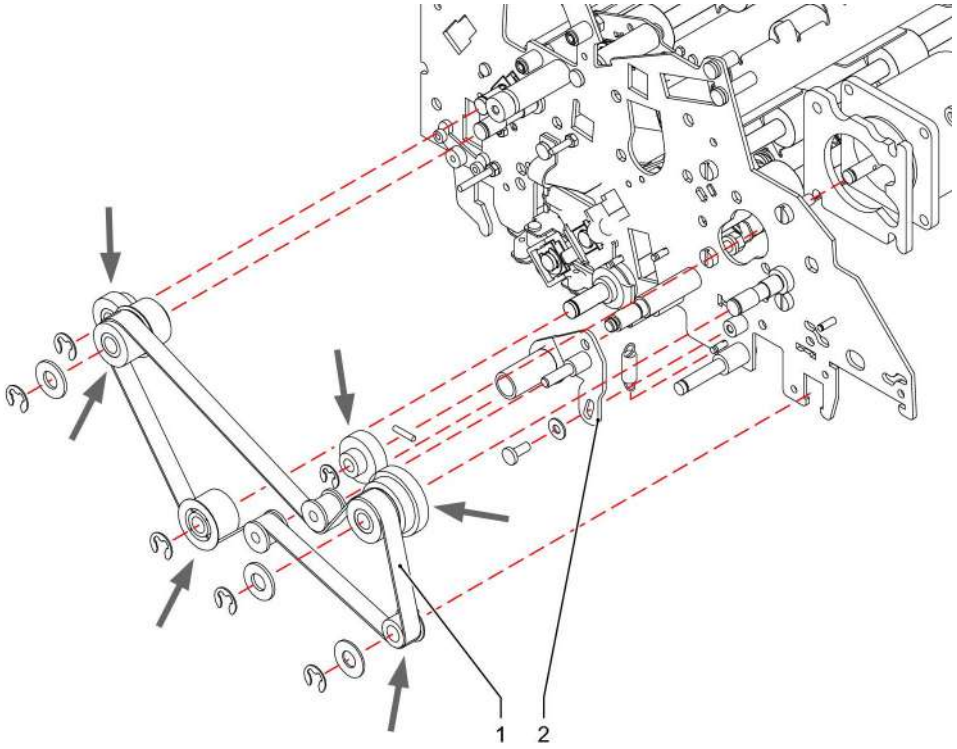
To remove rollers 24 and 25 (see Process description on page 12):

1. Remove the envelope hopper table; see the service video "Si30-Feeder E top plate.mp4" as shown below (or online). The instruction video is a 'guide line', details can be different for the 040.1.

2. Remove the rollers; see the service video "Si30-Feeder E roller.mp4" as shown below (or online). The instruction video is a 'guide line', details can be different for the 040.1.

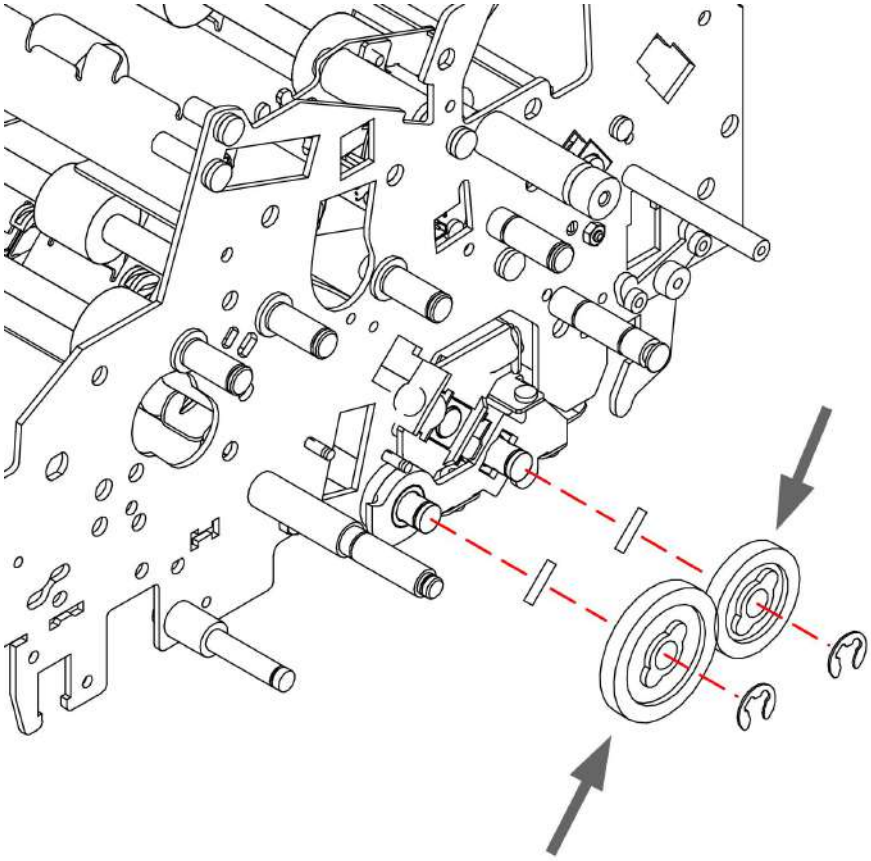
Gears envelope transport and drive belt

Gears LH side



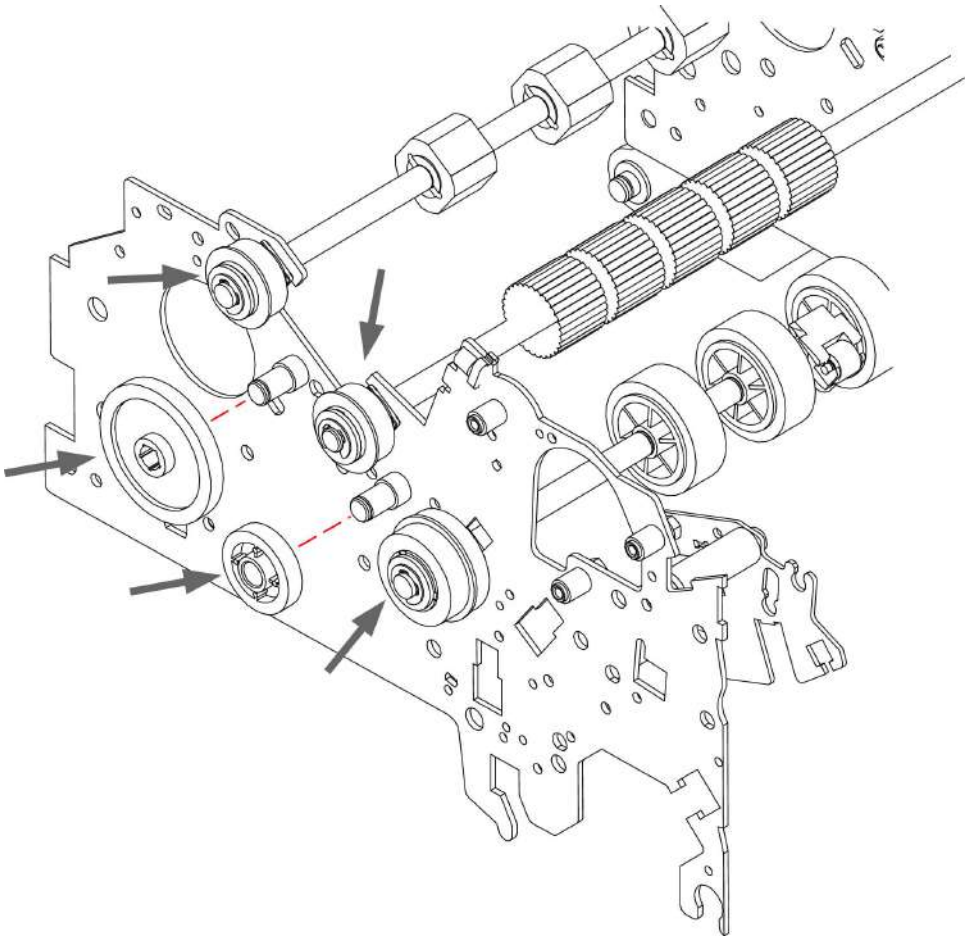
1. Remove the LH operating lever and the bar.
2. Release the belt tension (bracket 2).
3. Pull belt 1 from the belt tensioner.
4. Remove spring clips and washers to remove the gears.

Gears on the RH side



1. Remove the RH operating lever and the ribbon cable holder.
2. Remove the spring clips to remove the gears.

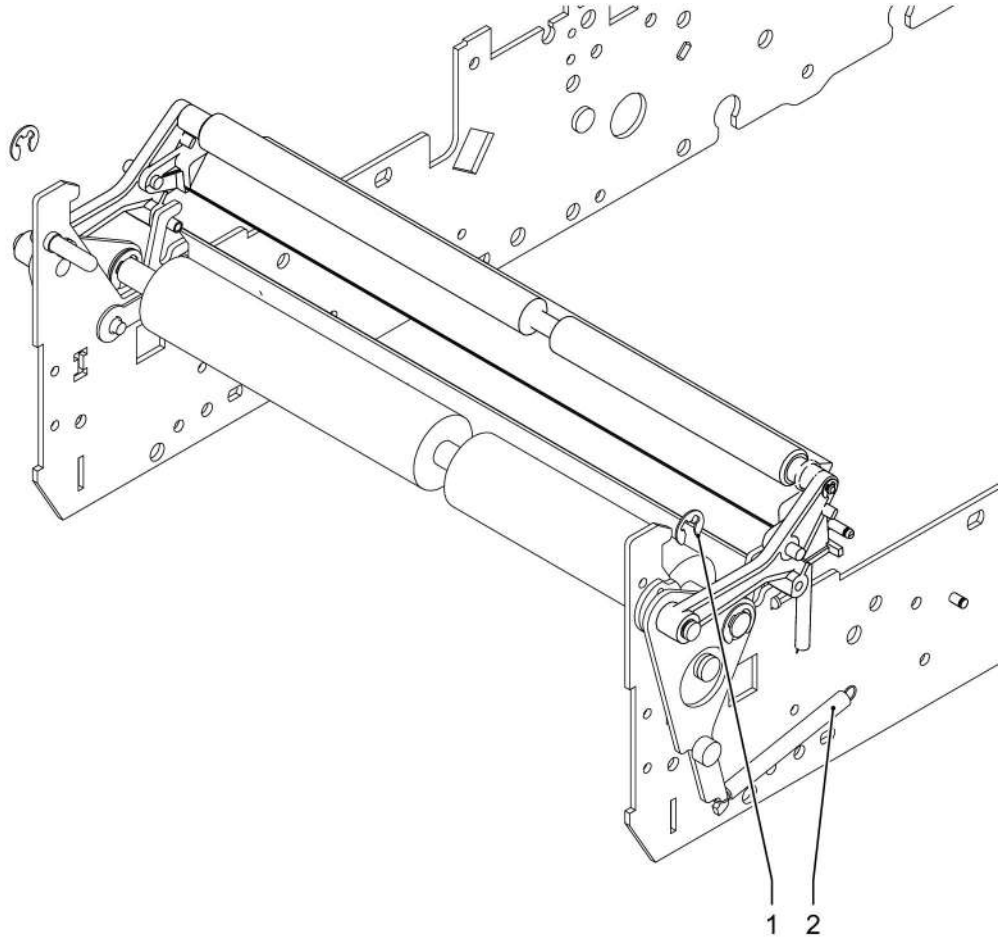
Envelope hopper gears



1. Remove the LH operating lever and the bar.
2. Remove spring clips, washers or bolts to remove the gears.

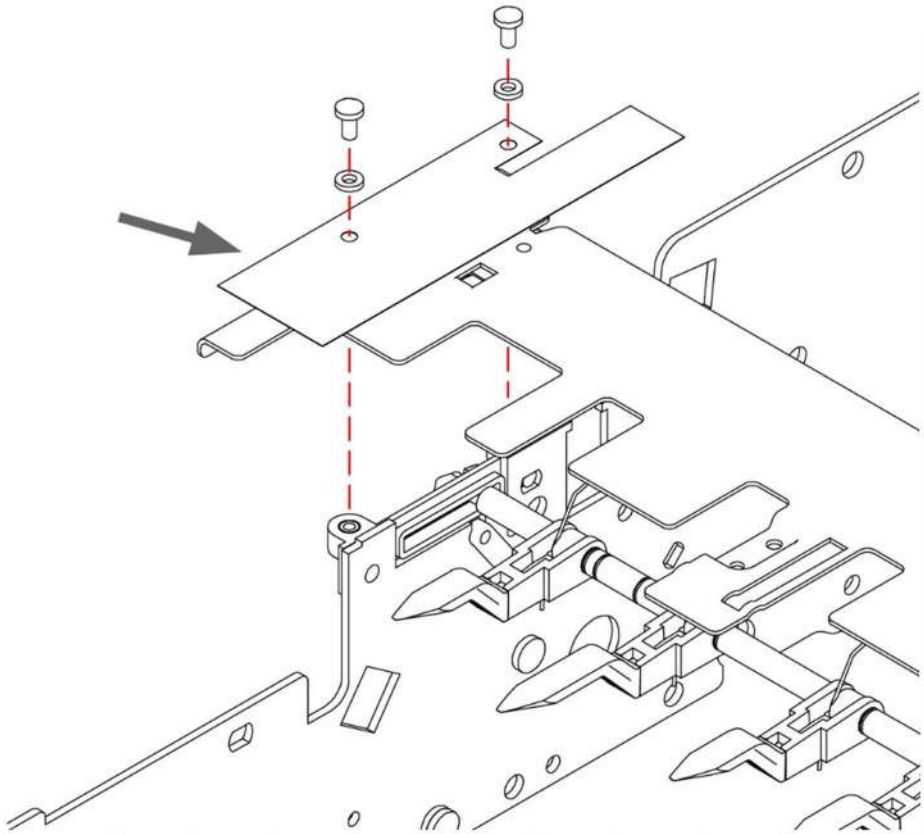
Insert area

Deflector envelope exit assy / inserting roller assy (4149825J)



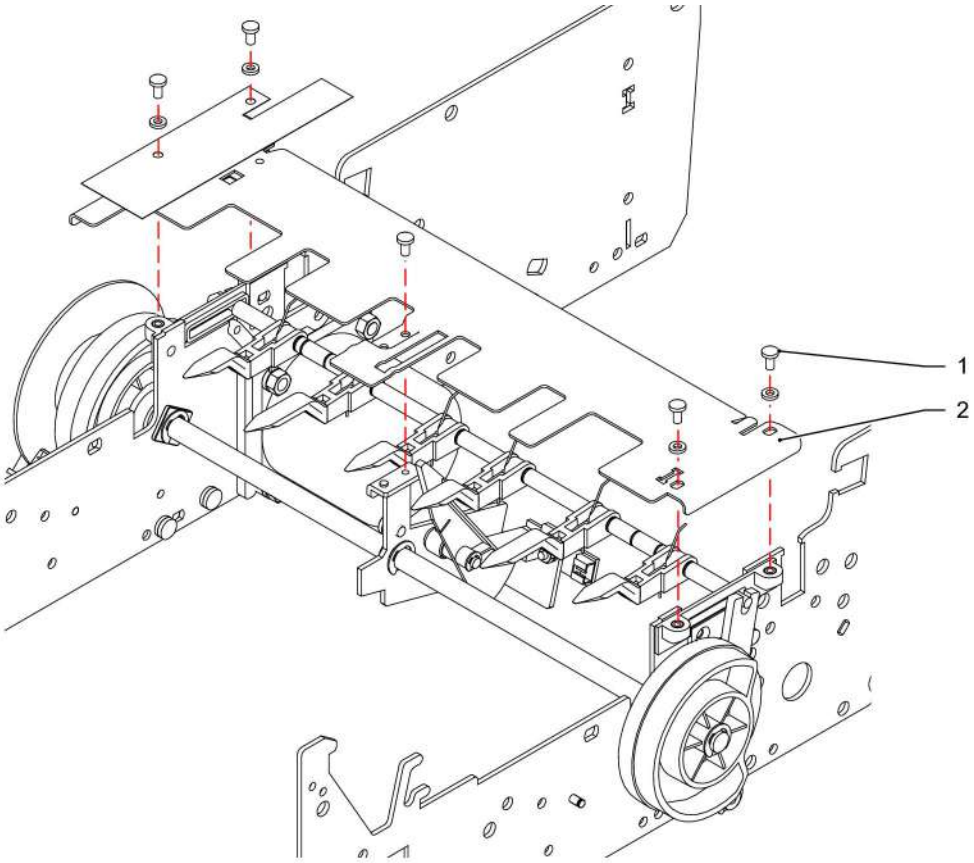
1. Remove the bottom cover.
2. Unhook spring 2.
3. Remove clips 1 that secure the assy to the axle.
4. Pull on one side the lever from the axle and remove the assy.

Screening plate (mylar)



The mylar document support plate is located on the insert plate.

Inserting plate assy (4149850K)

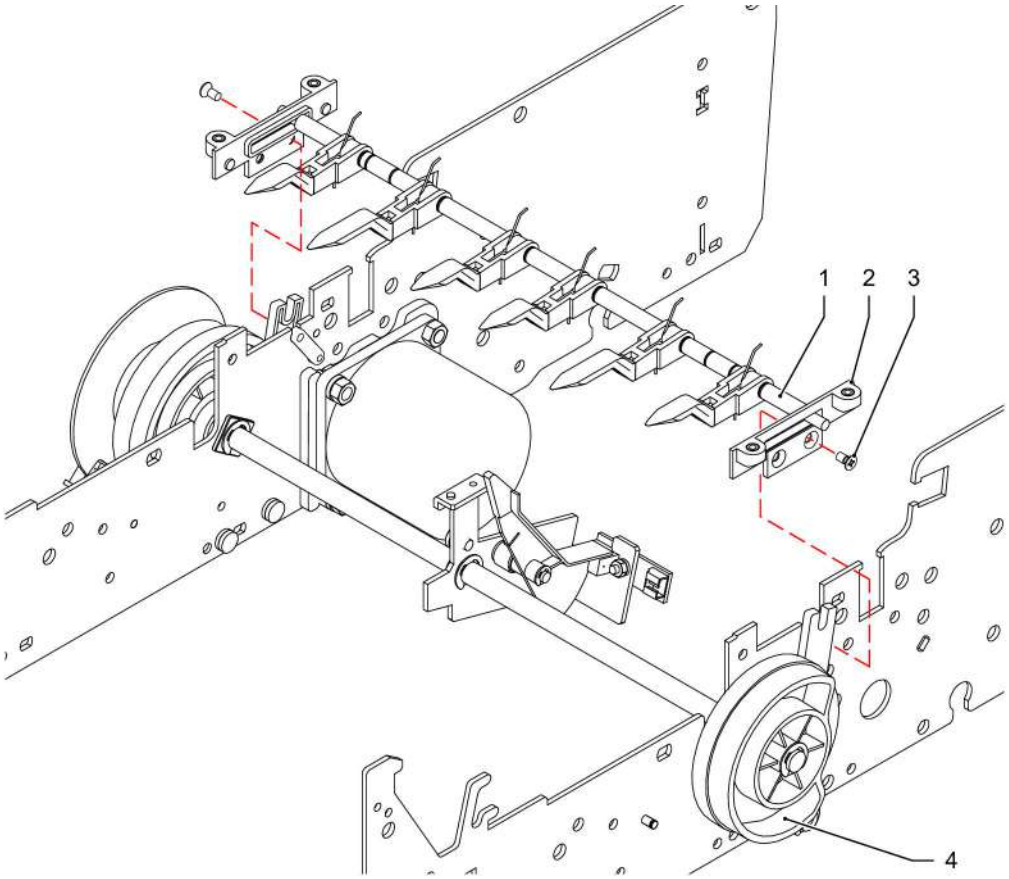


1. Open the system.

2. Remove five screws 1 that hold the inserting plate.

3. Remove inserting plate 2.

Insert fingers assy (4149883U) and fingers



1. Open the system.
2. Remove the bottom cover.
3. Remove the inserting plate (see Inserting plate assy (4149850K) on page 94).
4. On the RH side rotate disc 4 counterclockwise until the fingers are in upper position.
5. Remove screws 3.
6. Lift rail 2 until you can pull out finger assy 1.

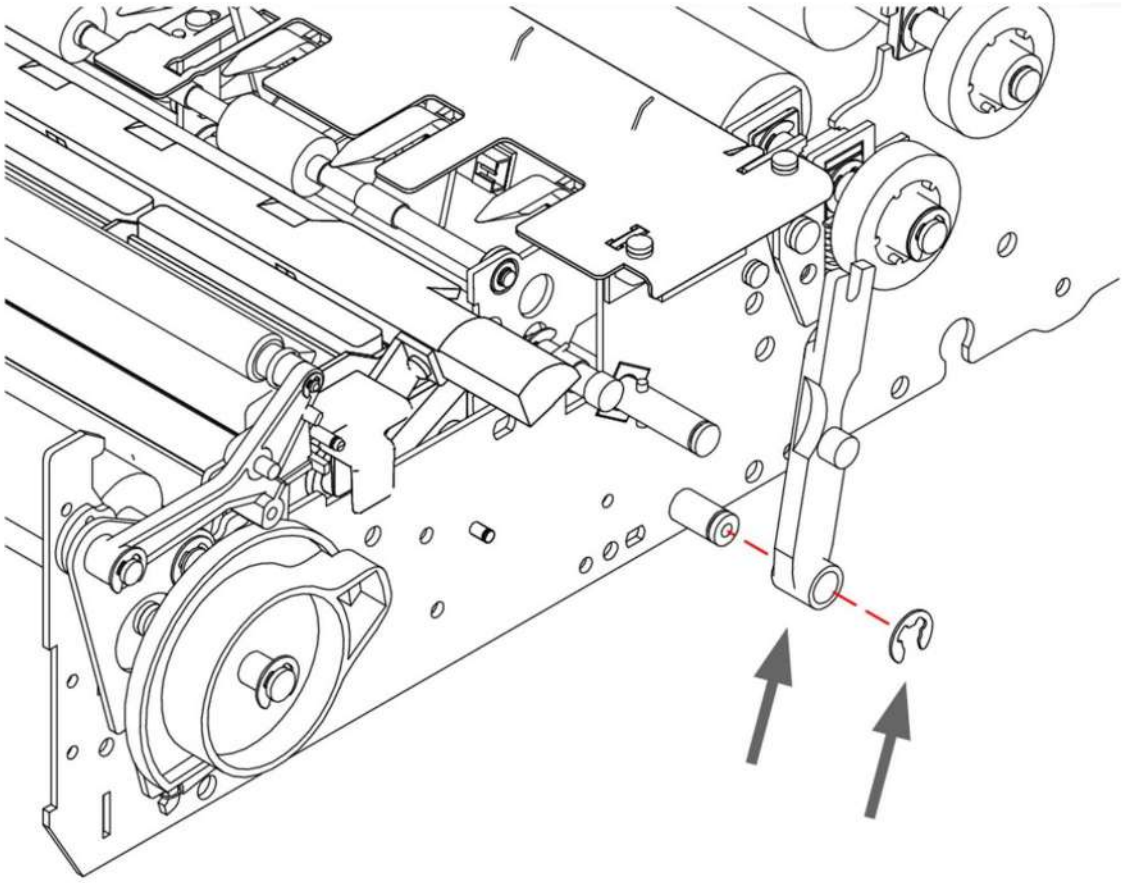
If you want to replace the fingers: there are three types of fingers available. Which finger you need depends on the application of the customer. The finger types are:

- short insert finger (rounded), 4152001A
- short insert finger (sharp), 4147188M
- long insert finger (sharp), 4147189N

Inserting rollers

Refer to Folding rollers on page 75.

Finger levers



1. Remove the cam disc (see Drive (exit) on page 97).
2. Remove the spring clip that secures the lever.
3. Remove the lever.

Sealing and exit

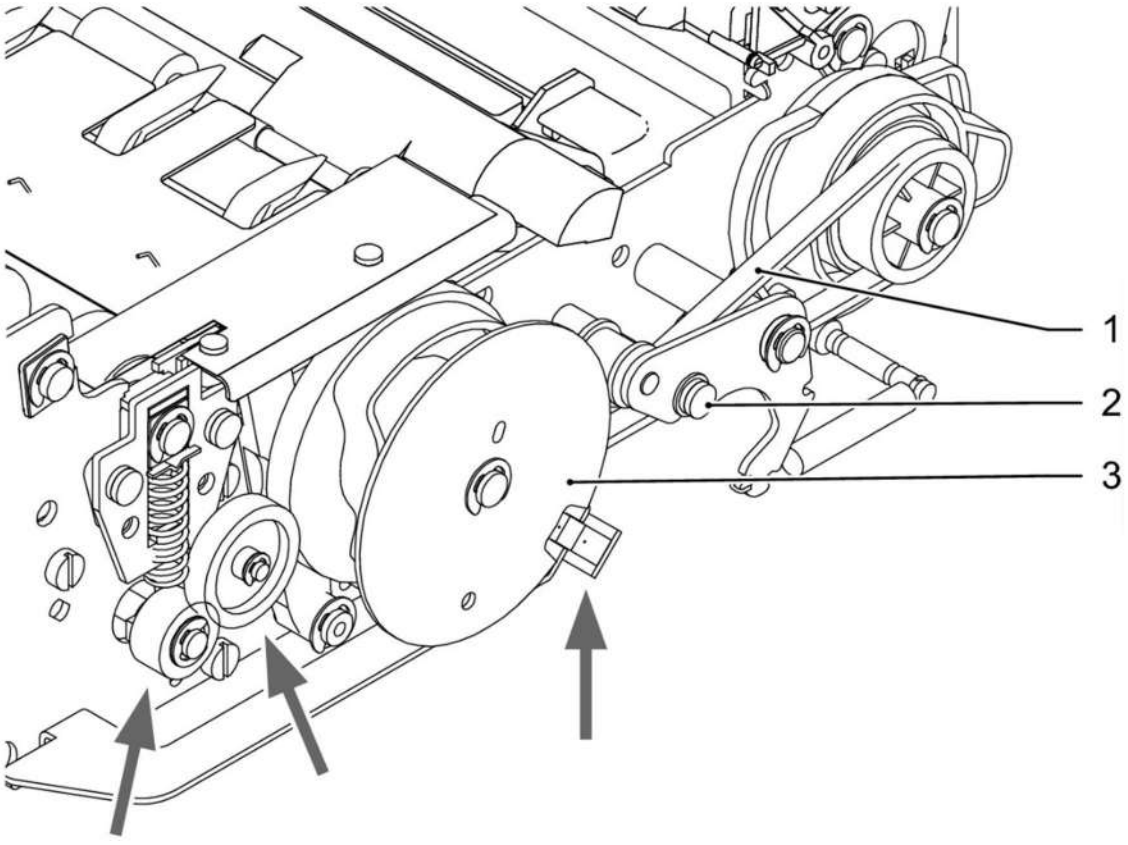
Sealing liquid reservoir (4149859U)

1. Open the system.
2. Lift the reservoir out of the system.

Moistening brushes

1. Remove the sealing liquid reservoir.
2. Pull the brushes out of the reservoir.

Drive (exit)



1. Remove the bottom cover.
2. Remove the inserting plate (see Inserting plate assy (4149850K) on page 94)
3. Remove the spring clip and pull disk cover 3 from the axle (LH side).
4. Loosen screw 2 to release the belt tension.

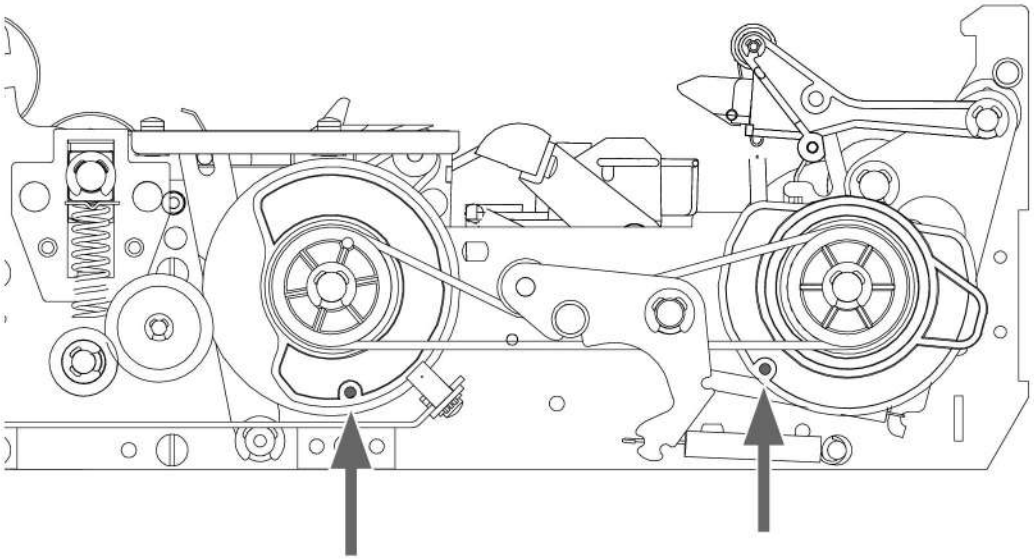
5. Pull belt 1 from the disk.
6. Remove the sensor.
7. Rotate the disk until you can remove it from the axle.

> Do not remove the disks on the left and right side at the same time. On assembly you can use the disk on the other side to determine the correct position: the disks on both sides must have equal positions.

On assembly of the LH side:

- The position of the LH disk and RH disk must be exactly the same.
- Synchronize both disks on the LH side before you replace the drive belt.

Synchronize the disks on the LH side as follows:



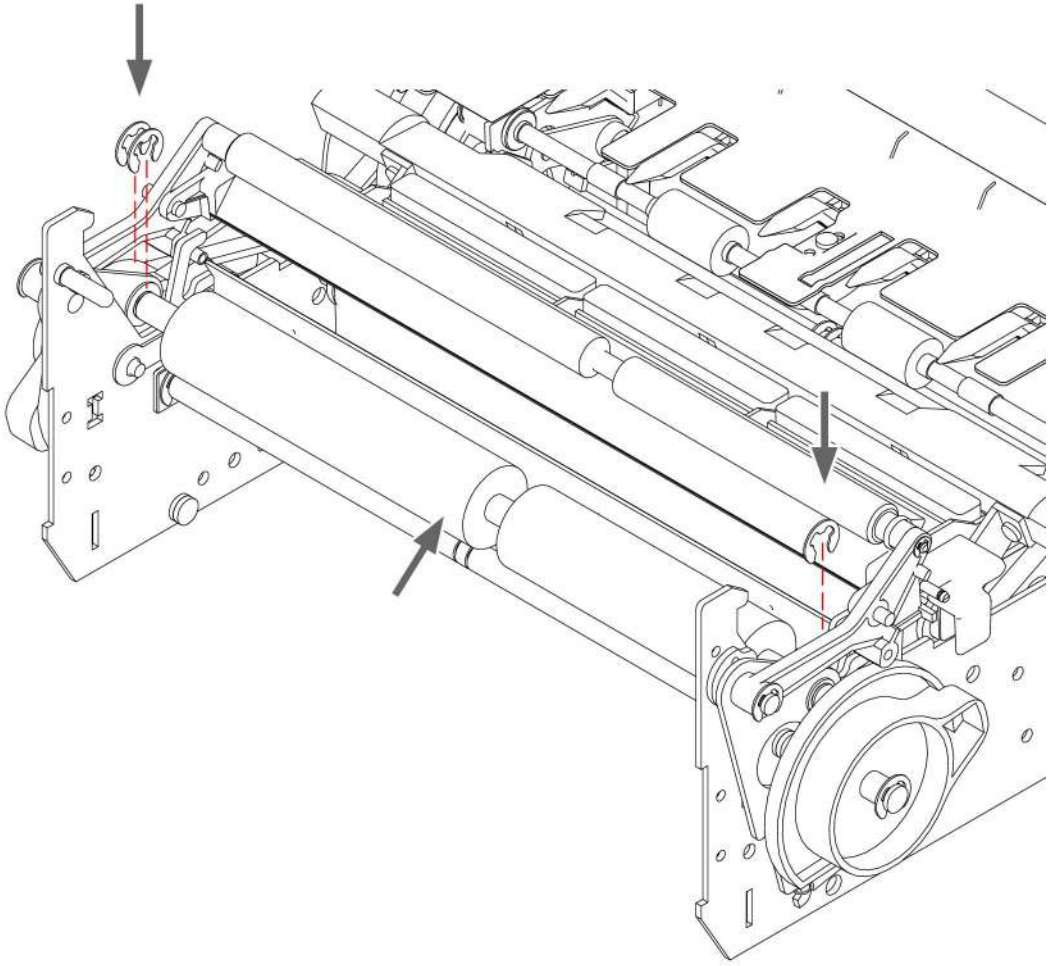
1. Both disks have small holes. Position these holes exactly in front of holes in the frame.
2. Use screw drivers or 3 mm pins to secure the disk's position.
3. Replace the drive belt.
4. Secure the belt tensioner (see Exit drive belt on page 120).
5. Remove the pins you used to secure the disk position.
6. Replace the disk cover.

Drive belt on the inside left

To remove the drive belt on the inside of the frame on the left, refer to the disassembly of the lower fold roller (see Folding rollers on page 75).

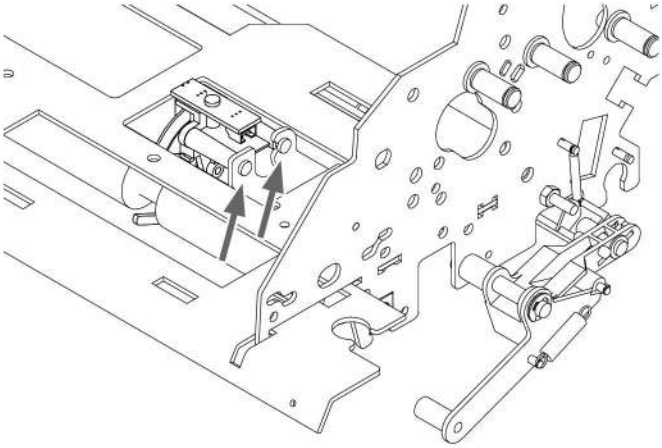
Exit rollers

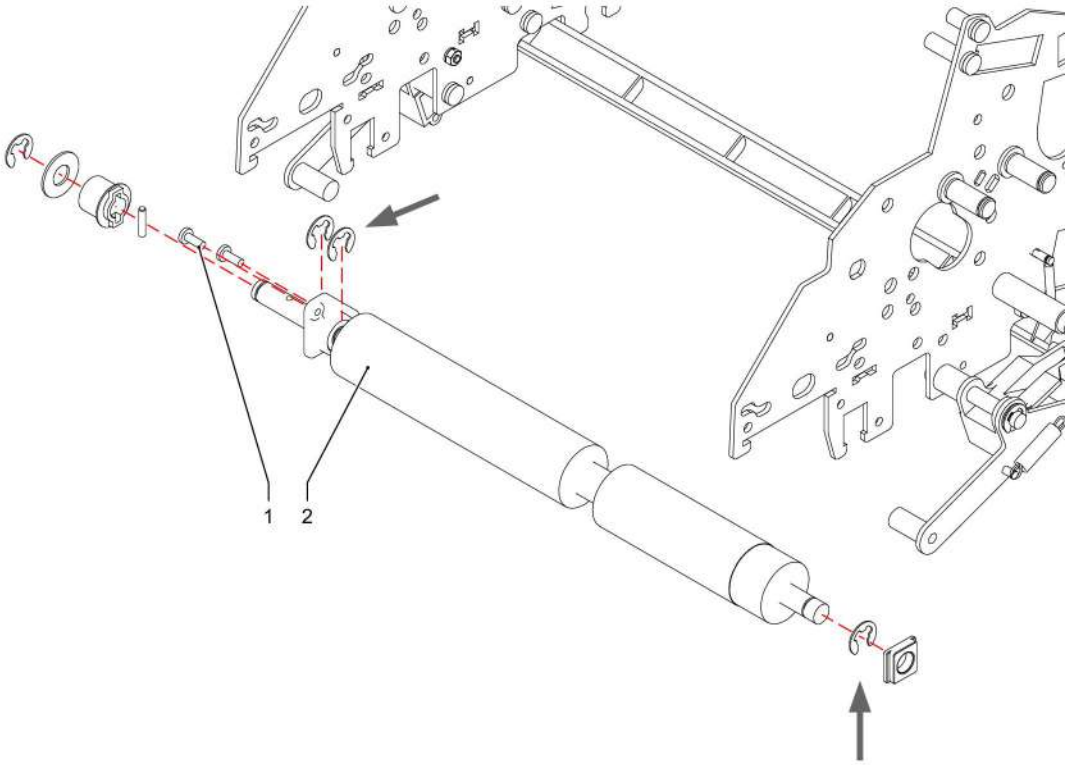
Lower roller



1. Remove the three spring clips from the axle.
2. Shift the axle to one side and pull it out of the frame.

Upper roller

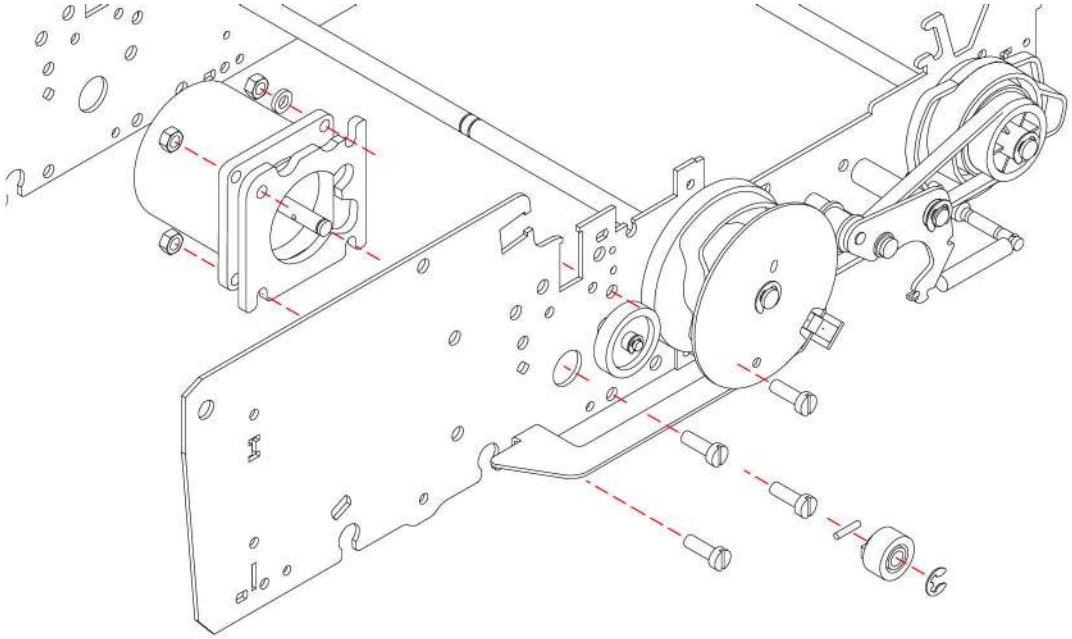




1. Remove the top cover.
2. Remove the main motor M1 (see Main motor M1 on page 102). This is necessary to get access to the screws that secure the sensor.
3. Remove the screws that secure the bracket of the exit sensor (FS12).
4. Open the system.
5. On the LH side remove the belt from the pulley of the exit roller.
6. Remove the inside clip on the right.
7. Remove screws 1 that secure the bearing on the left.

8. Remove the spring clip on the left.
9. Carefully release the axle from the flag of FS12 and take out the axle.

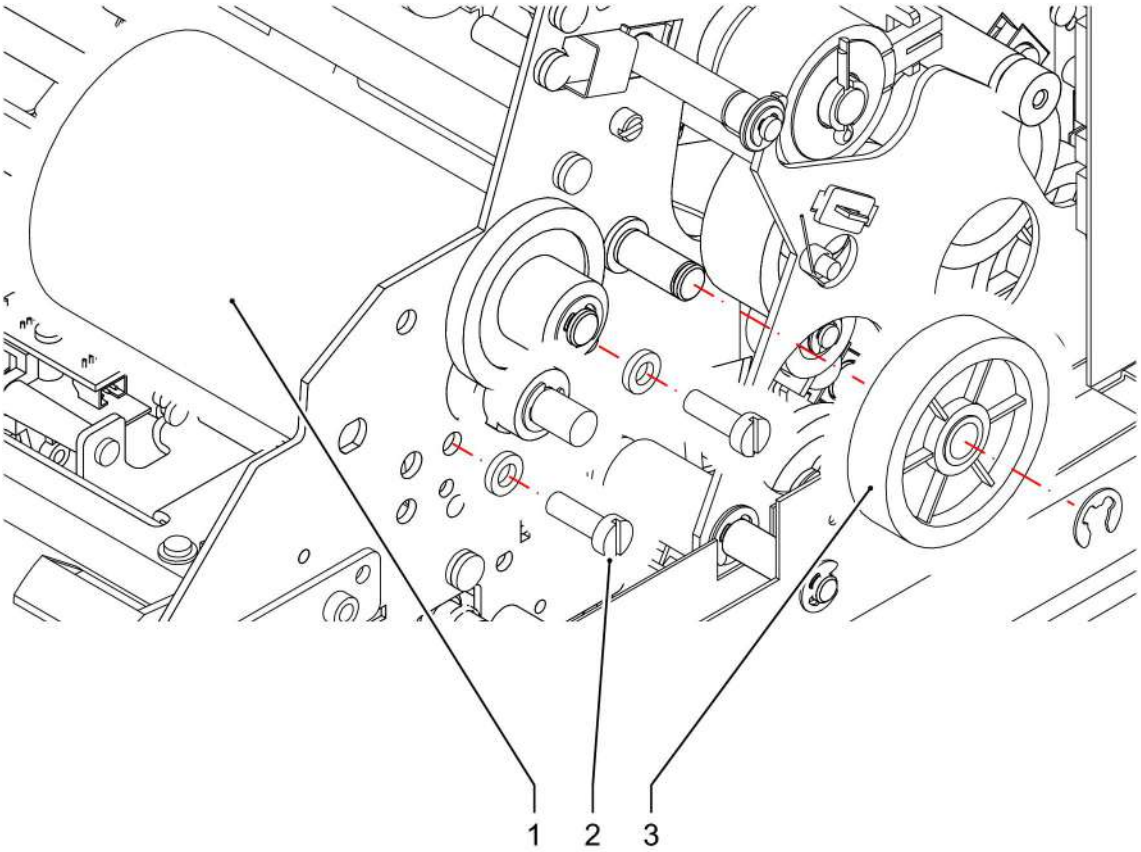
Envelope transport and CAM motor M4



1. Remove the bottom cover.
2. Lift the system to get access to the bottom side.
3. Remove the four screws that secure motor M4. Mind the nuts.
4. Remove spring clip and gear from the motor axle.
5. Disconnect the connector from the motor and remove the motor from the system.

Main drive

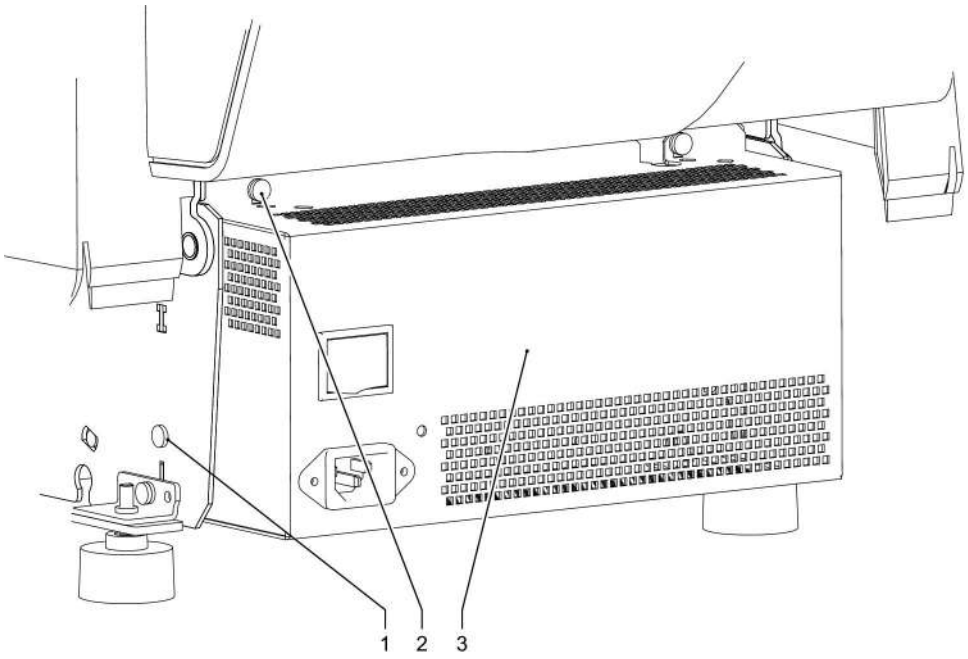
Main motor M1



1. Remove the top cover.
2. Remove spring clip and gear 3.
3. Remove two screws 2 that secure the motor.
4. Carefully remove motor 1 and the distance plate from the system.
5. Disconnect the connector from the motor.

Electrical components

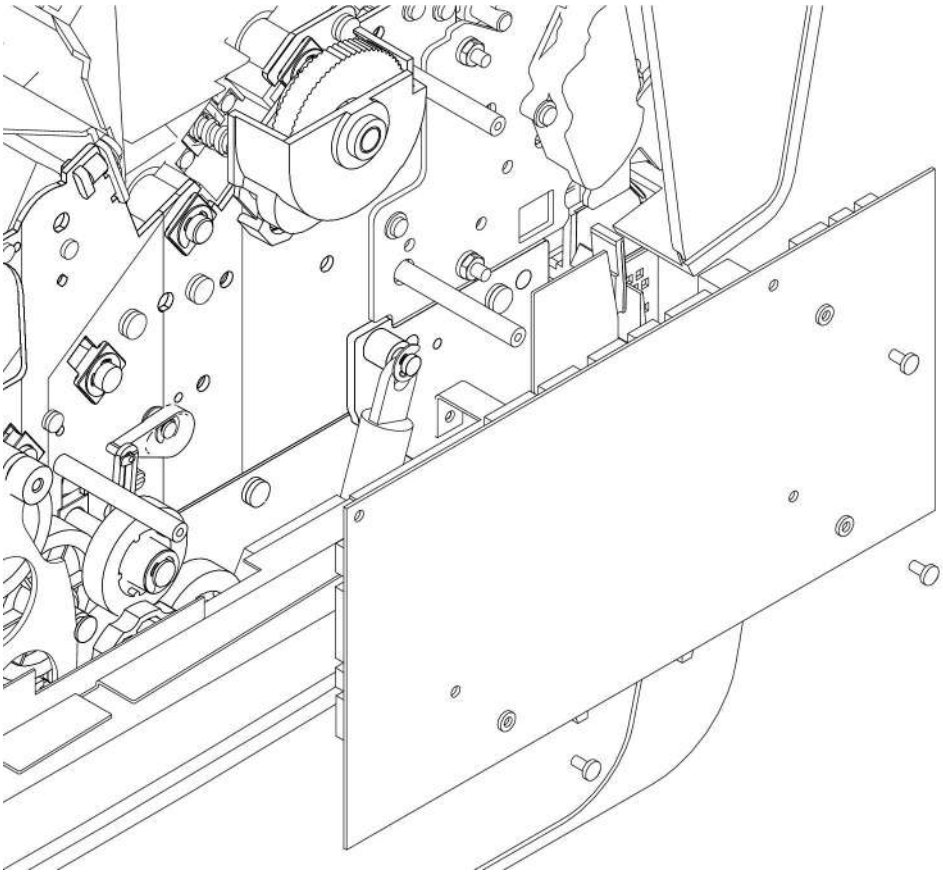
Power supply



1. Remove the bottom cover.
2. Remove two screws 2 above the power supply.
3. Remove two screws 1 at both sides of the power supply.
4. Lift the system to remove power supply 3.
5. Disconnect the power supply from the main board.

Replacement of the Main PCB (main board)

Potential hazard may exist to electronic hardware in conditions with static electricity. It is advised that, when handling electronic parts, an earth connected wrist band is used in order to be permanently discharged from static electricity.



IMPORTANT INFORMATION

The serial number that is stored on the main board must match the system serial number and is connected to a dedicated customer. Also when making use of the DS-connect feature it is key to have a serial number for identification because in case of mismatch, data gathered in the "data lake" will be mixed up. This will affect features as:

- Stats (Customer)
- Software download (Customer/ NIO)
- Data analyses (NIO)

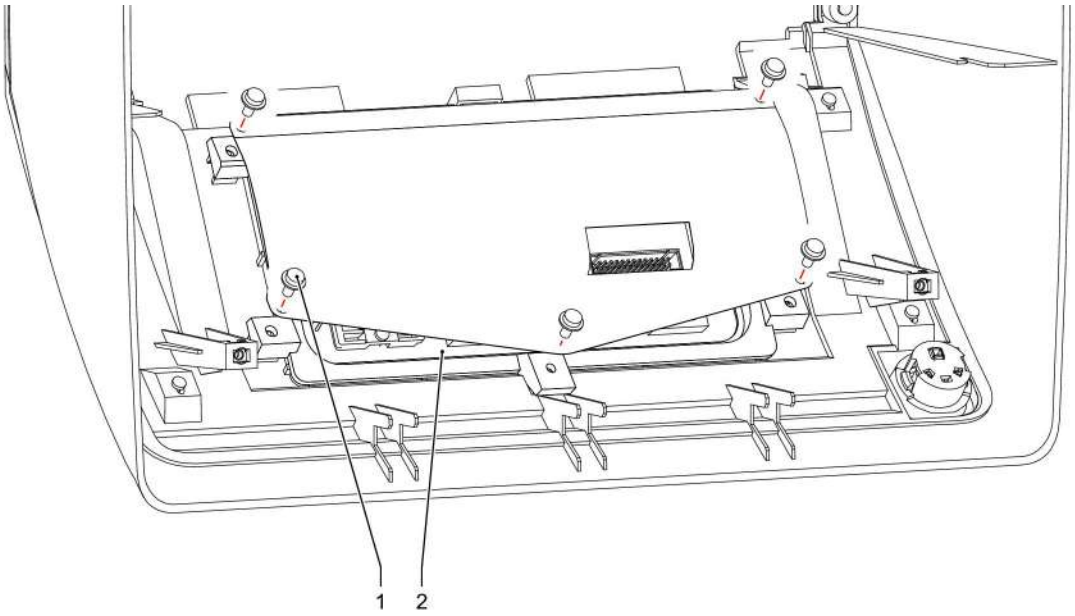
When replacing a main board the following scenarios are possible of which you have to be aware of:

1. Main board replacement by a new main board: there is no serial number stored on the main board.
   - serial number must be entered at boot up, refer to the type plate on the system (see The system on page 10) for the system serial number.
   - date/time must be entered at boot up.
   Note: the serial number contains a checksum.
2. Main board replacement by a re-used main board: an 'old' serial number is likely present on the main board. In this case:
   - after start-up a "reset data" must be performed to erase memory incl. serial number., date/time;
   - after reset and machine reboot; the serial number and date/time must be entered at boot up.

Note that in case of a new system the serial number is stored on the main board by the factory.

1. Remove the top cover.
2. Remove the ribbon cable holder.
3. Remove the three screws that hold the main board.
4. Disconnect the remaining connectors from the main board.
5. Remove the main board.

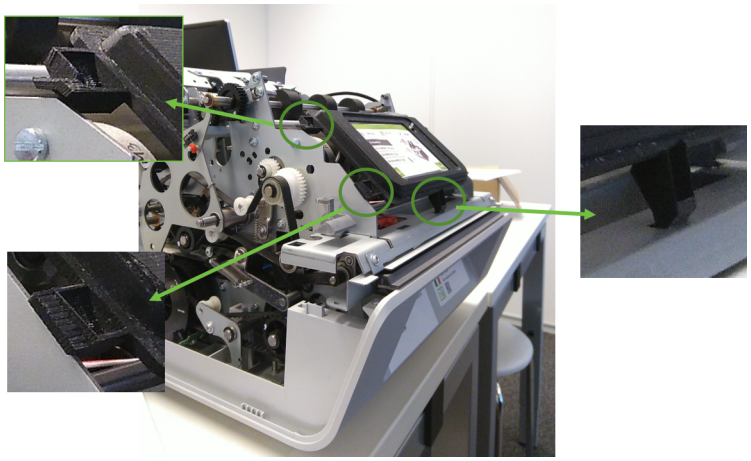
Control panel assy



1. Remove the top cover assy.
2. Loosen the five screws 1 that secure the control panel assy. together with the MMI protection (plate) to the top cover assy.
3. Remove the control panel assy 2 with the MMI protection (plate).

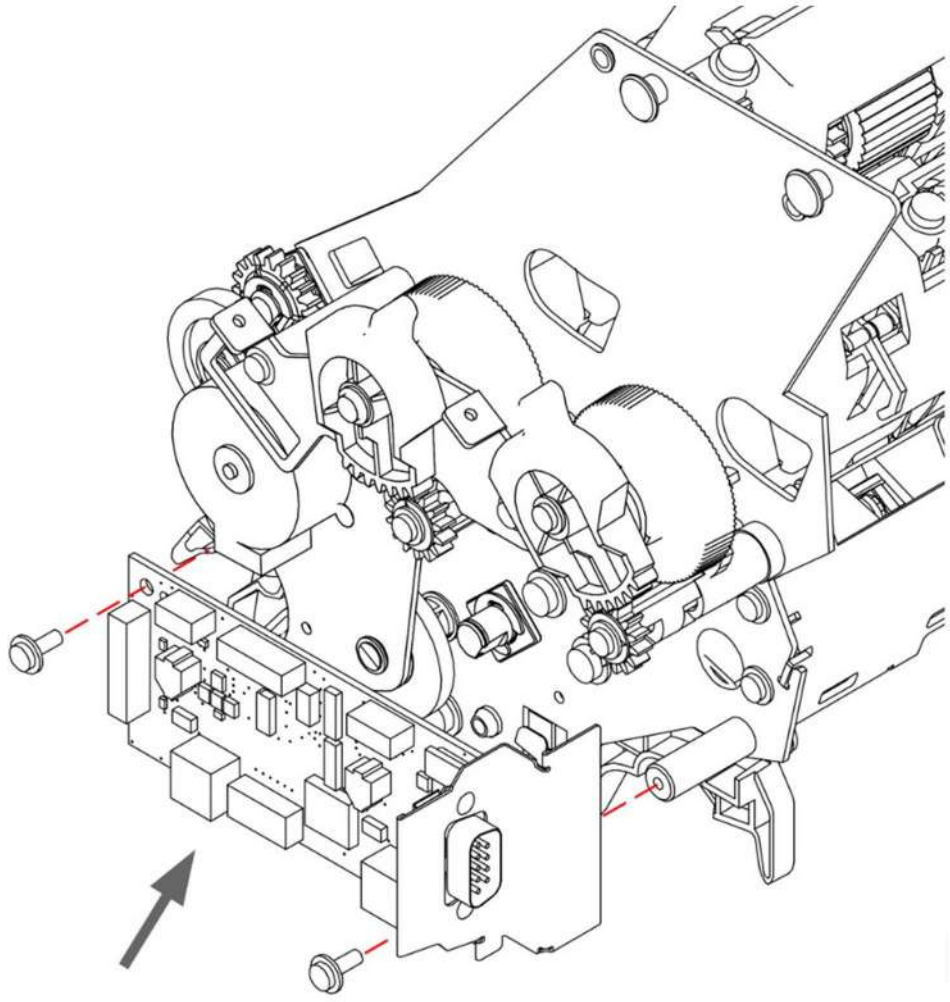
Service purposes

For service purposes, the control panel assy has been adapted to fit/stay on the chassis when it has been dismounted from the top cover assy.



Note: be aware that when the control panel is positioned at the "service" position it is not fastened/mounted to the chassis.

PCB assembly document feeder (4149862X)

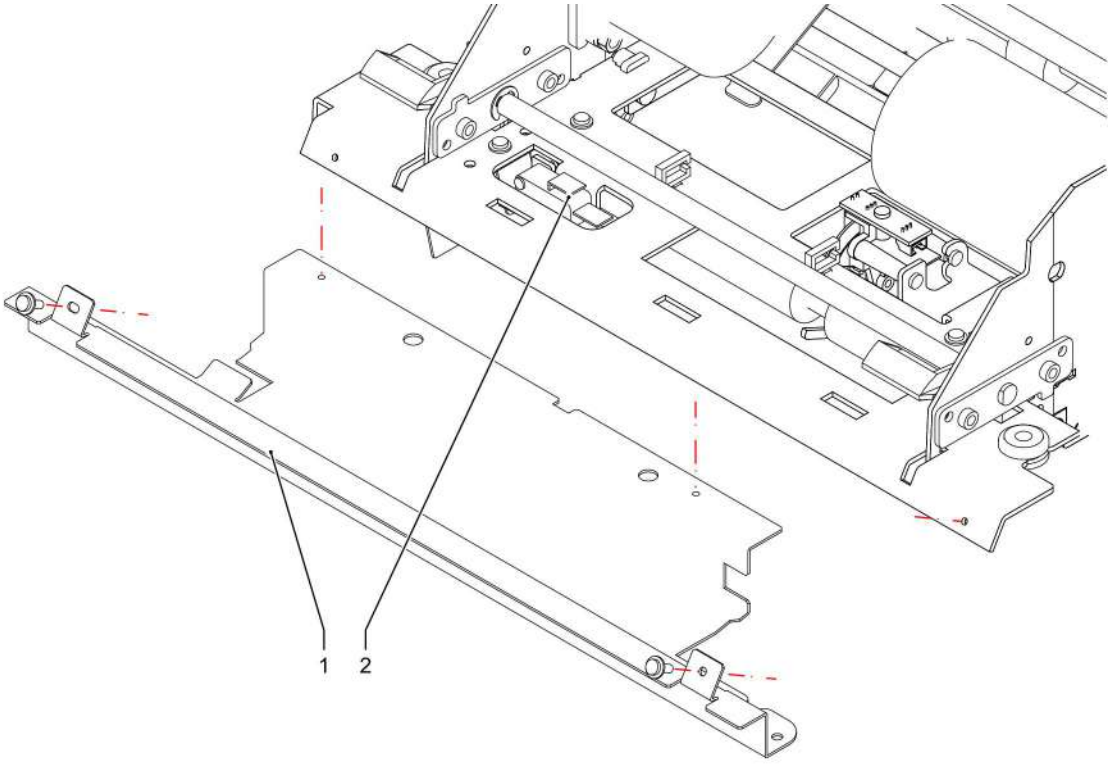


1. Remove the RH side cover.
2. Remove both screws that hold the PCB.
3. Remove the PCB assy.

Sensors

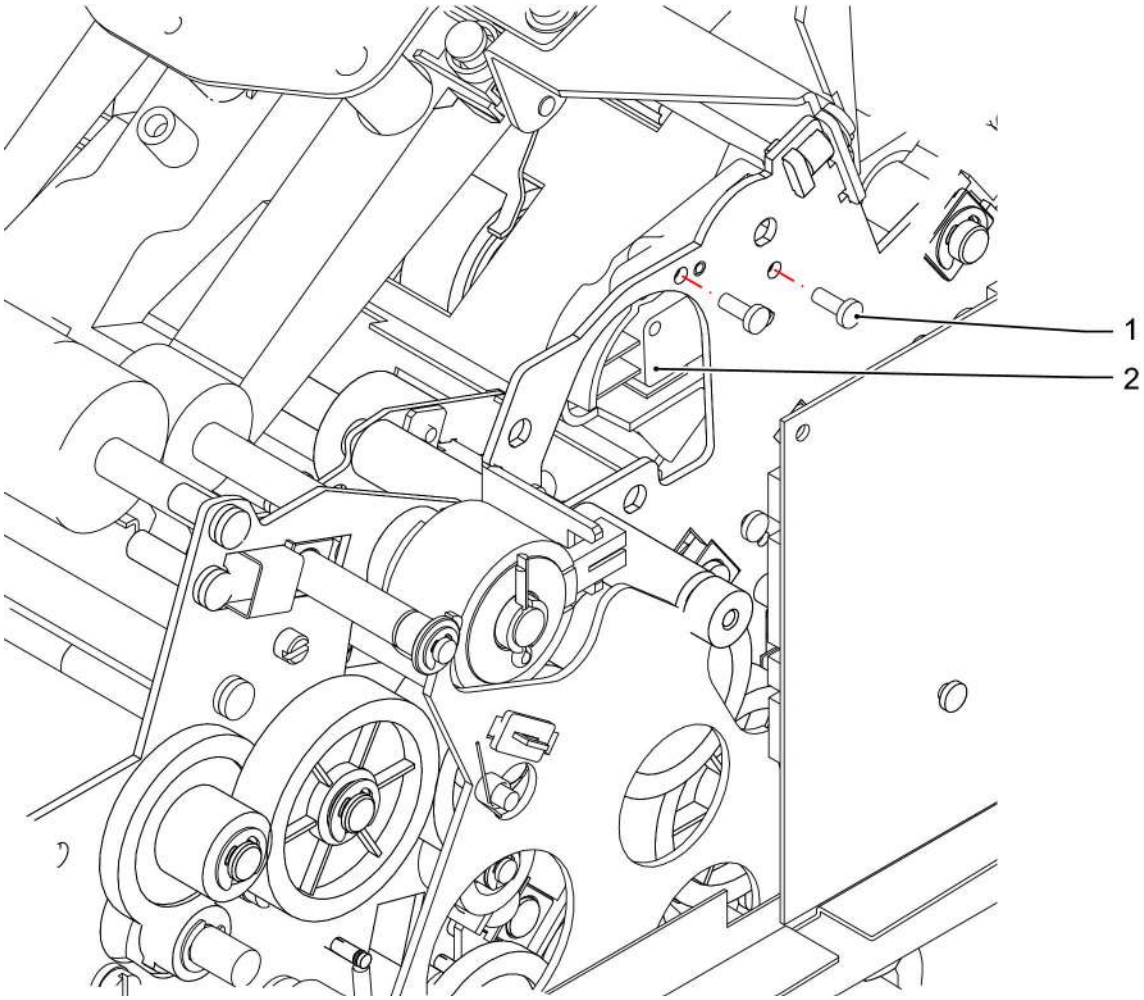
Microswitches (4149858T)

System open (MS1)



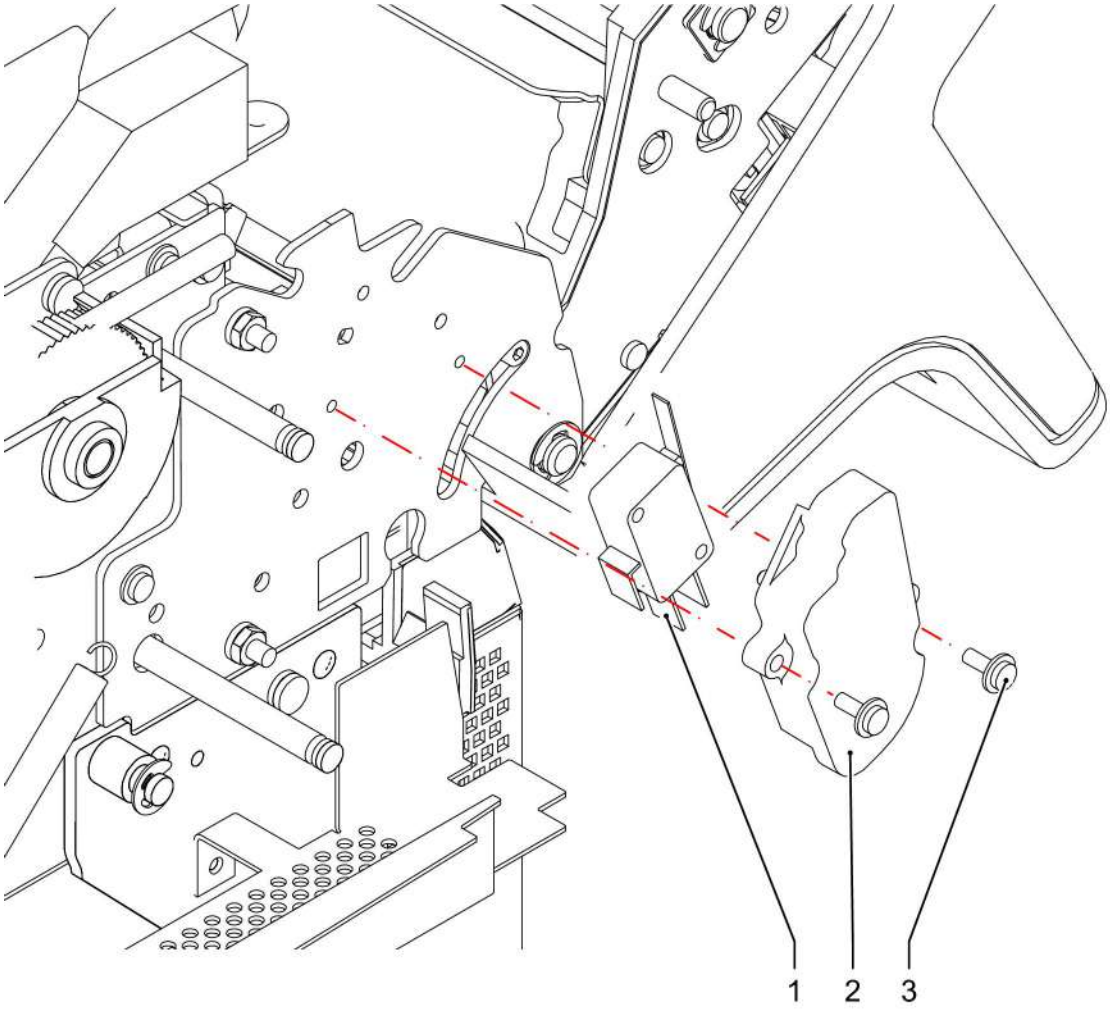
1. Remove the top cover.
2. Remove plate 1.
3. Remove the screws that secure the microswitch.
4. Disconnect and remove the microswitch.

Feeder block (MS2)



1. Remove the top cover.
2. Remove screws 1 that secure microswitch 2.
3. Disconnect and remove the microswitch.

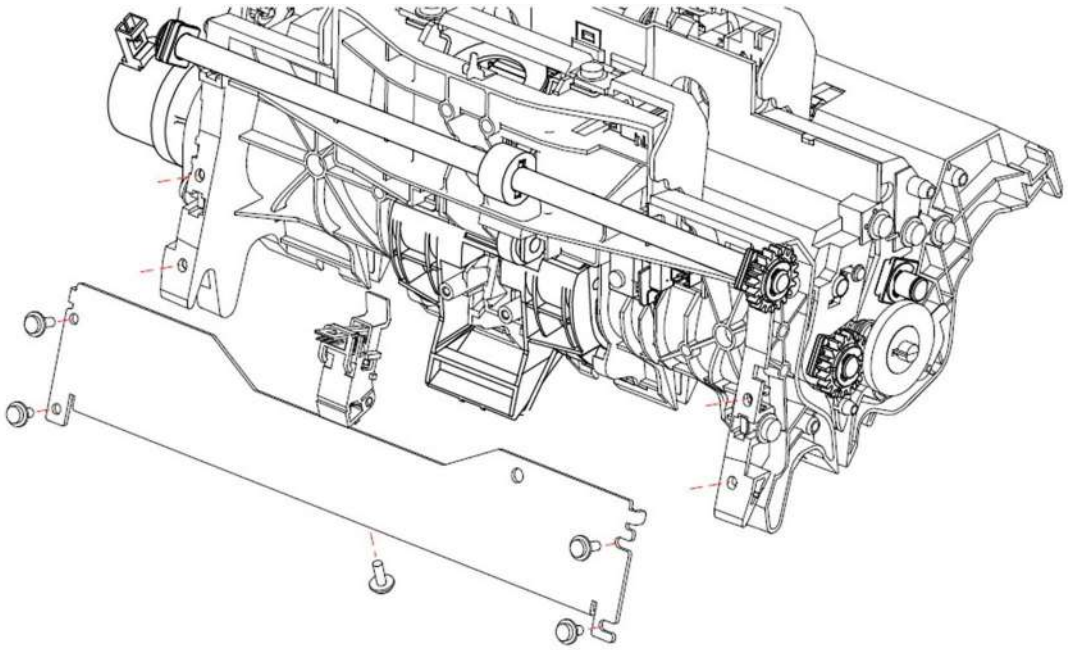
Feeder 3 (MS3)



1. Remove the main board.
2. Open feeder 3.
3. Remove screws 3 that secure microswitch 2.
4. Disconnect and remove the microswitch.

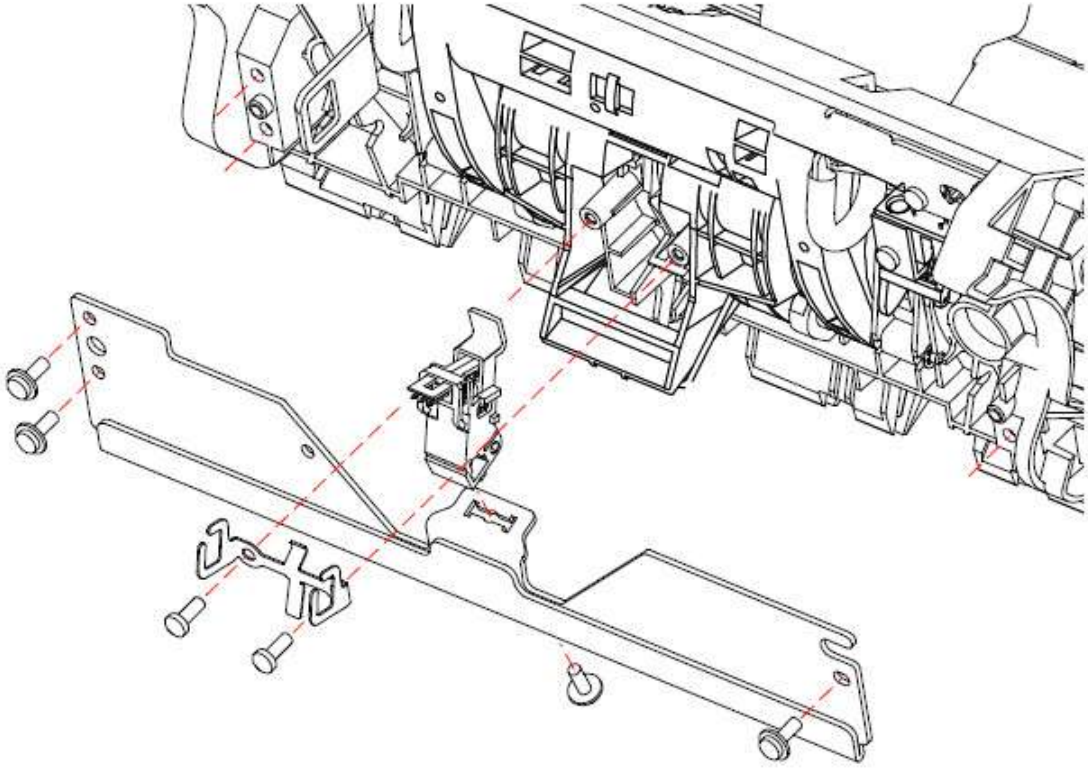
DFC unit

Feeder 1



1. Remove the side covers and top cover.
2. Remove the reinforcement frame.
3. Disconnect the connector from the DFC.
4. Remove the DFC.

Feeder 2

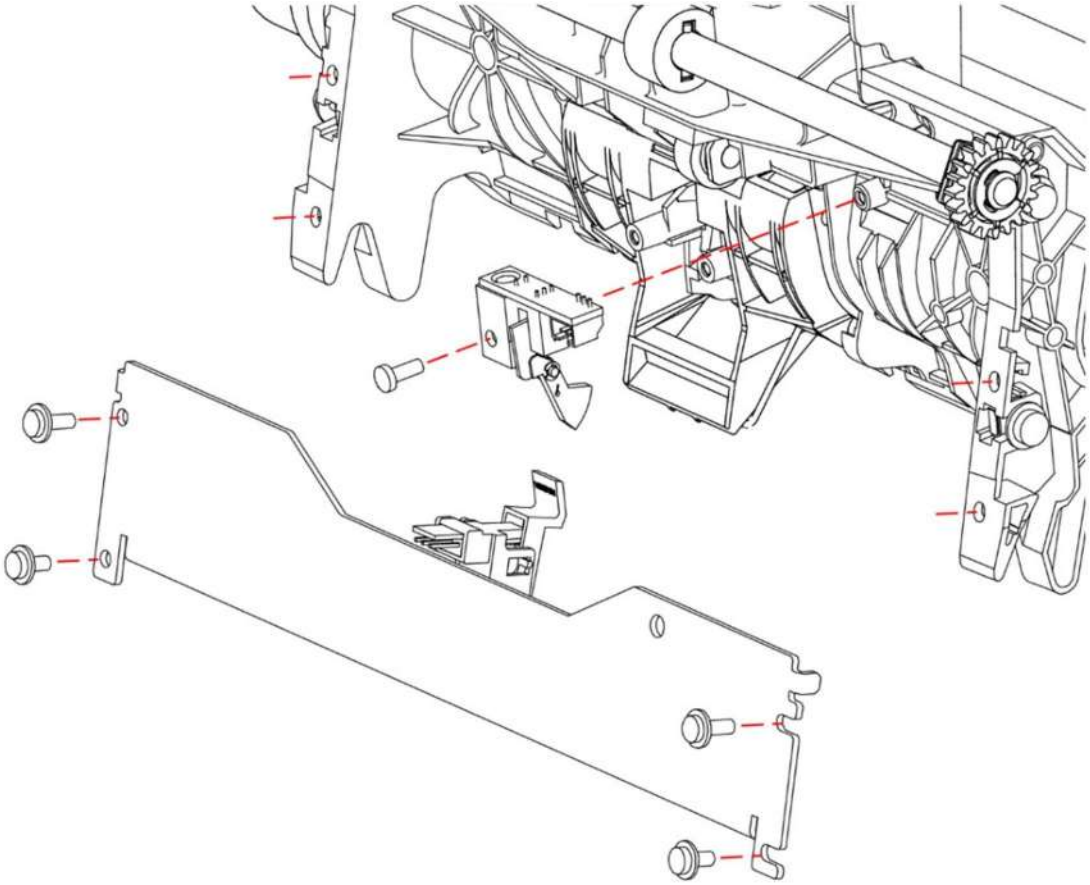


1. Remove the reinforcement frame.
2. Remove the small bracket that secures the DFC.

3. Disconnect the connector from the DFC.
4. Remove the DFC.

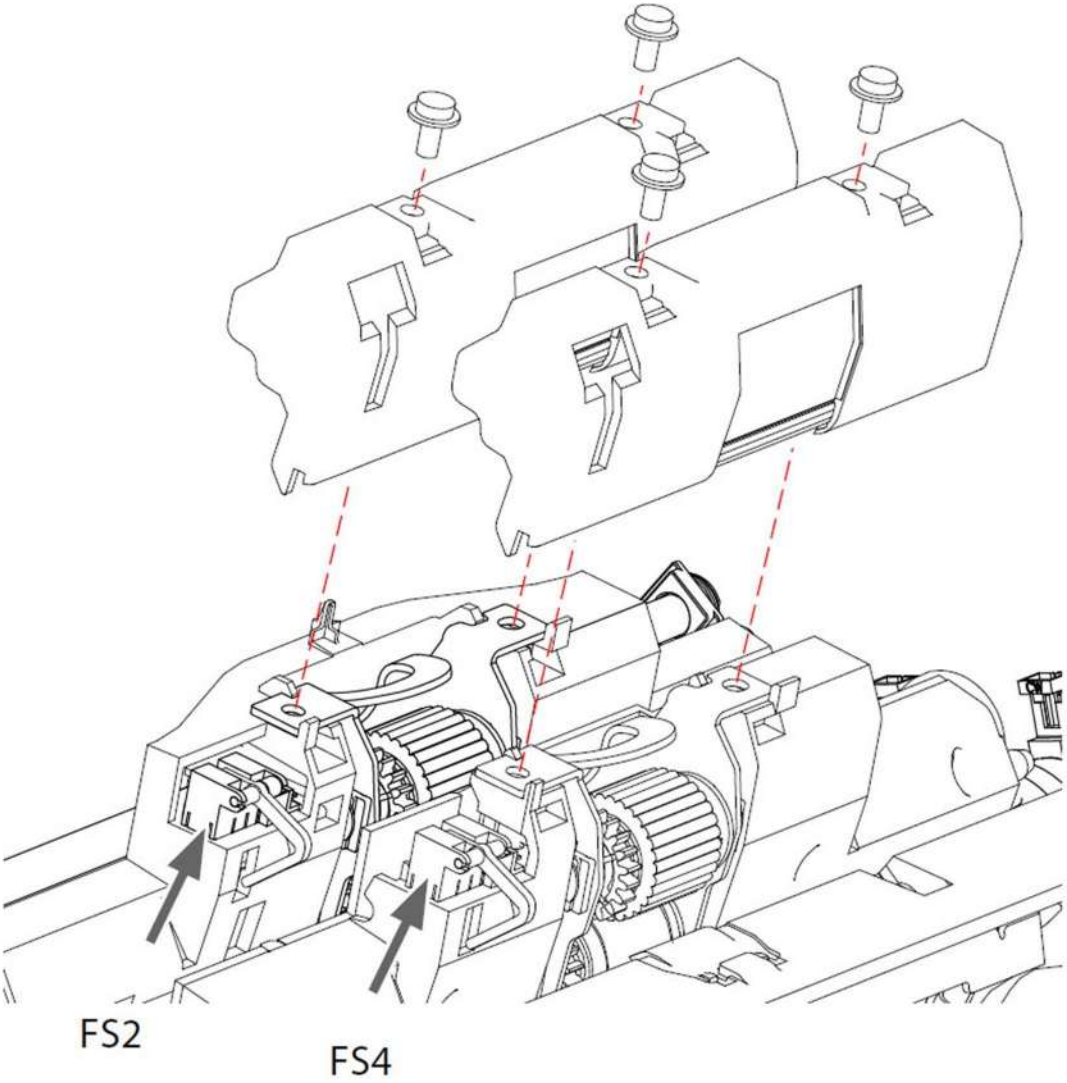
Flag switches

Separation flag switch feeder 1, FS1 (4149849J)



1. Remove the side covers and top cover.
2. Remove the reinforcement frame.
3. Remove the screw that secures the flag switch assy.
4. Shift the flag switch assy out of the feeder block.

Document detection flag switch feeder 1 (FS2)

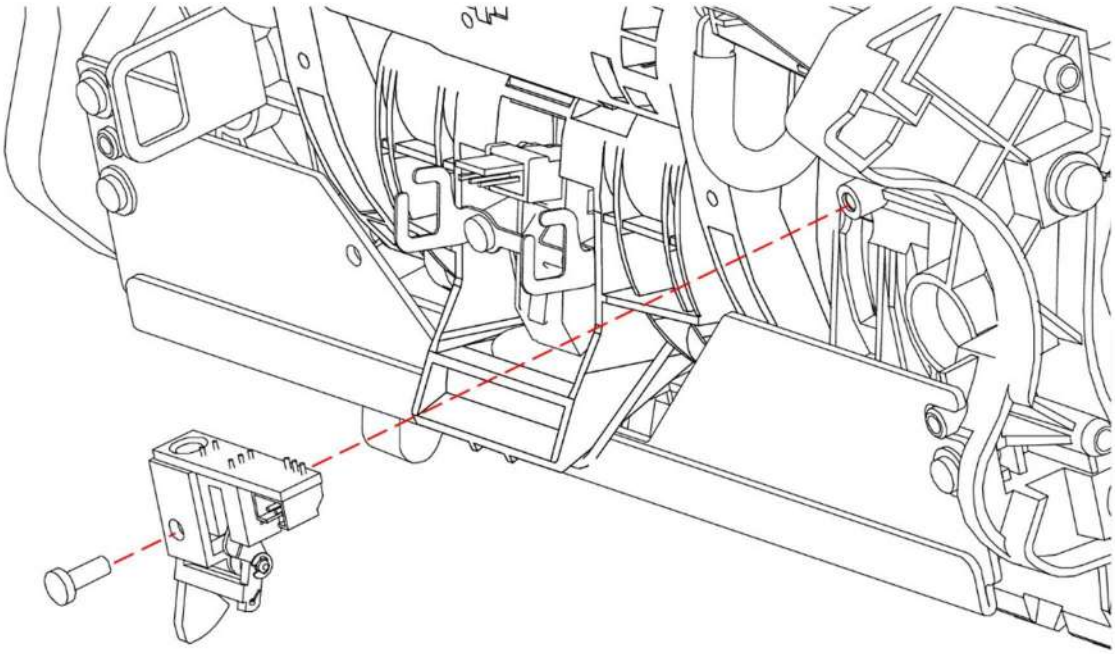


1. Remove the side covers and top cover.
2. From the top of the feeder unit remove the two screws that secure the cover of the separation module.
3. Pull the cover out of the feeder unit. Take care of the flag switch.
4. Pull out the flag switch assy.

Document detection flag switch feeder 2 (FS4)

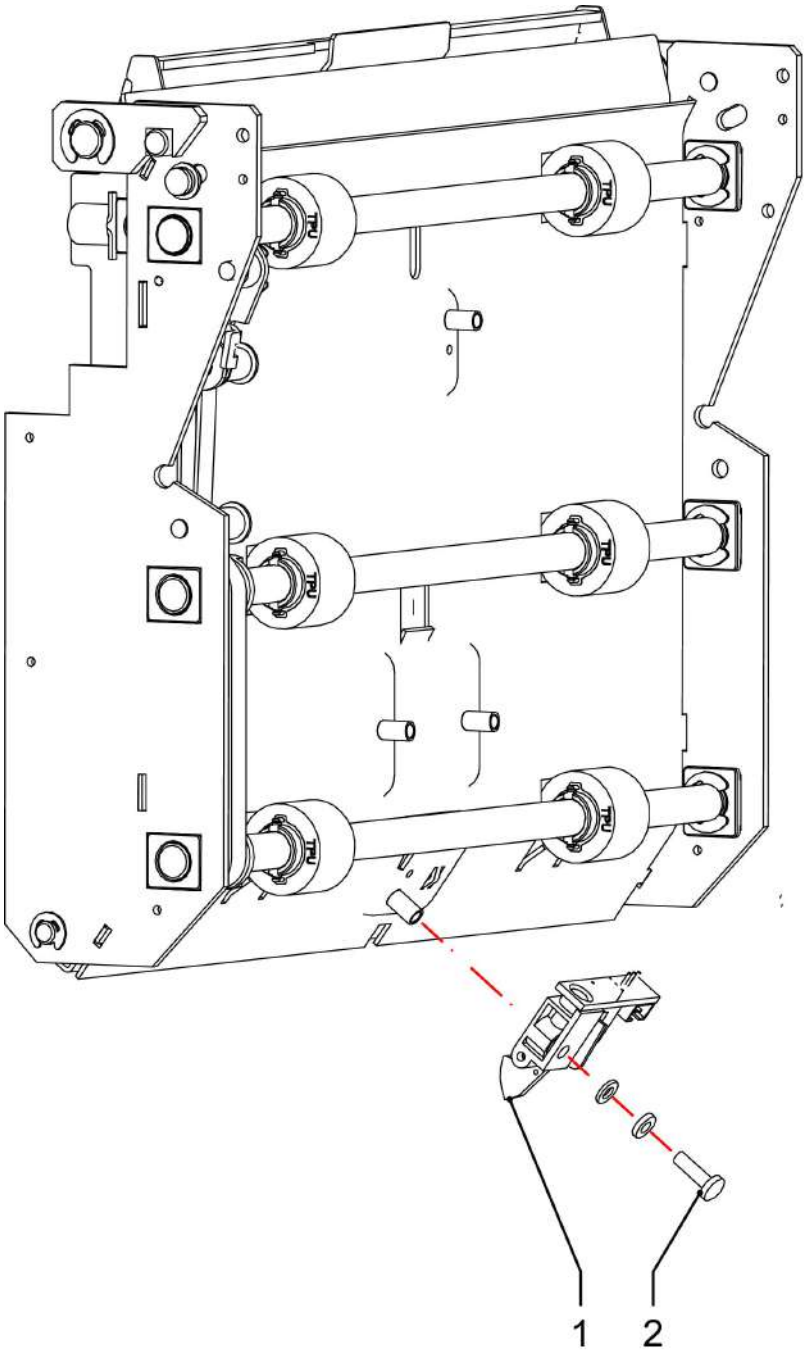
1. From the top of the feeder unit remove the two screws that secure the cover of the separation module.
2. Pull the cover out of the feeder unit. Take care of the flag switch.
3. Pull out the flag switch assy with a pair of pliers.
4. Replace the flag switch with a new one.

Separation flag switch feeder 2, FS3 (4149872H)



1. Remove the screw that secures the flag switch assy.
2. Shift the flag switch assy out of the feeder unit.

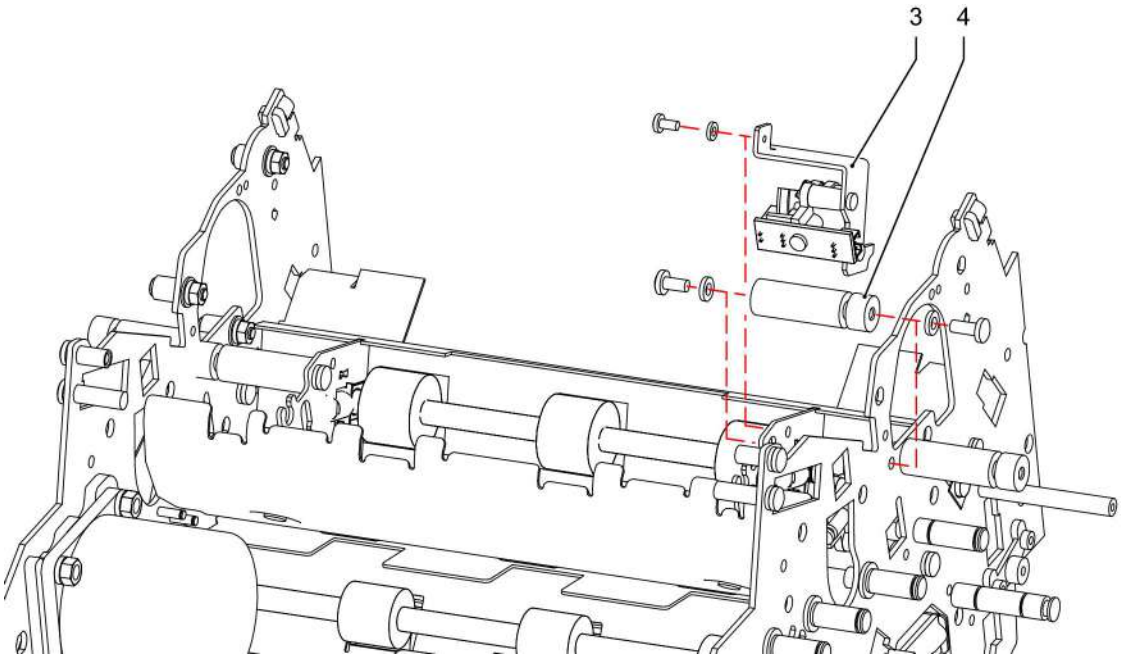
Insert path sensor FS7 (stop position, 4149849J)



To remove the feeder 3 stop position sensor FS7:

1. Remove the upper fold table and feeder 3 path; see the service video "Pocket A & Path C assy.mp4" as shown below (or online). The instruction video is a 'guide line', details can be different for the 040.1.
2. Remove screw 2 that secures the sensor assy.
3. Disconnect sensor 1.

Envelope reference sensor assy FS8 (4149837W)



1. Remove the top cover.
2. Remove bush 4 above the sensor.
3. Remove the screw that secures sensor bracket 3 to the system.
4. Pull out the bracket with the sensor.

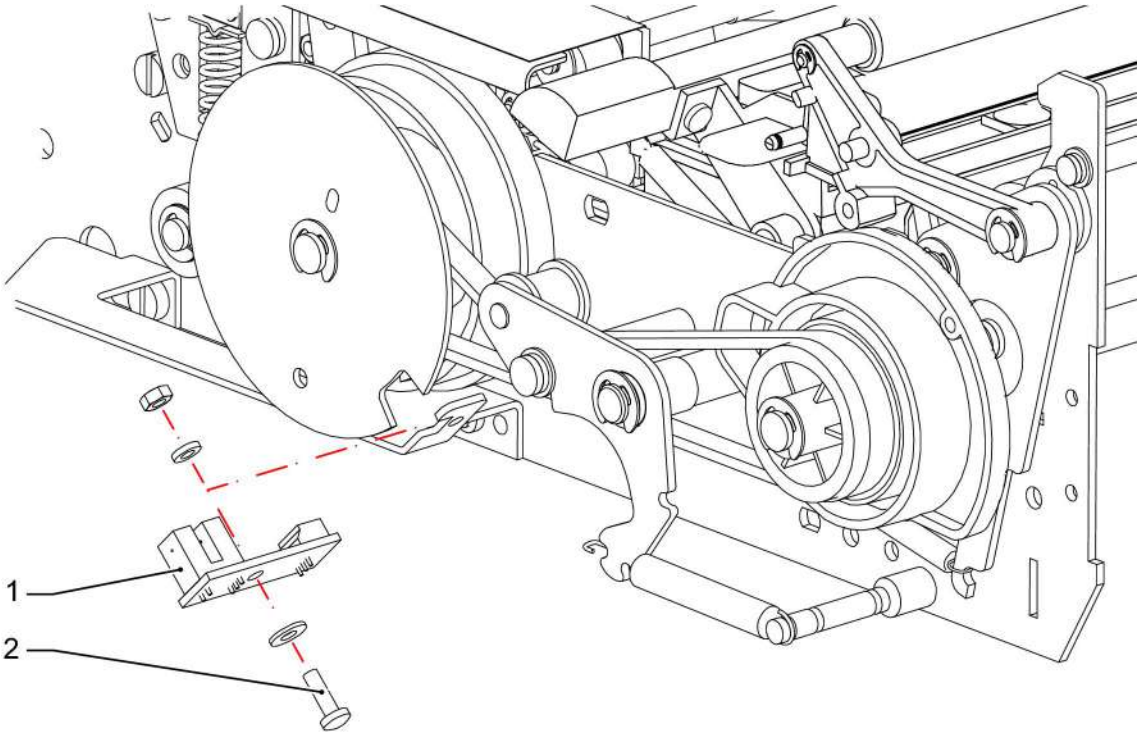
On replacement first connect the sensor connector.

Exit sensor FS12 (4149852M)

See Exit rollers on page 99, lower roller.

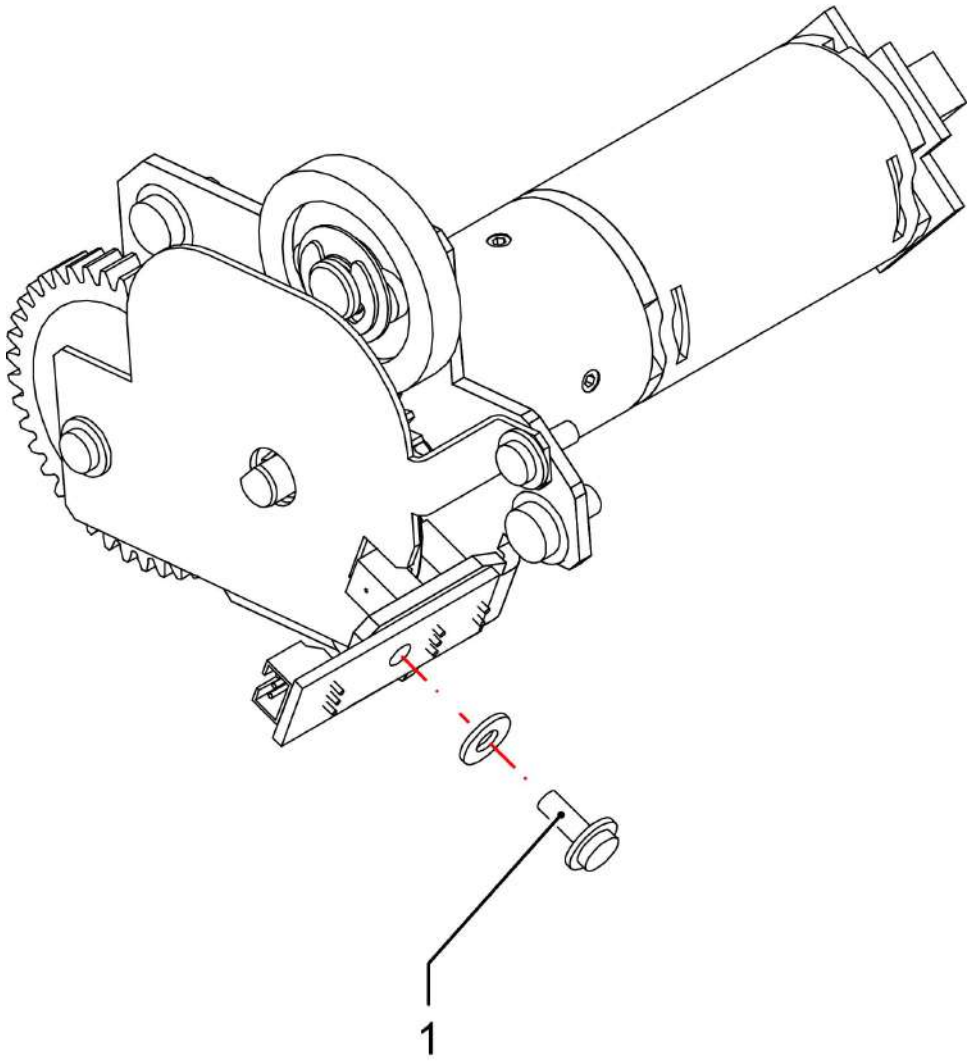
OS Sensors (4149870F)

Sensor at cam disk (OS13)



1. Remove the bottom cover.
2. Remove screw 2 to remove sensor 1.
3. Disconnect the sensor connector.

Sensor at envelope hopper motor (OS14)



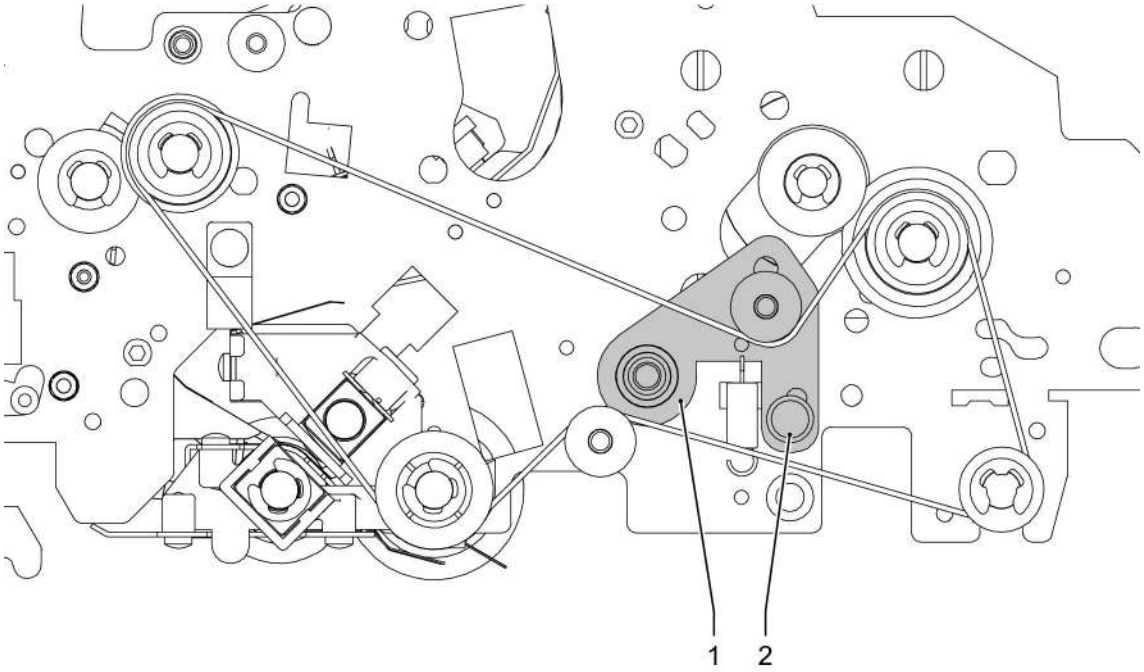
1. Remove the top cover

2. Remove screw 1 to remove the sensor.

3. Disconnect the sensor connector.

Adjustments

Main drive belt

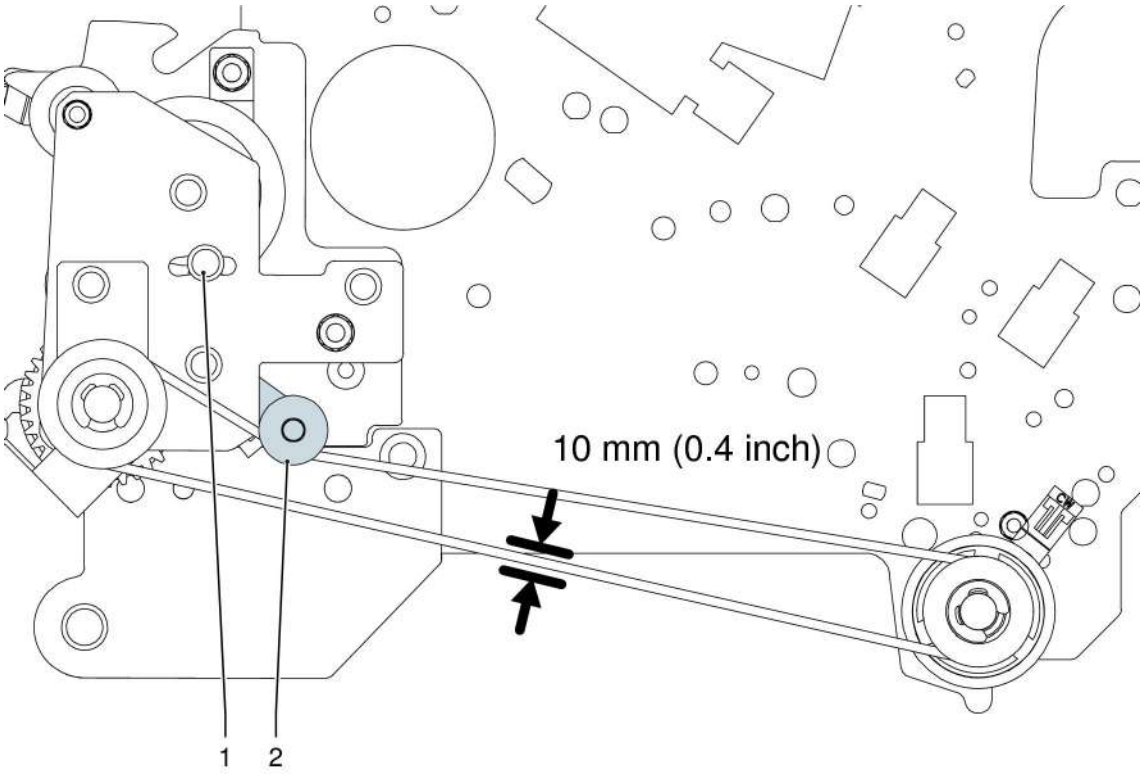


To adjust:

1. Remove the gear from the envelope transport motor axle.
2. Slacken screw 2 that secures the belt tensioner (1).
3. Turn the gear next to the tensioner in both directions to release belt tension.

   The belt tension is determined by a spring that holds the tensioner.
4. Retighten the screw of the belt tensioner. Make sure that the tensioner does not move when you tighten the screw.

Drive belt feeder 3



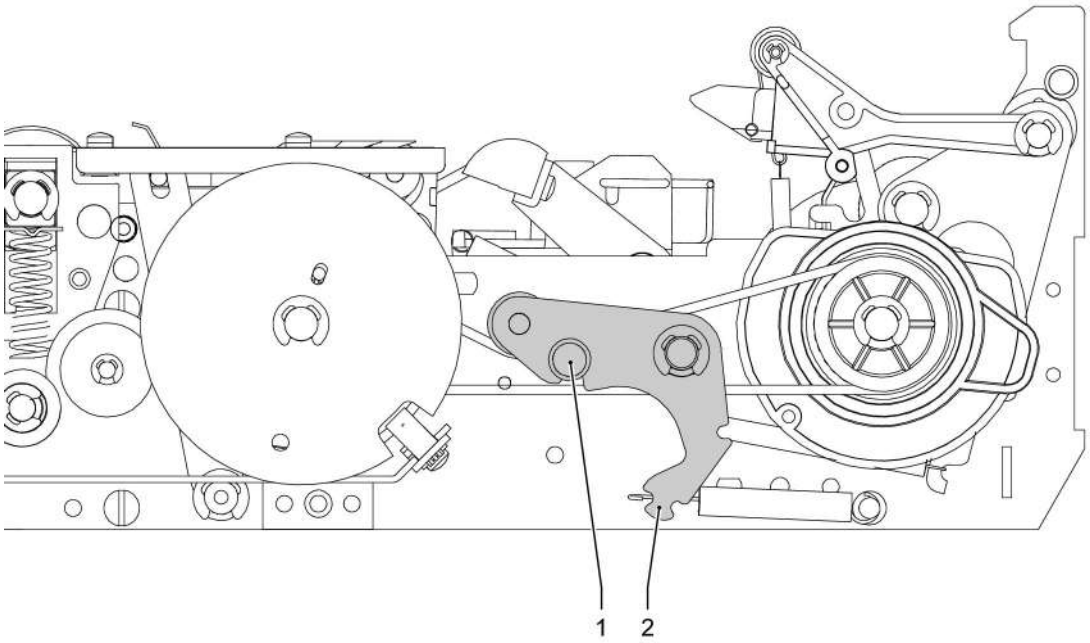
The maximum movement of the drive belt at the indicated position is 10 mm (0.4 inch).

To adjust

1. Slacken screw (1) that secures the belt tensioner (2).
2. Shift the belt tensioner to adjust the correct belt movement.
3. Hold the belt tensioner in position and retighten the screw.
4. Check the adjustment and readjust if necessary.

Do not adjust the drive belt too tight.

Exit drive belt



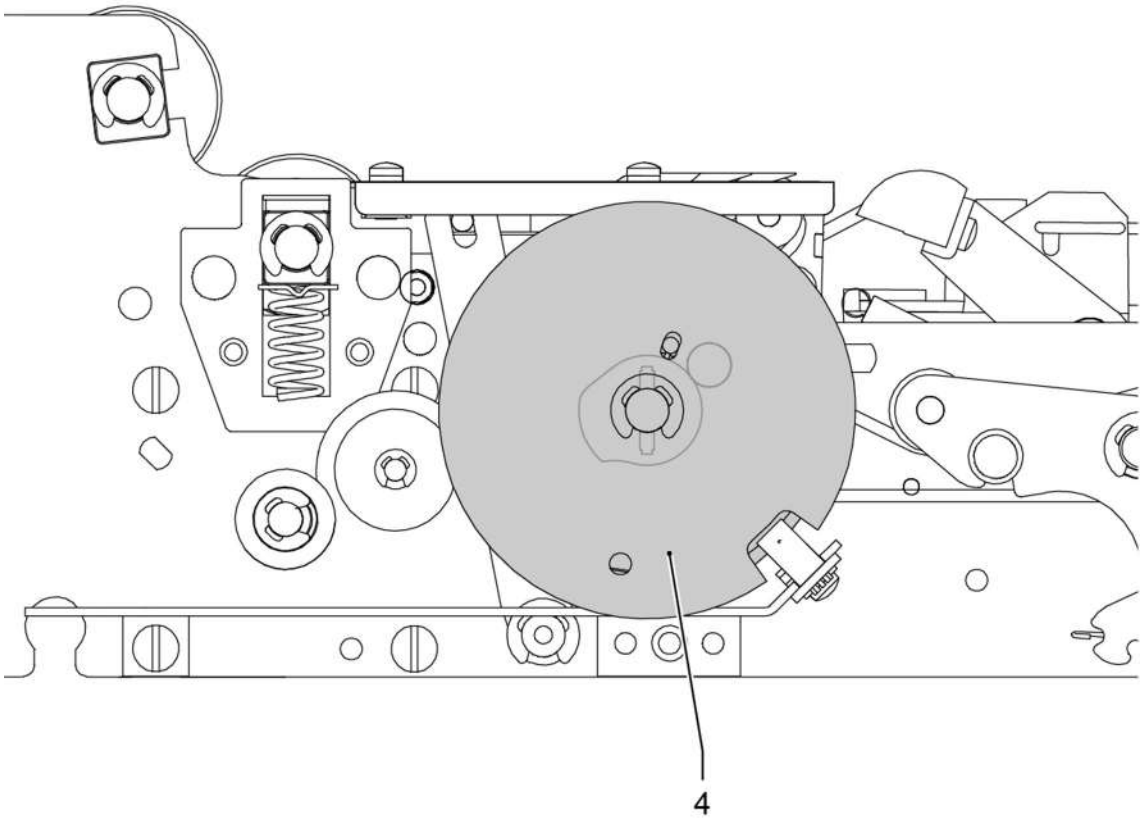
To adjust:

1. Slacken the screw (3) that secures the belt tensioner (2).

   The belt tension is determined by a spring that holds the tensioner.

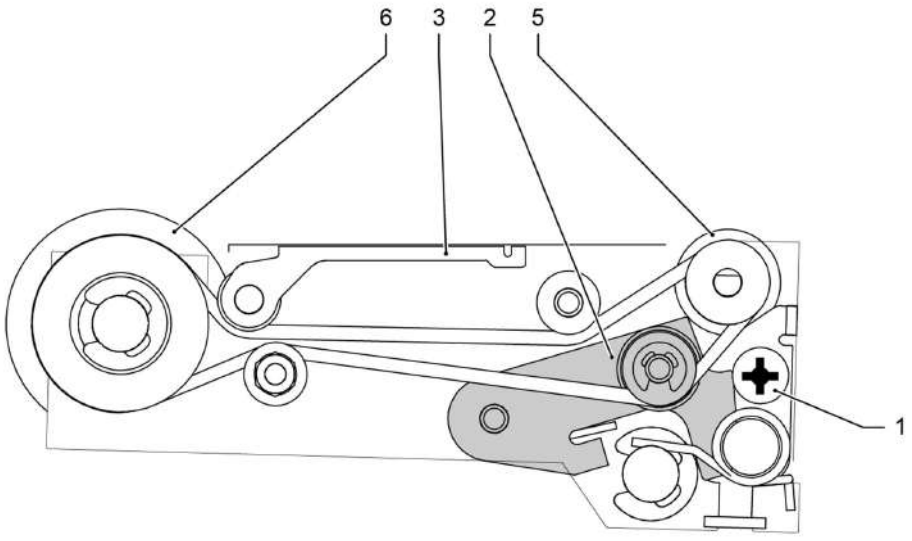
2. Retighten the screw of the belt tensioner. Make sure that the tensioner does not move when you tighten the screw.

Inserter belt



To adjust:

1. Make sure that cam disk 4 is in the position as indicated in the figure (position 0, see Insert into envelope, sealing and exit on page 19).



2. Slacken screw 1 that secures the belt tensioner 2.

   The belt tension is determined by a spring that holds the tensioner.

3. Rotate inserting roller 5 a few turns in the direction of operation, to tension the belt correctly. Do not use roller 6 to correct the belt tension.
4. Retighten the screw of the belt tensioner.

> Incorrect adjustment of the inserter belt can cause noise, skewed insertion or envelope feed faults.

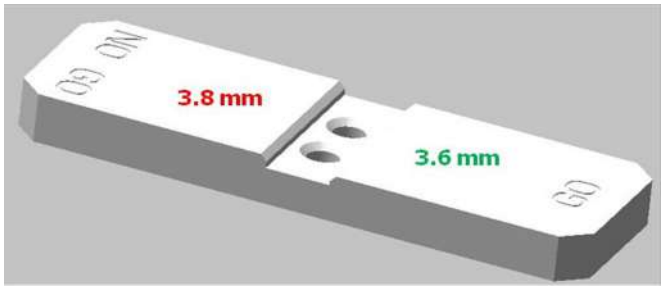
Envelope separation gap adjustment

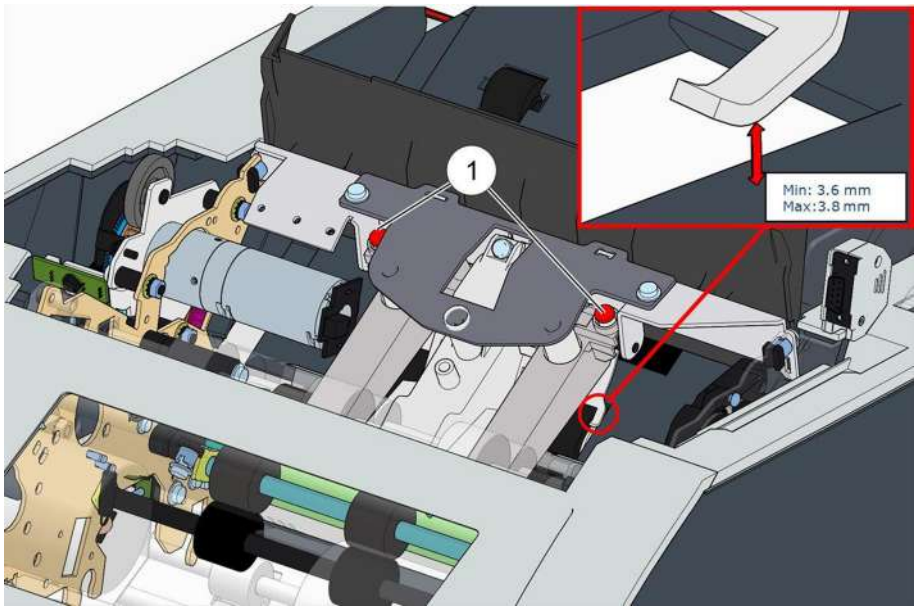
Adjustment of the gap between selection plate assy (p/n 4139856Z) and envelope feeder table (p/n 4145654P), see detailed cut out.

> Adjustment of the separation gap must be done on both sides and must be equal.

Required tool

- Adjustment gauge, p/n A0024616





The gap can be adjusted with the screws (1).

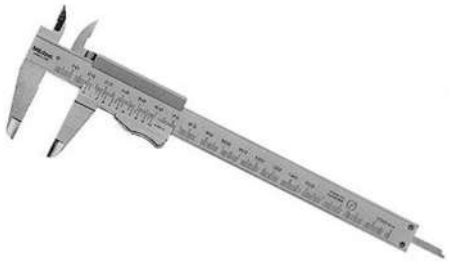
- CCW = open
- CW = close

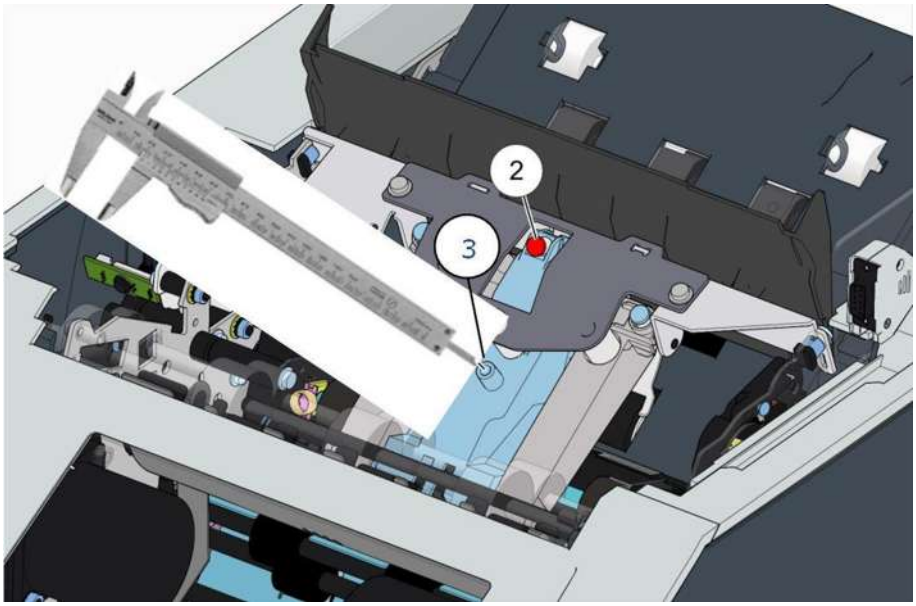
1. Place the adjustment gauge with the GO (3.6mm) side on the right side between the bracket of the selection plate assy and the envelope feeder table.
2. Adjust the gap with the screw (1) so that the gauge can be slide easily between the bracket and table.
3. The gap should not allow the NO GO (3.8mm) side to slide between the two surfaces.
4. Repeat step 1 through 3 for the left hand side.

Separation depth adjustment

Required tool

- Caliper





1. Insert the rear side of the caliper into hole (3).
2. Adjust the depth with the screw (2), so that the caliper measures between 48.8 and 49.2 mm.

7 Electrical Description

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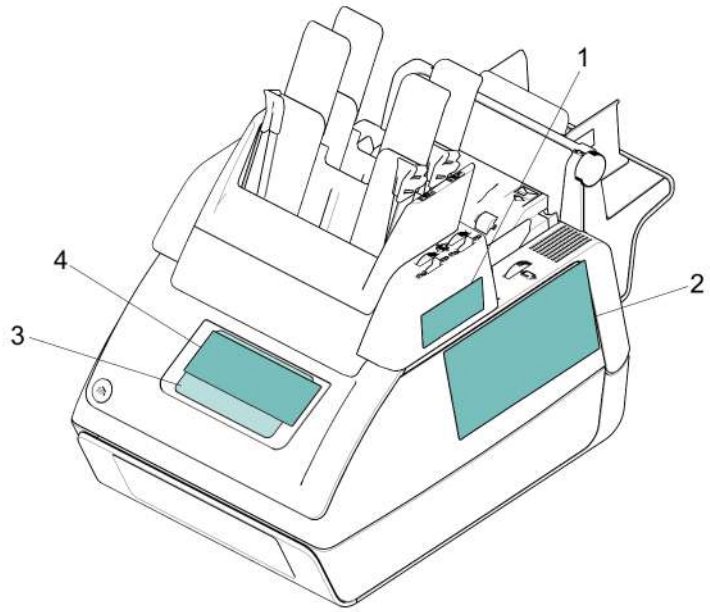
PCB's



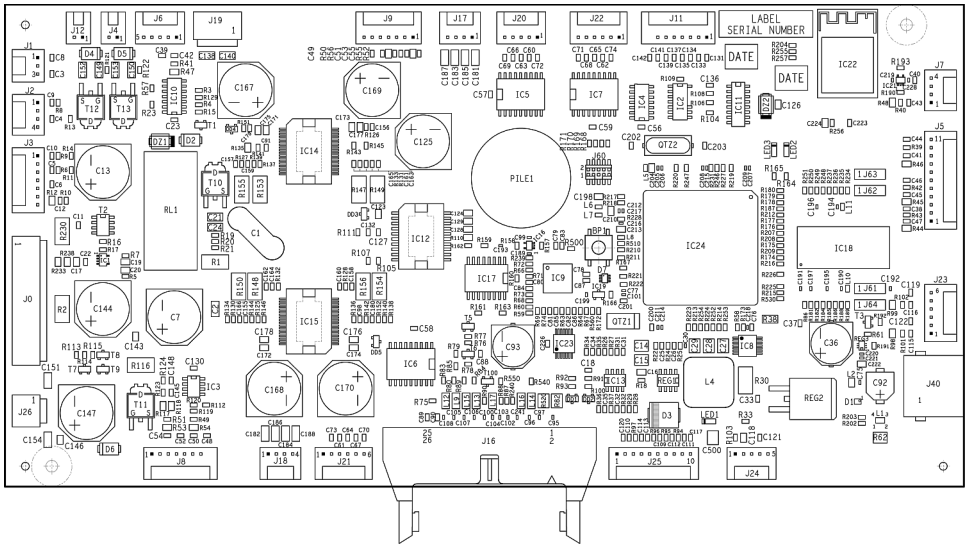
Three PCB's and one TFT display are part of the electrical system:

Item	Description / board name	Part number	Spare part number
1	Feeder board	4146583G	
2	Main board	A0099855	A0115524
3	TFT Display 5 inch	A0092969	A0115572
4	Key board	A0100192	A0115572

Main board

On replacement of the main board note the instruction as described in Replacement of the Main Board on page 103.

Component overview



7

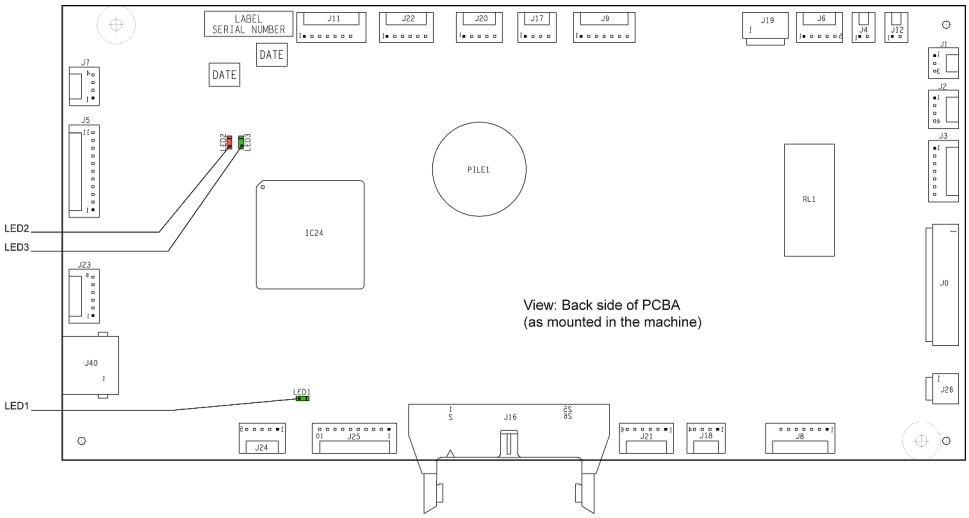
Wiring overview

Connector number	Part no. wiring	Description	Remarks
J0	N.A.	Power supply	See note
J1	4148120H	Machine open switch	
J2	4148121J	Feeder open switch	
J3	4148122K	Feeder 3 empty and open switch	
J4	4121973W	Top solenoid	See note
J5	4148112Z	Sensors	
J6	4148118F	Insert signal sensor	
J7	4148113A	Pulsedisc cable	
J8	4148126P	Cam & doc loaded sensor	
J9	4148116D	Separate and stop insert	
J10	N.A.	Not Applicable	
J11	4148114B	Clutches wiring	
J12	4121973W	Bottom solenoid	See note
J13	N.A.	Not Applicable	
J14	N.A.	Not Applicable	
J15	N.A.	Not Applicable	
J16	4148127Q	Display connector	
J17	4148115C	Envelope transport motor	
J18	4148115C	Cam motor	
J19	4148117E	Feeder motor	
J20	4148106T	Top folder motor	See note
J21	4148108V	Bottom folder motor	See note
J22	4148107U	No fold motor	See note
J23	N.C.	Not Connected	

J24	4148125N	Double feed detection Feeder 3	
J25	4148110X	Feeder 1-2 cable	
J26	4148124M	Folder motor	
J40	A0109495	USB (Service connector)	

Note: This wiring cannot be ordered separately as it is included in the part.

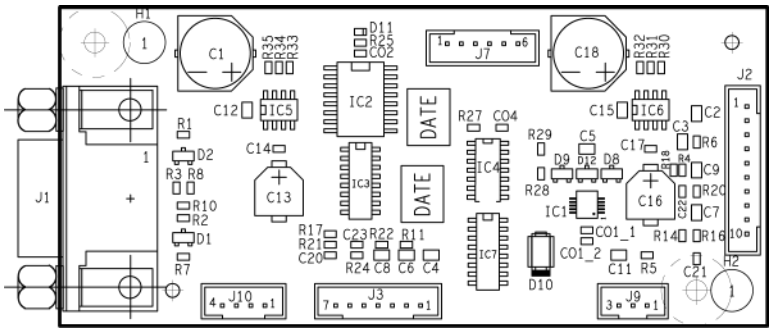
LED's overview



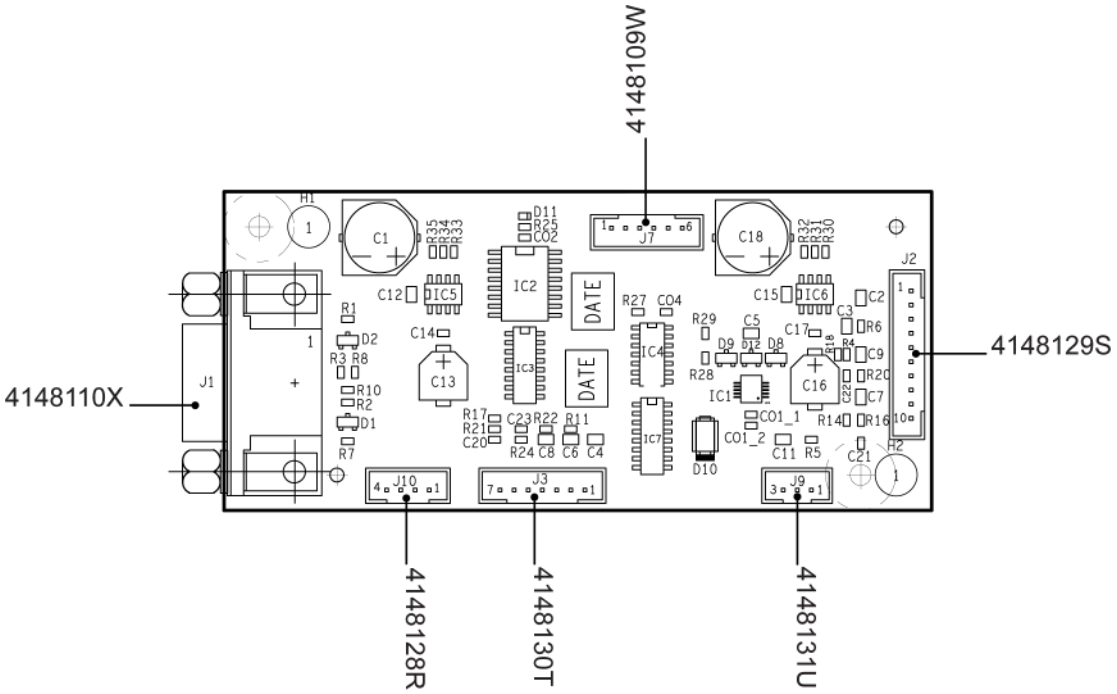
LED	Color	Function	Remark
LED1	Green	Power (5V)	
LED2	Red	Software exception	
LED3	Green	Heartbeat	Flashing

Feeder board

Component overview



Wiring overview



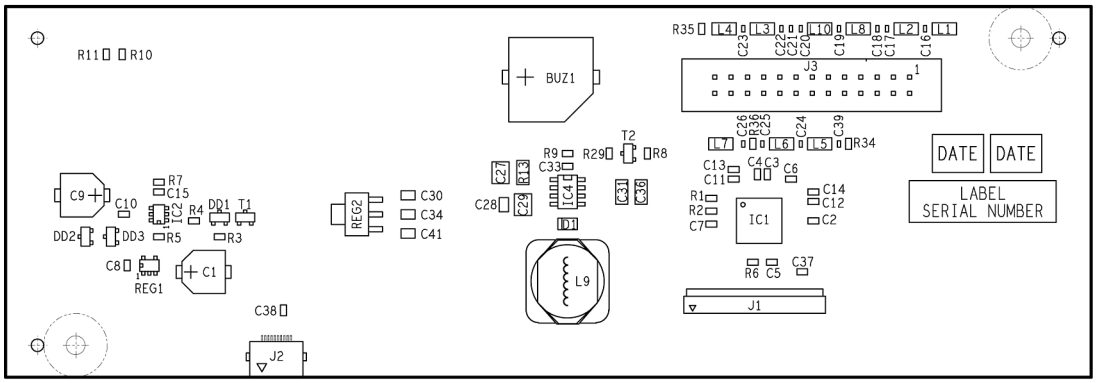
Connector number	Part no. wiring	Description	Remarks
J1	4148110X	Feeder 1-2 cable	
J2	4148129S	Feeder 1 cable	
J3	4148130T	Feeder 2 cable	
J7	4148109W	Auto/manual motor	See note
J9	4148131U	Feeder 2 empty	
J10	4148128R	Clutches	

Note: This wiring cannot be ordered separately as it is included in the part.

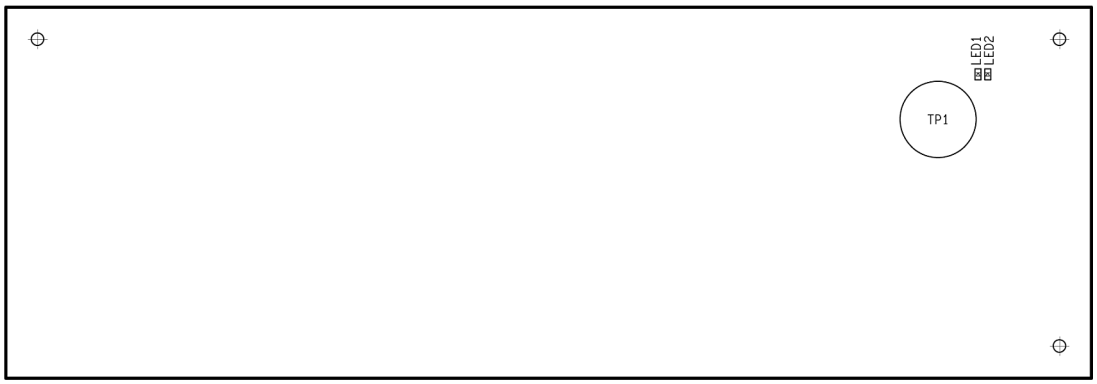
Key board

Component overview

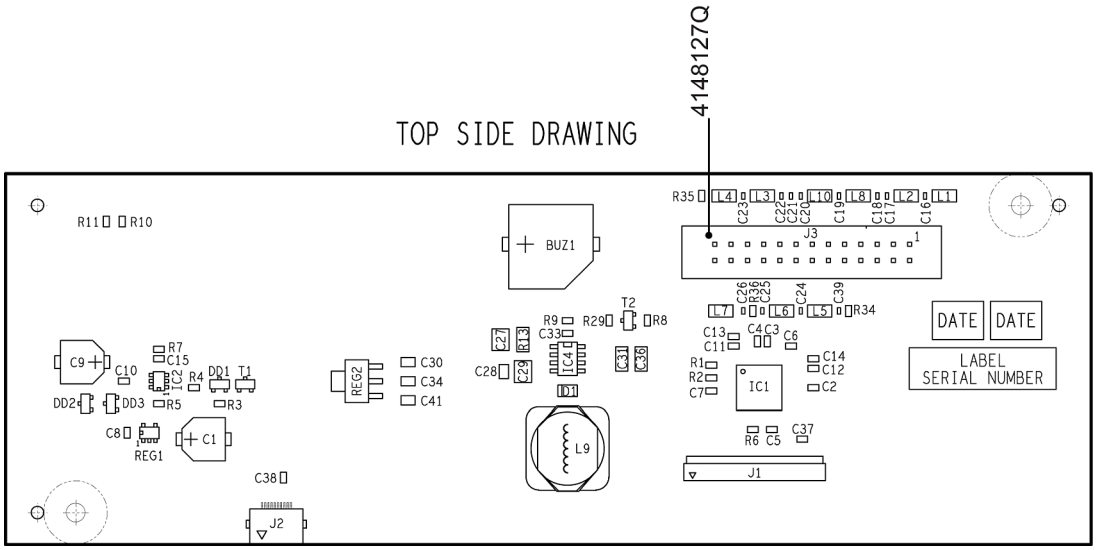
TOP SIDE DRAWING



BOTTOM SIDE DRAWING



Wiring overview



Connector number	Part no. wiring	Description	Remarks
J3	4148127Q	Display connector	

8 Preventive Maintenance

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Preventive maintenance

Average preventive service visits should take place at approximately 30.000 inserts (30k). At 90.000 inserts (90k) an extensive service visit is necessary. The table below shows the intervals.

Please note that there is a statistical relationship between the actual average monthly volume and the service requirements of the machine. Significant larger average volumes might double the yearly service requirements.

Maintenance	Number of cycles	Service visit
1	+/- 30.000	30k
2	+/- 60.000	30k
3	+/- 90.000	90k
4	+/- 120.000	30k
5	+/- 150.000	30k
6	+/- 180.000	90k
...	...	...

It is recommended to service the machine at least twice a year.

30k Service visit

Activities during 30,000 service visit:

- Ask the operator if any problems occurred
- Visual inspection
- Clean all document separation and transport rollers
- Clean document path
- Replace the moistening brushes, see Moistening brushes on page 97.

90k Service visit

Activities during 90k service visit:

- 30k service visit activities
- Replace the parts mentioned in the table below

Description	Parts list drawing	Item no.	Part no.	Qty.	Remarks
Feeder 1 and 2					
Separation axle assy. (daily mail)	Document feeder 1-2 5/6 on page 188	26	4149871G	1	
Separation roller		28	4151281A	1	
Separation module 1 assy.	Document feeder 1-2 3/6 on page 184	34	4151616Z	1	

Separation module 2 assy.	Document feeder 1-2 4/6 on page 186	9	4149874K	1	
Feeder 3					
Separation roller	Feeder 3 (insert-BRE feeder) 3/3 on page 202	15	4151281A	1	
Rollers		29	4150009A	1	
General					
Short insert finger (rounded)	Insert-moistening-exit 2/5 on page 228	30	4152001A	-	*) see Note.
Short insert finger (sharp)		31	4147188M	-	
Long insert finger (sharp)		32	4147189N	-	
Moistener brush holder assy	Insert-moistening-exit 4/5 on page 232	3	21PIA0027.2	3	
Lower deflector plate assy	Feeder 1-2 document transport 3/3 on page 196	20	4149854P	1	
Tongue LH and RH		23	4149880R	1	
Separation kit	Envelope feed 2/4 on page 174	15	4149873J	1	

*) Note: Type and quantity of fingers depend on configuration/application.

9 Fault finding

9 Fault finding 136

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Resolve problems remotely 137
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Fault finding

There are three kinds of errors:

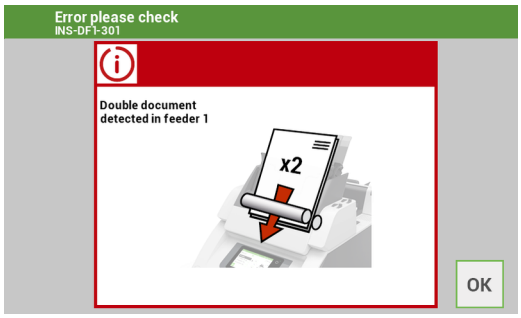
- Hardware related errors that make further paper processing impossible. The error screen displays a 'call service' pictogram.
- Hardware related errors at which further paper processing is still possible.
- Operational errors, in most cases paper flow errors.

An error may result into:

- A soft stop. An error situation forces the machine to stop. After solving the problem the process can be resumed. The machine part with the problem is directly stopped, but in other machine parts envelopes and documents are transported to the next stop position.
- A hard stop. An error forces the machine to stop and the process cannot simply resumed after solving the error. The machine must be switched off. An example of a hard stop is the opening of a microswitch-guarded cover. All main motor-driven moving parts of both the system are abruptly stopped. The process timing (based on pulses delivered by slotted photocells) is completely disrupted.

If an error occurs in one of the parts of the system, an error screen is displayed. The display shows a screen showing the following information:

- An indication of the area in which the error occurred.
- An error description.
- A suggested solution



Priority

Usually the error that appears first, is displayed first.

There are however some exceptions:

- A hard stop error prevails over a soft stop error.
- A soft stop error prevails over a divert stop error.

If a feeder hopper is empty the machine continues the process until the last complete set is handled.

Resolve problems remotely

For remotely diagnosing customer problems, check the following with the customer:

- The machine model:

  1. Open the clamshell.
  2. Read the machine model from the type plate.

- The serial number:
  1. Open the clamshell.
  2. Read the serial number from the type plate.

  The serial number can also be checked by the supervisor:
  1. Enter the supervisor menu.
  2. Go to "Versions".

3. Read the serial number from the screen.

- The customer's failure description.
- The error message coming with the failure.
- The installed software, this can be checked by the supervisor:

  1. Enter the supervisor menu.
  2. Go to "Versions".
  3. Read the software version installed.
- In case the system is connected to the internet ask the supervisor (user) to make a connection via "Remote assistance".
- Select a follow up process:

  1. Guide the supervisor through a remote resolution process. A trained remote service engineer needs to be consulted.
  2. When sufficient cycles have been done since last service visit, schedule a preventive maintenance visit. Schedule enough time for both the engineer and the customer.
  3. When there is no clue about the exact cause of the failure, schedule a corrective maintenance resolution process. A trained field engineer needs to be consulted.

Error handling document system

The error format of inserter errors is as follows: INS-XXX-YYY. XXX is an abbreviation that indicates a specific system part. The following system areas/prefixes apply:

XXX	Explanation	Reference
DF	Document Feeder	Document feeder errors (DF) on page 138
EH	Envelope Hopper	Envelope hopper errors (EH) on page 140
EX	Exit	Exit errors (EX) on page 141
FOL	Folder	Folder errors (FOL) on page 140
INS	Insert	Insert errors (INS) on page 140
M	Motor	Motor errors (M) on page 139
MD	Master Data	Master data (MD) on page 141
PD	Pulse Disc	Pulse disc errors (PD) on page 139
PRC	Production Control	Production control errors (PRC) on page 140
S	Software	Software errors (S) on page 139

Document feeder errors (DF)

Error	Message	Cause
INS-DFx-000	Separation timeout feeder x	Paper never reached flag switch in feeder 1 or 2 (FS1 or FS3).
INS-DF3-110	Document transport failure	Paper crashed under separation cell of feeder 3 (FS5). (Only applicable in a 2,5 station system).
INS-DF3-111	Document transport failure	Paper has left separation flag switch (FS5) but never arrived at stop position flag switch (FS7). It is somewhere in between in the track. (Only applicable in a 2,5 station system).
INS-DF3-120	Document transport failure	Document was not ejected from BRE track after actuating the clutch (C4) so its still under photocell (FS7). (Only applicable in a 2,5 station system).

INS-DFx-121	Paper jam in feeder x	Document was preseparated but when then folder was supposed to pull the paper out, it never arrived at folder flag switch (FS10), and it is still seen inside the feeder. So the paper was not grabbed by folding rollers.
INS-DFx-300	Check set at exit for double documents	Current pre-separated set is thinner then the set at the exit. (i.e. in the previous sets a double document can be expected).
INS-DFx-301	Double document detected in Feeder x	The DFC sensor detected a document thickness thicker then 1,67 times the reference thickness.
INS-DFx-302	Check set at exit for double documents	Current pre-separated set is thinner then the set at the exit. (first sheet was used reference thickness, this could be a double document).
INS-DFx-402	Technical Failure, Call service	DFC sensor broken.

Pulse disc errors (PD)

Error	Message	Cause
INS-PD1-400	Technical Failure, Call service	No or too less pulses from pulse disc feeder motor (M2).

Software errors (S)

Error	Message	Cause
INS-S01-304	Technical Failure, Call service	The CAM photocell (OS13) has not seen the opening in the CAM after making a 360 degrees rotation with motor M4.

Motor errors (M)

Error	Message	Cause
INS-M01-400	Technical Failure, Call service	Motor blockage of the folder motor (more then 5000 mA current drawn) while there was no paper in the folding area.
INS-M02-400	Technical Failure, Call service;	No or too less pulses from pulse disc feeder motor (M2).

Folder errors (FOL)

Error	Message	Cause
INS-FOL-110	Document transport failure	Paper has left the feeder module but never arrived inside bottom fold pocket (seen by FS10).
INS-FOL-120	Document transport failure	Paper has never reached the insert place, crashed between FS10 and FS11 (folding pocket 2).
INS-FOL-290	Document transport failure	Before initialization of the fold pockets the system detects paper in bottom fold pocket (FS10 covered).

Envelope hopper errors (EH)

Error	Message	Cause
INS-EH1-000	Envelope transport failure	Something is triggering the envelope separation sensor (FS8) while the system wants to start an envelope separation cycle.
INS-EH1-001	Empty envelope hopper	At the start of a job something is triggering the flap scraper cell (FS9).
INS-EH1-121	Envelope transport failure	Envelope never reached the flap scraper sensor (FS9). The envelope crashed between separation and flap scraper.
INS-EH1-122	Document transport failure	Flap scraper envelope hopper (FS9) was covered at a moment where it should be free (crash or defect sensor).

Production control errors (PRC)

Error	Message	Cause
INS-PRC-303	Technical Failure, Call service	Internal software error.

Insert errors (INS)

Error	Message	Cause
INS-INS-100	Document transport failure	Document insert sensor (FS11) covered too long (crash inside envelope at inserter place).
INS-INS-120	Document transport failure	The fold-only set never arrived at exit cell FS12.
INS-INS-121	Document transport failure	When running a job with a short envelope (C5/6, DL or #9) this envelope needs to be transported between the exit rollers FIRST before the exit rollers can be closed. When this transport is done but the exit cell (FS12) is not covered this error is generated.

INS-INS-290	Document transport failure	At start of a job, paper is found at the insert area (FS11).
INS-INS-380	Technical Failure, Call service	CAM motor (M4) move to mechanical state-0 failed.
INS-INS-381	Technical Failure, Call service	CAM motor (M4) move to mechanical state-1 failed.
INS-INS-382	Technical Failure, Call service	CAM motor (M4) move to mechanical state-2 failed.
INS-INS-383	Technical Failure, Call service	CAM motor (M4) move to mechanical state-3 failed.
INS-INS-384	Technical Failure, Call service	CAM motor (M4) move to mechanical state-4 failed.
INS-INS-385	Technical Failure, Call service	CAM motor (M4) move to mechanical state-5 failed.
INS-INS-386	Technical Failure, Call service	CAM motor (M4) move to mechanical state-6 failed.
INS-INS-387	Technical Failure, Call service	CAM motor (M4) move to mechanical state-7 failed.

Exit errors (EX)

Error	Message	Cause
INS-EX1-110	Document transport failure	The set arrived at the exit cell (FS12), but it never left this cell (blockage in exit).
INS-EX1-290	Document transport failure	At start of a job, paper is found at the exit area (FS12).

Master data (MD)

Error	Message	Cause
INS-MD1-580	Technical Failure, Call service	The system did not find a SD-card on the main board.

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Tri-Fold option

For installation of the drive for the Tri-Fold transportation unit see separate document: Mounting Instruction no. 131, Installation of the Tri-Fold kit.

Once the drive has been fitted the sealing liquid reservoir can easily be replaced by the Tri-Fold transportation unit in order to use the Tri-Fold functionality.

11 Technical specifications

11 Technical specifications 144

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Product customization per country / organization 150

Technical Specifications

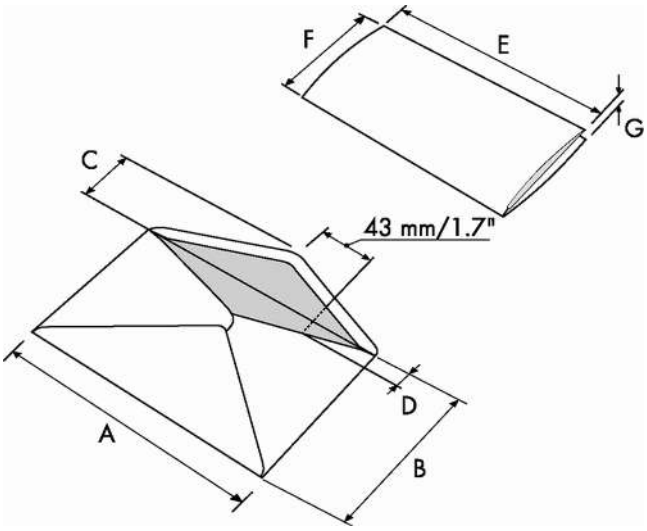
Model	FD 6104
Type	Folder and inserter system for small office use.
Theoretical max. speed	1,350 inserts per hour, depending on application
Power consumption	100-240 VAC/ 50-60 Hz / 1,3 - 0,6A
Voltage tolerance	100-240 VAC: +6% / -10% 230 VAC: +10% / -10%
Fuse	100/115 Vac: T 5.0 A, 125 V.
	Time lag, 5.0 Amps. rated current, 125 V.
	230 Vac: T 2,5 A H, 250 V.
	Time lag, 2.5 Amps. rated current, high breaking capacity, 250 V.
Approvals	RED (Radio Equipment Directive) 2014/53/EU FCC Certificate conform 47CFR, part 15 CB Certificate conform IEC 62368-1 UL Listed I.T.E. (Information Technology Equipment), conform UL-IEC 62368-1, file E153801 Conform NEN-EN-IEC 62368-1 and derivatives.
Noise Level	< 65 dBA
Operating temperature	10°C - 40°C (50°F-104°F)
Humidity	30%-80%

Document Specifications

Paper quality	minimum 60 g/m² (16 lb bond) maximum 120 g/m² (32 lb bond)
Paper size	Minimum width: 142 mm (5.6") Maximum width: 225 mm (8.9") Minimum length: 90 mm (3.5") Maximum length: 356 mm (14.0")
Folding capacity	V-fold - 5 sheets (max. 80 g/m² / 21 lb bond) C-fold - 3 sheets (max. 80 g/m² / 21 lb bond) Double V-fold - 2 sheets (max. 80 g/m² / 21 lb bond)
Enclosure sizes	Standard BRE (Business Reply Envelopes) Maximum length: 158 mm (6.22")
Enclosure quality	BRE, minimum: 75 g/m² (20 lb bond) BRE, maximum: 120 g/m² (32 lb bond) Insert, minimum: 75 g/m² (20 lb bond) Insert, maximum: 250 g/m² (67 lb bond)

Envelope and Insert Specifications

Envelope quality	Minimum: 75 g/m² (20 lb bond) Maximum: 120 g/m² (32 lb bond)



	A	B	C	D	E	F	G
Min. size	229 mm	105 mm	32 mm	10 mm	142 mm	90 mm*	70 g/m2
Max. size	241 mm	162 mm	54 mm	35 mm	A-12 mm**	B-6 mm	1.5 mm
Min. size	9.0"	4.1"	1.3"	0.40"	5.6"	3.5"	
Max. size	9.5"	6.4"	2.1"	1.4"	A-0.47"**	B-0.24"	0.06"

* In case of fold only (no insert): height > 120 mm / 4.7". If the Tri-Fold option is used: height = 99 mm / 3.9".

** When insert is more than 1 mm (0.04"): A-15 mm / A-0.6".

Remarks:

Maximum insert specifications are based on single sheets. When multiples are handled, more room inside the envelope is needed depending on the application. The specification of the paper handling equipment is often wider than that of the envelopes and documents handled. The condition of material handled will limit the specified environmental conditions. We recommend that materials to be handled are stored at a temperature of 20°C (68°F) with a relative humidity factor of 50%. If difference in temperature occurs etween store room and mailing area, the material has to be stored near the system at least 24 hours before use. Self-copying paper may cause rubber parts to wear quicker. The rubber used in this system has the best resistance to Wiggins Teape material.

Feeder, Hopper and Exit Capacity

Envelope hopper	100 envelopes (80 g/m² / 21 lb bond)
Document feeder tray 1 and 2	100 sheets (80 g/m² / 21 lb bond) per feeder tray
BRE / Enclosure feeder tray 3	100 BRE's/Inserts
Envelope exit - Catch tray	100 env C5/6 with 1xA4 80 gr/m2 multiple fold

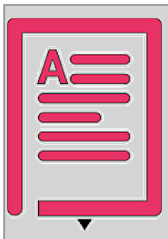
Fold types

The FD 6104 has two folding tables, both in upwards position seen from the paper path. The following folds are possible:

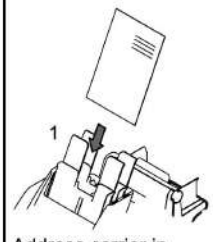
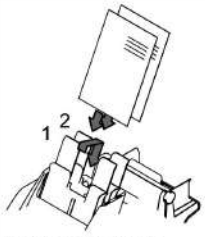
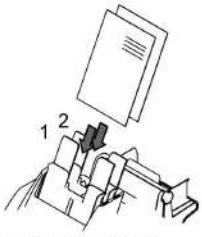
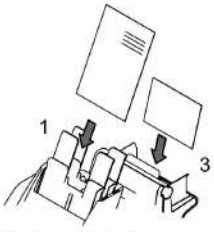
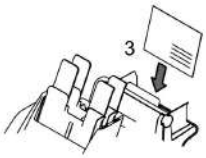
- No Fold
- V-fold (single fold)
- C-fold (letter fold)
- Double V-fold (double parallel fold)
- Tri-Fold (is a C-fold where all three panels have the same dimension). Only applicable if the Tri-Fold option has been installed.

Document orientation

The touch screen shows how to load documents and envelopes into the feeders. The table shows the meaning of the symbols:

	**Address carrier face up and trailing (top address)**
	Enclosure face up

Feeding instructions

	one document	feeder linking	two documents	document + enclosure
V-fold C-fold double V-fold	 Address carrier in feeder 1. Face up and trailing.	 Address carrier in feeders 1 and 2. Face up and trailing.	 Address carrier in feeder 1. Face up and trailing.	 Address carrier in feeder 1. Face up and trailing.
no fold	 Address carrier in feeder 3. Face up and trailing.			

Processing speed

1x A4	output/hour: 1350
2x A4 + insert	output/hour: 1080

Dimensions and weight

	with Catch Tray	without Catch Tray
Height	680 mm (26.8")	540 mm (21.3")
Width	420 mm (16.5")	420 mm (16.5")
Length	793 mm (31.2")	658 mm (25.9")
Weight	37,9 kg (83.6 lb)	37 kg (81.6 lb)

Display-User Interface properties

Number of jobs programmable	15
Screen size	5 inch (5")
Screen resolution	640 * 480 pixels
Screen technology	Color touch screen
Screen protection	Full cover glass

Recommended batch sizes

Maximum volume per month: 5,000 envelopes

Recommended and maximum batch sizes:

Frequency	Recommended	Maximum
Daily	<100	150
Weekly	<500	750
Monthly	<1000	5000

12 Parts Lists

12 Parts Lists 151

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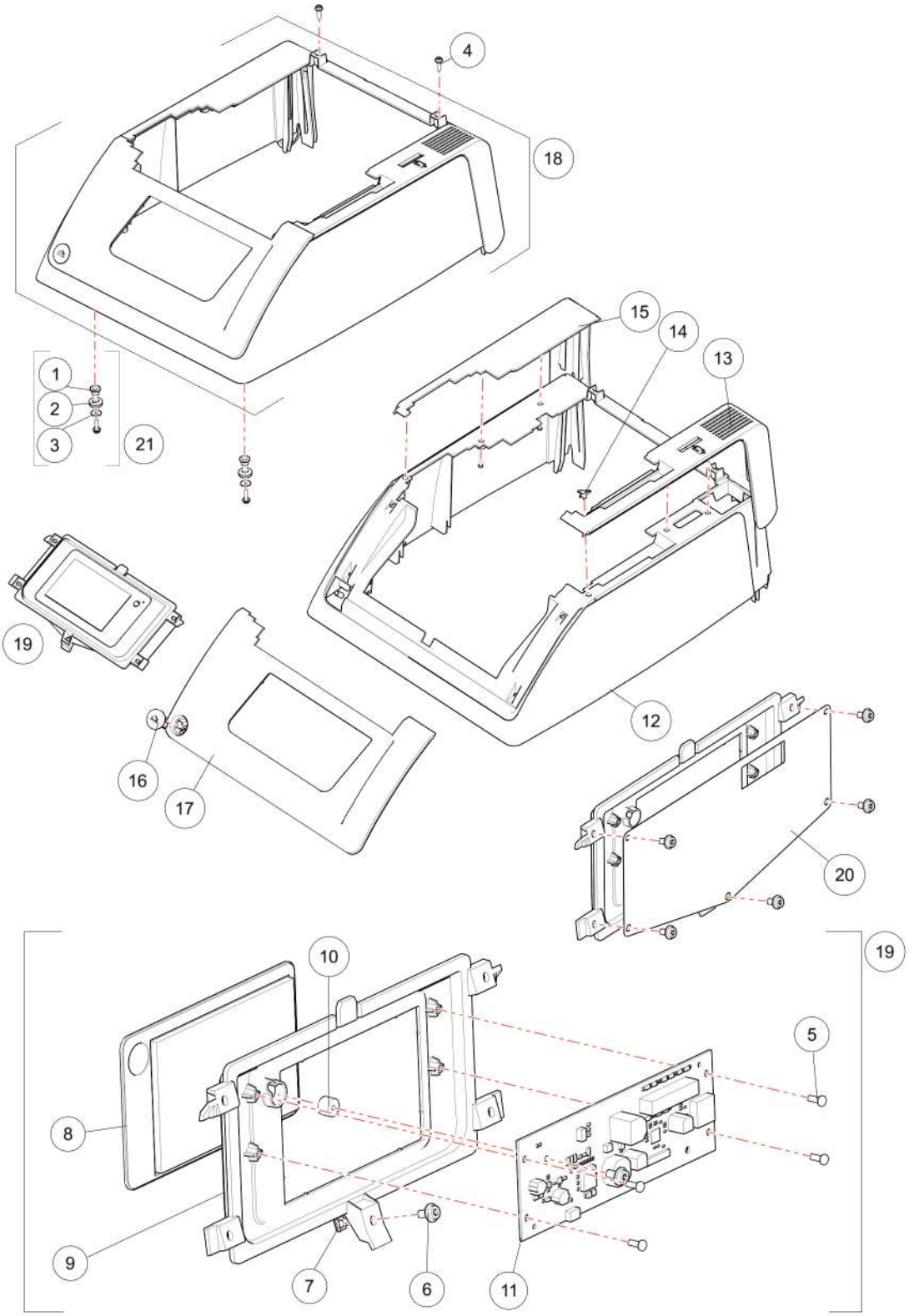
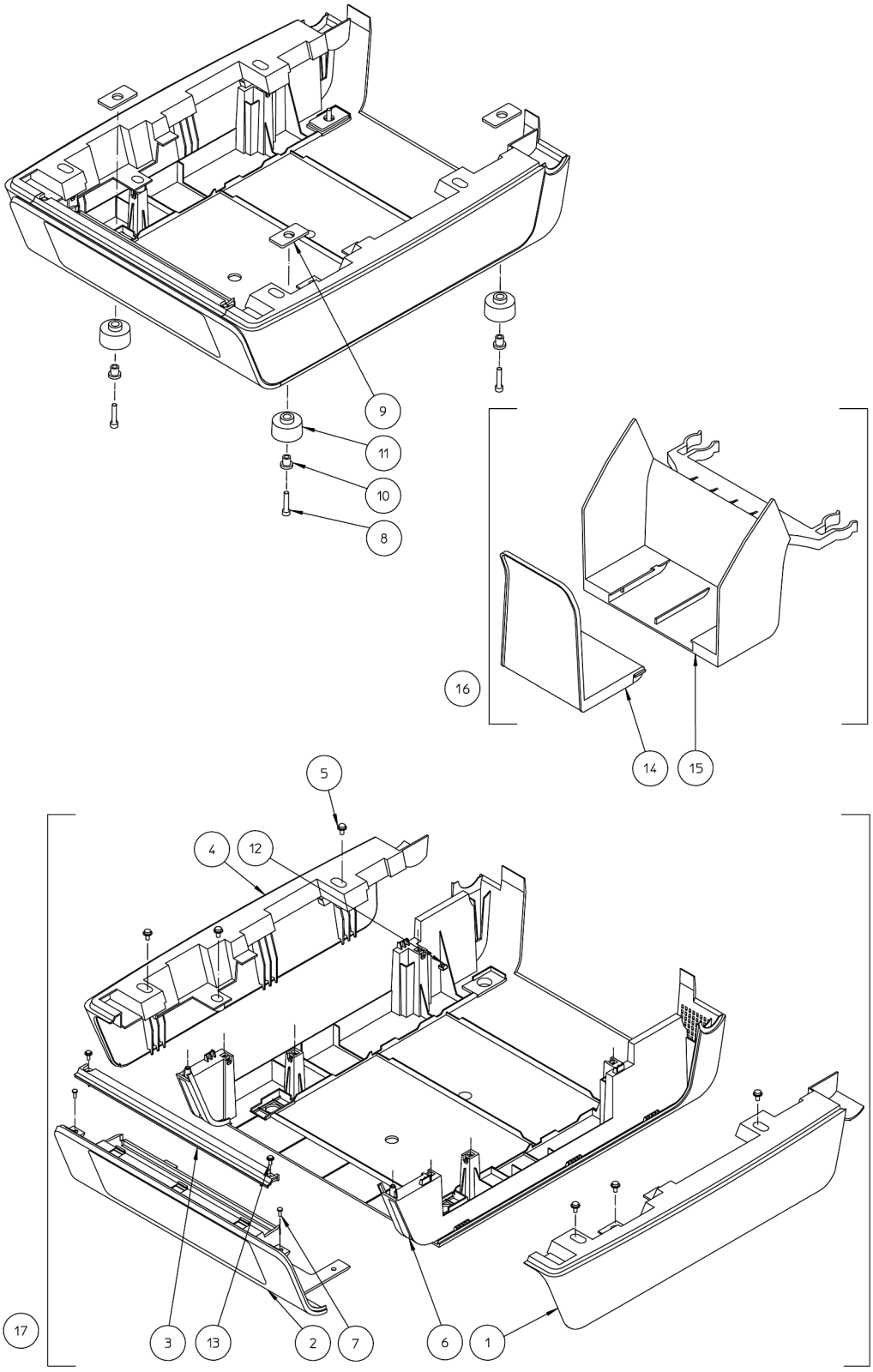
Spare part kit E-ring **244**
Spare part kit plastic Torx **246**
Spare part kit spring **248**
Spare part kit washers **250**

Top covers and display



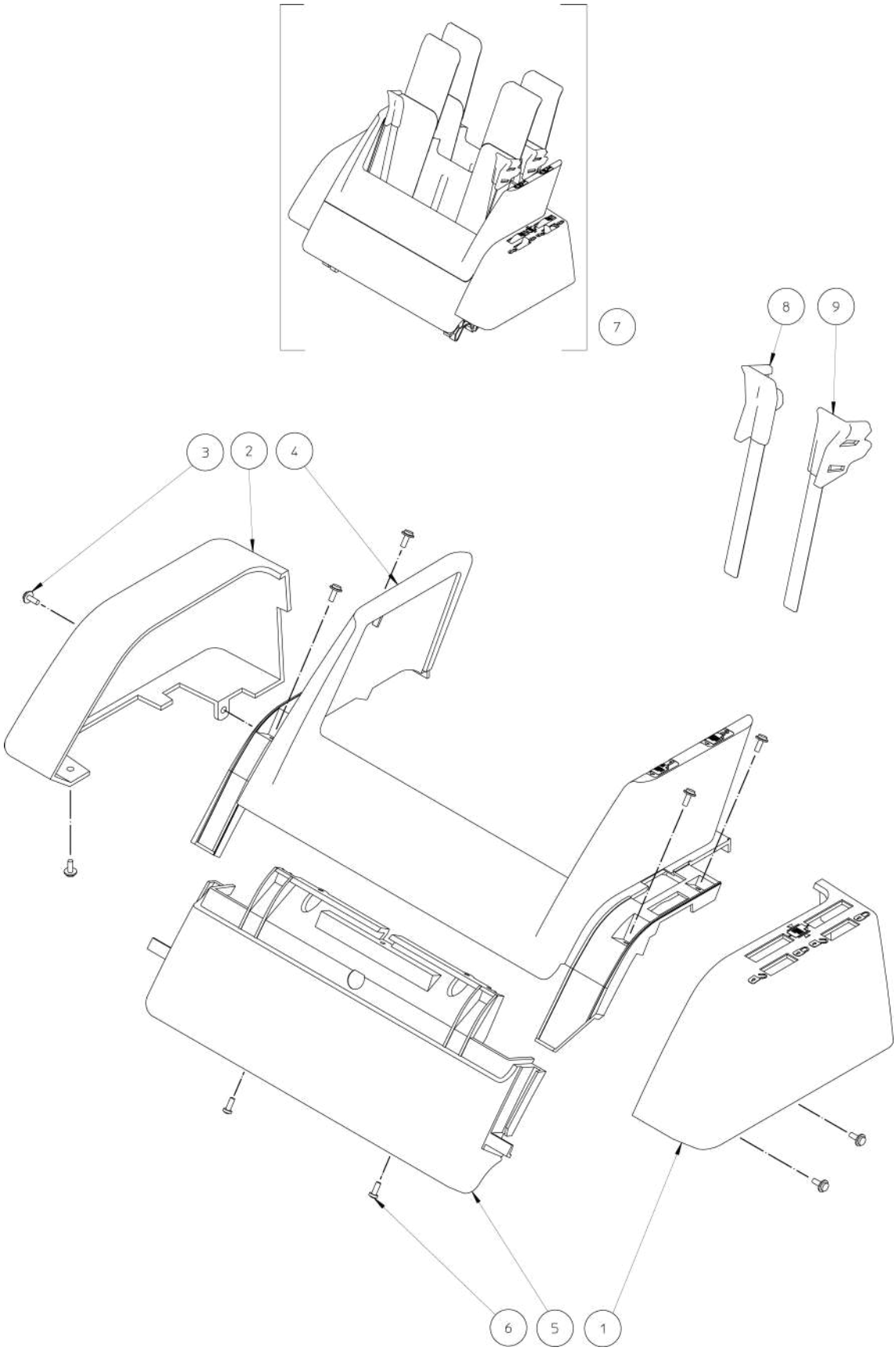
No.	Description	Part No.	Qty.	Spare	Remarks
1	BIG SILENT-BLOC MUFF	11PIA0316.2	2	Yes	
2	SILENT BLOC	11PIA0332.2	2	Yes	
3	WASHER LU D=4X14X0.8	RON31282	2	Yes	
4	ECO-FIX TORX SCREW M4X16	1007740D	4	No	
5	ECO-syn TORX HEAD SCREW D=3x8	VIS30250	4	Yes	
6	M4*8 ECO-FIX TORX SCREW	VIS35781	2	Yes	
7	CLIP-SPRING-NUT	A0025476	1	No	
8	DISPLAY-TFT DISPLAY 5 POUCES	A0092969	1	No	
9	FD 6104 MMI COVER	A0103236	1	No	
10	CYLINDER PCB	A0087804	1	No	
11	PCBA KEYBOARD	A0100192	1	No	
12	UPPER COVER	4146958X	1	No	
13	UPPER RH COVER	4146959Y	1	No	
14	CABLE BRACKET	4151200R	1	No	
15	UPPER LH COVER	4146960Z	1	No	
16	OPENING BUTTON	4146963C	1	No	
17	FRONT PANEL	4146962B	1	No	
18	TOP COVER ASSY.	A0012492	1	Yes	
19	FD 6104 MMI ASSY	A0115572	1	Yes	
20	MMI PROTECTION	A0103672	1	No	
21	SILENT BLOC ASSY.	A0058750	1	Yes	

Bottom covers



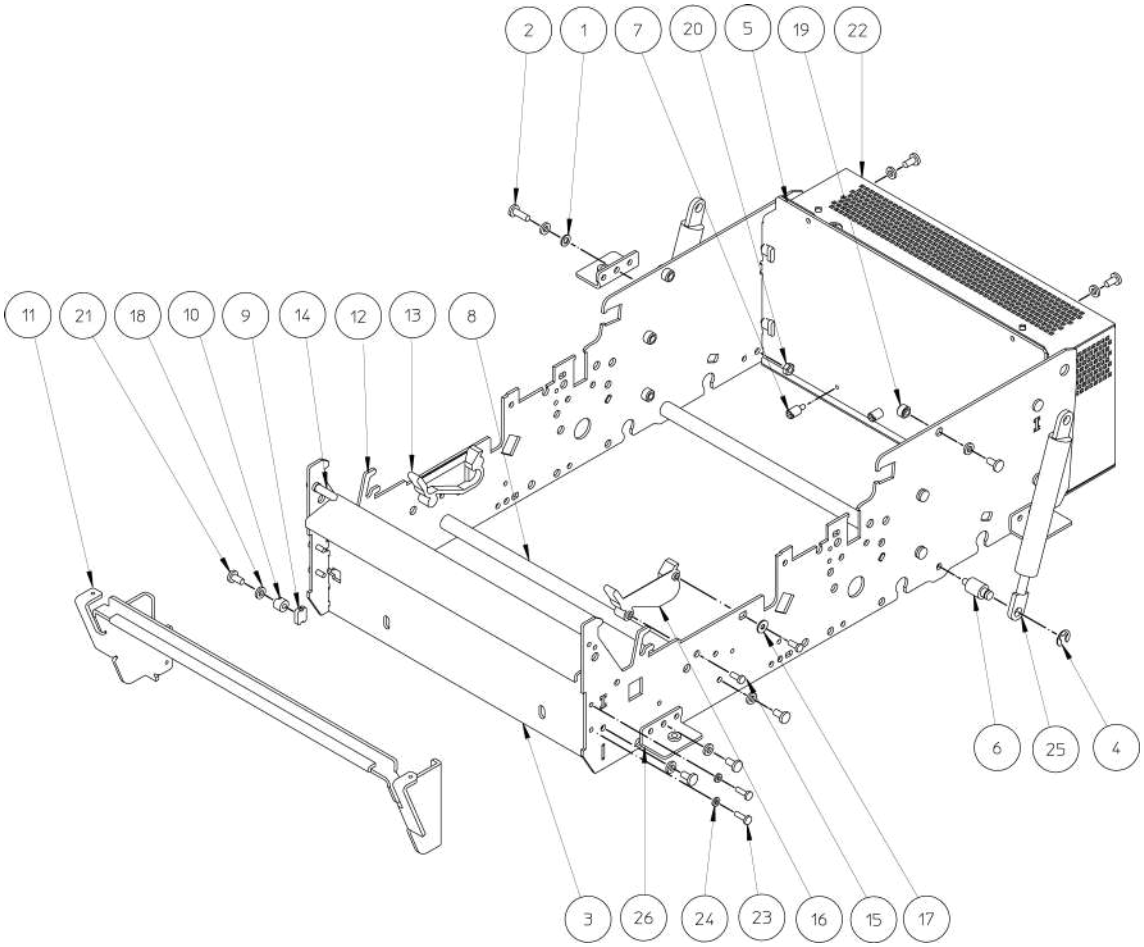
No.	Description	Part No.	Qty.	Spare	Remarks
1	BOTTOM RH COVER	4146952R	1	No	
2	BOTTOM FRONT COVER	4146951Q	1	No	
3	FRONTAL BAR HIDE	4146956V	1	No	
4	BOTTOM LH COVER	4146954T	1	No	
5	M4*8 ECO-FIX TORX SCREW	VIS35781	6	Yes	
6	BOTTOM COVER	4146950P	1	No	
7	ECO-syn TORX HEAD SCREW D=3x8	VIS30250	2	Yes	
8	ECO-FIX TORX SCREW M5X30	1007786B	4	No	
9	DAMPER PLATE	4148328Z	4	No	
10	FOOT SPACER	4149788V	4	No	
11	FOOT	4150588D	4	Yes	
12	LOCKING-UNLOCKING-BASE NUT ASSY	A0046828	6	Yes	
13	ECO-FIX TORX SCREW M3x8	VIS35779	2	Yes	
14	MOBILE CATCH TRAY	4149113S	1	No	
15	FIXED CATCH TRAY	4149114T	1	No	
16	CATCH TRAY COMPLETE	4149819C	1	Yes	
17	Bottom cover assy.	A0020928	1	Yes	

Feeder 1-2 covers



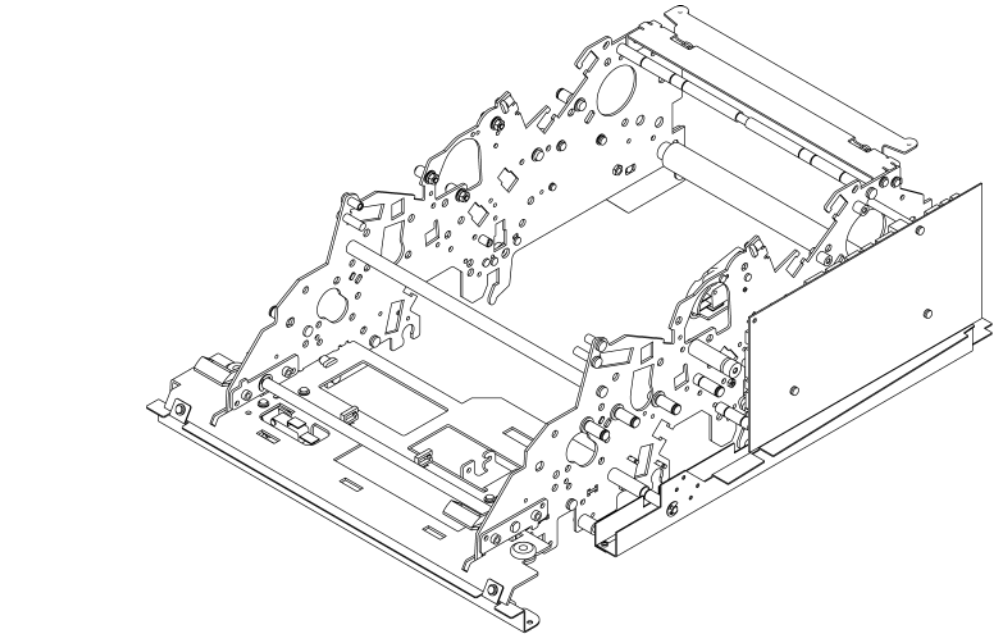
No.	Description	Part No.	Qty.	Spare	Remarks
1	DOC. FEEDER RH COVER	4146969J	1	Yes	
2	DOC. FEEDER LH COVER	4146970K	1	Yes	
3	ECO-FIX TORX SCREW M3x8	VIS35779	8	Yes	
4	DOC. FEEDER UPPER COVER	4146967G	1	Yes	
5	DOC. FEEDER BOTTOM COVER	4146968H	1	Yes	
6	ECO-syn TORX HEAD SCREW D=3x8	VIS30250	2	Yes	
7	DOUBLE FEEDER	4149999Q	1	No	
8	PAPER GUIDE LH	4151730T	2	Yes	
9	PAPER GUIDE RH	4151728R	2	Yes	

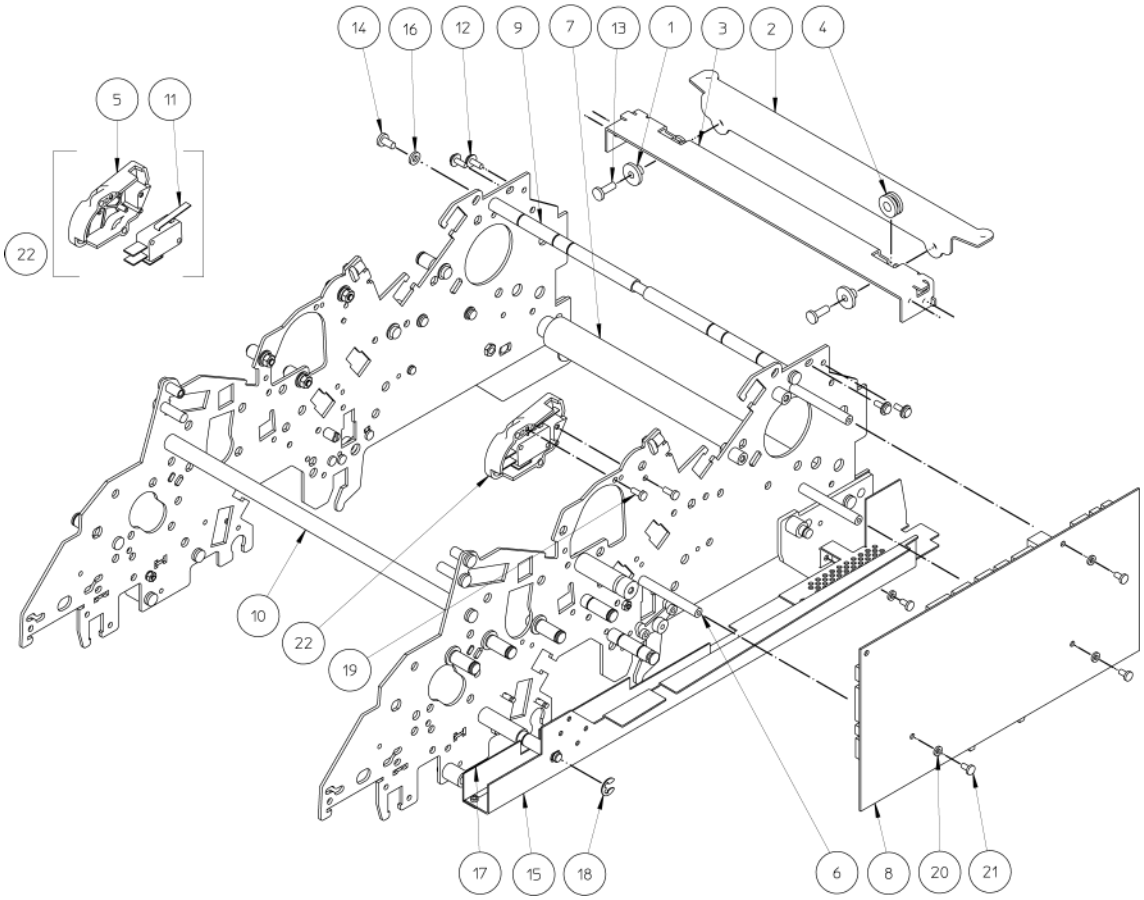
Frames and external parts 1/6



No.	Description	Part No.	Qty.	Spare	Remarks
1	FLAT WASHER D=4X8X0.8	RON31280	1	Yes	
2	ECO-FIX TORX SCREW M4X12 (CL.10.9)	1007741E	1	No	
3	EXIT LOWER PROTECTION	4147889S	1	No	
4	E-RING D=6	CIR35182	2	Yes	
5	REINFORCEMENT PLATE	11PID0101	1	No	
6	LOWER HINGE AXLE	11PIA0182.2	2	No	
7	SPINDLE SCREW	11PIA0013.2	3	Yes	
8	SPACER	11PIA0019.2	2	No	
9	NUT END	4101996M	6	Yes	
10	PLATE NUT	11PIA0136.2	6	Yes	
11	STRUCTURE REINFORCING BAR	4146955U	1	No	
12	LOWER FLANGE	4147324D	2	No	
13	LH MOISTENER SUPPORT	11PIA0069.2	1	Yes	
14	LOCKING FINGER	11PIA0501	1	No	
15	PAN HEAD SCREWS TORX M3,5X8	1007734X	4	No	
16	SUPPORT, RH MOISTENER	11PIA0068.2	1	Yes	
17	WASHER d=3.5x9x0.8	RON31191	2	No	
18	SERRATED LOCK WASHER D=4.1X8X1.5	RON32008	16	Yes	
19	POCKET GUIDING PIN	11PIA0521	6	No	
20	HEXAGONAL NUT H M4	VIS35304	4	Yes	
21	M4*8 ECO-FIX TORX SCREW	VIS35781	19	Yes	
22	POWER SUPPLY	4147421E	1	Yes	Connector J0; The wiring cannot be ordered separately as it is included in the part.
23	ECO-FIX TORX SCREW M3x8	VIS35779	5	Yes	
24	SERRATED LOCK WASHER D=3.05X6X1.2	RON32023	5	Yes	
25	DAMPER	4147204D	2	Yes	
26	FOOT SUPPORT	4147841S	4	No	

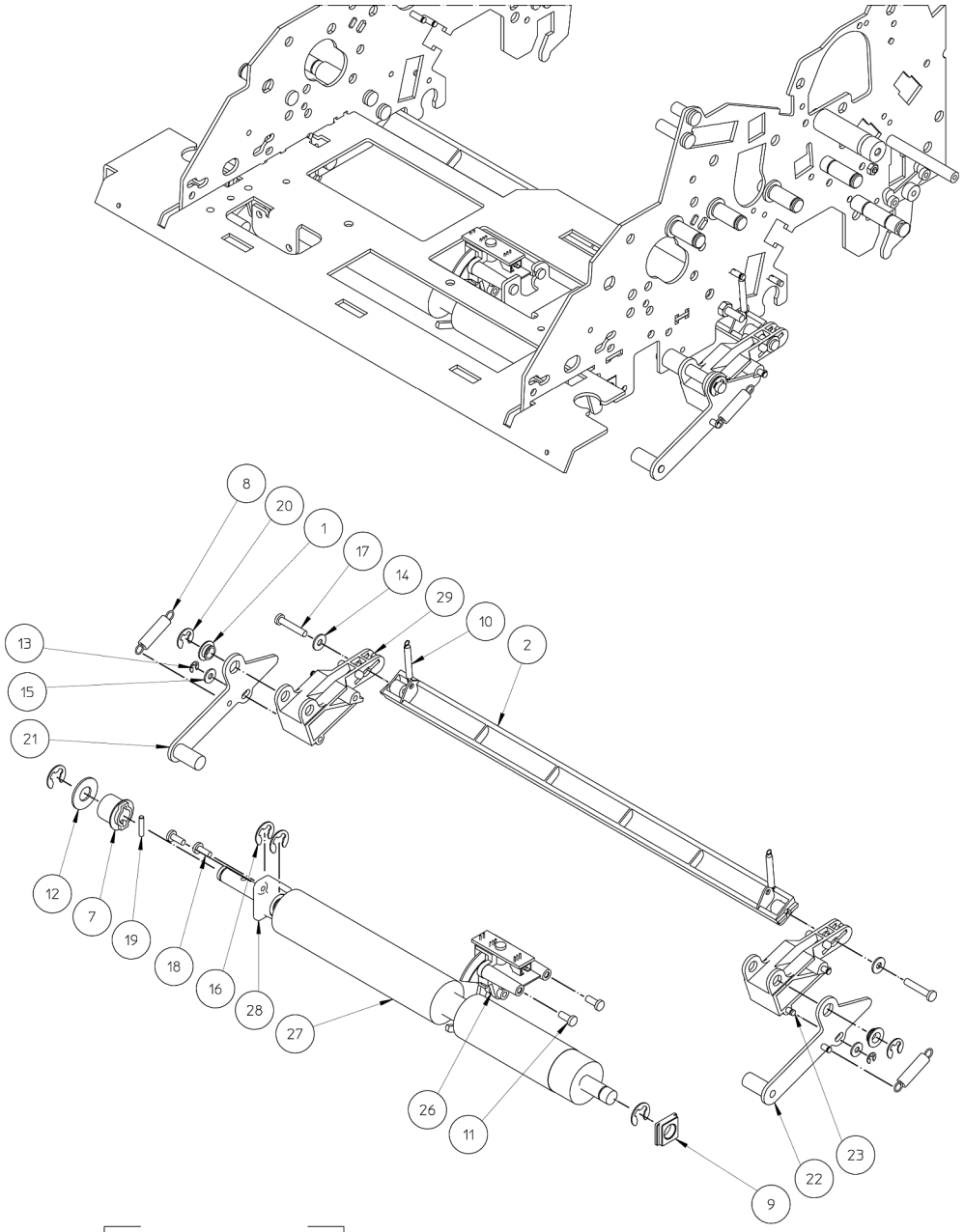
Frames and external parts 2/6

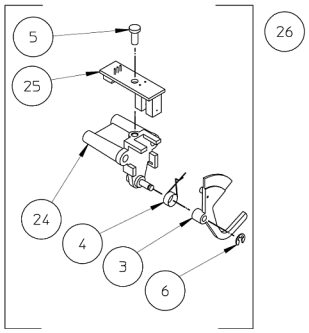




No.	Description	Part No.	Qty.	Spare	Remarks
1	SMALL SILENT-BLOC MUFF	4148868M	2	No	
2	COVER FIXING PLATE	4148781W	1	No	
3	TOP COVER FIXING PLATE	4147586B	1	No	
4	SILENT BLOC	21SKA3145.2	2	No	
5	INTERLOCK SWITCH COVER	4147581W	1	No	
6	LOGIC PCB SPACER	4149327Q	3	No	
7	REAR SPACER	11PID0099	1	No	
8	MAIN PCB (MAIN BOARD)	A0115524	1	Yes	
9	HOPPER SPACER	11PIA0095.2	1	No	
10	SPACER	11PIA0019.2	1	No	
11	INTERLOCK SWITCH	4149627C	1	No	
12	ECO-FIX TORX SCREW M3x8	VIS35779	4	Yes	
13	ECO-FIX TORX SCREW M4X12 (CL.10.9)	1007741E	5	No	
14	M4*8 ECO-FIX TORX SCREW	VIS35781	3	Yes	
15	LARGE MAINBOARD MASK	4147893W	1	No	
16	SERRATED LOCK WASHER D=4.1X8X1.5	RON32008	6	Yes	
17	MAINBOARD SMALL MASK	4124739C	1	No	
18	E-RING D=6	CIR35182	1	Yes	
19	ECO-syn BLACK TORX HEAD SCREW D=3x8	1007148M	2	Yes	
20	SERRATED LOCK WASHER D=3.05X6X1.2	RON32023	4	Yes	
21	ECO-FIX TORX SCREW M3X6	1007738B	7	Yes	
22	MICROSWITCH ASSEMBLY	4149858T	1	Yes	

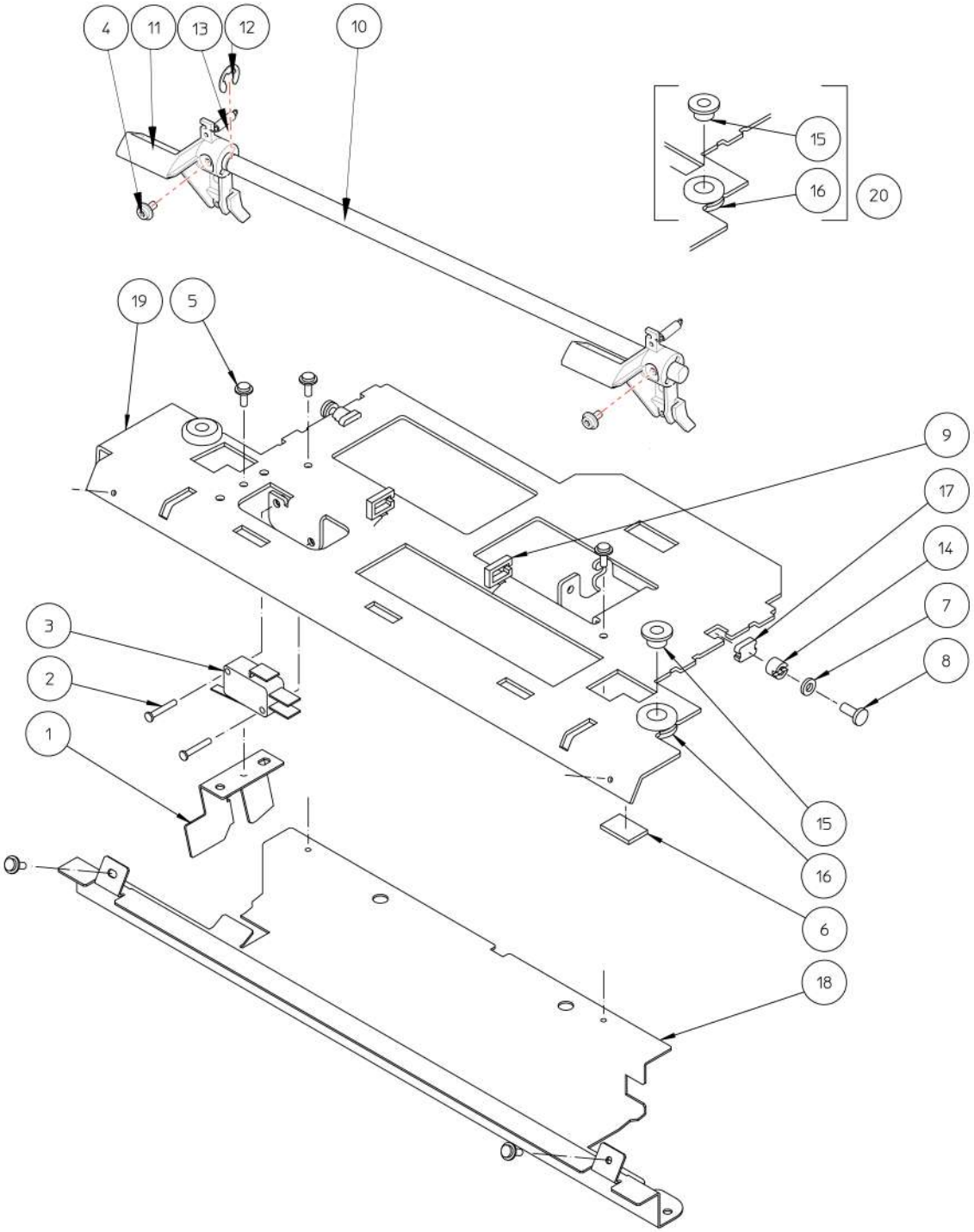
Frames and external parts 3/6





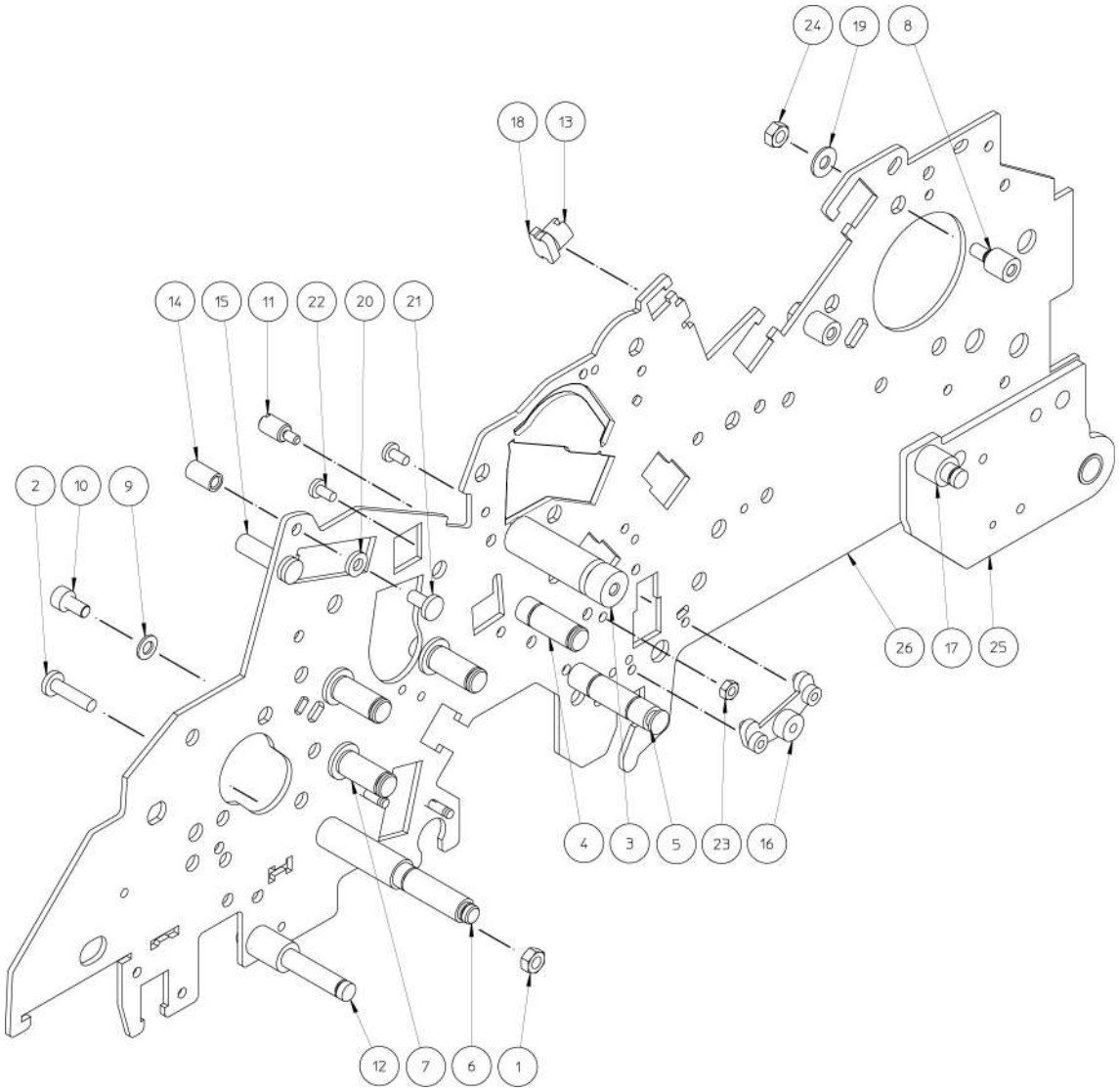
No.	Description	Part No.	Qty.	Spare	Remarks
1	PLASTIC PLAIN BEARING D=6X11X7.8X2	FRO30176	2	Yes	
2	APPLICATOR	11PIA0042.2	1	Yes	
3	LONG ACTUATOR	11PIA0117.2	1	Yes	
4	SPRING	11PIA0212.2	1	Yes	
5	HEXALOBULAR SOCKET CYLINDRICAL HEAD M3X8	1007739C	1	No	
6	E-RING D=3	CIR35171	1	Yes	
7	EXIT SPINDLE PULLEY	11PIB0043.2	1	Yes	
8	MOISTENER COMPENSATION SPRING	11PIA0225.2	2	Yes	
9	BEARING	11PIA0001.2	1	Yes	
10	MOISTENER SPRING	11PIA0223.2	2	Yes	
11	PAN HEAD SCREWS TORX M3,5X8	1007734X	2	No	
12	WASHER d=8.2x18x1	CAL31668	1	No	
13	E-RING D=3	CIR35171	2	Yes	
14	WASHER d=3.5x9x0.8	RON31191	2	No	
15	FLAT WASHER D=3X8X0.8	RON31141	2	Yes	
16	E-RING D=8	CIR35184	4	Yes	
17	PT®-PAN HEAD SCREWS TORX D=3,5x20	1007747L	2	No	
18	CYLINDRICAL CAPSCREW TORX M3X8	VIS30605	2	No	
19	CYLINDRICAL PIN D=2.5X12	GOU00745	1	Yes	
20	E-RING D=6	CIR35182	2	Yes	
21	LH MOISTENER COMMAND LEVER	21PIA0006.2	1	Yes	
22	RH MOISTENER COMMAND LEVER	21PIA0012.2	1	Yes	
23	RH APPLICATOR SUPPORT ASSY	21PIA0042.2	1	Yes	
24	DETECTOR LONG SUPPORT	21PIA0046.2	1	Yes	
25	PCBA SENSOR 1	4122298K	1	Yes	
26	Letter-output sensor assembly	4149852M	1	Yes	
27	EXIT ROLLER	4122861W	1	Yes	
28	EXIT SPINDLE BEARING	21PIA0055.2	1	Yes	
29	LH APPLICATOR SUPPORT	21PIA0007.2	1	Yes	

Frames and external parts 4/6



No.	Description	Part No.	Qty.	Spare	Remarks
1	CLOSING SWITCH PROTECTION	4147320Z	1	No	
2	ECO-FIX TORX SCREW M3X16	1007744H	2	No	
3	INTERLOCK SWITCH	4149627C	1	No	
4	ECO-FIX TORX SCREW M3X6	1007738B	2	Yes	
5	ECO-FIX TORX SCREW M3x8	VIS35779	5	Yes	
6	MOISTENER BIN FOAM	12PIA0016.2	1	No	
7	SERRATED LOCK WASHER D=4.1X8X1.5	RON32008	2	Yes	
8	ECO-FIX TORX SCREW M4X10	1007735Y	2	No	
9	CLIP	ISO12380	2	No	
10	LOCKING SPINDLE	4147175Y	1	No	
11	LOCKING LEVER	11PIA0189.2	2	Yes	
12	E-RING D=8	CIR35184	1	Yes	
13	LOCKER SPRING	11PIA0229.2	2	Yes	
14	PLATE NUT	11PIA0136.2	2	Yes	
15	BIG SILENT-BLOC MUFF	11PIA0316.2	2	Yes	
16	SILENT BLOC	11PIA0332.2	2	Yes	
17	NUT END	4101996M	2	Yes	
18	EXIT HIGH PROTECTION ASSY.	4122740V	1	No	
19	EXIT SPACER	4147319Y	1	No	
20	SILENT BLOC ASSY.	A0058750	2	Yes	

Frames and external parts 5/6



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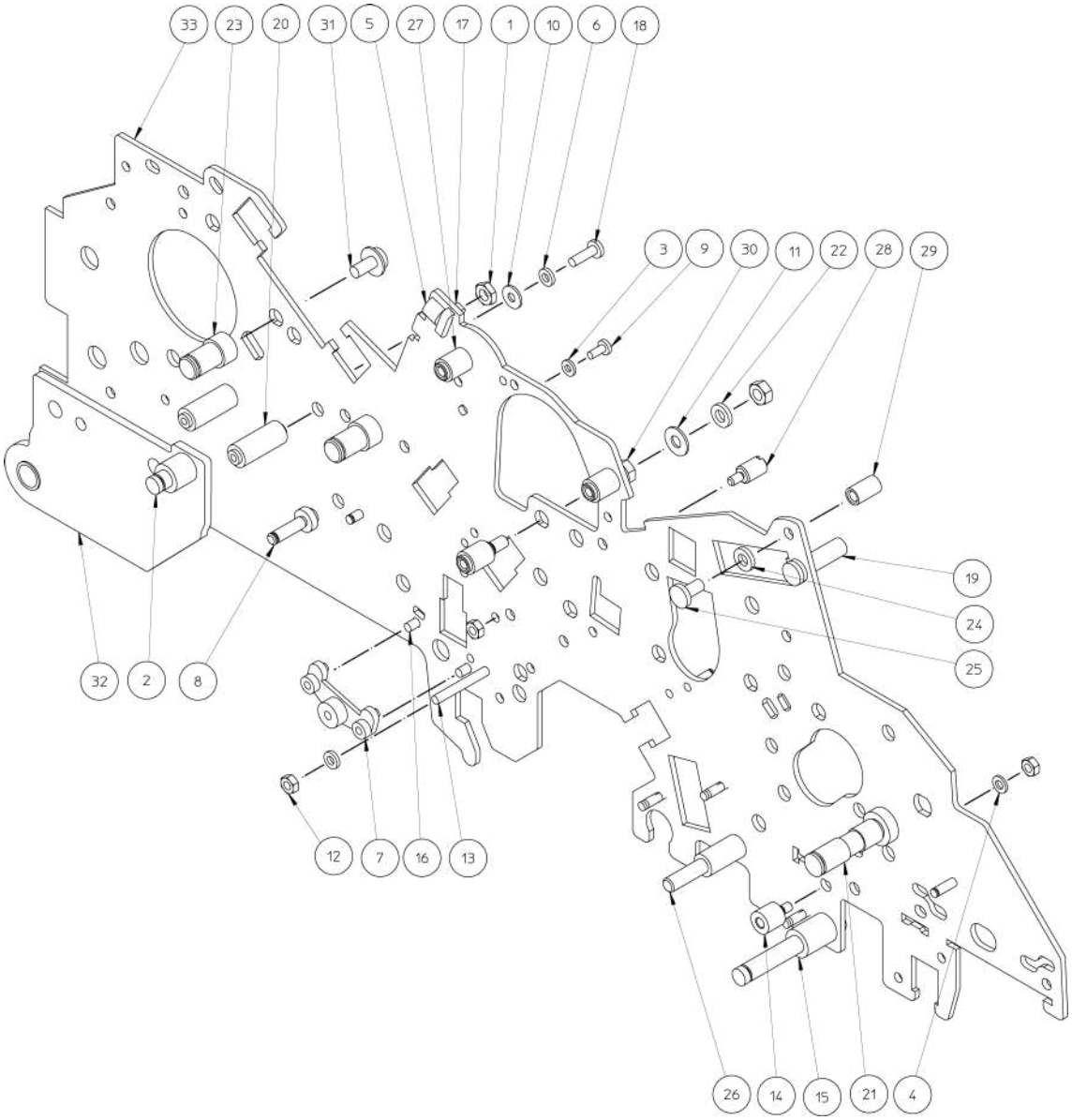
No.	Description	Part No.	Qty.	Spare	Remarks
1	HEXAGONAL NUT H M4	VIS35304	1	Yes	
2	ECO-FIX TORX SCREW M4X16	1007740D	1	No	
3	DOC, ENTRY GUIDE SPINDLE	11PIA0156.2	1	No	
4	GEAR WHEEL LONG SPINDLE	11PID0046	1	Yes	
5	GEAR WHEEL LONG SPINDLE	11PID0049	1	Yes	
6	ENTRY LEVER DOC. SHAFT	4121839G	1	No	
7	GEAR AXLE Z39-Z17	4126840R	3	Yes	
8	COLUMN SUPPORT KNOB	4147850B	2	No	
9	FLAT WASHER D=4X8X0.8	RON31280	5	Yes	
10	HEXALOBULAR SOCKET CYLINDRICAL HEAD M4X8	1007748M	5	No	
11	SPINDLE SCREW	11PIA0013.2	1	Yes	
12	MOISTENER LEVER SPINDLE	11PIA0038.2	1	No	
13	PLATE NUT	11PIA0136.2	1	Yes	
14	SPINDLE	4152111Q	1	No	
15	SPINDLE	11PIA0252.2	1	No	
16	POCKET A DEFLECTOR BEARING	11PIC0075	1	Yes	
17	CYLINDER TOP SPINDLE	11PID0131	1	No	
18	NUT END	4101996M	1	Yes	
19	WASHER MU d=4x10x0.8	RON31281	2	Yes	
20	SERRATED LOCK WASHER D=4.1X8X1.5	RON32008	5	Yes	
21	M4*8 ECO-FIX TORX SCREW	VIS35781	5	Yes	
22	HEXALOBULAR SOCKET CYLINDRICAL HEAD M4X8	1007748M	2	No	
23	HEX. NUT M3	VIS35303	1	Yes	
24	HEXAGONAL NUT H M4	VIS35304	2	Yes	
25	RH HINGE ASSY	4147624R	1	No	
26	UPPER FLANGE	4145716D	1	No	

Frames and external parts 6/6



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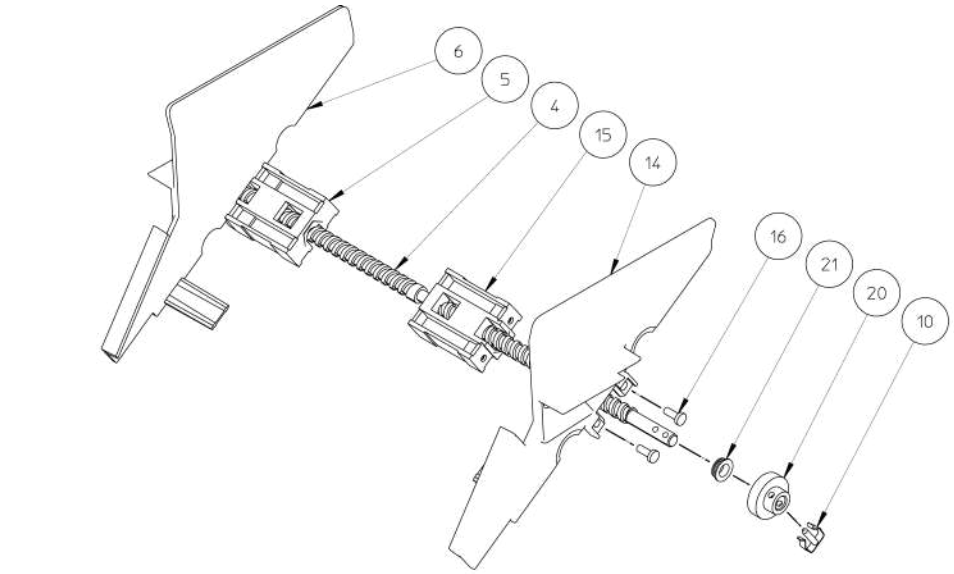
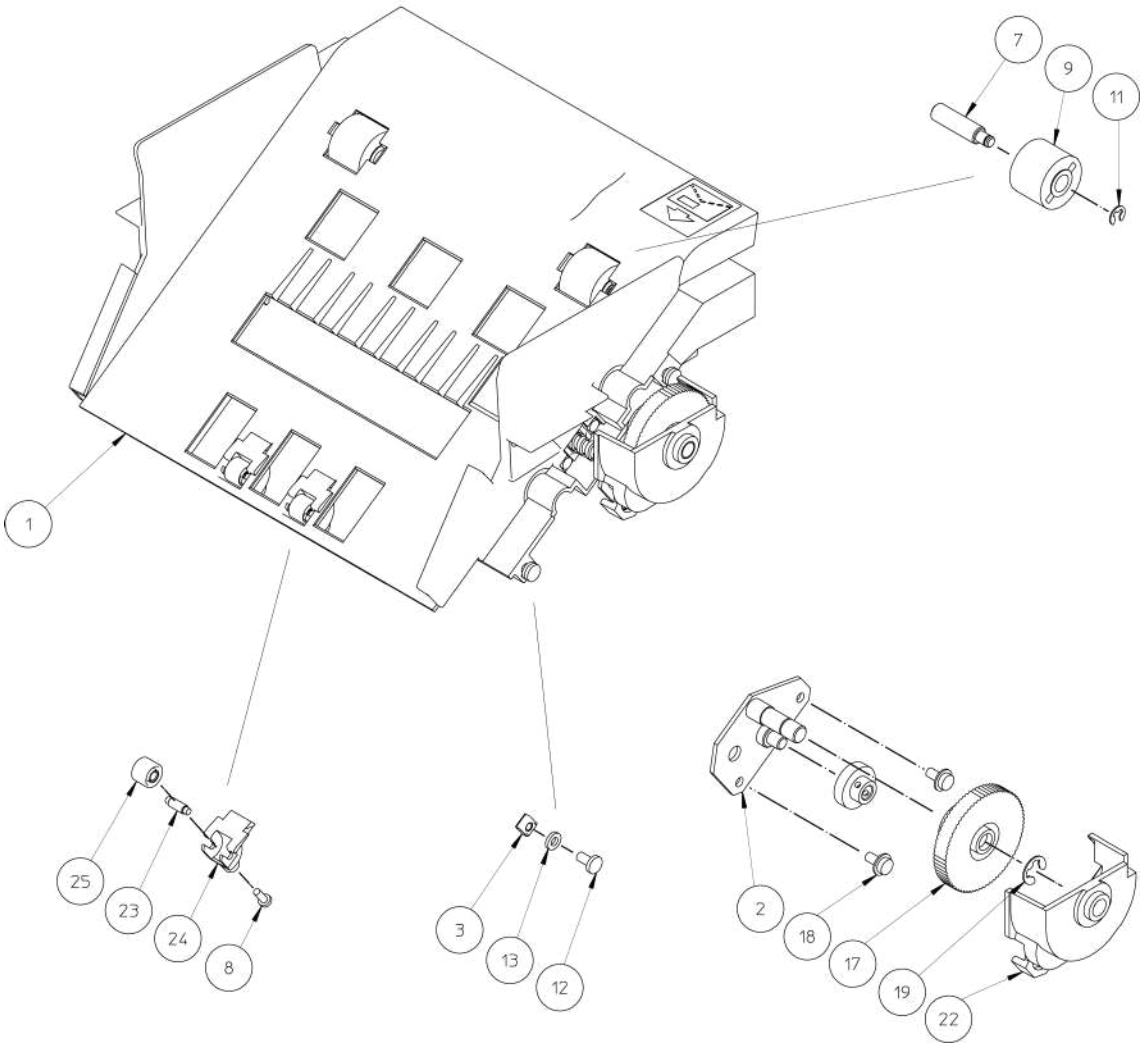
No.	Description	Part No.	Qty.	Spare	Remarks
1	HEXAGONAL NUT HM M4	VIS35321	1	Yes	
2	CYLINDER TOP SPINDLE	11PID0131	1	No	
3	NOT USED	Unnamed item	-		
4	WASHER ZU d=3x6x0.8	RON31140	1	Yes	
5	PLATE NUT	11PIA0136.2	1	Yes	
6	SERRATED LOCK WASHER D=3.05X6X1.2	RON32023	3	Yes	
7	POCKET A DEFLECTOR BEARING	11PIC0075	1	Yes	
8	SPINDLE GEAR WHEEL, SHUTTER	11PIC0110	1	No	
9	ECO-FIX TORX SCREW M2.5X6	1007732V	1	No	
10	FLAT WASHER D=3X8X0.8	RON31141	2	Yes	
11	WASHER MU d=4x10x0.8	RON31281	3	Yes	
12	HEX. NUT M3	VIS35303	3	Yes	
13	ECO-FIX TORX SCREW M3X25	1007743G	1	No	
14	TENSIONER LEVER SHAFT	4147885N	1	No	
15	MOISTENER LEVER SPINDLE	11PIA0038.2	1	No	
16	HEXALOBULAR SOCKET CYLINDRICAL HEAD M4X8	1007748M	2	No	
17	NUT END	4101996M	1	Yes	
18	ECO-FIX TORX SCREW M3x8	VIS35779	2	Yes	
19	SPINDLE	11PIA0252.2	1	No	
20	MOTOR SUPPORT COLUMN	4147870X	2	No	
21	ENVELOPE INTERMEDIATE GEAR WHEEL SPINDLE	11PIA0155.2	1	No	
22	SERRATED LOCK WASHER D=4.1X8X1.5	RON32008	3	Yes	
23	GEAR Z45 AND Z26 SHAFT	4147357N	2	No	
24	SERRATED LOCK WASHER D=4.1X8X1.5	RON32008	4	Yes	
25	M4*8 ECO-FIX TORX SCREW	VIS35781	5	Yes	
26	TENSIONER SPINDLE	11PIA0172.2	1	No	
27	SPACER MOTOR	4147270X	3	No	
28	SPINDLE SCREW	11PIA0013.2	1	Yes	
29	SPINDLE	11PIA0246.2	1	Yes	
30	HEXAGONAL NUT H M4	VIS35304	3	Yes	
31	M4*8 ECO-FIX TORX SCREW	VIS35781	2	Yes	
32	LH HINGE ASSY	4147627U	1	No	
33	UPPER FLANGE	4145716D	1	No	

Envelope feed 1/4





No.	Description	Part No.	Qty.	Spare	Remarks
1	ENV. FEEDER TABLE	4145654P	1	No	
2	ENVELOPE KNOB BRACKET	4147239Q	1	No	
3	LOCKING-UNLOCKING-BASE NUT ASSY	A0046828	4	Yes	
4	SIDE GUIDE SPINDLE	4145707U	1	Yes	
5	ENV. FEEDER LH SIDE GUIDE NUT	4147238P	1	No	
6	SIDE GUIDE LH (ENV. FEEDER)	4145706T	1	Yes	
7	REAR ROLLER SHAFT	4145715C	2	No	
8	ECO-syn BLACK TORX HEAD SCREW D=3x8	1007148M	2	Yes	
9	ENV. FEEDER REAR ROLLER	4145710X	2	No	
10	SPLIT PIN D=2.5X18	4150451L	1	Yes	
11	E-RING D=5	CIR35181	2	Yes	
12	M4*8 ECO-FIX TORX SCREW	VIS35781	4	Yes	
13	SERRATED LOCK WASHER D=4.1X8X1.5	RON32008	4	Yes	
14	SIDE GUIDE RH (ENV. FEEDER)	4145705S	1	Yes	
15	ENV. FEEDER RH SIDE GUIDE NUT	4147237N	1	No	
16	ECO-syn TORX HEAD SCREW D=3x8	VIS30250	4	Yes	
17	ENV. FEEDER ADJUSTMENT KNOB	4145708V	1	No	
18	M4*8 ECO-FIX TORX SCREW	VIS35781	2	Yes	
19	E-RING D=8	CIR35184	1	Yes	
20	GEAR Z18 M1	4147022P	2	No	
21	PLASTIC PLAIN BEARING D=6X11X7.8X2	FRO30176	1	Yes	
22	KNOB CAP	4148950X	1	No	
23	SEPARATOR ROLLER SHAFT	4150563C	2	No	
24	SEPARATOR ROLLER SUPPORT	4147572M	2	No	
25	SEPARATOR ROLLER	4139699L	2	No	

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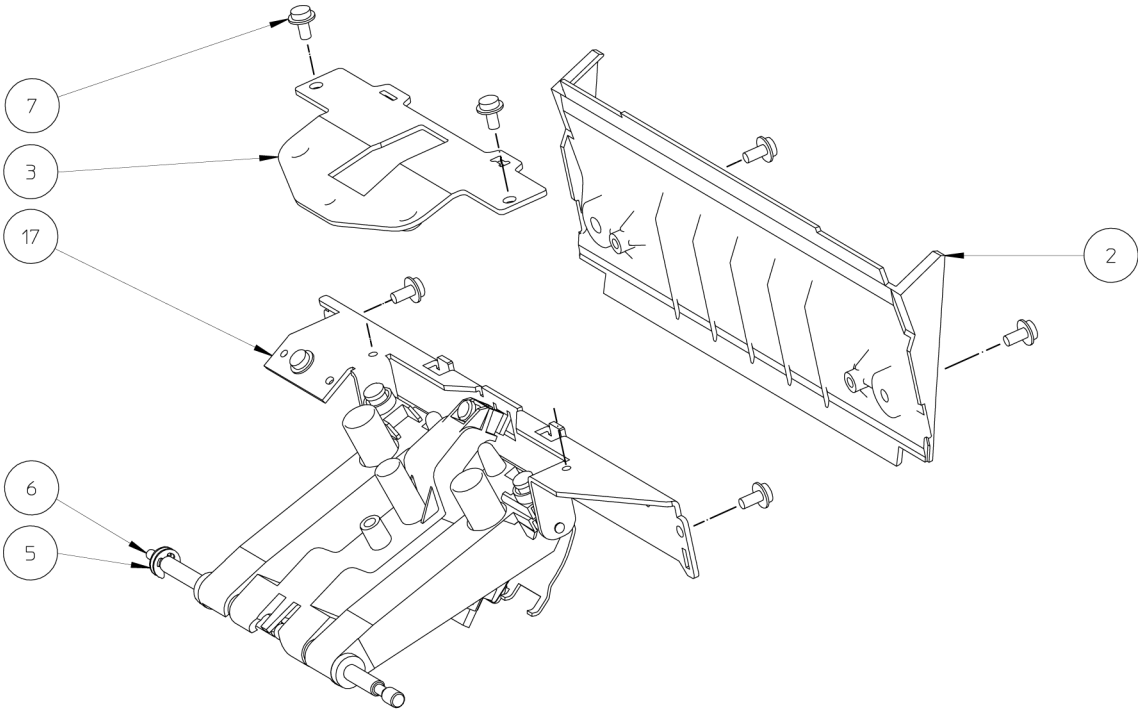

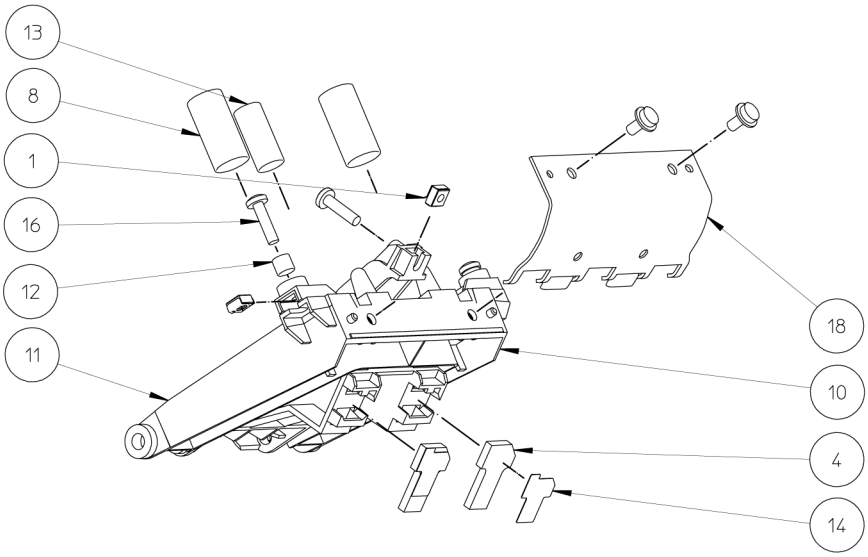

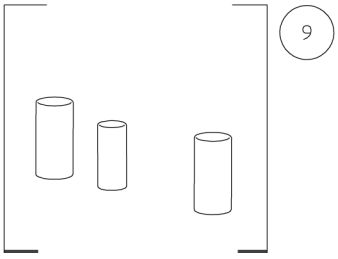

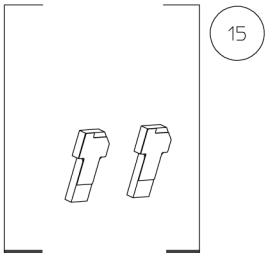

No.	Description	Part No.	Qty.	Spare	Remarks
1	LOCKING-UNLOCKING-BASE NUT ASSY	A0046828	5	Yes	
2	ENV. FRONT WALL EQUIPPED	4151589W	1	No	
3	SUPPORT SPRING	4147233J	1	No	
4	ENVELOPE SEPARATION PAD	4131360Z	2	No	
5	E-RING D=6	CIR35182	2	Yes	
6	SEPARATOR SHAFT	4147246X	1	No	
7	M4*8 ECO-FIX TORX SCREW	VIS35781	9	Yes	
8	SPRING FIRST SEPARATOR	4147859L	2	No	
9	SEPARATION SPRING KIT	4149876M	1	Yes	
10	ENV. FEEDER FIRST SEPARATOR LEVER	4147234K	1	No	
11	ENV. FEEDER SECOND SEPARATOR LEVER	4147236M	1	No	
12	SPRING SCREW	4147858K	3	No	
13	SPRING SECOND SEPARATOR	4147860M	1	No	
14	ENVELOPE PAD PLATE	4150786K	2	No	
15	SEPARATION KIT	4149873J	1	Yes	
16	TORX SCREW M4*16	VIS35782	3	Yes	
17	FRONT WALL SUPPORT	4145722K	1	No	
18	SELECTION PLATE (ASSY.)	A0013995	1	No	

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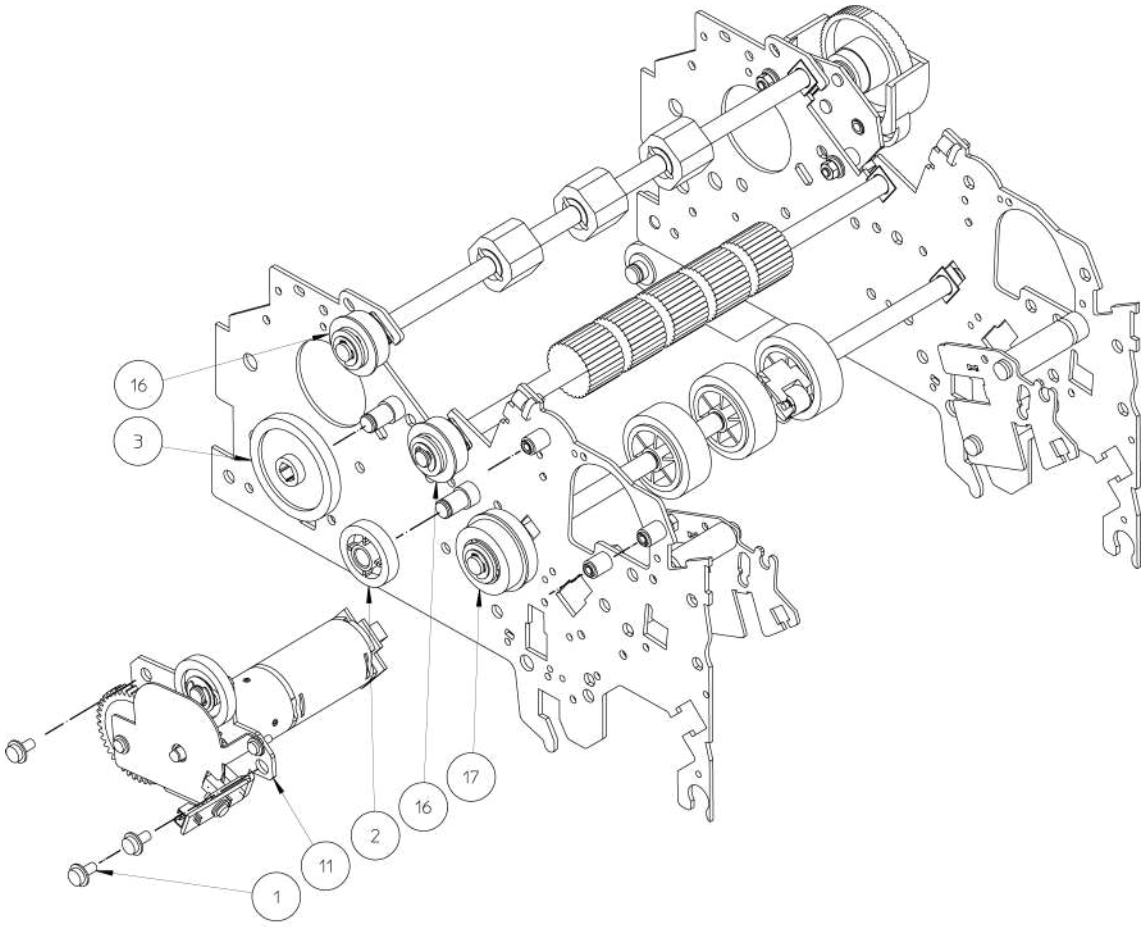

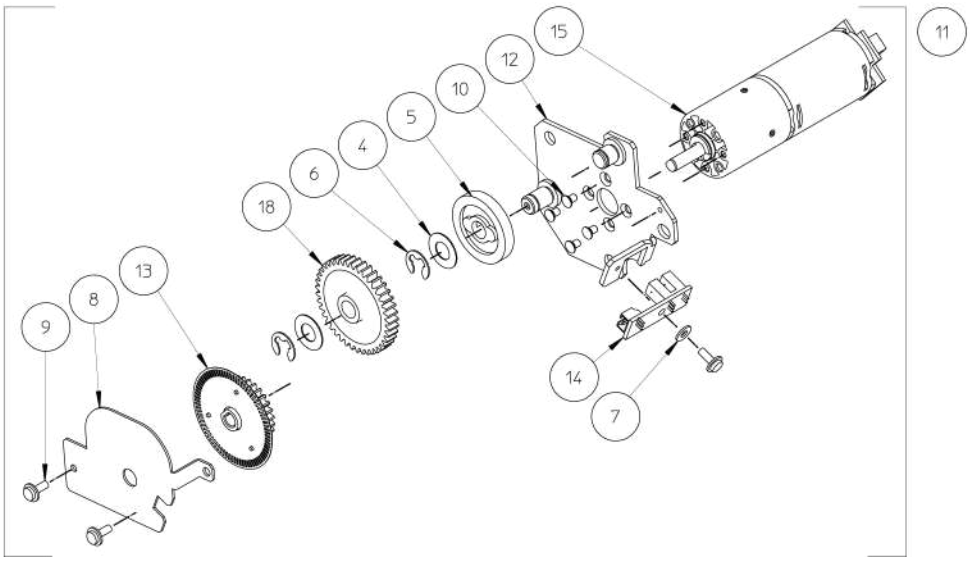

No.	Description	Part No.	Qty.	Spare	Remarks
1	M4*8 ECO-FIX TORX SCREW	VIS35781	3	Yes	
2	GEAR Z26 M1	4147254F	1	Yes	
3	GEAR WHEEL 45T	11PIC0125	1	Yes	
4	FLAT WASHER D=8.2X16X0.5	CAL31665	2	Yes	
5	GEAR WHEEL Z29 M1 NARROW	11PIA0025.2	1	Yes	
6	E-RING D=8	CIR35184	2	Yes	
7	FLAT WASHER	7470_0002	1	No	
8	ENCODER PROTECTION	4151744H	1	No	
9	ECO-FIX TORX SCREW M3x8	VIS35779	3	Yes	
10	FLAT COUNTERSUNK HEAD SCREWS F/90° TORX D=3X8	VIS30252	4	Yes	
11	MOTOR ASSEMBLY (ENV. HOPPER)	4149861W	1	Yes	
12	FEEDING GEAR MOTOR BRACKET	A0054774	1	No	
13	MOTOR GEAR Z19 ASSY	4151756V	1	No	
14	PCBA SENSOR 1	4122298K	1	Yes	
15	FEEDING GEAR MOTOR PREPARED	A0054790	1	No	
16	GEAR 23T M1	4147386T	2	Yes	
17	GEAR	4151742F	1	No	

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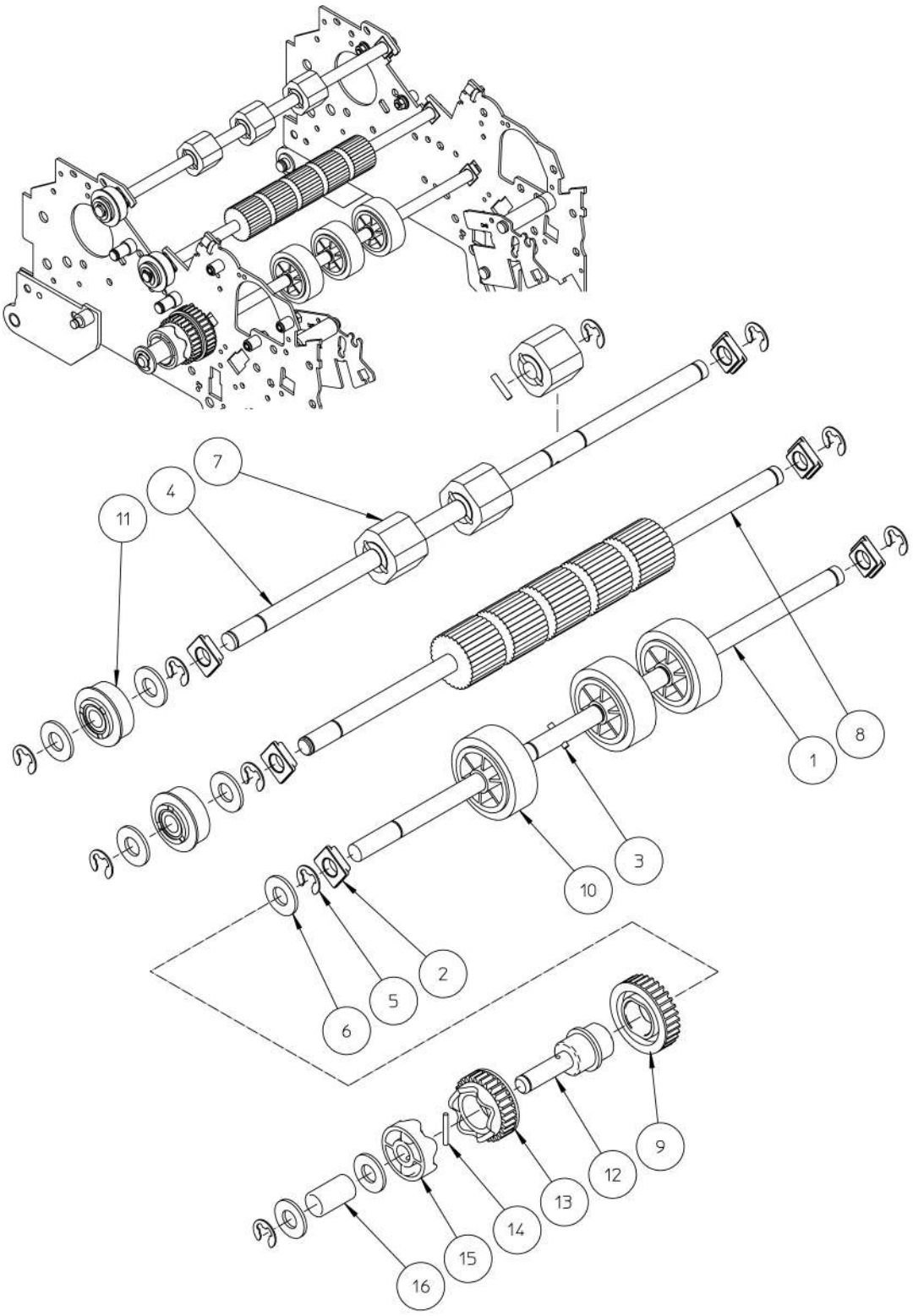

No.	Description	Part No.	Qty.	Spare	Remarks
1	FIRST ROLLER SEPARATION SHAFT	4147241S	1	No	
2	BEARING	11PIA0001.2	6	Yes	
3	CYLINDRICAL PIN D=2.5X14	GOU34710	6	Yes	
4	THIRD ROLLER MAG ENV SHAFT	4147872Z	1	No	
5	E-RING D=8	CIR35184	12	Yes	
6	WASHER MU d=8x18x1.5	RON31681	7	No	
7	ROLLER ECCENTRIC	4148882B	3	No	
8	FEEDER ENV SECOND ROLLER	4148233A	1	Yes	
9	GEAR Z32 M1	4152457A	1	Yes	
10	ENVELOPE SEPARATION ROLLER	4147874B	3	Yes	
11	GEAR 23T M1	4147386T	2	Yes	
12	SHAFT EQUIPPED SLIP DEVICE	A0054590	1	Yes	
13	GEAR Z29 M1	4152459C	1	Yes	
14	DOWEL PIN D=2X16	GOU34712	1	Yes	
15	CLUTCH (SLIP DEVICE)	4152460D	1	Yes	
16	SPRING (SLIP DEVICE)	4152458B	1	Yes	

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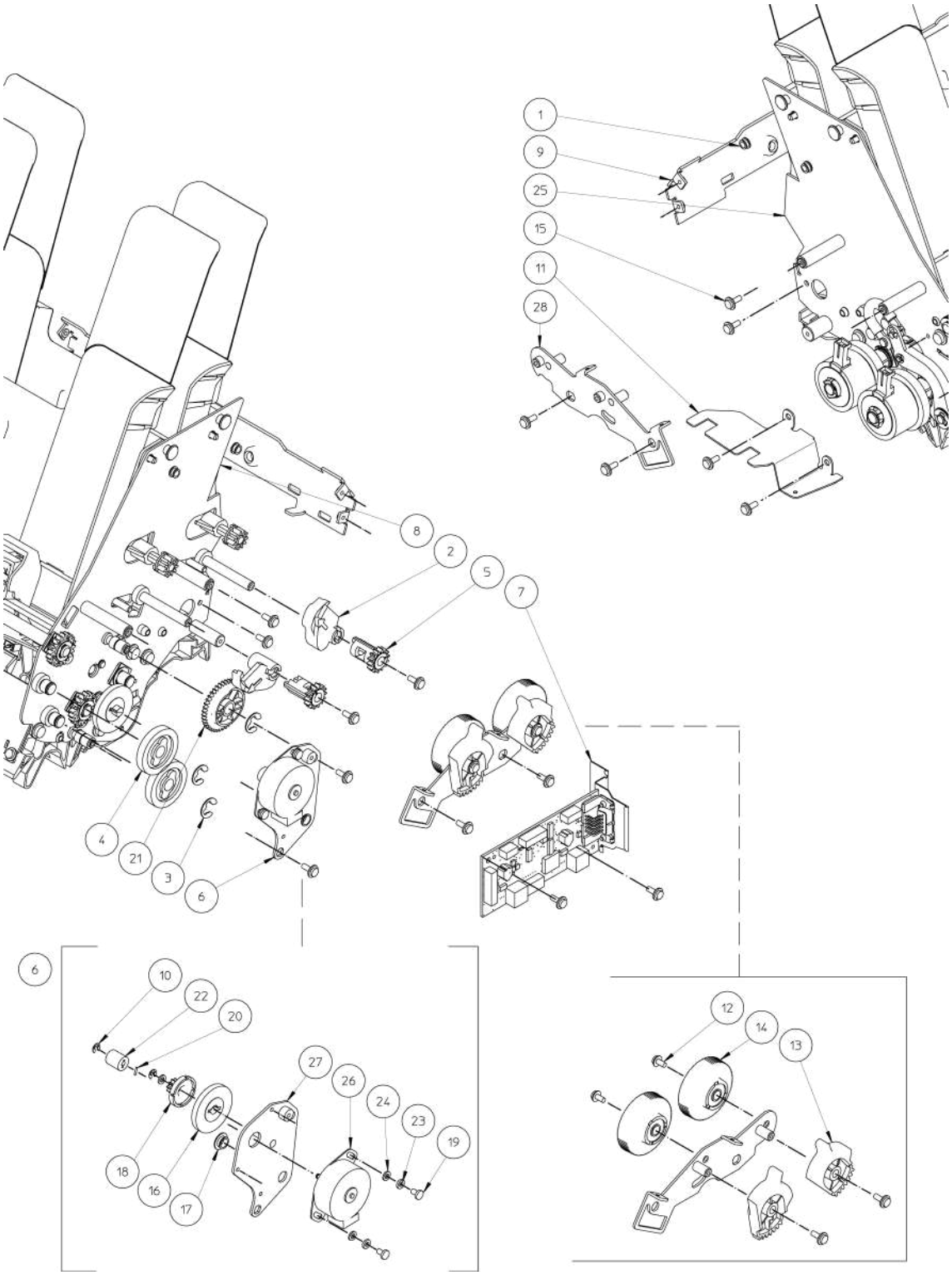

No.	Description	Part No.	Qty.	Spare	Remarks
1	BEARING D = 4X7X5.9X2	FRO30172	4	No	
2	HOPPER LOAD CAM	4147133E	2	No	
3	E-RING D=8	CIR35184	2	Yes	
4	GEAR WHEEL Z29 M1 NARROW	11PIA0025.2	2	Yes	
5	HOPPER INTERMEDIARY GEAR	4147135G	2	No	
6	STEPPER MOTOR ASSY	4149879Q	1	Yes	
7	FEEDER BOARD	4149862X	1	Yes	
8	RIGHT FLANGE ASSEMBLY	4147100V	1	No	
9	FEEDER 1/2 STRENGTHEN METAL PLATE	4147110F	1	No	
10	E-RING D=3	CIR35171	2	Yes	
11	CLUTCH STOPPING METAL FRAME	4147120R	1	No	
12	ECO-FIX TORX SCREW M3x8	VIS35779	20	Yes	
13	HOPPER LOAD KNOB	4147132D	2	No	
14	MARGING KNOB	4147134F	2	No	
15	ECO-FIX TORX SCREW M3x8	VIS35779	0	Yes	
16	DAILY MAIL GEAR	4147154B	1	No	
17	PLASTIC PLAIN BEARING D=6X11X7.8X2	FRO30176	1	Yes	
18	GEAR	4151375Y	1	No	
19	CYLINDRICAL CAPSCREW TORX M3x6	VIS30675	2	No	
20	CYLINDRICAL PIN D=1X5	GOU00014	1	No	
21	GEAR	4151374X	1	Yes	
22	MOTOR GEAR WHEEL Z10	11PIC0067	1	Yes	
23	SERRATED LOCK WASHER D=3.05X6X1.2	RON32023	2	Yes	
24	WASHER ZU d=3x6x0.8	RON31140	3	Yes	
25	LEFT FLANGE ASSEMBLY	4147093N	1	No	
26	AUTO/MANUAL MOTOR	4148109W	1	No	Connector J7; Included in Stepper motor assembly 4149879Q.
27	DAILY MAIL MOTOR SUPPORT METAL FRAME ASSEMBLY	4147156D	1	No	
28	COVER SUPPORT ASSEMBLY	4147922B	2	Yes	

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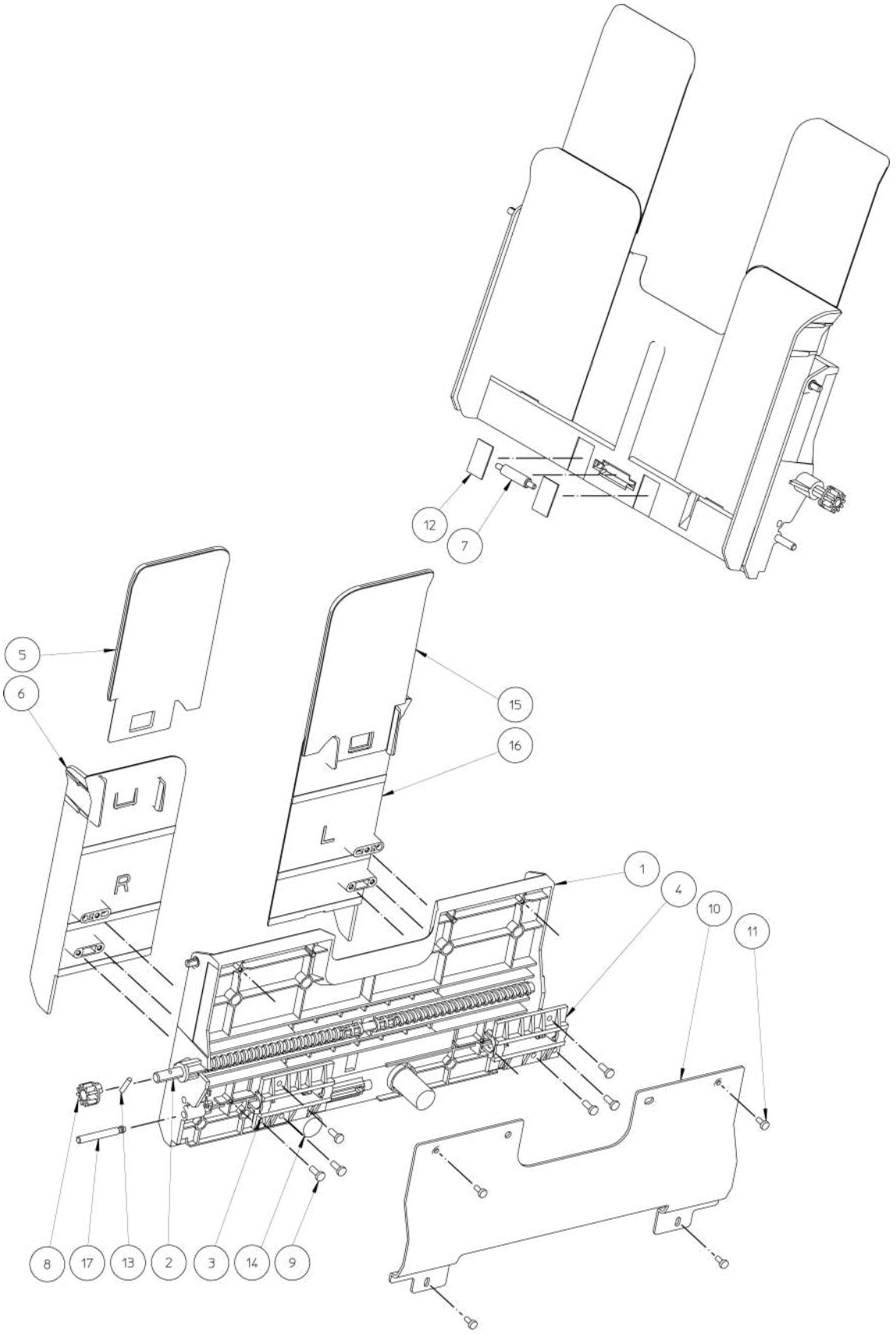

No.	Description	Part No.	Qty.	Spare	Remarks
1	HOPPER FRAME	4147112H	1	No	
2	DOC. FEEDER SIDE GUIDE SPINDLE	4147116M	1	No	
3	DOC. FEEDER RH SIDE GUIDE NUT	4147159G	1	No	
4	DOC. FEEDER LH SIDE GUIDE NUT	4147160H	1	No	
5	RH GUIDE EXTENSION	4147121S	1	Yes	
6	DOC. FEEDER RH SIDE GUIDE	4147113J	1	No	
7	HOPPER FREE ROLLER	4147056Z	1	No	
8	MARGING GEAR	4147136H	1	No	
9	ECO-syn TORX HEAD SCREW D=3x8	VIS30250	6	Yes	
10	HOPPER FRAME STRENGTHEN METAL PLATE	4147115L	1	No	
11	ECO-syn TORX HEAD SCREW 2.5x6	1004742F	4	Yes	
12	PUSHER PAD	4148388M	2	No	
13	CYLINDRICAL PIN D=2X10	GOU34709	1	No	
14	PUSHER SPRING (FEEDER 1/2)	4147892V	2	No	
15	LH GUIDE EXTENSION	4147122T	1	Yes	
16	DOC. FEEDER LH SIDE GUIDE	4147114K	1	No	
17	HOPPER FRAME SHEET METAL CAM SHAFT	4147140M	1	No	

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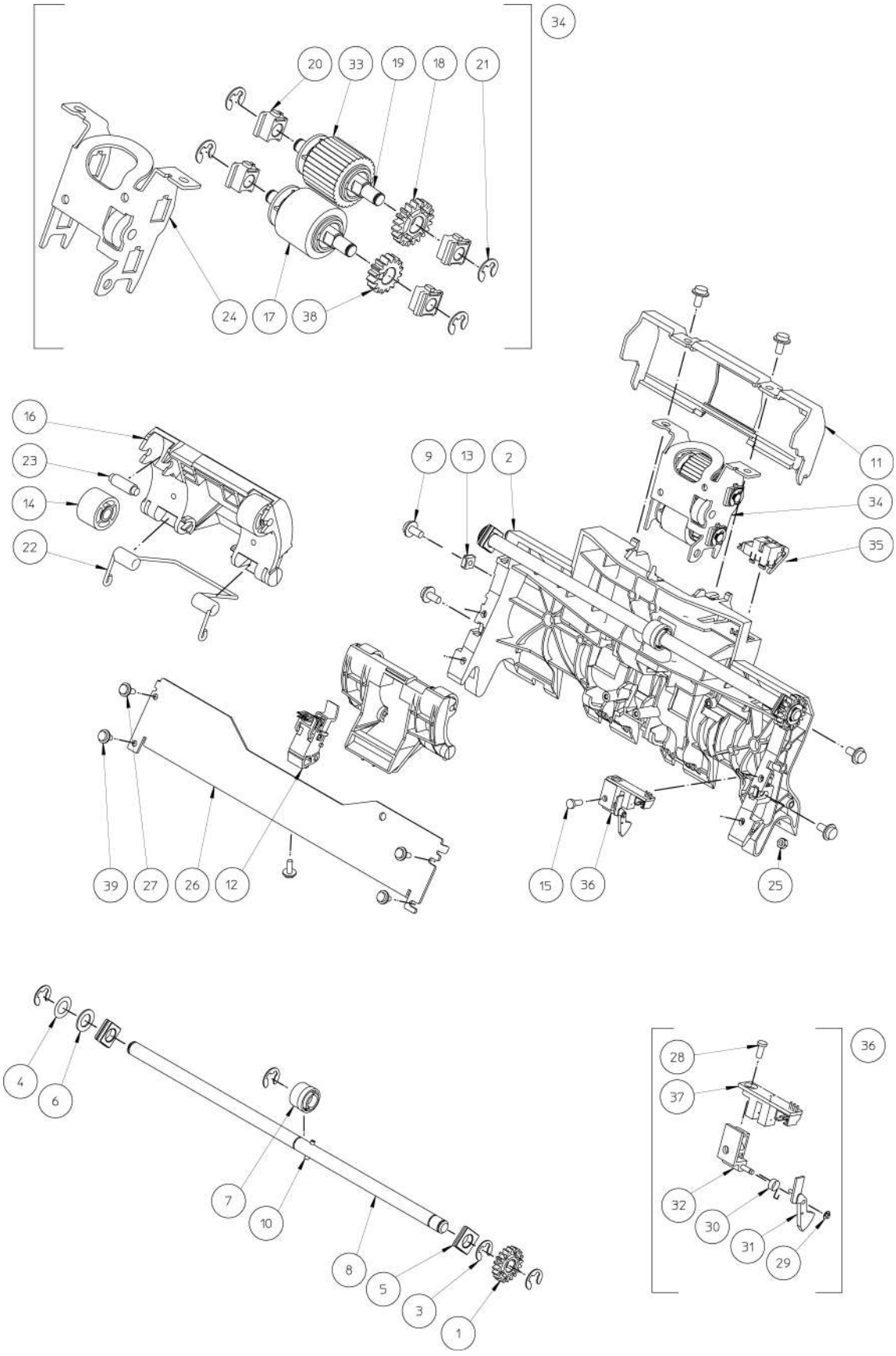

No.	Description	Part No.	Qty.	Spare	Remarks
1	KINEMATIC GEAR	4147169S	1	No	
2	FEEDER 1 FRONT FRAME	4147106B	1	No	
3	E-RING D=8	CIR35184	4	Yes	
4	WASHER ONDUFLEX D=8.1X13.8X0.1	1006204D	1	Yes	
5	BEARING	11PIA0001.2	2	Yes	
6	WASHER Ø 14 X Ø 8.2 X 0.8 MM	2040141W	1	Yes	
7	SEPARATION MODULE GEAR	4147171U	1	No	
8	FEEDER 1 KINEMATIC SHAFT	4147145S	1	No	
9	M4*8 ECO-FIX TORX SCREW	VIS35781	6	Yes	
10	CYLINDRICAL PIN D=2.5X12	GOU00745	1	Yes	
11	SEPARATION COVER	4147117N	1	No	
12	ASSY DFC	2951256Z	1	Yes	
13	LOCKING-UNLOCKING-BASE NUT ASSY	A0046828	6	Yes	
14	EXIT ROLLER CONS-ROLLER	4147329J	2	No	
15	ECO-syn BLACK TORX HEAD SCREW D=3x8	1007148M	3	Yes	
16	EXIT ROLLER LEVER	4147131C	1	No	
17	ROLLER	4151219L	1	Yes	
18	KINEMATIC GEAR	4147169S	1	No	
19	SEPARATION MODULE ROLLER SHAFT	4147174X	2	No	
20	BEARING BLOCK ANTISTAT 6MM	2042424Z	4	Yes	
21	E-RING D=6	CIR35182	4	Yes	
22	EXIT ROLLER LEVER-SPRING	A0001011	1	Yes	
23	CONS-ROLLER SHAFT	4147321A	2	No	
24	SEPARATION MODULE METAL FRAME ASSEMBLY	4151218K	1	No	
25	HEX. NUT M3	VIS35303	5	Yes	
26	FEEDER 1 DFC SUPPORT	4149544R	1	Yes	
27	ECO-FIX TORX SCREW M3x8	VIS35779	4	Yes	
28	ECO-syn TORX HEAD SCREW 2.5x6	1004742F	1	Yes	
29	E-RING D=2	CIR35169	1	Yes	
30	DETECTOR SPRING	11PID0028	1	No	
31	DETECTOR LEVER	11PID0133	1	Yes	
32	RTD DETECTOR ASSY	21NCA0071	1	No	
33	ROLLER	4150009A	1	Yes	
34	SEPARATION MODULE 1 ASSY.	4151616Z	1	Yes	
35	FLAG SWITCH	4152761S	1	Yes	
36	Insert path sensor assembly	4149849J	1	Yes	
37	PBCA SENSOR BIN C	4122604D	1	Yes	
38	SEPARATION ROLLER GEAR	4151223Q	1	No	
39	ECO-FIX TORX SCREW M3X6	1007738B	1	Yes	

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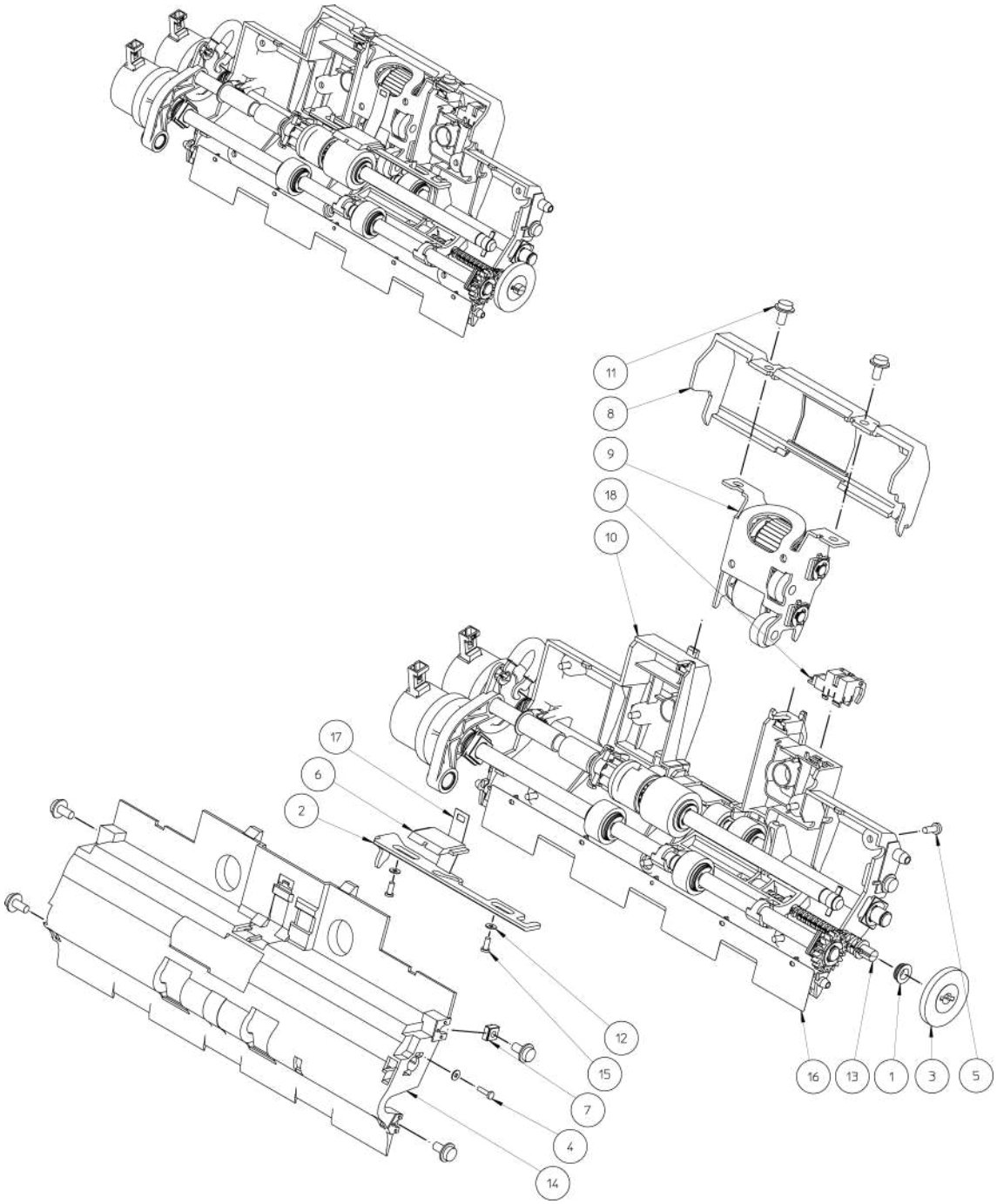

No.	Description	Part No.	Qty.	Spare	Remarks
1	PLASTIC PLAIN BEARING D=6X11X7.8X2	FRO30176	1	Yes	
2	DAILY MAIL CAM METAL PLATE	4147124V	1	No	
3	DAILY MAIL GEAR	4147154B	1	No	
4	CYLINDRICAL HEAD SCREW M2x8	VIS35424	1	Yes	
5	ECO-syn BLACK TORX HEAD SCREW D=3x8	1007148M	7	Yes	
6	PRE-SEPARATION DAILY MAIL PART	4147123U	1	No	
7	LOCKING-UNLOCKING-BASE NUT ASSY	A0046828	8	Yes	
8	SEPARATION COVER	4147117N	1	No	
9	SEPARATION MODULE 2 ASSY.	4149874K	1	Yes	
10	FEEDER 2 INNER PATH	4147108D	1	No	
11	M4*8 ECO-FIX TORX SCREW	VIS35781	8	Yes	
12	WASHER d=2x5.5x0.5	RON31081	3	Yes	
13	DAILY MAIL WORM	4147144R	1	No	
14	FEEDER 1 INNER PATH	4147107C	1	No	
15	ECO-syn TORX HEAD SCREW 2.5x6	1004742F	2	Yes	
16	SEPARATOR STRIP	4148105S	1	No	
17	DAILY MAIL LEAF SPRING	4147125W	1	No	
18	FLAG SWITCH	4152761S	1	Yes	

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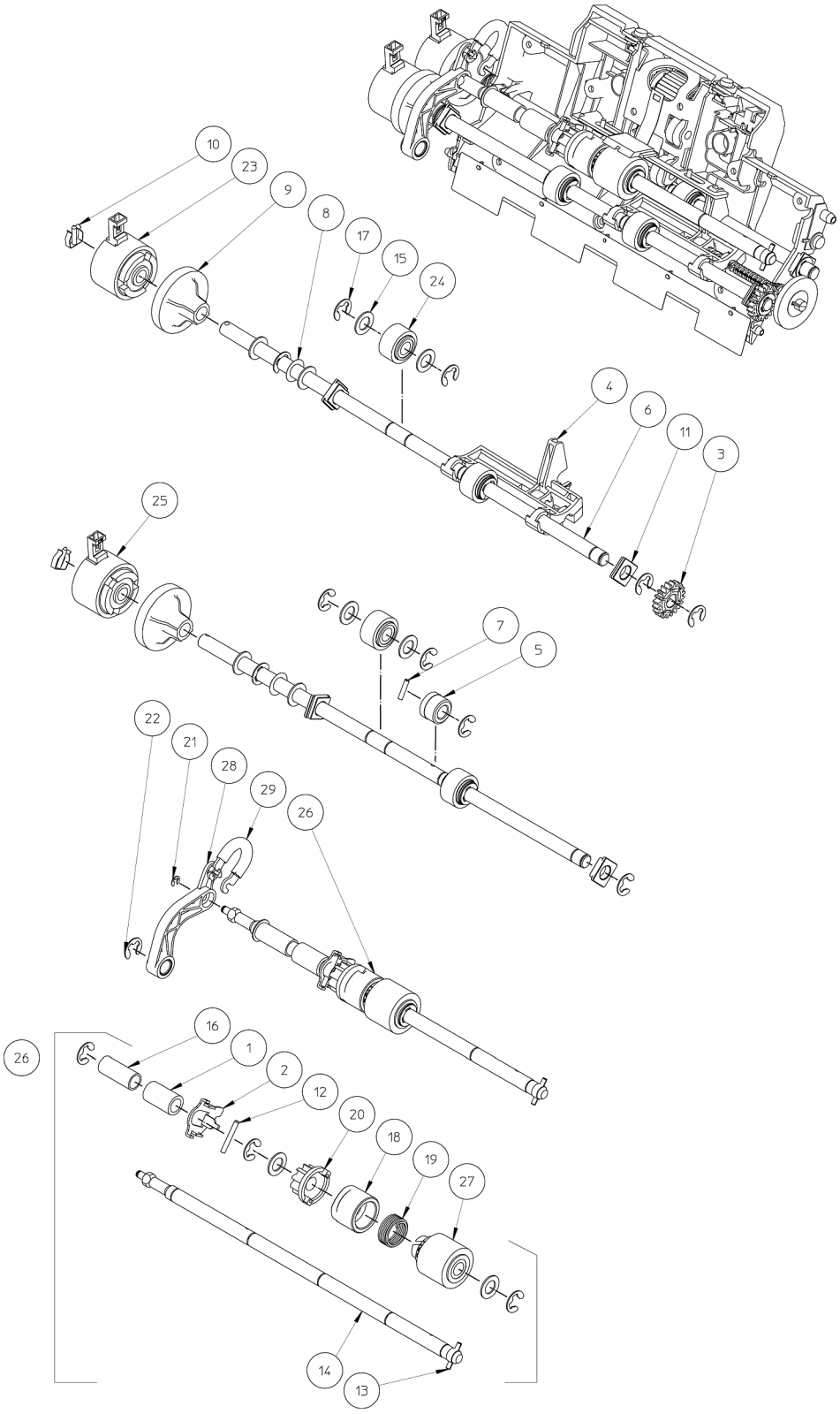

No.	Description	Part No.	Qty.	Spare	Remarks
1	SPACER	2041098T	1	Yes	
2	DAILY MAIL LEVER	4147126X	1	No	
3	KINEMATIC GEAR	4147169S	1	No	
4	DAILY MAIL NUT	4147111G	1	No	
5	SEPARATION MODULE GEAR	4147171U	1	No	
6	EXIT ROLLER SHAFT	4147328H	2	No	
7	CYLINDRICAL PIN D=2.5X12	GOU00745	1	Yes	
8	WASHER ONDUFLEX D=8.1X13.8X0.1	1006204D	2	Yes	
9	CLUTCH GEAR	4147330K	2	No	
10	SPLIT PIN D=2.5X18	4150451L	2	Yes	
11	BEARING	11PIA0001.2	4	Yes	
12	CYL. PIN Ø 2.5 X 20	2964193A	1	Yes	
13	PRYM SPIROL PIN 2.5X16 DIN7343	2043032H	1	No	
14	FEEDER 1 SEPARATION SHAFT	4147128Z	1	No	
15	WASHER Ø 14 X Ø 8.2 X 0.8 MM	2040141W	14	Yes	
16	PRESSURE SPRING D=1MM	2031114T	1	Yes	
17	E-RING D=8	CIR35184	17	Yes	
18	CLUTCH HUB	4147034B	1	No	
19	WRAP SPRING	2951131U	1	Yes	
20	RATCHET WHEEL	4147580V	1	No	
21	E-RING D=3	CIR35171	1	Yes	
22	E-RING D=8	CIR35184	1	Yes	
23	CLUTCH CCW	4148250T	1	Yes	
24	EXIT ROLLER	4147273A	4	No	
25	CLUTCH CW	14PIC0002	1	Yes	
26	SEPARATION AXLE ASSY	4149871G	1	Yes	
27	SEPARATION ROLLER	4151281A	1	Yes	
28	FEEDER 1 SEPARATION SHAFT LEVER	4147119Q	1	No	
29	FEEDER A SEPARATION BENDING SPRING	4147173W	1	No	

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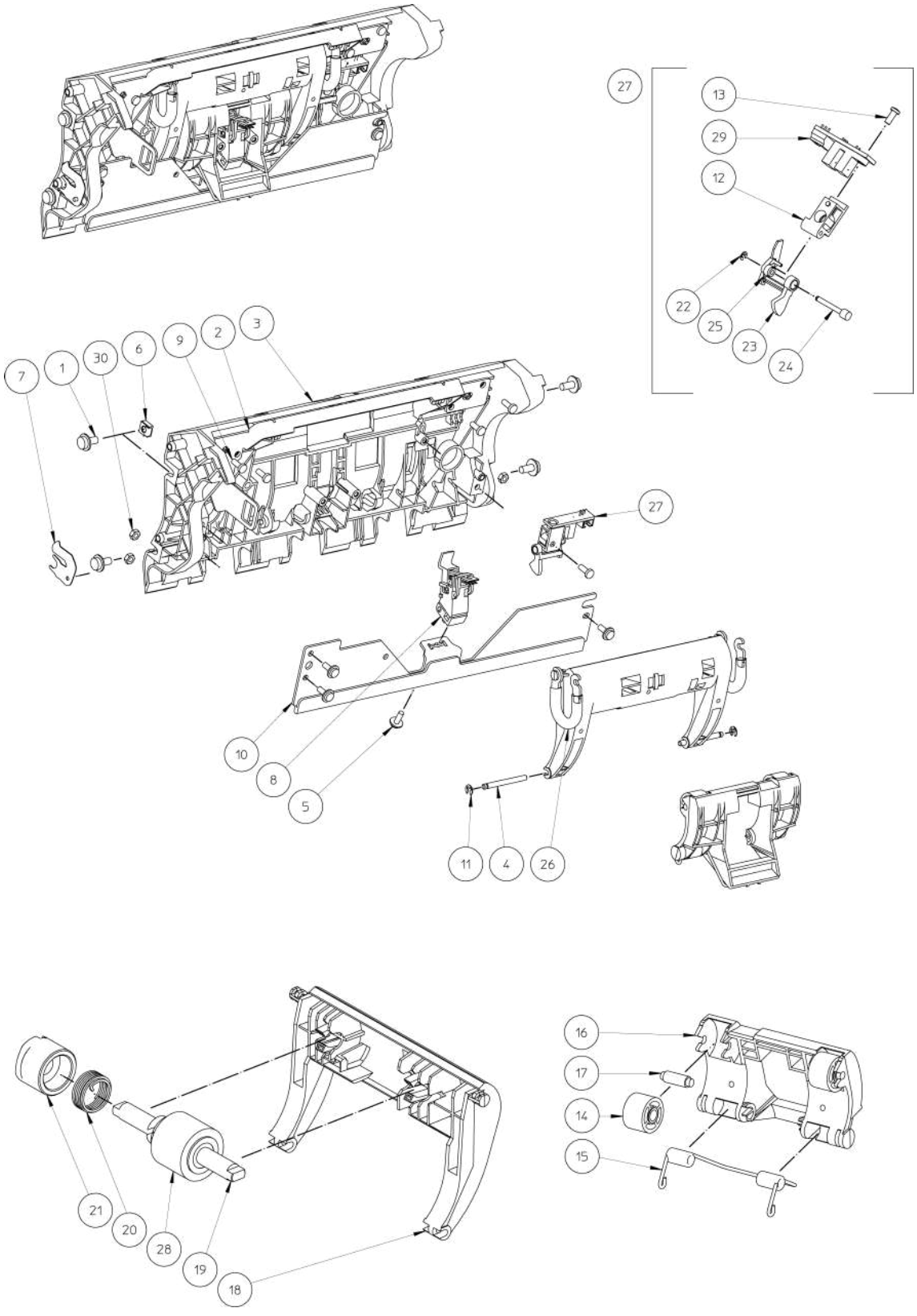
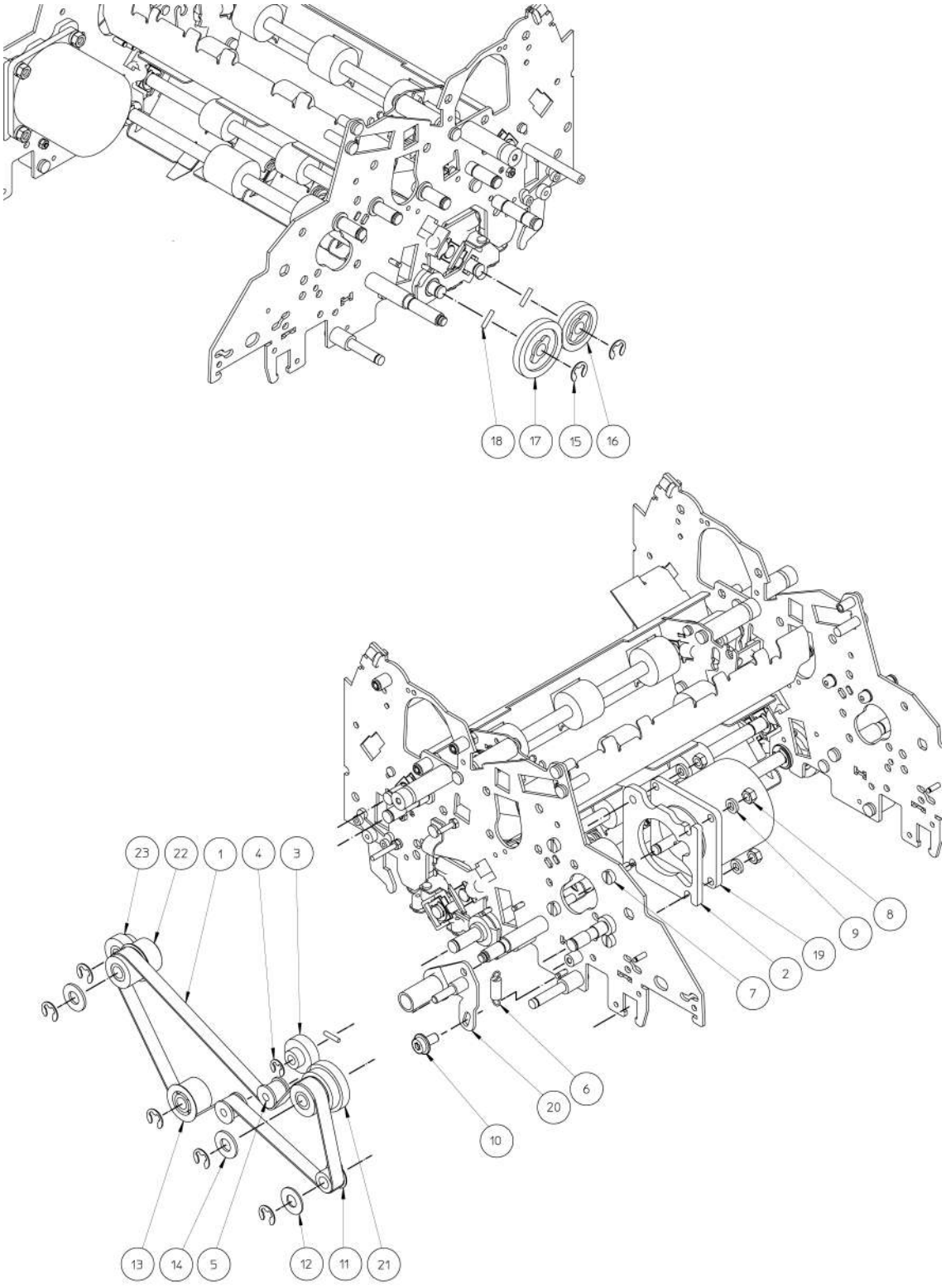


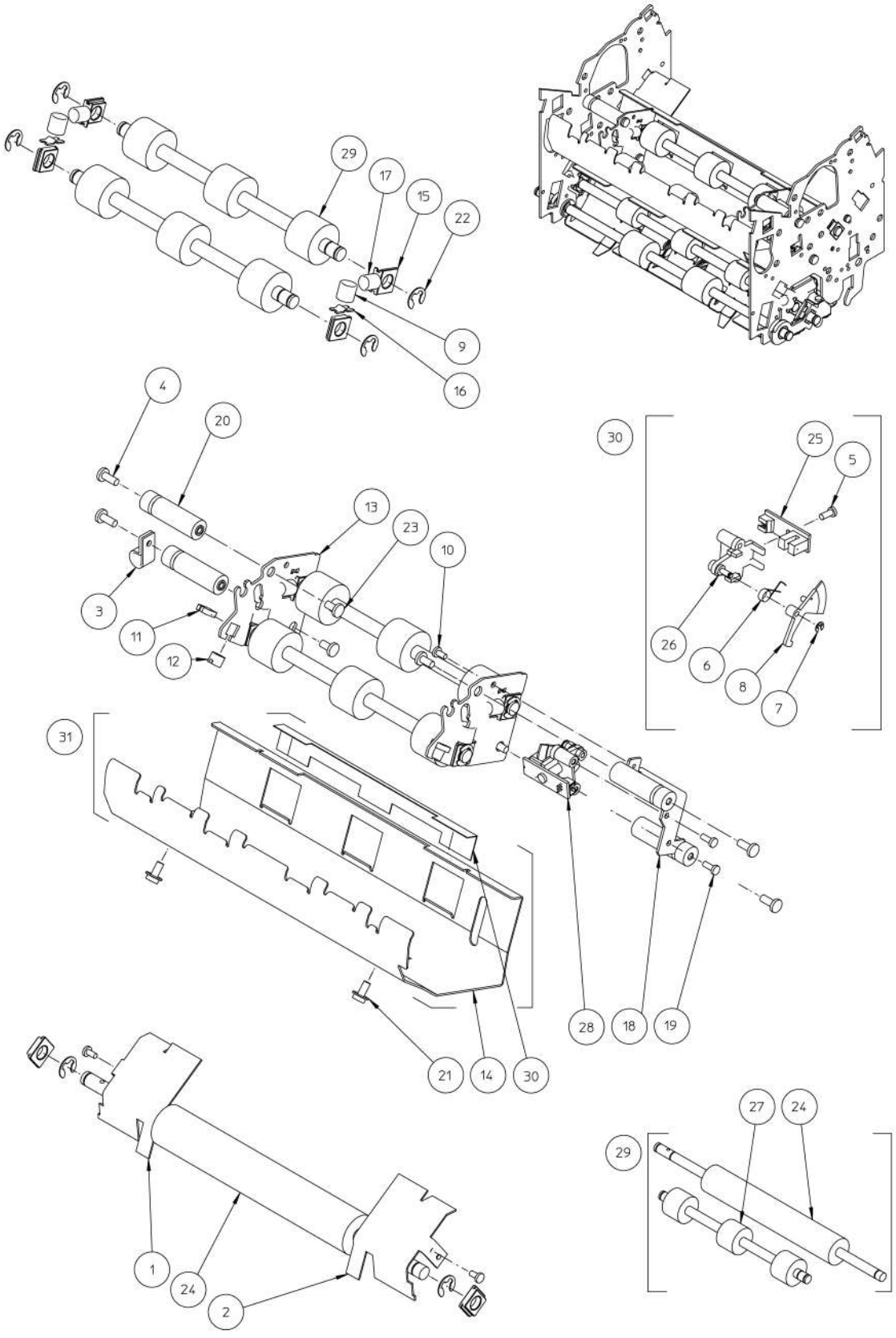
No.	Description	Part No.	Qty.	Spare	Remarks
1	M4*8 ECO-FIX TORX SCREW	VIS35781	4	Yes	
2	FEEDER 2 FRAME STRENGTHEN METAL PLATE	4147143Q	1	No	
3	FEEDER 2 REAR FRAME	4147109E	1	No	
4	FEEDER 2 SEPARATION LEVER SHAFT	4147168R	2	No	
5	ECO-FIX TORX SCREW M3x8	VIS35779	4	Yes	
6	LOCKING-UNLOCKING-BASE NUT ASSY	A0046828	4	Yes	
7	EARTH CONNECTOR	4147579U	1	No	
8	ASSY DFC	2951256Z	1	Yes	
9	ECO-syn BLACK TORX HEAD SCREW D=3x8	1007148M	7	Yes	
10	FEEDER 2 DFC SUPPORT	4149545S	1	No	
11	E-RING D=3	CIR35171	2	Yes	
12	DETECTOR SUPPORT	11NCA0440	1	No	
13	ECO-syn TORX HEAD SCREW 2.5x6	1004742F	1	Yes	
14	EXIT ROLLER CONS-ROLLER	4147329J	2	No	
15	EXIT ROLLER LEVER-SPRING	A0001011	1	Yes	
16	EXIT ROLLER LEVER	4147131C	1	No	
17	CONS-ROLLER SHAFT	4147321A	2	No	
18	FEEDER 2 SEPARATION LEVER	4147130B	1	No	
19	FEEDER 3 SEPARATION SHAFT	4147045N	1	No	
20	WRAP SPRING	2951131U	1	Yes	
21	CLUTCH HUB	4147034B	1	No	
22	E-RING D=2	CIR35169	1	Yes	
23	FEEDER 2 SEPARATION FLAG	4148814F	1	No	
24	FEEDER 2 SEPARATION FLAG SHAFT	4148815G	1	No	
25	DETECTOR SPRING	11PID0028	1	No	
26	FEEDER 3 SEPARATION BENDING SPRING	4147172V	2	Yes	
27	Separation flag switch (feeder 2)	4149872H	1	Yes	
28	SEPARATION ROLLER	4151281A	1	Yes	
29	PBCA SENSOR BIN C	4122604D	1	Yes	
30	HEX. NUT M3	VIS35303	3	Yes	

Feeder 1-2 document transport 1/3



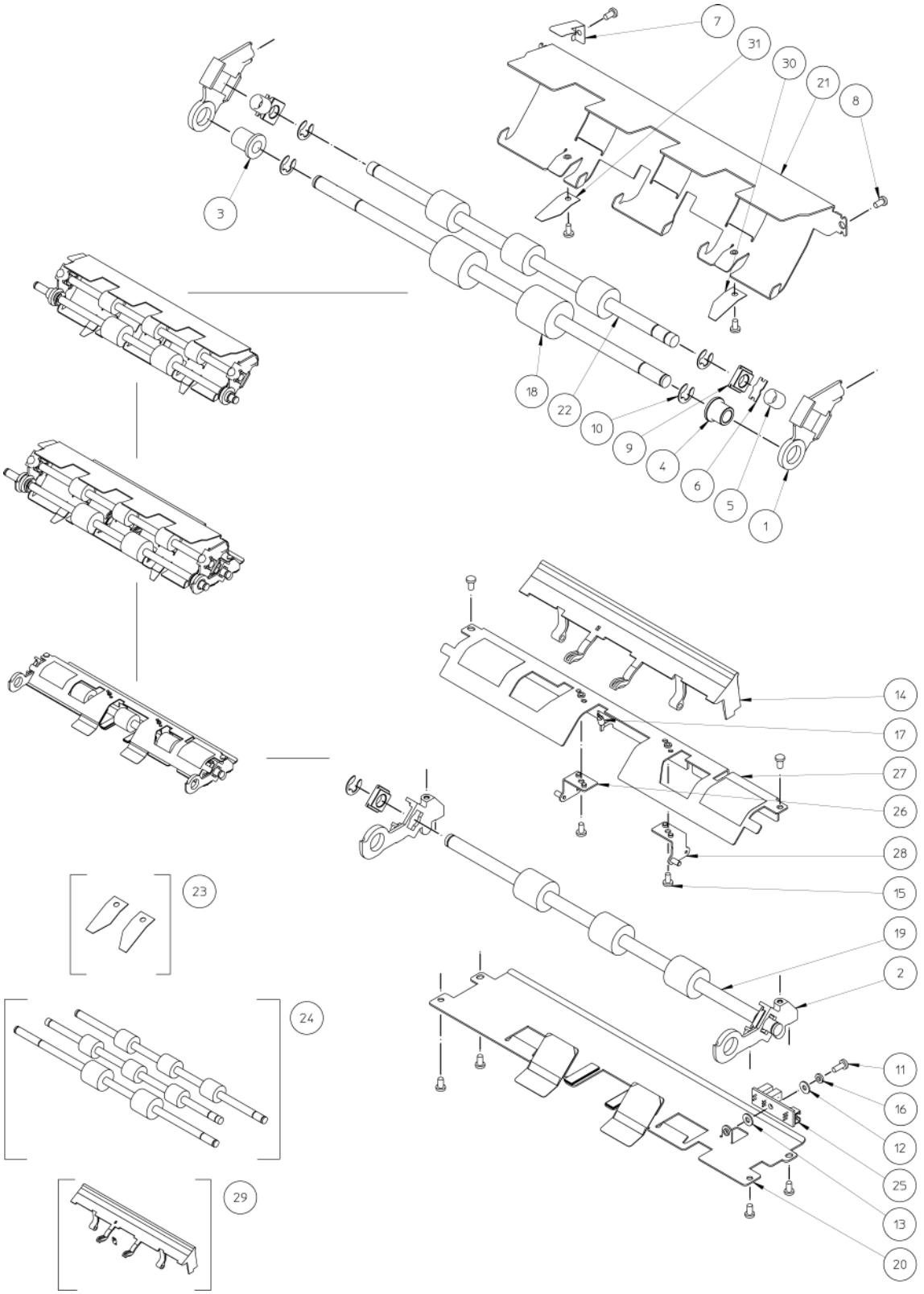
No.	Description	Part No.	Qty.	Spare	Remarks
1	ENVELOPE BELT	12PIA0003.2	1	Yes	
2	DRIVING CAM SPACER	11PIA0112.2	1	Yes	
3	ENVELOPE DRIVING GEAR WHEEL	4150540D	1	Yes	
4	E-RING D=6	CIR35182	1	Yes	
5	TENSIONER ROLLER	11PIA0171.2	2	Yes	
6	ENVELOPPE BELT TENSIONNER SPRING	A0000099	1	No	
7	CYLINDRICAL HEAD SCREW M5x15	VIS35747	4	Yes	
8	HEXAGONAL NUT H M5	VIS35305	4	Yes	
9	WASHER OR TYPE DE d=5.1x9x1.5	RON32022	4	No	
10	M4*8 ECO-FIX TORX SCREW	VIS35781	1	Yes	
11	EXIT SPINDLE PULLEY	11PIB0043.2	1	Yes	
12	WASHER d=8.2x18x1	CAL31668	1	No	
13	PULLEY MXL 34 TEETH	11PIA0027.2	1	Yes	
14	WASHER MU d=8x18x1.5	RON31681	2	No	
15	E-RING D=8	CIR35184	7	Yes	
16	GEAR WHEEL Z29 M1 NARROW	11PIA0025.2	1	Yes	
17	GEAR WHEEL Z36 M1	11PIA0026.2	1	Yes	
18	CYLINDRICAL PIN D=2.5X14	GOU34710	3	Yes	
19	ENV CAM TRANSPORT MOTOR	4148753S	1	Yes	
20	TENSIONER LEVER ASSY.	4148875U	1	No	
21	GEAR WHEEL Z32	4150539C	1	Yes	
22	PULLEY MXL 34T / GEAR WHEEL Z20	21PIA0059.2	1	Yes	
23	GEAR WHEEL Z20 M1	21PIC0051	1	Yes	

Feeder 1-2 document transport 2/3



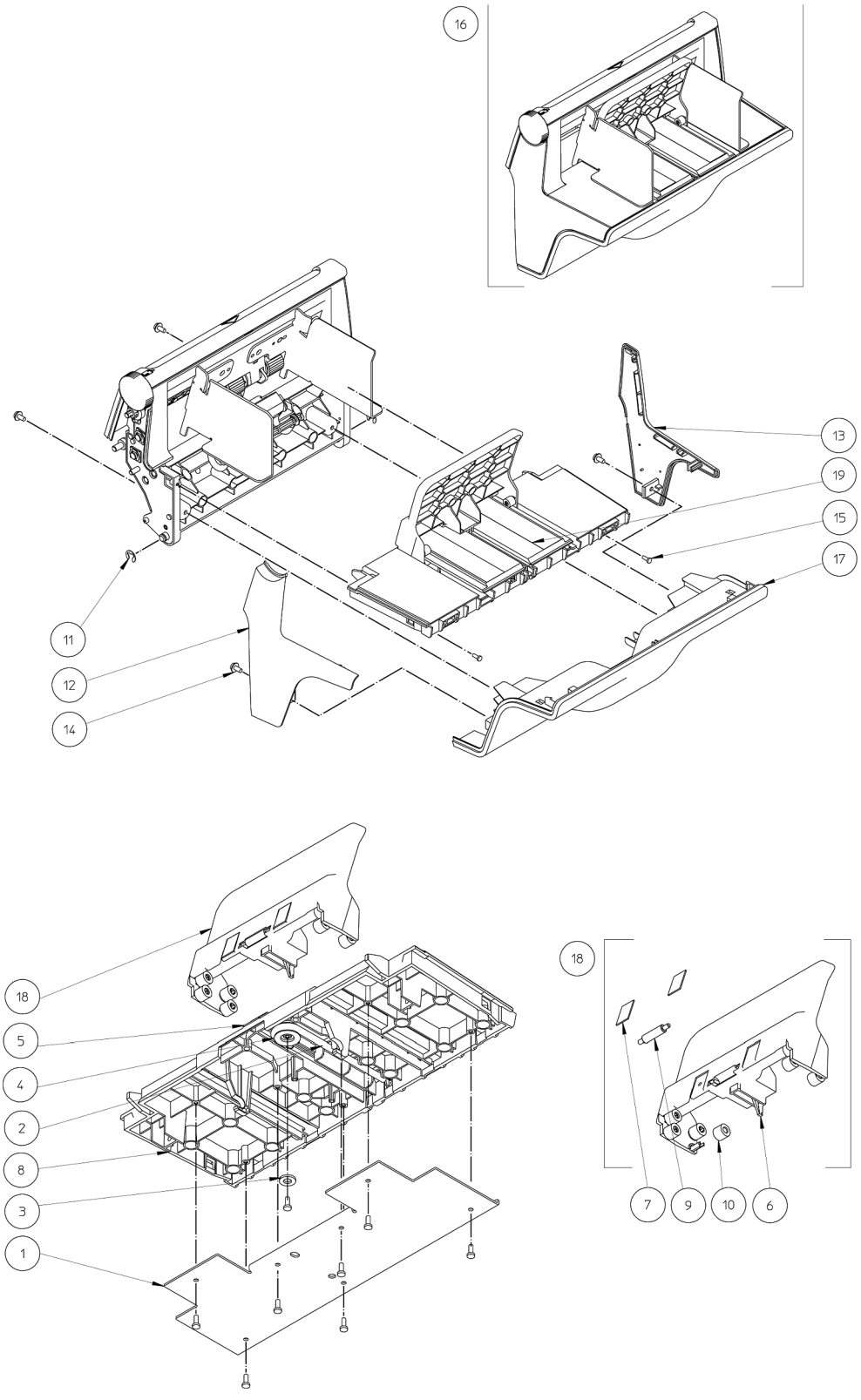
No.	Description	Part No.	Qty.	Spare	Remarks
1	LH PLATE UNDER DEFLECTOR	4147447G	1	No	
2	DEFLECTOR UNDER RIGHT PLATE	4147448H	1	No	
3	CABLE CLAMP	ISO12381	1	No	
4	M4*8 ECO-FIX TORX SCREW	VIS35781	4	Yes	
5	ECO-syn TORX HEAD SCREW D=3x8	VIS30250	1	Yes	
6	SPRING	11PIA0212.2	1	Yes	
7	E-RING D=3	CIR35171	1	Yes	
8	SHORT ACTUATOR	11PIA0175.2	1	Yes	
9	DEFLECTOR SPRING	11PIA0231.2	2	Yes	
10	ECO-FIX TORX SCREW M3X6	1007738B	3	Yes	
11	NUT END	4101996M	2	Yes	
12	PLATE NUT	11PIA0136.2	2	Yes	
13	RH SMALL CHEECK	4147262P	2	No	
14	ENV. ENTRY DEFLECTOR	4147877E	1	No	
15	BEARING	11PIA0001.2	6	Yes	
16	BEARING PLATE	11PIA0002.2	4	Yes	
17	ENVELOPE CARRYING SPRING	11PIA0456.2	2	Yes	
18	SENSOR SUPPORT	4147263Q	1	No	
19	M4*8 ECO-FIX TORX SCREW	VIS35781	2	Yes	
20	ECO-syn TORX HEAD SCREW D=3x8	VIS30250	2	Yes	
21	DOC, ENTRY GUIDE SPINDLE	11PIA0156.2	4	No	
22	E-RING D=8	CIR35184	6	Yes	
23	M4*8 ECO-FIX TORX SCREW	VIS35781	4	Yes	
24	EXTRACTION SPINDLE ROLLER	21PIA0017.2	1	Yes	
25	PCBA SENSOR 2	4122300M	1	No	
26	DETECTOR SHORT SUPPORT	4148006P	1	No	
27	ROLLER	31PIA0143	2	No	
28	ENV. REFERENCE SENSOR AS-SEMBLY	4149837W	1	Yes	
29	FEEDER 1/2 MAINTENANCE KIT	4149857S	1	Yes	
30	DEFLECTOR ENTRY ENVELOPE	4156295Y	1	Yes	
31	ENVELOPE ENTRY DEFLECTOR ASSY.	4156355L	1	Yes	

Feeder 1-2 document transport 3/3



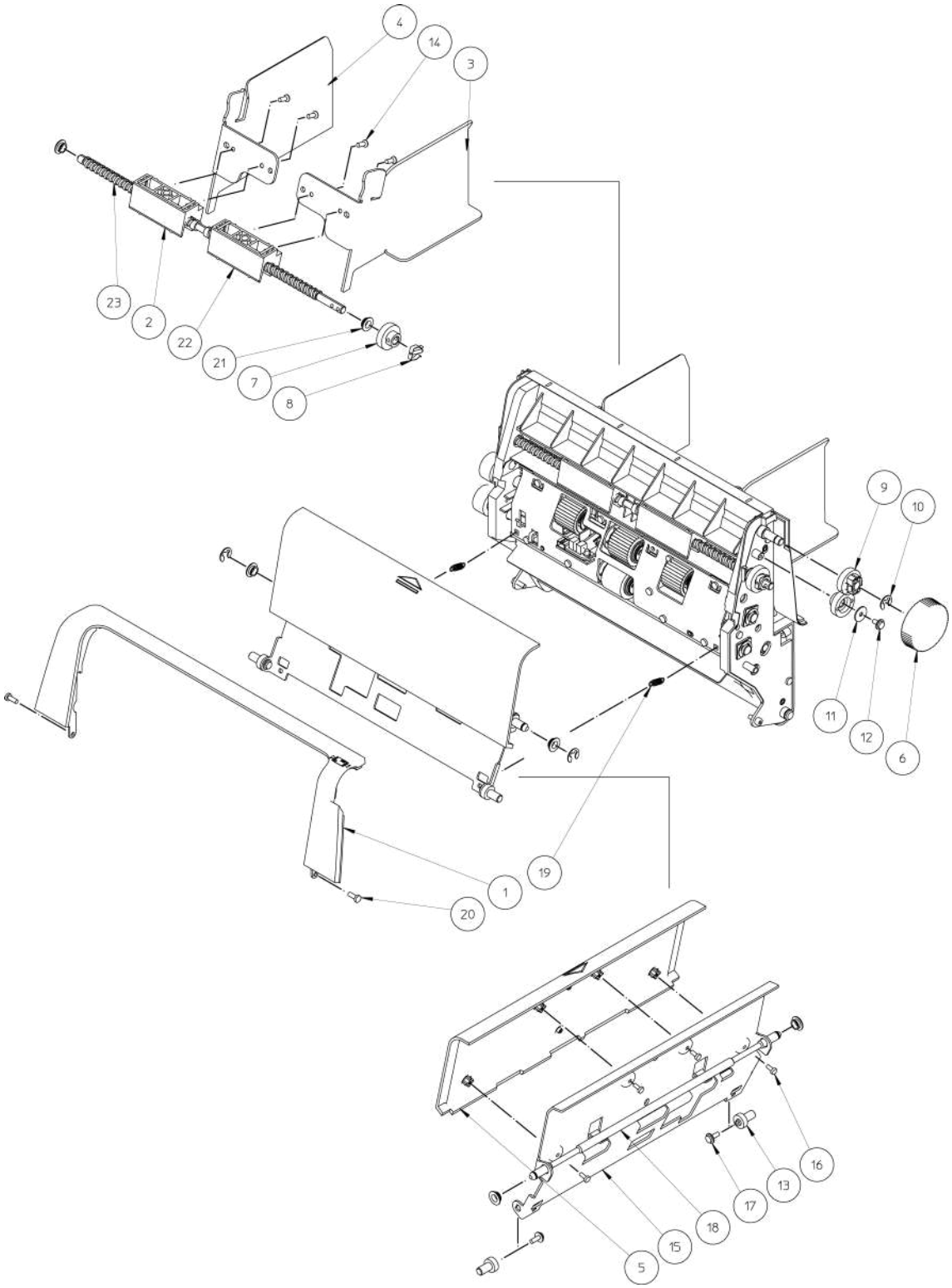
No.	Description	Part No.	Qty.	Spare	Remarks
1	SEALING SPRING	11PIC0232	2	Yes	
2	STOP FIXED SPINDLE BRACKET	11PIA0020.2	2	Yes	
3	BRONZE FLANGED BEARING D=8X12X16X16	FRO01533	1	Yes	
4	BRONZE FLANGED BEARING D=8X12X16X12	FRO01552	1	Yes	
5	DEFLECTOR SPRING	11PIA0231.2	2	Yes	
6	BEARING PLATE	11PIA0002.2	2	Yes	
7	ENVELOPE STOP MASS SPRING	11PIA0474.2	1	No	
8	ECO-syn TORX HEAD SCREW D=3x8	VIS30250	8	Yes	
9	BEARING	11PIA0001.2	4	Yes	
10	E-RING D=8	CIR35184	6	Yes	
11	HEXALOBULAR SOCKET CYLINDRICAL HEAD M3X8	1007739C	1	No	
12	FLAT WASHER D=3X8X0.8	RON31141	1	Yes	
13	FLAT WASHER	7470_0002	1	No	
14	MOBILE DEFLECTOR	A0012659	1	No	
15	ECO-FIX TORX SCREW M3X5	1007746K	2	No	
16	SERRATED LOCK WASHER D=3.05X6X1.2	RON32023	3	Yes	
17	MOBILE DEFLECTOR SPRING	11PIC0138	1	Yes	
18	INSERTING ROLLER	21PIA0035.2	1	Yes	
19	STOP FIXED SPINDLE ASSY	21PIA0034.2	1	Yes	
20	LOWER DEFLECTOR PLATE ASSY.	4149854P	1	Yes	
21	TOP DEFLECTOR PLATE	4147200Z	1	No	
22	MOBILE STOP ROLLER	21PIA0001.2	1	Yes	
23	TONGUE LH+RH	4149880R	1	Yes	
24	ENVELOPE STOP ASSY KIT	4124580M	1	Yes	
25	PCBA SENSOR 1	4122298K	1	Yes	
26	LH DEFLECTOR BRACKET ASSY	4147207G	1	No	
27	PLATE	4149965E	1	No	
28	RH DEFLECTOR BRACKET ASSY	4147208H	1	No	
29	FLAP SCRAPER ASSEMBLY	4149843C	1	Yes	
30	RH DEFLECTOR ENVELOPE (TONGUE RH)	4147202B	1	No	
31	LH DEFLECTOR ENVELOPE (TONGUE LH)	4147203C	1	No	

Feeder 3 (insert-BRE feeder) 1/3



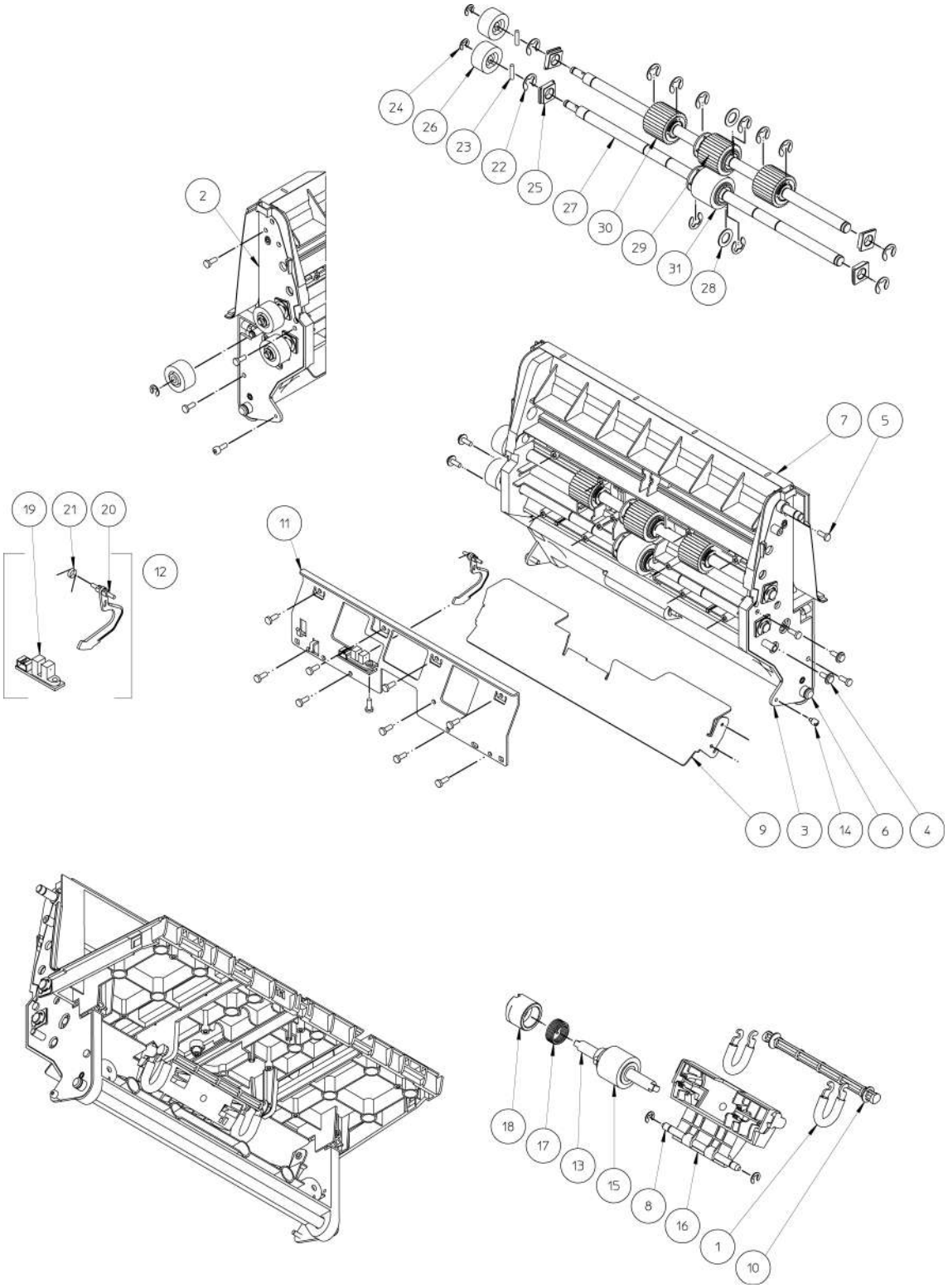
No.	Description	Part No.	Qty.	Spare	Remarks
1	PLATEAU STRENGTHEN METAL PLATE	4147059C	1	No	
2	PUSHER SPRING	4147055Y	1	Yes	
3	FLAT WASHER D=3X8X0.8	RON31141	1	Yes	
4	SPRING PULLEY	4147054X	1	No	
5	PRE SEPARATION PAD	4148389N	1	No	
6	BRE PUSHER	4147017J	1	No	
7	PUSHER PAD	4148388M	2	No	
8	BRE TABLE	4147024R	1	No	
9	HOPPER FREE ROLLER	4147056Z	1	No	
10	PUSHER WHEEL	4147015G	8	No	
11	E-RING D=8	CIR35184	2	Yes	
12	BRE RH COVER	4146974P	1	No	
13	BRE LH COVER	4146975Q	1	No	
14	M4*8 ECO-FIX TORX SCREW	VIS35781	4	Yes	
15	ECO-syn TORX HEAD SCREW D=3x8	VIS30250	10	Yes	
16	FEEDER 3 (COMPLETE)	4149839Y	1	Yes	
17	BRE COVERS ASSY	4146976R	1	No	
18	PUSHER ASSEMBLY	4149864Z	1	Yes	
19	TABLE PAD	4151257A	2	No	

Feeder 3 (insert-BRE feeder) 2/3



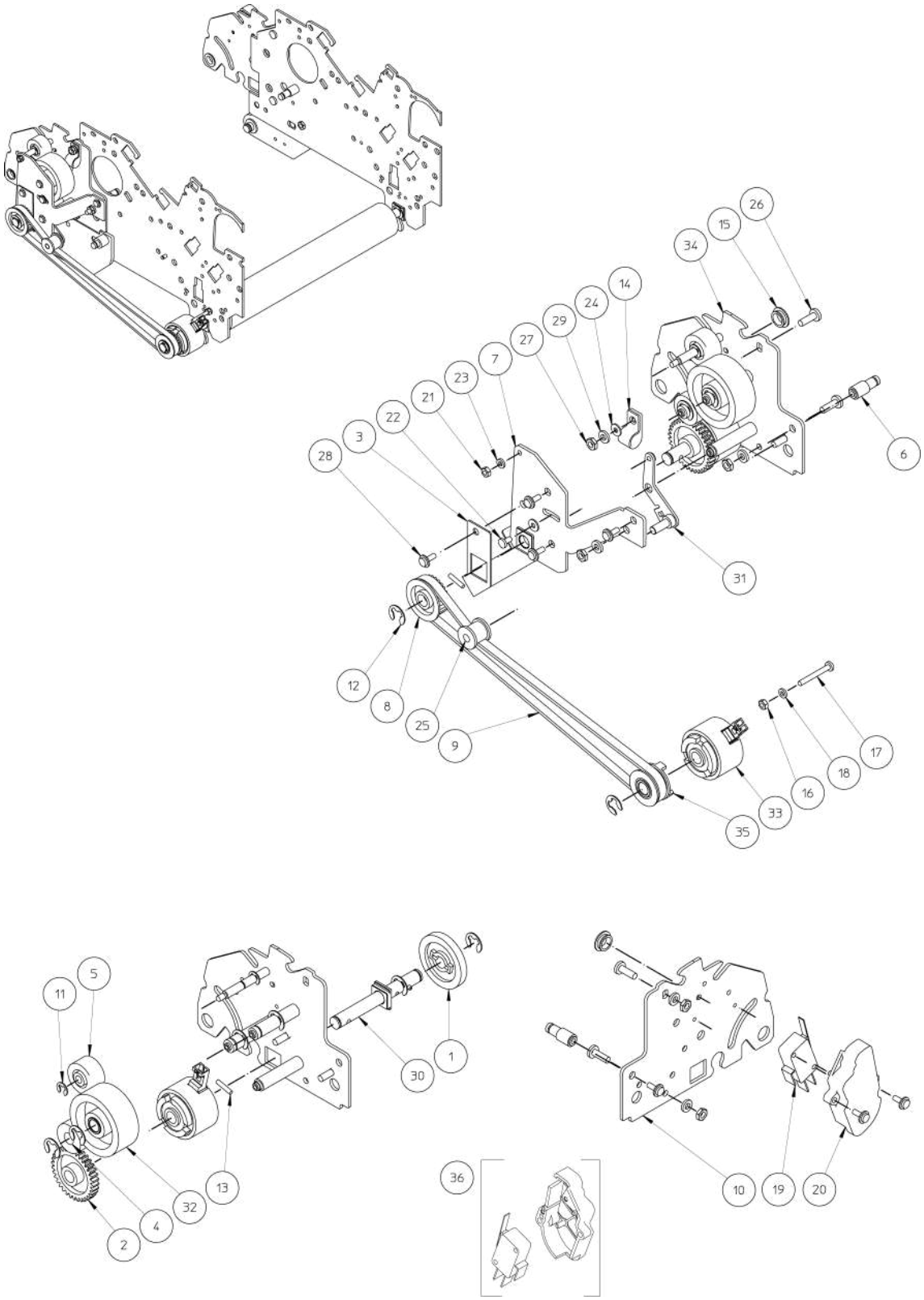
No.	Description	Part No.	Qty.	Spare	Remarks
1	BRE UPPER COVER	4146973N	1	No	
2	BRE RH SIDE GUIDE NUT	4147020M	1	No	
3	LEFT MARGING	4147032Z	1	No	
4	RIGHT MARGING	4147031Y	1	No	
5	LOCKING COVER	4147033A	1	No	
6	KNOB	4147023Q	1	No	
7	GEAR Z18 M1	4147022P	2	No	
8	SPLIT PIN D=2.5X18	4150451L	1	Yes	
9	KNOB GEAR Z18 M1	4147050T	1	No	
10	E-RING D=6	CIR35182	3	Yes	
11	WASHER LU d=3x12x0.8	RON31142	1	Yes	
12	ECO-FIX TORX SCREW M3X6	1007738B	1	Yes	
13	LOCKING SHAFT	4147044M	2	No	
14	FLAT COUNTERSUNK HEAD SCREWS F/90° TORX D=3X8	VIS30252	4	Yes	
15	LOCKING METAL PLATE	4147057A	1	No	
16	ECO-syn TORX HEAD SCREW 2.5x6	1004742F	4	Yes	
17	ECO-FIX TORX SCREW M3x8	VIS35779	2	Yes	
18	LOCKING SYSTEM SHAFT	4147039G	1	No	
19	LOCKING SPRING	4147036D	2	No	
20	ECO-syn TORX HEAD SCREW D=3x8	VIS30250	2	Yes	
21	PLASTIC PLAIN BEARING D=6X11X7.8X2	FRO30176	6	Yes	
22	BRE LH SIDE GUIDE NUT	4147021N	1	No	
23	SIDE GUIDE SPINDLE	4145707U	1	Yes	

Feeder 3 (insert-BRE feeder) 3/3



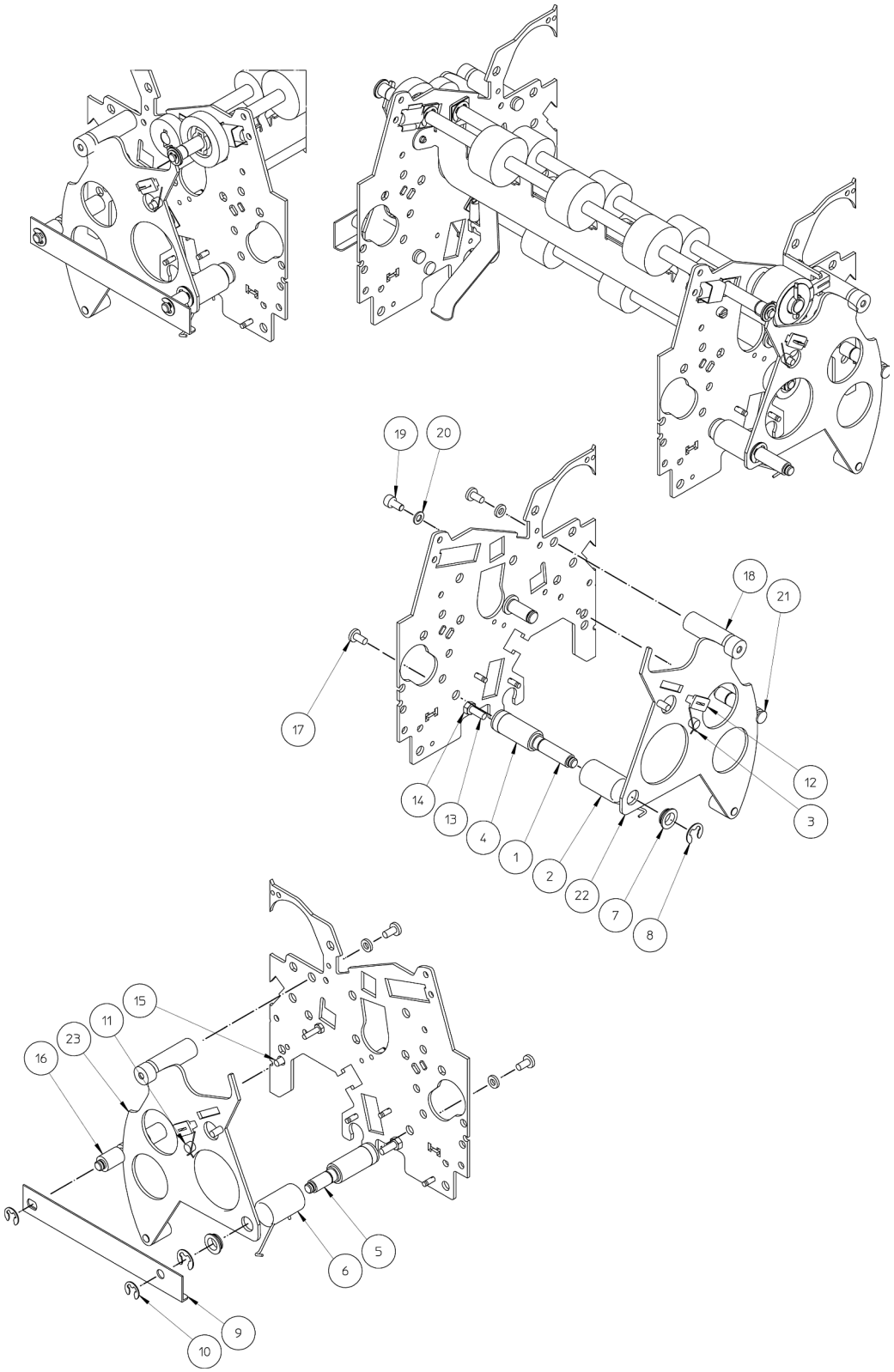
No.	Description	Part No.	Qty.	Spare	Remarks
1	FEEDER 3 SEPARATION BENDING SPRING	4147172V	2	Yes	
2	RIGHT METAL PLATE FRAME AS-SEMBLY	4147227C	1	No	
3	LEFT METAL PLATE FRAME AS-SEMBLY	4147228D	1	No	
4	ECO-FIX TORX SCREW M3x8	VIS35779	4	Yes	
5	ECO-syn TORX HEAD SCREW D=3x8	VIS30250	17	Yes	
6	MAIN SHAFT	4147040H	1	No	
7	BRE MAIN FRAME	4147019L	1	No	
8	SEPARATION LEVER SHAFT	4147037E	1	No	
9	PAPER GUIDING METAL PLATE	4147030X	1	No	
10	SPRING SUPPORT	4147025S	1	No	
11	FRAME STRENGTHEN METAL PLATE	4147058B	1	No	
12	SENSOR ASSEMBLY	4149869E	1	Yes	
13	FEEDER 3 SEPARATION SHAFT	4147045N	1	No	
14	POCKET SCREW	11PIB0037.2	2	Yes	
15	SEPARATION ROLLER	4151281A	1	Yes	
16	BRE SEPARATION LEVER	4147018K	1	No	
17	WRAP SPRING	2951131U	1	Yes	
18	CLUTCH HUB	4147034B	1	No	
19	PBCA SENSOR BIN C	4122604D	1	Yes	
20	BRE FLAG	4148211C	1	No	
21	BRE FLAG SWITCH SPRING	4148382F	1	No	
22	E-RING D=8	CIR35184	8	Yes	
23	CYLINDRICAL PIN D=2X10	GOU34709	2	No	
24	E-RING D=5	CIR35181	5	Yes	
25	BEARING	11PIA0001.2	4	Yes	
26	DRIVING GEAR WHEEL Z19 M1	11PIA0104.2	3	Yes	
27	LOWER SEPARATION SHAFT	4147042K	2	No	
28	WASHER Ø 14 X Ø 8.2 X 0.8 MM	2040141W	2	Yes	
29	ROLLER	4150009A	1	Yes	
30	ROLLER	4151134X	2	Yes	
31	ROLLER	4151219L	1	Yes	

Feeder 3 (insert-BRE feeder) drive



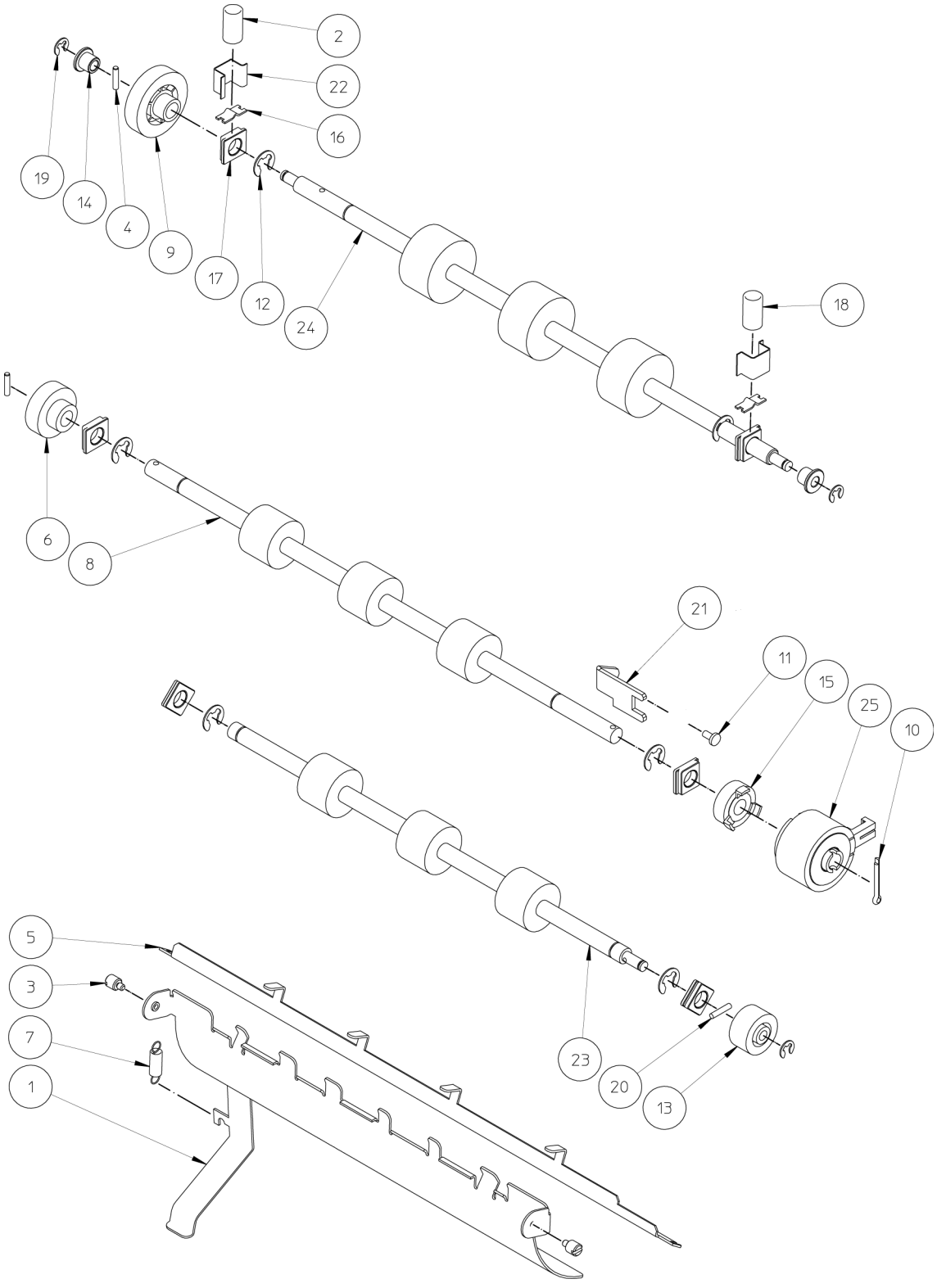
No.	Description	Part No.	Qty.	Spare	Remarks
1	PATH DRIVING GEAR	4122098B	1	Yes	
2	CLUTCH GEAR WHEEL SELECTION	4122040R	1	Yes	
3	GEAR WHEEL MASK	11PID0124	1	No	
4	RACK GEAR WHEEL Z18 M1	11PIA0004.2	1	Yes	
5	DRIVING GEAR WHEEL Z19 M1	11PIA0104.2	1	Yes	
6	POCKET BLOCK STOP	11PID0095	2	No	
7	SMALL CHEEK	4147585A	1	No	
8	S3M 27T PULLEY	4147582X	1	Yes	
9	BELT S3M	4147584Z	1	Yes	
10	INTERFACE FLANGE	4147028V	1	No	
11	E-RING D=5	CIR35181	2	Yes	
12	E-RING D=8	CIR35184	8	Yes	
13	CYLINDRICAL PIN D=2.5X14	GOU34710	2	Yes	
14	CABLE CLAMP	ISO12381	1	No	
15	PLASTIC PLAIN BEARING D=8X13X10.4X2	FRO30173	2	Yes	
16	HEX. NUT M3	VIS35303	1	Yes	
17	ECO-FIX TORX SCREW M3X25	1007743G	1	No	
18	SERRATED LOCK WASHER D=3.05X6X1.2	RON32023	1	Yes	
19	INTERLOCK SWITCH	4149627C	1	No	
20	INTERLOCK SWITCH COVER	4147581W	1	No	
21	HEX. NUT M3	VIS35303	0	Yes	
22	POZIDRIV PAN HEAD SCREW M3X6	VIS35800	1	Yes	
23	SERRATED LOCK WASHER D=3.05X6X1.2	RON32023	1	Yes	
24	FLAT WASHER D=3X8X0.8	RON31141	2	Yes	
25	TENSIONER ROLLER	11PIA0171.2	1	Yes	
26	ECO-FIX TORX SCREW M4X12 (CL.10.9)	1007741E	4	No	
27	HEXAGONAL NUT HM M4	VIS35321	5	Yes	
28	ECO-FIX TORX SCREW M3x8	VIS35779	7	Yes	
29	SERRATED LOCK WASHER D=4.1X8X1.5	RON32008	5	Yes	
30	DRIVE AXLE (FEEDER 3)	4122096Z	1	No	
31	BELT TENSIONER	31PID0023	1	No	
32	GEAR WHEEL Z40 M1	11PID0044	1	Yes	
33	CLUTCH CW	14PIC0002	2	Yes	
34	RIGHT SUPPORT	4147229E	1	No	
35	S3M 23T PULLEY	4148209A	1	Yes	
36	MICROSWITCH ASSEMBLY	4149858T	1	Yes	

Operating lever - stop bar 1/2



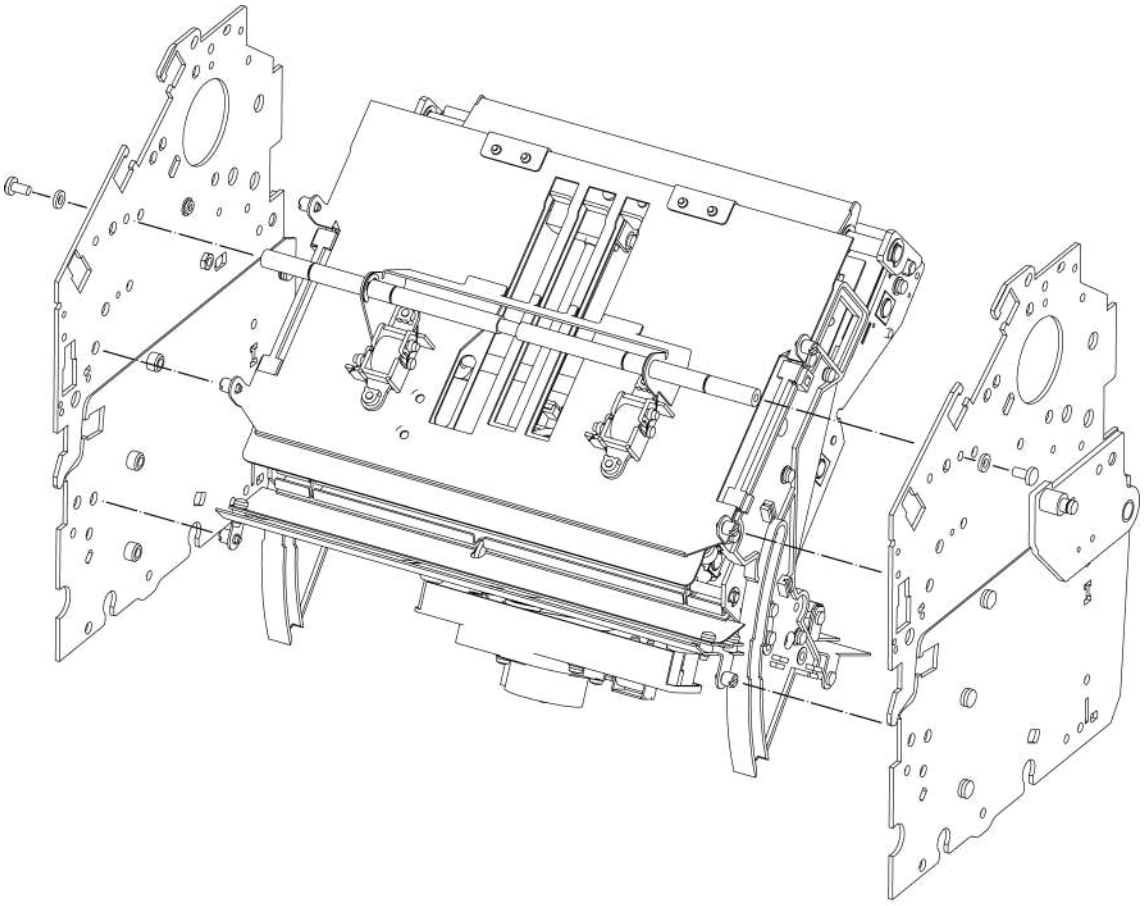
No.	Description	Part No.	Qty.	Spare	Remarks
1	ENTRY LEVER DOC. SHAFT	4121839G	1	No	
2	LH DOCUMENT ENTRY SPRING	11PIA0469.2	1	Yes	
3	RH DOCUMENT ENTRY END SPRING	11PID0054	1	Yes	
4	TENSIONER LEVER HUB	11PIA0170.2	2	No	
5	DOCUMENT ENTRY LEVER SPINDLE	11PIA0145.2	1	No	
6	RH DOCUMENT ENTRY SPRING	11PIA0468.2	1	No	
7	PLASTIC PLAIN BEARING D=8X13X10.4X2	FRO30173	2	Yes	
8	E-RING D=8	CIR35184	2	Yes	
9	RETAINING PLATE	11PIA0242.2	1	No	
10	E-RING D=6	CIR35182	2	Yes	
11	LH DOCUMENT ENTRY END SPRING	11PID0055	1	Yes	
12	DOCUMENT STOP SPINDLE	11PIC0058	2	Yes	
13	ECO-FIX TORX SCREW M4X16	1007740D	2	No	
14	HEXAGONAL NUT H M4	VIS35304	2	Yes	
15	ECO-FIX TORX SCREW M4X6	1007742F	1	No	
16	LONG GUIDE SPINDLE	11PIA0250.2	1	No	
17	M4*8 ECO-FIX TORX SCREW	VIS35781	4	Yes	
18	DOC, ENTRY GUIDE SPINDLE	11PIA0156.2	2	No	
19	HEXALOBULAR SOCKET CYLINDRICAL HEAD M4X8	1007748M	1	No	
20	FLAT WASHER D=4X8X0.8	RON31280	1	Yes	
21	GEAR WHEEL LONG SPINDLE	11PID0049	1	Yes	
22	RH DOCUMENT ENTRY LEVER ASSY	21PID0013	1	Yes	
23	LH DOCUMENT ENTRY LEVER ASSY	21PID0014	1	No	

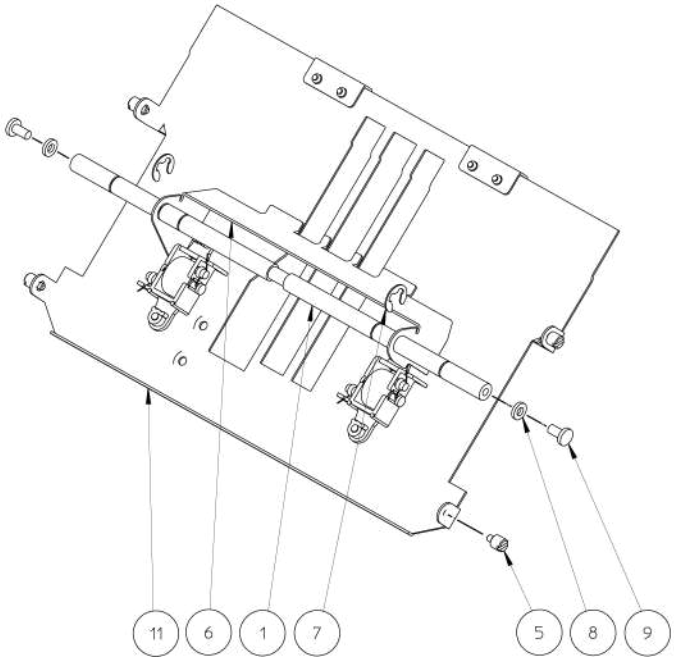
Operating lever - stop bar 2/2

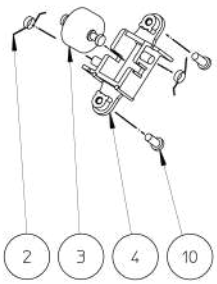


No.	Description	Part No.	Qty.	Spare	Remarks
1	DOCUMENT ENTRY DEFLECTOR	11PIC0060	1	No	
2	SPRING	4149001A	1	Yes	
3	POCKET SCREW	11PIB0037.2	2	Yes	
4	CYLINDRICAL PIN D=2.5X12	GOU00745	2	Yes	
5	DOCUMENT ENTRY STOP	11PID0053	1	Yes	
6	GEAR WHEEL Z24 M1	11PIC0139	1	Yes	
7	DEFLECTOR SPRING	11PIA0132.2	1	Yes	
8	ROLLER	4149481A	1	Yes	
9	GEAR WHEEL Z32 M1	11PIC0140	1	Yes	
10	SPLIT PIN D=2.5X18	4150451L	1	Yes	
11	ECO-FIX TORX SCREW M3X6	1007738B	1	Yes	
12	E-RING D=8	CIR35184	6	Yes	
13	DRIVING GEAR WHEEL Z19 M1	11PIA0104.2	1	Yes	
14	SLEEVE 5X8X12X8	4126966X	2	Yes	
15	CLUTCH GEAR WHEEL Z19 M1	11PID0041	1	Yes	
16	BEARING PLATE	11PIA0002.2	2	Yes	
17	BEARING	11PIA0001.2	6	Yes	
18	RH DOCUMENT ENTRY SPRING	4149002B	1	No	
19	E-RING D=5	CIR35181	3	Yes	
20	CYLINDRICAL PIN D=2X10	GOU34709	1	No	
21	CLUTCH TRAVEL LIMIT	11PID0117	1	No	
22	MOBILE ROLLER SPRING HIDER	11PIC0066	2	No	
23	INTERMEDIATE SPINDLE ROLLER	21PID0011	1	Yes	
24	ENTRY MOBILE SPINDLE ROLLER ASSY	21PIC0018	1	Yes	
25	CLUTCH CW	14PIC0002	1	Yes	

Fold tables 1/6

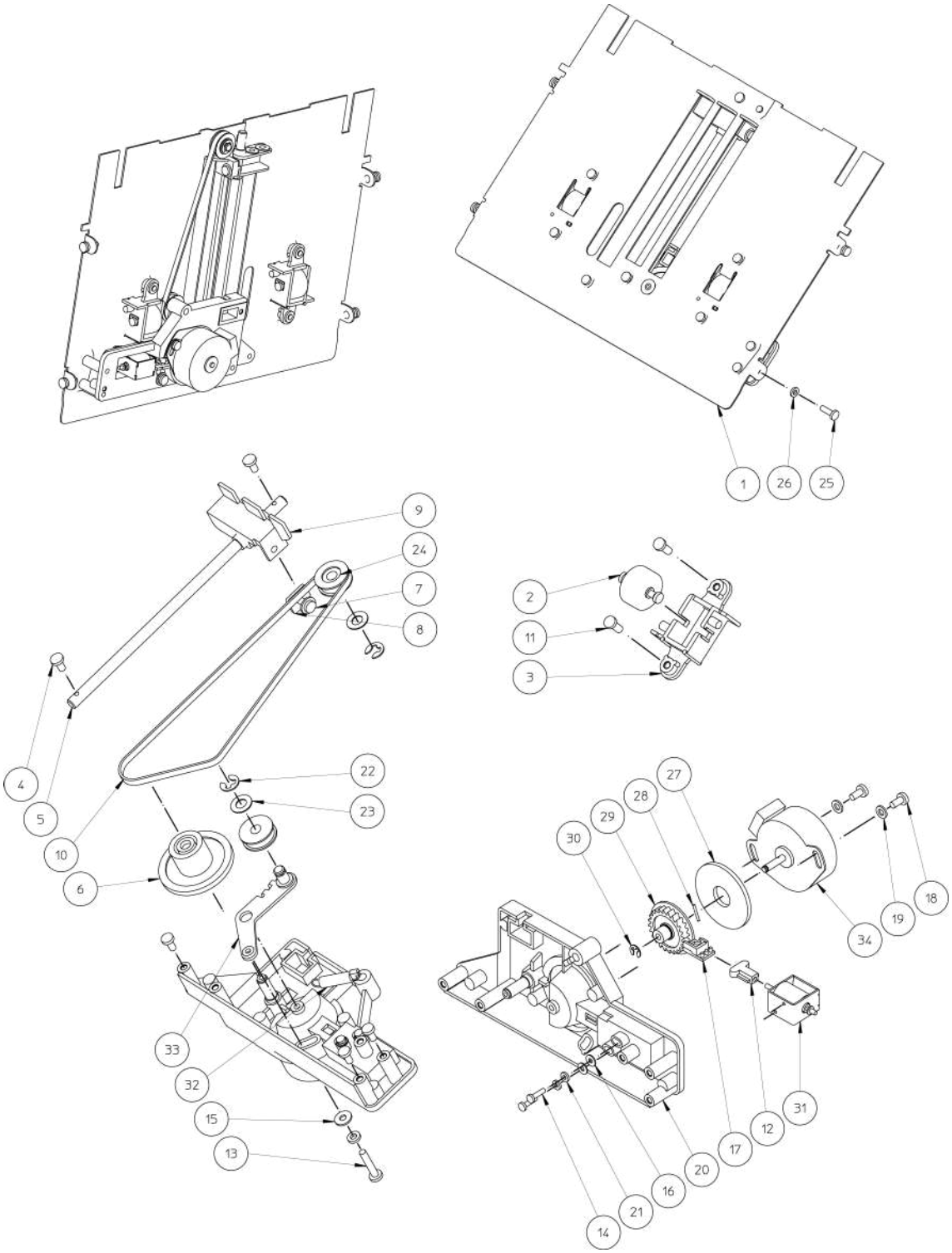






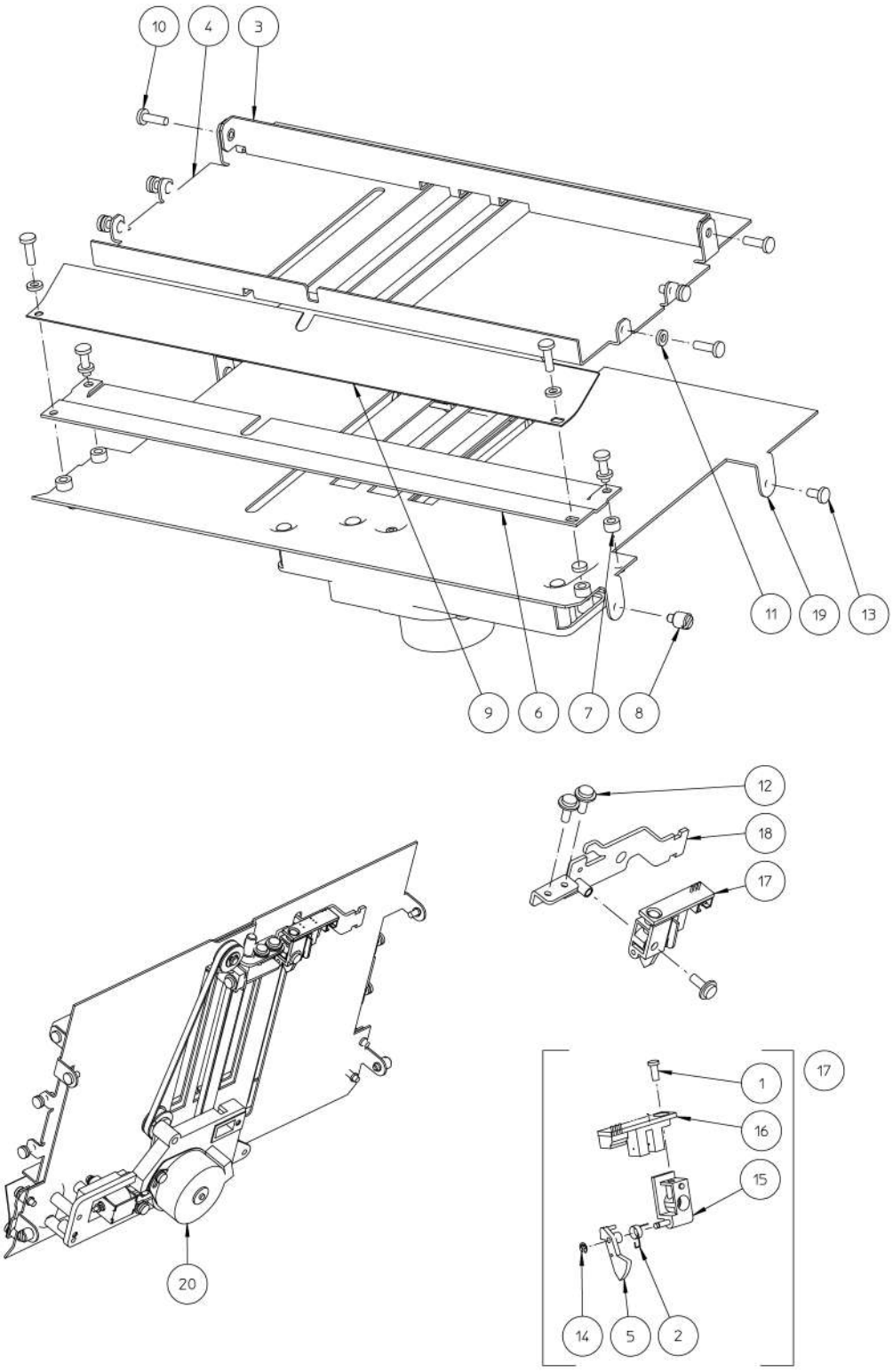
No.	Description	Part No.	Qty.	Spare	Remarks
1	HOPPER SPACER	11PIA0095.2	1	No	
2	POCKET ROLLER SPRING	11PIA0163.2	4	Yes	
3	POCKET ROLLER	11PIA0124.2	2	No	
4	POCKET ROLLER SUPPORT	11PIA0123.2	2	No	
5	POCKET SCREW	11PIB0037.2	4	Yes	
6	A POCKET REINFORCEMENT	4147197W	1	No	
7	E-RING D=8	CIR35184	2	Yes	
8	SERRATED LOCK WASHER D=4.1X8X1.5	RON32008	2	Yes	
9	M4*8 ECO-FIX TORX SCREW	VIS35781	2	Yes	
10	ECO-syn TORX HEAD SCREW D=3x8	VIS30250	4	Yes	
11	UPPER PLATE ASSY	4123083C	1	No	

Fold tables 2/6



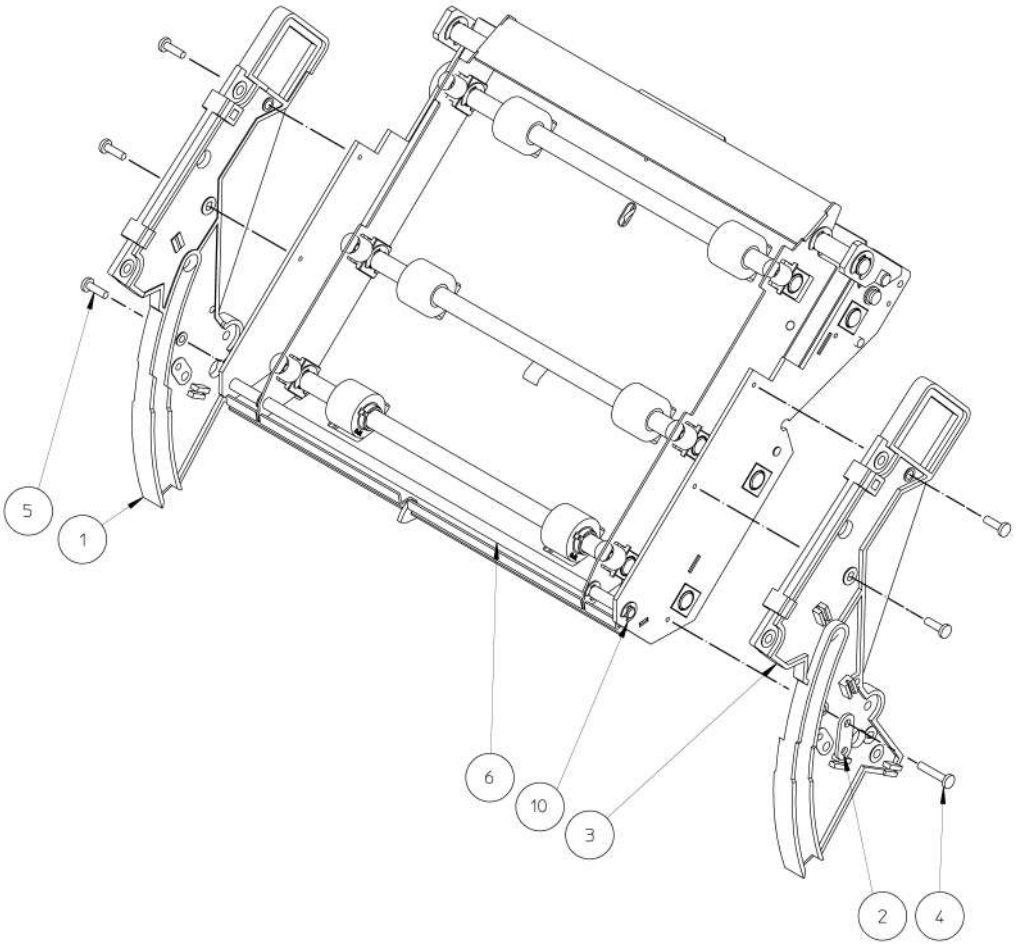
No.	Description	Part No.	Qty.	Spare	Remarks
1	HIGH POCKET LOWER PLATE	11PID0104	1	No	
2	POCKET ROLLER	11PIA0124.2	2	No	
3	POCKET ROLLER SUPPORT	11PIA0123.2	2	No	
4	HEXALOBULAR SOCKET CYLINDRICAL HEAD M3X8	1007739C	2	No	
5	FIRST POCKET SET UP SPINDLE	11PIA0270.2	1	No	
6	COMMAND PULLEY	11PIB0005.2	1	No	
7	ECO-FIX TORX SCREW M3x8	VIS35779	1	Yes	
8	BELT MAINTENING PLATE	4148268M	1	No	
9	BENDING END	4147182F	1	No	
10	BELT MXL 150 TEETH	12PIB0002.2	1	Yes	
11	ECO-syn TORX HEAD SCREW D=3x8	VIS30250	4	Yes	
12	PUSHER	11PIB0011.2	1	Yes	
13	ECO-FIX TORX SCREW M3X16	1007744H	1	No	
14	CYLINDRICAL HEAD SCREW M2x8	VIS35424	2	Yes	
15	WASHER d=2x5.5x0.5	RON31081	2	Yes	
16	LOCKING FINGER	4147381N	1	Yes	
17	TORX PLASTIC SCREW M3x6 Black	4131178K	4	No	
18	WASHER ZU d=3x6x0.8	RON31140	2	Yes	
19	POCKET SETTING SUPPORT	11PIB0004.2	1	No	
20	SERRATED LOCK WASHER D=2.05X4.5X0.9	RON32020	2	Yes	
21	E-RING D=5	CIR35181	2	Yes	
22	WASHER d=5.2x10x0.5	CAL32046	2	No	
23	TENSIONER ROLLER	11PIB0014.2	2	No	
24	ECO-FIX TORX SCREW M3x8	VIS35779	4	Yes	
25	SERRATED LOCK WASHER D=3.05X6X1.2	RON32023	5	Yes	
26	CENTERING RING	11PIB0008.2	1	No	
27	CYLINDRICAL PIN D=1X8	GOU34702	1	No	
28	DRIVING GEAR WHEEL	4147380M	1	No	
29	E-RING D=3	CIR35171	1	Yes	
30	POCKET ELECTROMAGNET	4121973W	1	Yes	
31	POCKET TENSIONER SPRING	11PIB0029.2	1	No	
32	POCKET TENSIONER ASSY	21PIB0001.2	1	No	
33	STEPPER MOTOR 1	4148106T	1	Yes	

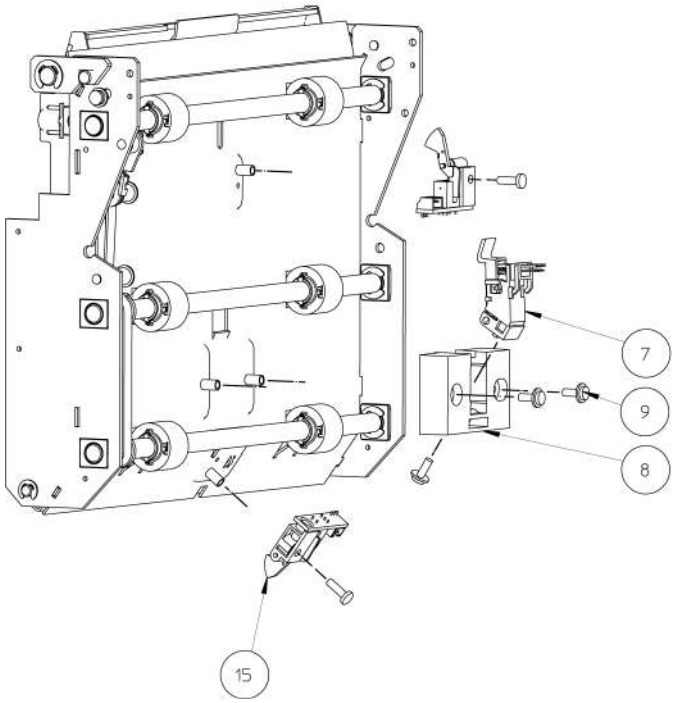
Fold tables 3/6

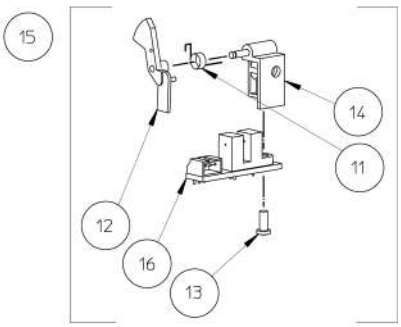


No.	Description	Part No.	Qty.	Spare	Remarks
1	ECO-syn TORX HEAD SCREW 2.5x6	1004742F	1	Yes	
2	DETECTOR SPRING	11PID0028	1	No	
3	B POCKET REINFORCEMENT	4147196V	1	No	
4	B POCKET HIGHER PLATE	4147195U	1	No	
5	DETECTOR LEVER	4151510P	1	No	
6	LOWER POCKET HIGHER FIXED PLATE	4148993S	1	No	
7	POCKET SPACER	11PIA0210.2	4	No	
8	POCKET SCREW	11PIB0037.2	2	Yes	
9	WAY FIXED LOWER PLATE	11PID0023	1	No	
10	ECO-FIX TORX SCREW M3x8	VIS35779	10	Yes	
11	SERRATED LOCK WASHER D=3.05X6X1.2	RON32023	8	Yes	
12	ECO-FIX TORX SCREW M3x8	VIS35779	3	Yes	
13	POCKET SCREW	11PIB0037.2	2	Yes	
14	E-RING D=2	CIR35169	1	Yes	
15	RTD DETECTOR ASSY	21NCA0071	1	No	
16	PBCA SENSOR BIN C	4122604D	1	Yes	
17	SMALL SENSOR ASSY.	~~4151011U~~	1	~~No~~ Yes	4149849J
18	MANNED LOWER POCKET SENSOR SUPPORT	4147178B	1	No	
19	POCKET B LOWER PLATE	4147181E	1	No	
20	STEPPER MOTOR 3	4148108V	1	Yes	Connector J21; The wiring cannot be ordered separately as it is included in the part.

Fold tables 4/6

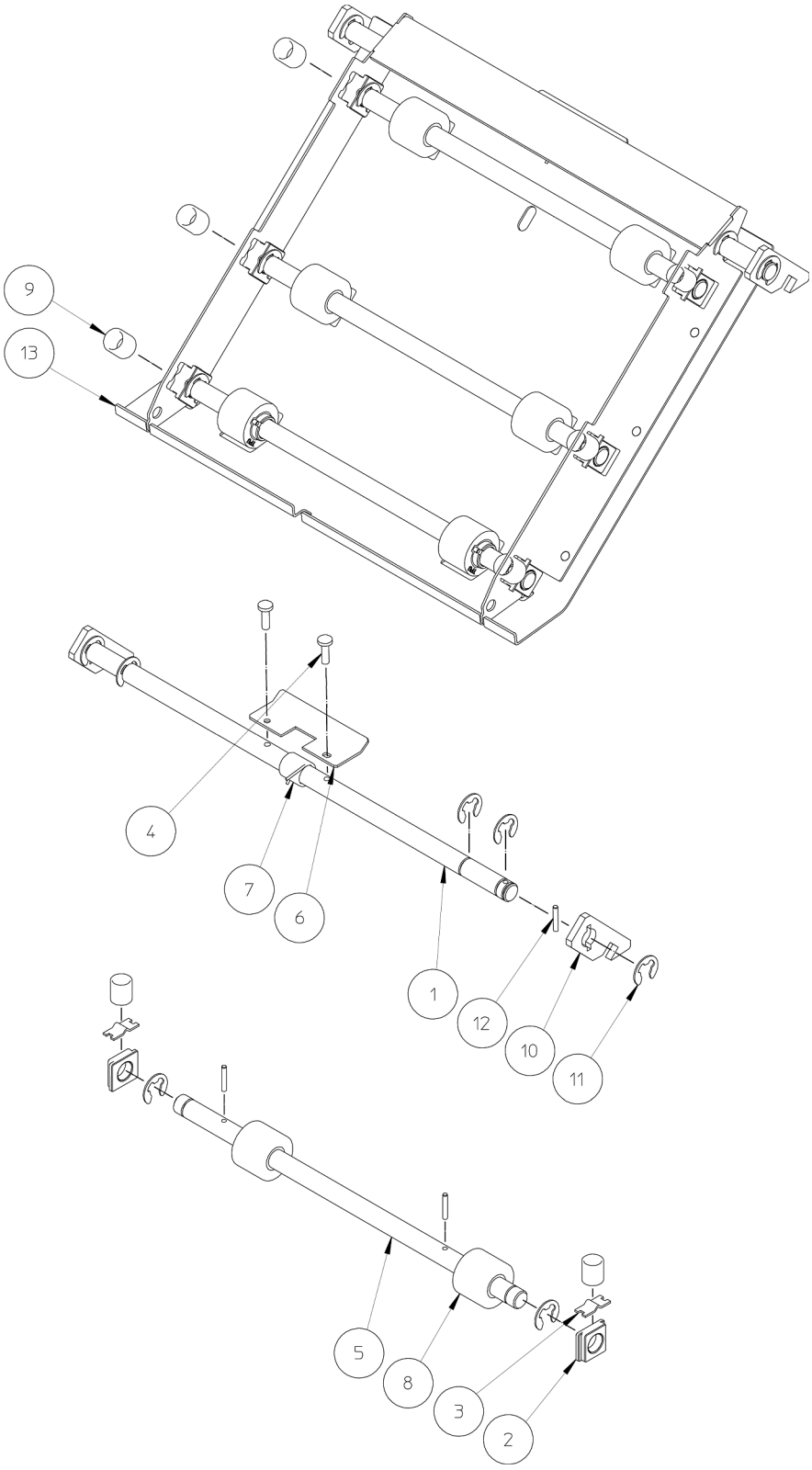






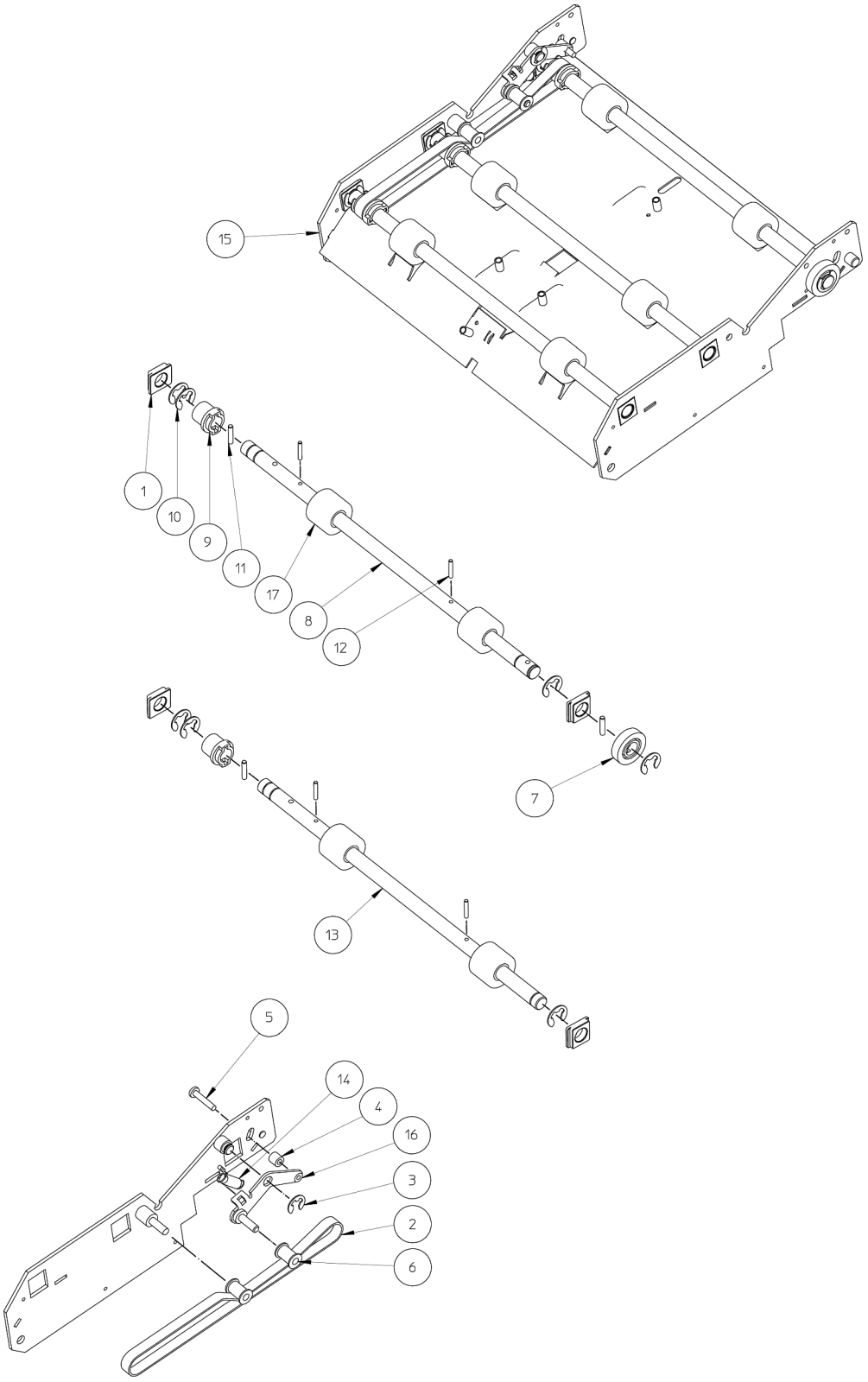
No.	Description	Part No.	Qty.	Spare	Remarks
1	LH POCKET SPACER	4122037N	1	No	
2	POCKET BLOCK MASS	11PID0123	1	No	
3	RH POCKET SPACER	4122038P	1	No	
4	ECO-FIX TORX SCREW M3X16	1007744H	1	No	
5	ECO-FIX TORX SCREW M3x8	VIS35779	7	Yes	
6	WAY HINGED JOINT SPINDLE	11PID0015	1	Yes	
7	ASSY DFC	2951256Z	1	Yes	
8	BRE PATH DFC SUPPORT	4147896Z	1	No	
9	ECO-FIX TORX SCREW M3x8	VIS35779	3	Yes	
10	E-RING D=5	CIR35181	4	Yes	
11	DETECTOR SPRING	11PID0028	2	No	
12	DETECTOR LEVER	11PID0133	2	Yes	
13	ECO-syn TORX HEAD SCREW 2.5x6	1004742F	2	Yes	
14	RTD DETECTOR ASSY	21NCA0071	2	No	
15	Insert path sensor assembly	4149849J	2	Yes	
16	PBCA SENSOR BIN C	4122604D	2	Yes	

Fold tables 5/6



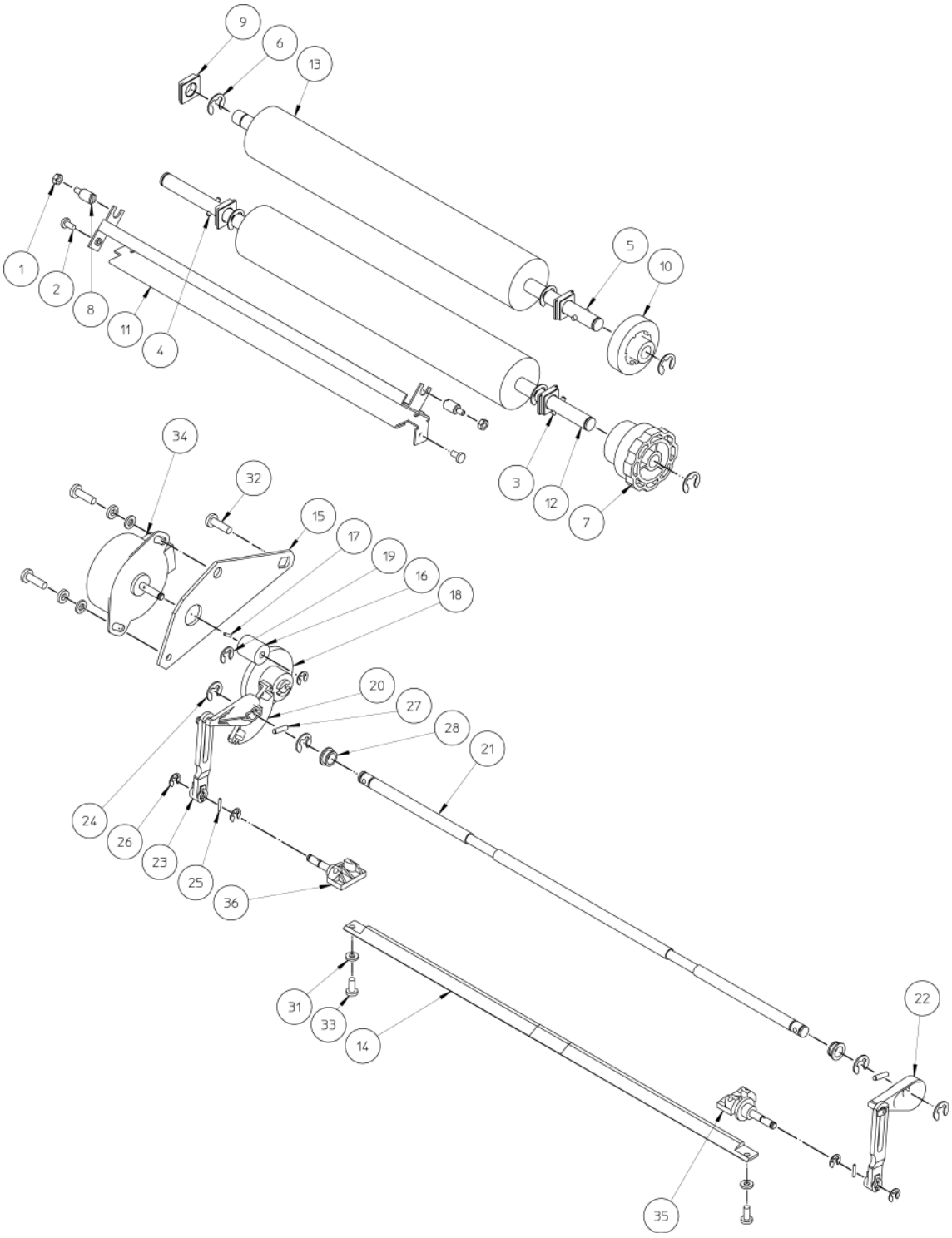
No.	Description	Part No.	Qty.	Spare	Remarks
1	WAY LOCKING SPINDLE	11PID0017	1	No	
2	BEARING	11PIA0001.2	6	Yes	
3	BEARING PLATE	11PIA0002.2	6	Yes	
4	POP RIVETING D=2.48X7.5	RIV35043	2	No	
5	HIGHER ROLLER SPINDLE	4147622P	3	No	
6	WAY LOCKING VANE	11PID0019	1	No	
7	PATH SEALING SPRING	11PID0020	1	No	
8	BRE PATH ROLLER	A0015278	6	Yes	
9	DEFLECTOR SPRING	11PIA0231.2	6	Yes	
10	WAY LOCKING PAWL	11PID0018	2	No	
11	E-RING D=8	CIR35184	12	Yes	
12	DOWEL PIN D=2X12	GOU34711	8	Yes	
13	TOP WAY ASSY	4147628V	1	No	

Fold tables 6/6



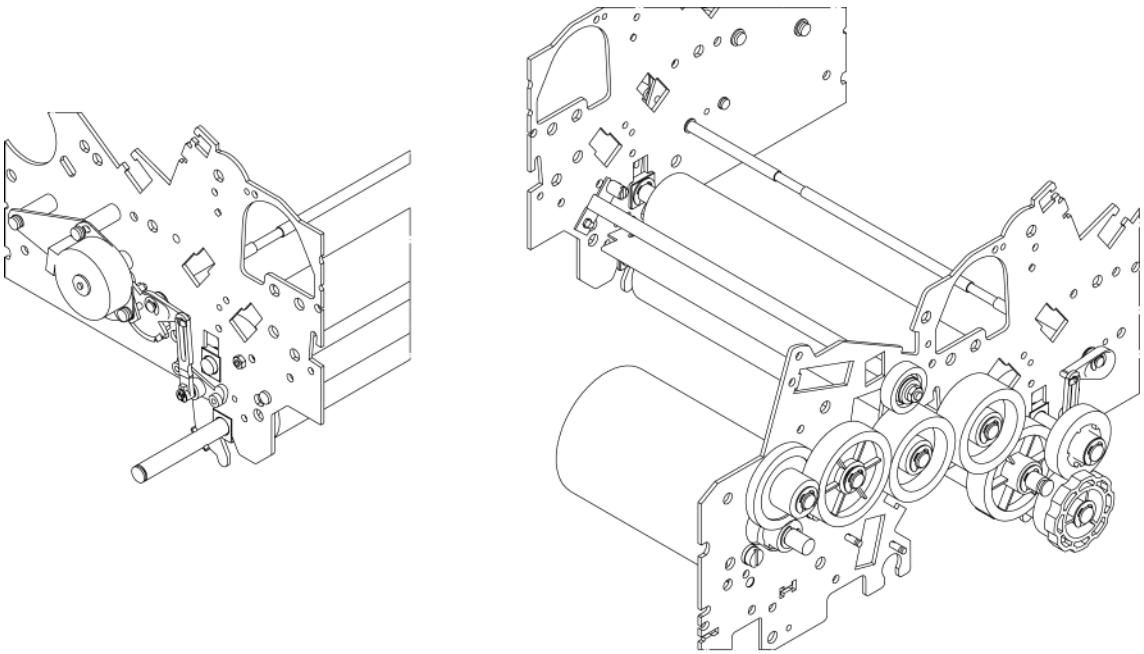
No.	Description	Part No.	Qty.	Spare	Remarks
1	BEARING	11PIA0001.2	6	Yes	
2	BELT, LABEL CONTROL	12NCA0004	1	Yes	
3	E-RING D=6	CIR35182	1	Yes	
4	WAY TENSIONER SPACER	11PID0007	1	No	
5	ECO-FIX TORX SCREW M3X16	1007744H	1	No	
6	LOADING BELT ROLLER	11PIA0077.2	2	Yes	
7	GEAR 18T	11PID0088	1	Yes	
8	LOWER ROLLER LONG SPINDLE	4147621N	1	No	
9	PULLEY MXL Z19	11PID0113	3	No	
10	E-RING D=8	CIR35184	10	Yes	
11	CYLINDRICAL PIN D=2.5X12	GOU00745	4	Yes	
12	DOWEL PIN D=2X12	GOU34711	6	Yes	
13	SHORT SPINDLE LOWER	4147623Q	2	No	
14	DEFLECTOR SPRING	11PIA0132.2	1	Yes	
15	LOWER WAY ASSY	4148274T	1	No	
16	RIGGED TENSIONER LEVER	21PID0027	1	No	
17	BRE PATH ROLLER	A0015278	6	Yes	

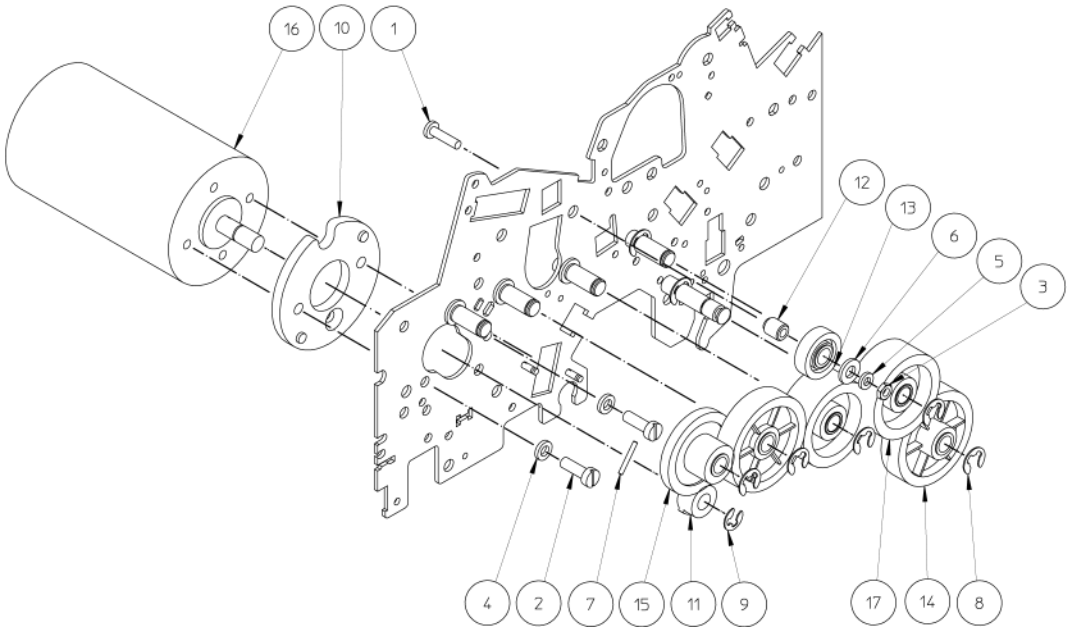
Folding rollers and pocket closing



No.	Description	Part No.	Qty.	Spare	Remarks
1	HEX. NUT M3	VIS35303	2	Yes	
2	HEXALOBULAR SOCKET CYLINDRICAL HEAD M4X8	1007748M	2	No	
3	CYLINDRICAL PIN D=2.5X12	GOU00745	1	Yes	
4	ELASTIC PIN D=2.5X12	GOU34240	1	No	
5	CYLINDRICAL PIN D=2.5X14	GOU34710	1	Yes	
6	E-RING D=8	CIR35184	6	Yes	
7	BENDING GEAR WHEEL	4147192R	1	Yes	
8	SPINDLE SCREW	11PIA0013.2	2	Yes	
9	BEARING	11PIA0001.2	4	Yes	
10	GEAR WHEEL Z15 M2	4147191Q	1	Yes	
11	BENDING ROLLER DEFLECTOR	4147184H	1	Yes	
12	FOLDING ROLLER	A0118899	1	Yes	
13	ASSY LOADING FOLDER ROLLER	A0118907	1	Yes	
14	MANNED DEFLECTOR	4147210K	1	Yes	
15	UPPER MOTOR SHUTTER SUPPORT	11PIC0135	1	No	
16	MOTOR GEAR WHEEL Z10	11PIC0067	1	Yes	
17	CYLINDRICAL PIN D=1X5	GOU00014	1	No	
18	DOUBLE GEAR WHEEL	11BFA2402.2	1	Yes	
19	E-RING D=4	CIR35180	1	Yes	
20	SECTOR LEVER SHUTTER	4147248Z	1	Yes	
21	SHUTTER LEVER SPINDLE	4147869W	1	Yes	
22	LEVER SHUTTER	4147249A	1	Yes	
23	LEVER	4147250B	2	Yes	
24	E-RING D=5	CIR35181	4	Yes	
25	CYLINDRICAL PIN D=1X6	GOU34701	2	No	
26	E-RING D=3	CIR35171	4	Yes	
27	CYLINDRICAL PIN D=2X8	GOU00196	2	Yes	
28	PLASTIC PLAIN BEARING D=5X8X6.8X2	FRO30174	2	Yes	
29	SERRATED LOCK WASHER D=3.05X6X1.2	RON32023	2	Yes	
30	WASHER ZU d=3x6x0.8	RON31140	2	Yes	
31	ECO-FIX TORX SCREW M3x8	VIS35779	3	Yes	
32	ECO-FIX TORX SCREW M2.5X6	1007732V	2	No	
33	STEPPER MOTOR 2	4148107U	1	No	The wiring cannot be ordered separately as it is included in part 4149961A.
34	RH DEFLECTOR END ASSY	21PID0033	1	Yes	
35	LH DEFLECTOR END ASSY	21PID0032	1	Yes	
36	CYLINDRICAL CAPSCREW TORX M3x6	VIS30675	1	No	
37	POCKET A SHUTTER MOTOR	4149961A	1	Yes	Connector J22 included.

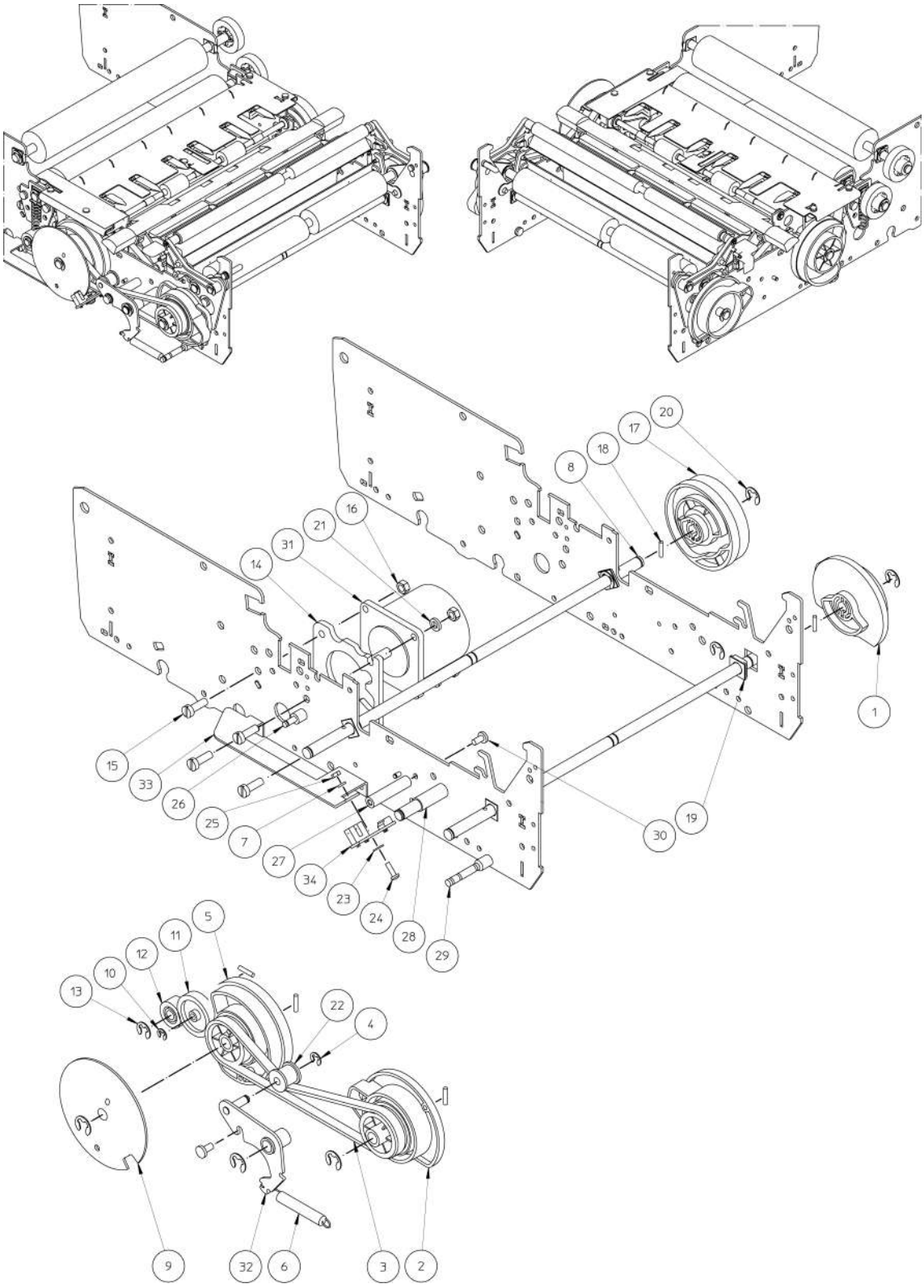
Drive (main)





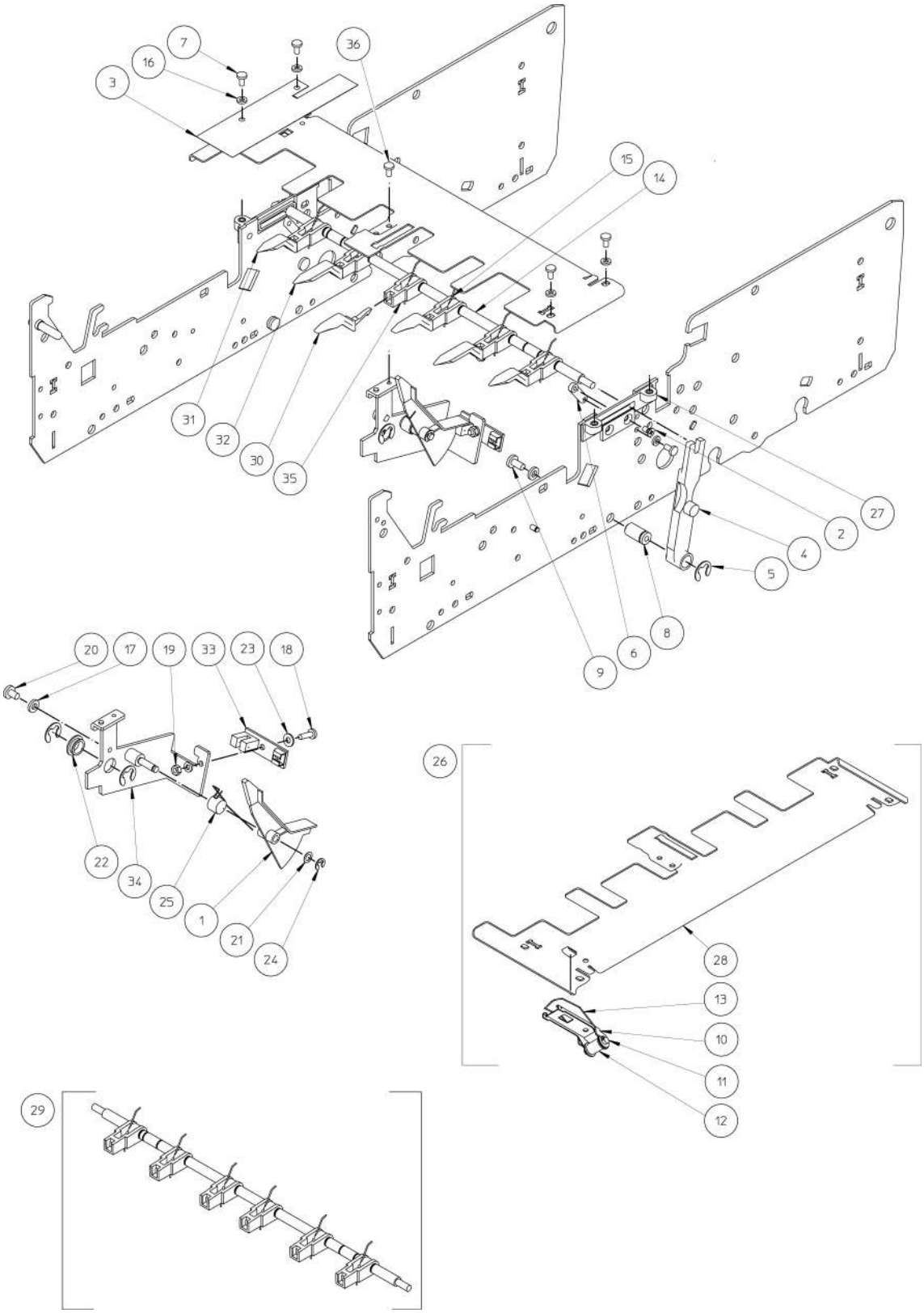
No.	Description	Part No.	Qty.	Spare	Remarks
1	ECO-FIX TORX SCREW M4X16	1007740D	1	No	
2	CYLINDRICAL HEAD SCREW M5x15	VIS35747	2	Yes	
3	HEXAGONAL NUT HM M4	VIS35321	1	Yes	
4	WASHER OR TYPE DE d=5.1x9x1.5	RON32022	2	No	
5	SERRATED LOCK WASHER D=4.1X8X1.5	RON32008	1	Yes	
6	WASHER MU d=4x10x0.8	RON31281	1	Yes	
7	DOWEL PIN D=2X16	GOU34712	1	Yes	
8	E-RING D=8	CIR35184	7	Yes	
9	E-RING D=6	CIR35182	1	Yes	
10	MOTOR PLATE	4148038X	1	No	
11	DRIVING GEAR WHEEL	11PID0146	1	Yes	
12	GEAR WHEEL SPINDLE	11PID0043	1	No	
13	GEAR WHEEL Z21 M1	11PID0042	1	Yes	
14	GEAR WHEEL Z45 M1	11PID0071	2	Yes	
15	INTERMEDIATE GEAR WHEEL Z39/Z17	11PID0109	1	Yes	
16	MAIN MOTOR	4148123L	1	Yes	
17	GEAR WHEEL Z40 M1	11PID0044	2	Yes	

Insert-moistening-exit 1/5



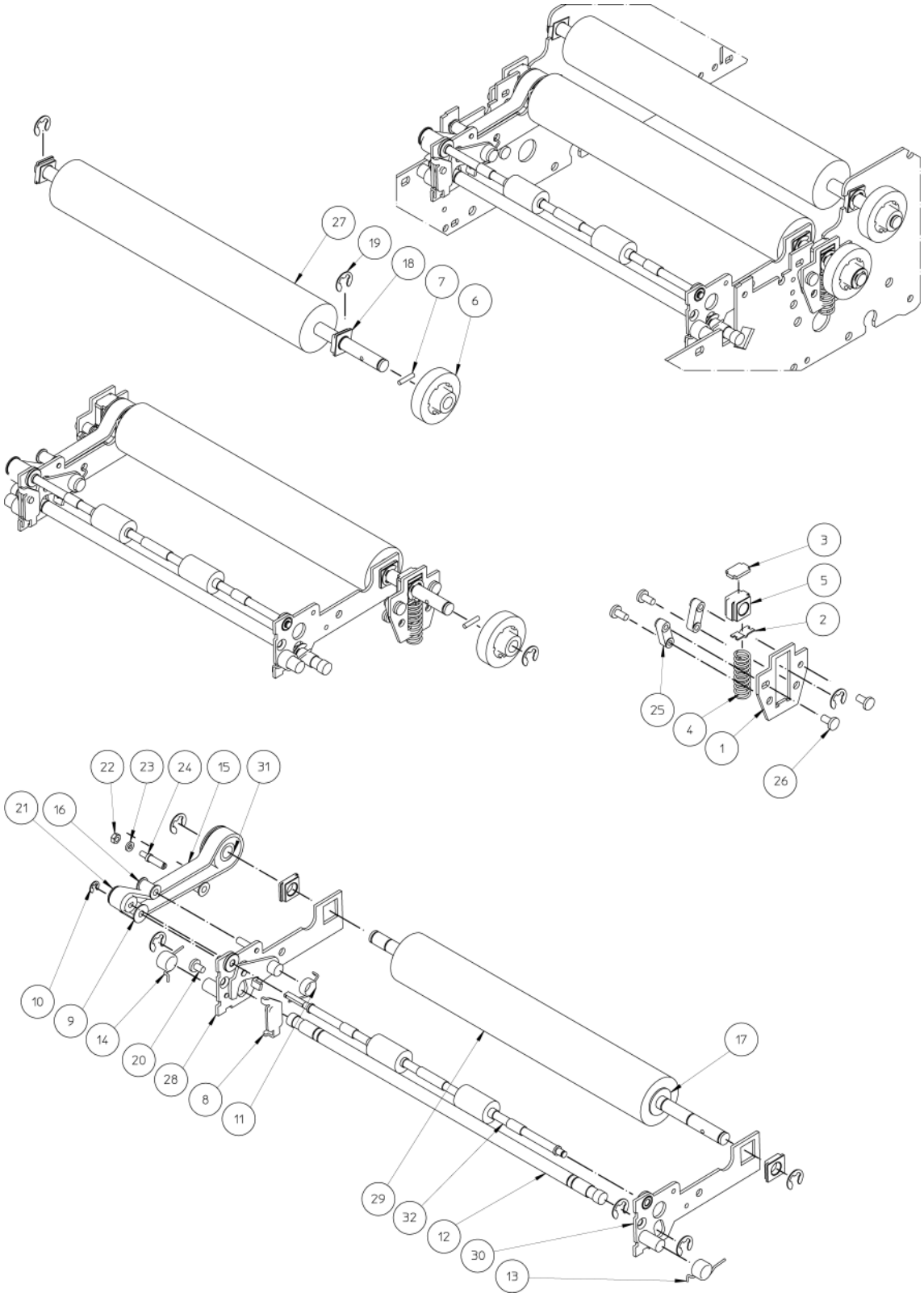
No.	Description	Part No.	Qty.	Spare	Remarks
1	RH FRONT CAM	11PIC0127	1	Yes	
2	LH REAR CAM	11PIC0128	1	Yes	
3	CAM BELT	12PIA0007.2	1	Yes	
4	E-RING D=5	CIR35181	1	Yes	
5	LH REAR CAM	11PIC0213	1	Yes	
6	CAM SPRING	11PIA0307.2	1	Yes	
7	SERRATED LOCK WASHER D=3.05X6X1.2	RON32023	1	Yes	
8	CAM SPINDLE	11PIA0121.2	2	No	
9	PULLEY CHEECK	11PIA0122.2	1	Yes	
10	E-RING D=4	CIR35180	1	Yes	
11	CAM INTERMEDIATE GEAR WHEEL	11PIB0038.2	1	Yes	
12	CAM DRIVING GEAR WHEEL	11PIB0007.2	1	Yes	
13	E-RING D=6	CIR35182	1	Yes	
14	DRIVING CAM SPACER	11PIA0112.2	1	Yes	
15	CYLINDRICAL HEAD SCREW M5x15	VIS35747	4	Yes	
16	HEXAGONAL NUT H M5	VIS35305	4	Yes	
17	RH REAR CAM	11PIC0214	1	Yes	
18	CYLINDRICAL PIN D=2.5X14	GOU34710	5	Yes	
19	BEARING	11PIA0001.2	4	Yes	
20	E-RING D=8	CIR35184	9	Yes	
21	WASHER OR TYPE DE d=5.1x9x1.5	RON32022	2	No	
22	TENSIONER ROLLER	11PIA0171.2	1	Yes	
23	FLAT WASHER	7470_0002	1	No	
24	ECO-FIX TORX SCREW M3x8	VIS35779	1	Yes	
25	HEX. NUT M3	VIS35303	1	Yes	
26	INTERMEDIATE CAM GEAR WHEEL SPINDLE	11PIA0111.2	1	No	
27	STOP COLUMN	11PIA0327.2	1	No	
28	TENSIONER LEVER SPINDLE	11PIA0291.2	1	No	
29	SPRING HOOK	11PIA0293.2	1	No	
30	M4*8 ECO-FIX TORX SCREW	VIS35781	5	Yes	
31	ENV CAM TRANSPORT MOTOR	4148753S	1	Yes	
32	TENSIONER LEVER	21PIA0069.2	1	Yes	
33	HOME POSITION CAM SUPPORT	11PIA0167.2	1	No	
34	PCBA SENSOR 1	4122298K	1	Yes	

Insert-moistening-exit 2/5



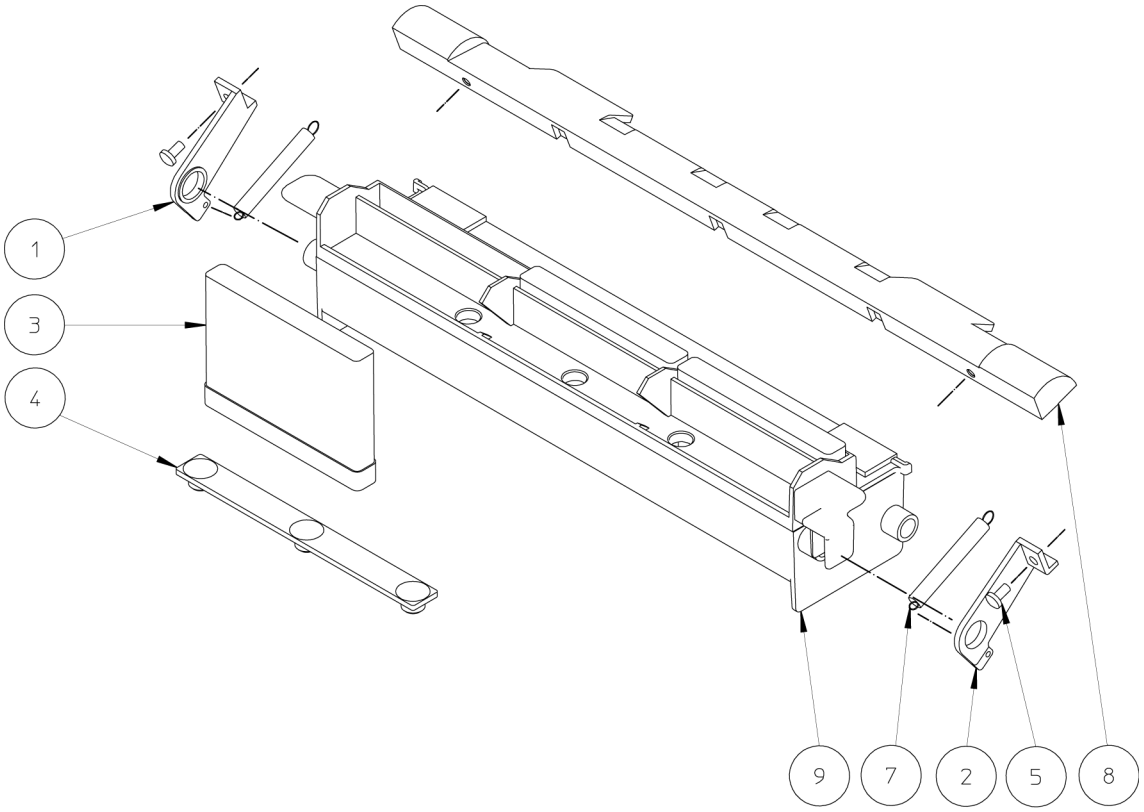
No.	Description	Part No.	Qty.	Spare	Remarks
1	ACTUATOR	11PIA0052.2	1	No	
2	SCREW, M/C, CSK HD, TORX, M3 X 6	3100346B	2	No	
3	SCREENING PLATE (MYLAR)	4147278F	1	Yes	
4	COMMAND ARM	11PIA0051.2	2	Yes	
5	E-RING D=8	CIR35184	4	Yes	
6	SLIDING NUT	11PIA0073.2	2	No	
7	ECO-FIX TORX SCREW M3X6	1007738B	7	Yes	
8	COMMAND ARM SPINDLE	11PIA0086.2	2	No	
9	M4*8 ECO-FIX TORX SCREW	VIS35781	2	Yes	
10	LOADING TENSIONER PLATE	11PIA0318.2	1	No	
11	LOADING TENSIONER ROLLER SPINDLE	11PIA0320.2	1	Yes	
12	LOADING BELT ROLLER	11PIA0077.2	1	Yes	
13	LOADING TENSIONER SPRING	11PIA0325.2	1	No	
14	FINGER CARRIER SPINDLE	11PIC0080	1	No	
15	INSERTION FINGER SPRING	11PIA0088.2	6	Yes	
16	SERRATED LOCK WASHER D=3.05X6X1.2	RON32023	7	Yes	
17	SERRATED LOCK WASHER D=4.1X8X1.5	RON32008	3	Yes	
18	ECO-FIX TORX SCREW M3x8	VIS35779	1	Yes	
19	HEX. NUT M3	VIS35303	1	Yes	
20	ECO-FIX TORX SCREW M4X6	1007742F	1	No	
21	WASHER d=4.2x7x0.2	CAL31252	1	No	
22	PLASTIC PLAIN BEARING D=8X13X10.4X2	FRO30173	1	Yes	
23	FLAT WASHER	7470_0002	1	No	
24	E-RING D=4	CIR35180	1	Yes	
25	LOADING ACTUATOR	11PIC0090	1	No	
26	INSERTING PLATE ASSEMBLY	4149850K	1	Yes	
27	FINGERS SLINDING GUIDE ASSY	21PIA0056.2	2	Yes	
28	DOCUMENT SUPPORT PLATE	4147206F	1	No	
29	INSERT FINGERS ASSEMBLY	4149883U	1	Yes	
30	SHORT INSERT FINGER (ROUNDED)	4152001A	-	Yes	Type and quantity of fingers depend on configuration/application.
31	SHORT INSERT FINGER (SHARP)	4147188M	-	Yes	Type and quantity of fingers depend on configuration/application.
32	LONG INSERT FINGER (SHARP)	4147189N	-	Yes	Type and quantity of fingers depend on configuration/application.
33	SENSORS	4149870F	1	Yes	
34	LOADING ACTUATOR SUPPORT ASSEMBLY	4148098K	1	No	
35	INSERTION FINGER BASE	4147187L	6	No	
36	CYLINDRICAL CAPSCREW TORX M3x6	VIS30675	1	No	

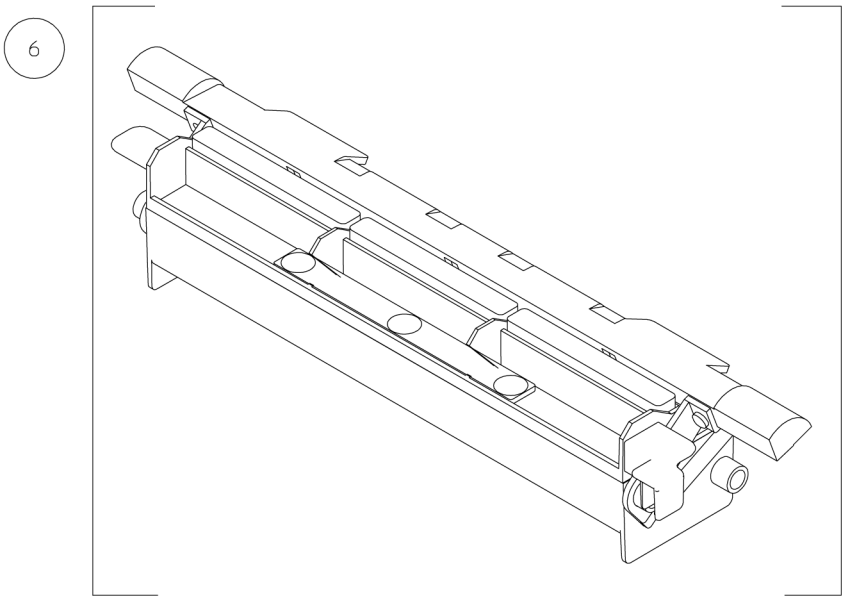
Insert-moistening-exit 3/5



No.	Description	Part No.	Qty.	Spare	Remarks
1	FOLDING ROLLER BEARING SUPPORT	4147194T	2	No	
2	BEARING PLATE	11PIA0002.2	2	Yes	
3	LAST FOLDING BEARING PLATE	4147619L	2	No	
4	FOLDING SPRING	4147618K	2	No	
5	FOLDING ROLLER BEARING	4147620M	2	Yes	
6	GEAR WHEEL Z15 M2	4147191Q	2	Yes	
7	CYLINDRICAL PIN D=2.5X12	GOU00745	2	Yes	
8	LEVER STOP PLATE	4147444D	1	No	
9	PRETENSIONER LEVER PULLEY	11PIA0326.2	1	Yes	
10	E-RING D=4	CIR35180	1	Yes	
11	PRE TENSIONER LEVER SPRING	11PIA0319.2	1	Yes	
12	SPINDLE	11PIA0084.2	1	Yes	
13	RH LOADING ROLLER SPRING	11PIA0087.2	1	Yes	
14	LH LOADING ROLLER SPRING	11PIA0343.2	1	No	
15	LOADING BELT	12PIA0006.2	1	Yes	
16	LOADING BELT ROLLER	11PIA0077.2	2	Yes	
17	WASHER d=8.2x18x1	CAL31668	2	No	
18	BEARING	11PIA0001.2	4	Yes	
19	E-RING D=8	CIR35184	10	Yes	
20	ECO-FIX TORX SCREW M4X6	1007742F	1	No	
21	LOADING PULLEY MXL 17 TEETH	11PIA0053.2	1	Yes	
22	HEX. NUT M3	VIS35303	1	Yes	
23	SERRATED LOCK WASHER D=3.05X6X1.2	RON32023	1	Yes	
24	LOADING ROLLER SPINDLE	11PIA0346.2	1	No	
25	SLIDING SUPPORT NUT	11PIA0074.2	4	No	
26	M4*8 ECO-FIX TORX SCREW	VIS35781	8	Yes	
27	FOLDING ROLLER (ALUMINIUM)	11PID0075	1	Yes	
28	LEFT LOADING FLANGE	4147440Z	1	No	
29	MOTOR FOLDING ROLLER	A0118898	1	Yes	
30	RIGHT LOADING	4147443C	1	No	
31	BENDING PULLEY MXL 36TEETH	21PIA0053.2	1	Yes	
32	LOADING ROLLER	21PIC0026	1	Yes	

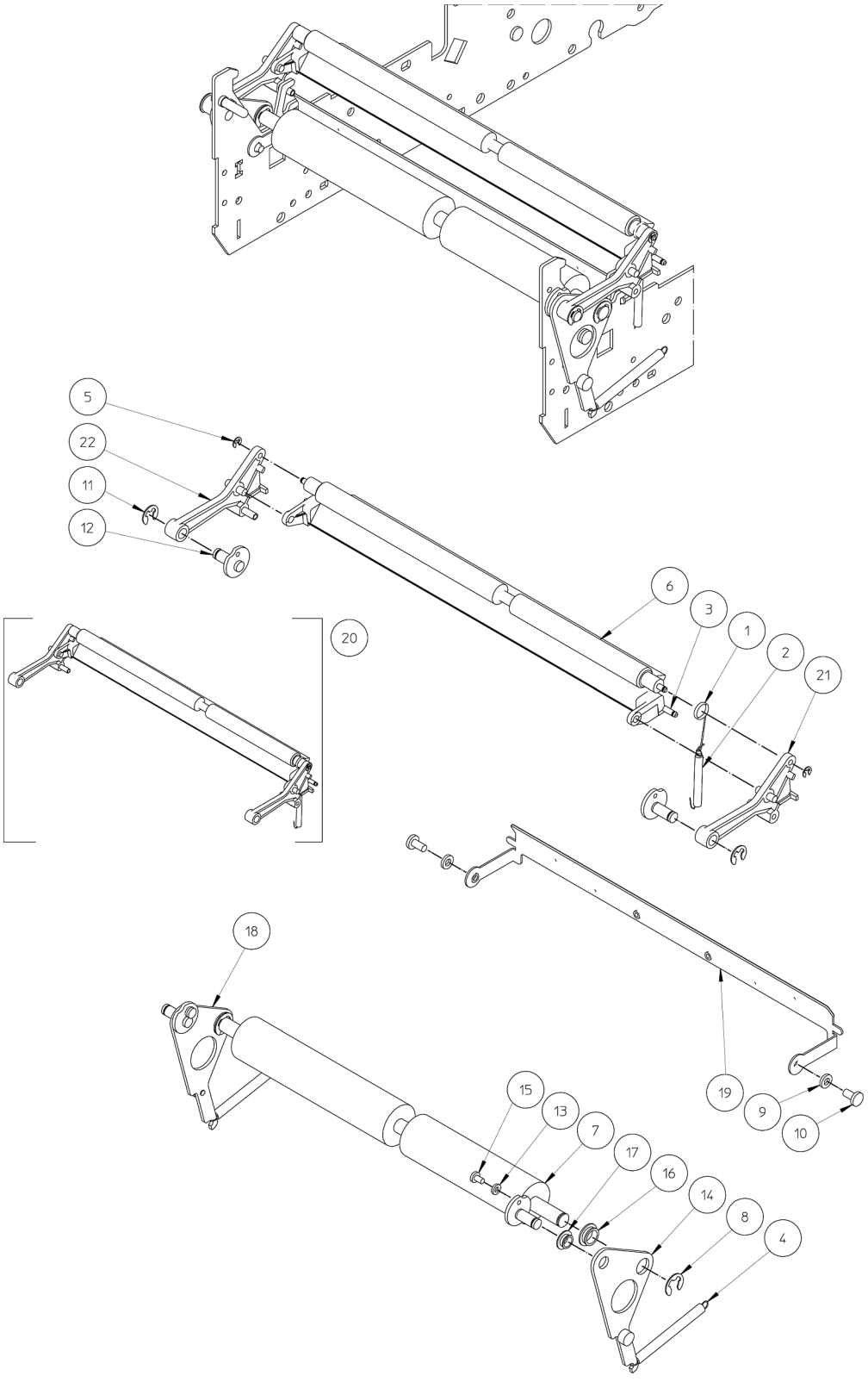
Insert-moistening-exit 4/5





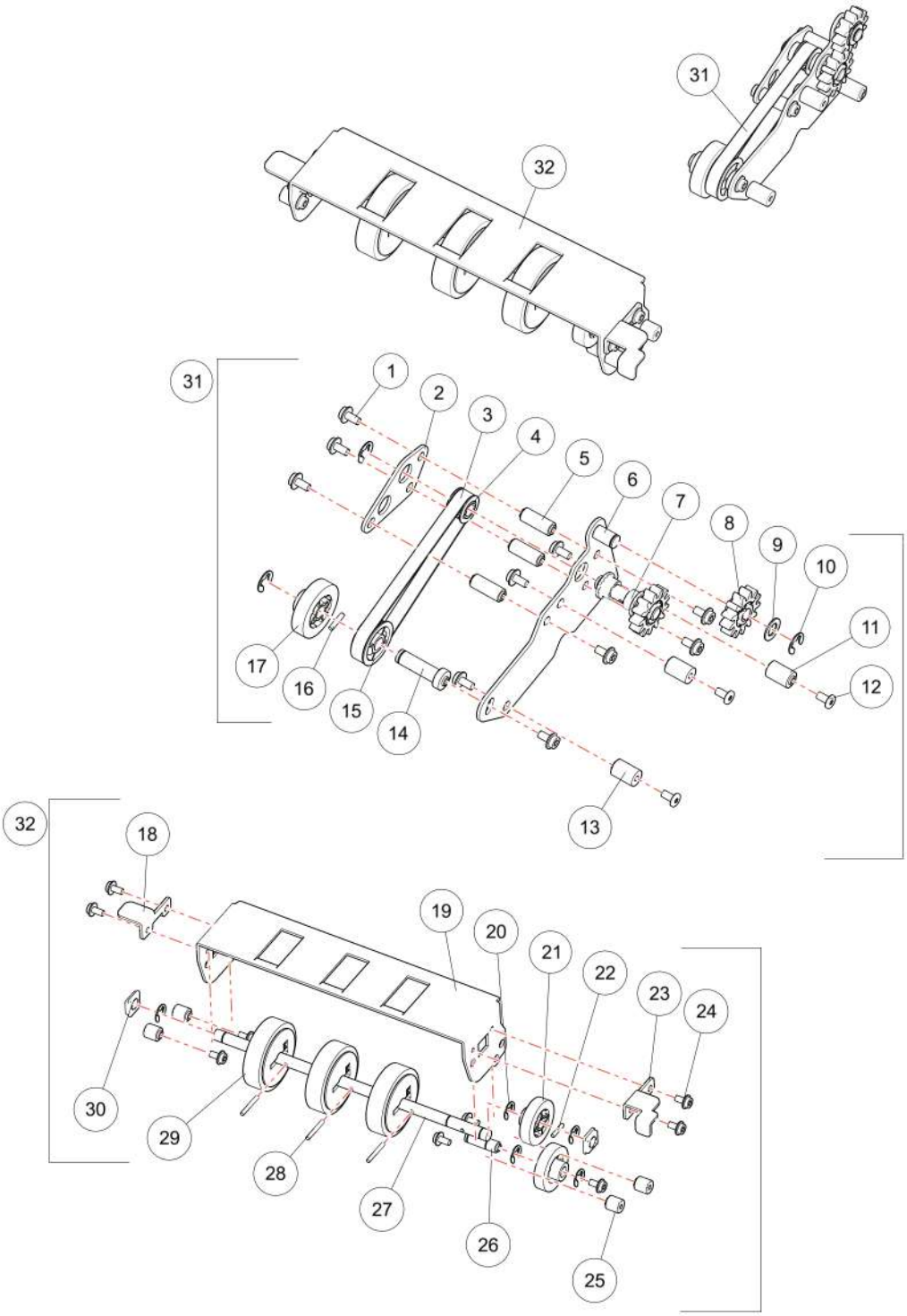
No.	Description	Part No.	Qty.	Spare	Remarks
1	LH MOISTENER LEVER	11PIA0065.2	1	Yes	
2	RH MOISTENER LEVER	11PIA0064.2	1	Yes	
3	MOISTENER BRUSH HOLDER ASSY	21PIA0027.2	3	Yes	
4	MOISTENER PLUG	11PIA0063.2	1	Yes	
5	PAN HEAD SCREWS TORX M3,5X8	1007734X	2	No	
6	Moistener tank assy	4149859U	1	Yes	
7	MOISTENER SPRING	11PIA0223.2	2	Yes	
8	MOISTENER BAR	11PIA0066.2	1	Yes	
9	MOISTENER CONTAINER ASSY	4123001S	1	No	
10	BRUSH KIT (3 BRUSHES)	4124581N	1	Yes	

Insert-moistening-exit 5/5



No.	Description	Part No.	Qty.	Spare	Remarks
1	PRE-SEALING SPRING HOOK	11PIC0248	1	Yes	
2	PRE-SEALING SPRING	11PIC0247	1	Yes	
3	PRE-SEALING COUNTER ROLLER	11PIC0178	1	Yes	
4	SEALING SPRING	11PIC0166	2	Yes	
5	E-RING D=3	CIR35171	2	Yes	
6	RETAINING SPINDLE	11PIC0245	1	Yes	
7	SEALING SPINDLE ROLLER	21PIA0024.2	1	Yes	
8	E-RING D=8	CIR35184	3	Yes	
9	SERRATED LOCK WASHER D=4.1X8X1.5	RON32008	2	Yes	
10	POZIDRIV PAN HEAD SCREW M4X8	VIS35821	2	Yes	
11	E-RING D=6	CIR35182	2	Yes	
12	SEALING LEVER SPINDLE	11PIA0034.2	2	No	
13	SERRATED LOCK WASHER D=3.05X6X1.2	RON32023	2	Yes	
14	LEFT SEALING LEVER	21PIA0005.2	1	Yes	
15	CYLINDRICAL CAPSCREW TORX M3x6	VIS30675	2	No	
16	PLASTIC PLAIN BEARING D=8X13X10.4X2	FRO30173	2	Yes	
17	PLASTIC PLAIN BEARING D=6X11X7.8X2	FRO30176	2	Yes	
18	RH LOCKING LEVER ASSY	21PIA0008.2	1	Yes	
19	SMALL EXIT DEFLECTOR ASSY	4149925N	1	No	
20	DEFLECTOR ASSEMBLY (EXIT)	4149825J	1	Yes	
21	RH PRE-SEALING LEVER	21PIA0117.2	1	Yes	
22	LH PRE-SEALING LEVER	21PIA0118.2	1	Yes	

Tri-Fold kit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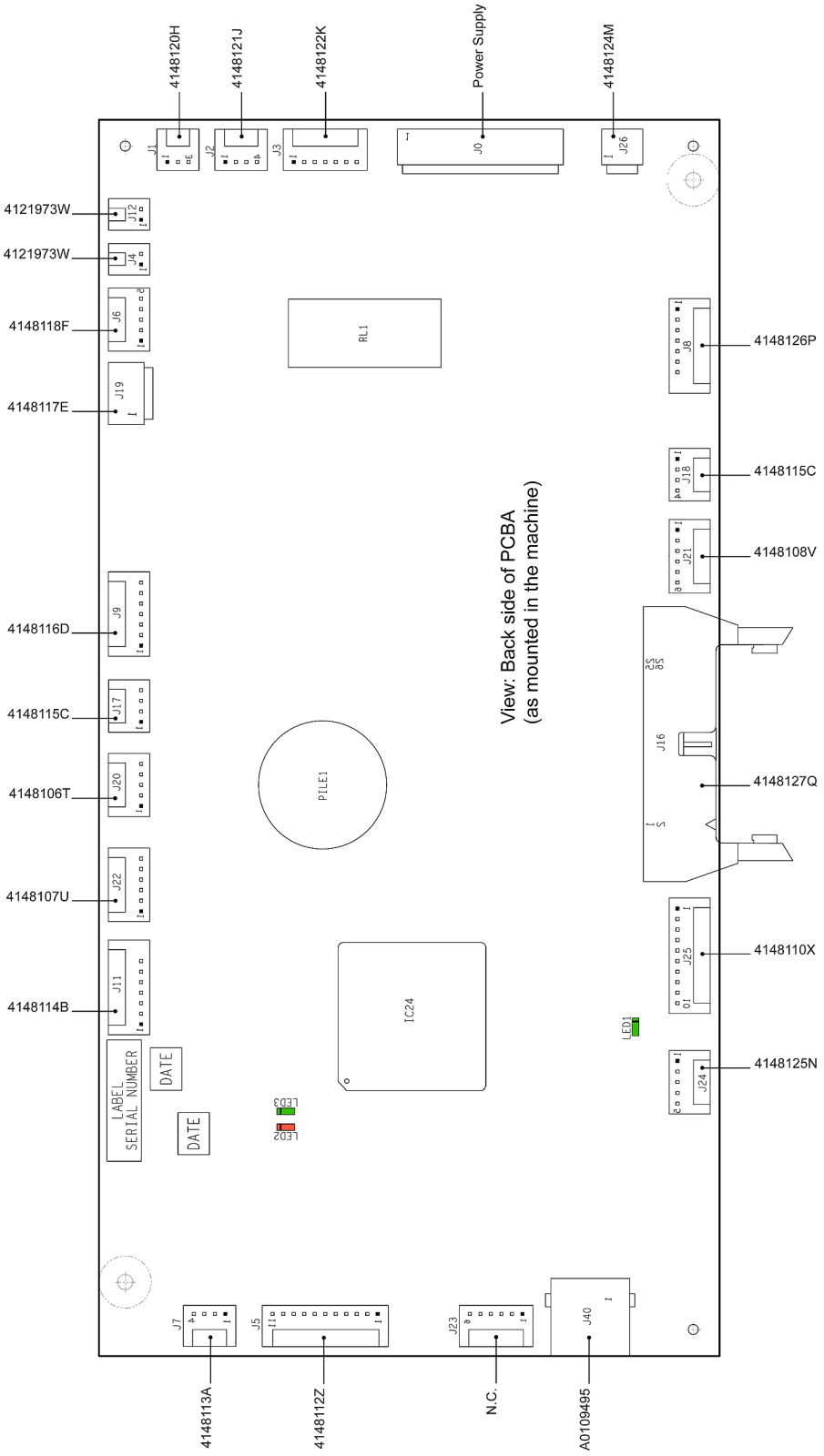
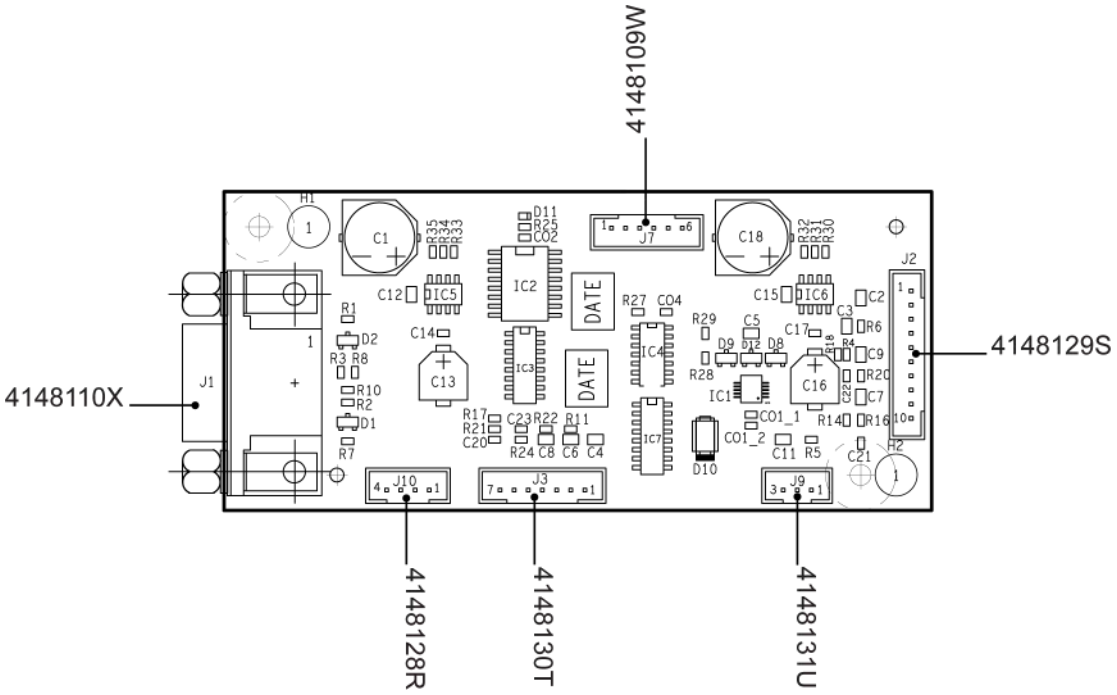
No.	Description	Part No.	Qty.	Spare	Remarks
1	M4*8 ECO-FIX TORX SCREW	VIS35781	10	Yes	
2	SHAFT LOCKER	A0091233	1	No	
3	TIMING BELT-L=254 MXL-BELT 125-MXL-08	A0091210	1	No	
4	PULLEY 25MXL ASSY	A0091208	1	No	
5	PLAIN SHAFT-SPACER 17MM	A0091232	3	No	
6	CARACAL KINEMATIK PLATE ASSY	A0108386	1	No	
7	GEAR PULLEY SHAFT ASSY	A0091188	1	No	
8	GEAR-Z=13 M=2-D8	A0091111	2	No	
9	WASHER Ø 14 X Ø 8.2 X 0.8 MM	2040141W	1	Yes	
10	E-RING D=8	CIR35184	3	Yes	
11	PLAIN SHAFT-SPACER 18X5.5	A0091126	1	No	
12	HEXALOBULAR SOCKET EXTREMELY LOW HEADS SCREW M4X8	1007771L	2	No	
13	PLAIN SHAFT-SPACER 18	A0091150	2	No	
14	RING GROOVE SHAFT-PULLEY SHAFT	A0091167	1	No	
15	PULLEY 42MXL ASSY	A0091250	1	No	
16	CYLINDRICAL PIN D=2.5X12	GOU00745	1	Yes	
17	GEAR WHEEL Z15 M2	4147191Q	1	Yes	
18	CARACAL LEFT HANDLE	A0103421	1	No	
19	CARACAL ROLLER STRUCTURE	A0091115	1	No	
20	E-RING D=8	CIR35184	5	Yes	
21	GEAR WHEEL Z15 M2	4147191Q	2	Yes	
22	CYLINDRICAL PIN D=2.5X14	GOU34710	1	Yes	
23	CARACAL RIGHT HANDLE	A0103420	1	No	
24	M4*8 ECO-FIX TORX SCREW	VIS35781	9	Yes	
25	PLAIN SHAFT-D10	A0091127	4	No	
26	RING GROOVE SHAFT-D8	A0091131	1	No	
27	RING GROOVE SHAFT-CARACAL	A0091112	1	No	
28	CYLINDRICAL PIN D=2.5X22	1006915U	3	No	
29	OMMF CONVEYING ROLLER AS-SEMBLY	4140479Y	3	No	
30	BEARING	11PIA0001.2	2	Yes	
31	KINEMATIC ASSY	A0091125	1	No	
32	ROLLER	A0091106	1	No	

Wiring overview main board



No.	Description	Part No.	Qty.	Spare	Remarks
0	POWER SUPPLY	4147421E	1	Yes	Connector J0; The wiring cannot be ordered separately as it is included in the part.
1	MACHINE OPEN SWITCH	4148120H	1	Yes	Connector J1
2	FEEDER OPEN SWITCH	4148121J	1	Yes	Connector J2
3	FEEDER 3 EMPTY AND OPEN SWITCH	4148122K	1	Yes	Connector J3
4	POCKET ELECTROMAGNET	4121973W	1	Yes	
5	SENSORS	4148112Z	1	Yes	Connector J5
6	INSERT SIGNAL SENSOR	4148118F	1	Yes	Connector J6
7	PULSEDISK CABLE	4148113A	1	Yes	Connector J7
8	CAM & DOC LOADED SENSOR	4148126P	1	Yes	Connector J8
9	SEPARATE AND STOP INSERT	4148116D	1	Yes	Connector J9
10	NOT APPLICABLE	N.A.	-		
11	CLUTCHES WIRING	4148114B	1	Yes	Connector J11
12	POCKET ELECTROMAGNET	4121973W	1	Yes	
13	NOT APPLICABLE	N.A.	-		
14	NOT APPLICABLE	N.A.	-		
15	NOT APPLICABLE	N.A.	-		
16	DISPLAY CONNECTOR	4148127Q	1	Yes	Connector J16
17	ENVELOPE TRANSPORT MOTOR	4148115C	1	Yes	Connector J18
18	ENVELOPE TRANSPORT MOTOR	4148115C	1	Yes	Connector J18
19	FEEDER MOTOR	4148117E	1	Yes	Connector J19
20	STEPPER MOTOR 1	4148106T	1	Yes	
21	STEPPER MOTOR 3	4148108V	1	Yes	Connector J21; The wiring cannot be ordered separately as it is included in the part.
22	STEPPER MOTOR 2	4148107U	1	No	The wiring cannot be ordered separately as it is included in part 4149961A.
23	NOT CONNECTED	N.A.	-		
24	DOUBLE FEED DETECTION FEEDER 3	4148125N	1	Yes	Connector J24
25	FEEDER 1-2 CABLE	4148110X	1	Yes	Connector J1
26	FOLDER MOTOR CABLE	4148124M	1	Yes	Connector J26
40	USB CABLE L=0.50m	A0109495	1	Yes	

Wiring overview feeder board



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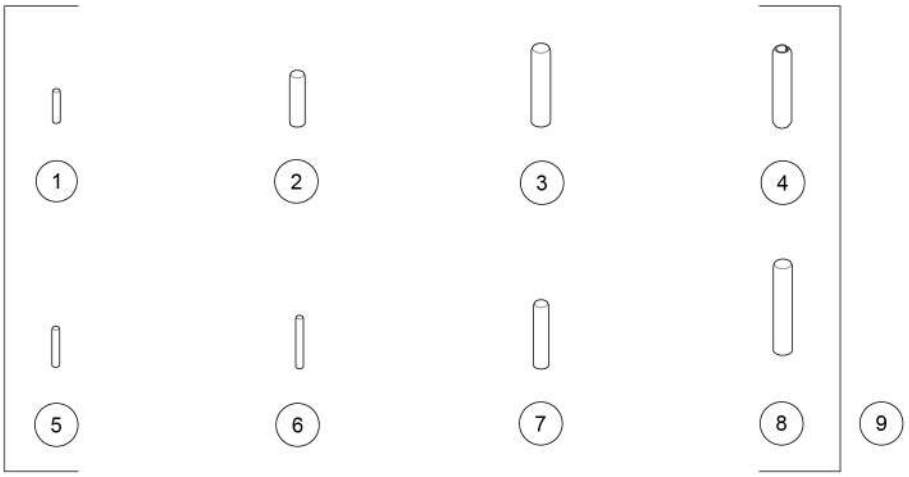
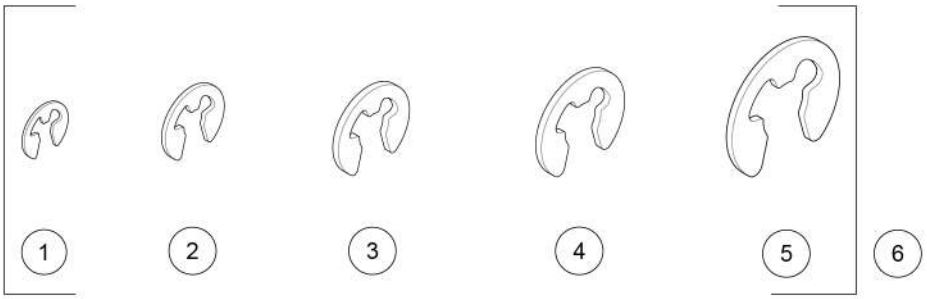
No.	Description	Part No.	Qty.	Spare	Remarks
1	FEEDER 1-2 CABLE	4148110X	1	Yes	Connector J1
2	FEEDER 1 CABLE	4148129S	1	Yes	Connector J2
3	FEEDER 2 CABLE	4148130T	1	Yes	Connector J3
7	AUTO/MANUAL MOTOR	4148109W	1	No	Connector J7; Included in Stepper motor assembly 4149879Q.
9	FEEDER 2 EMPTY	4148131U	1	Yes	Connector J9
10	CLUTCHES	4148128R	1	Yes	Connector J10

Spare part kit cyl. pin



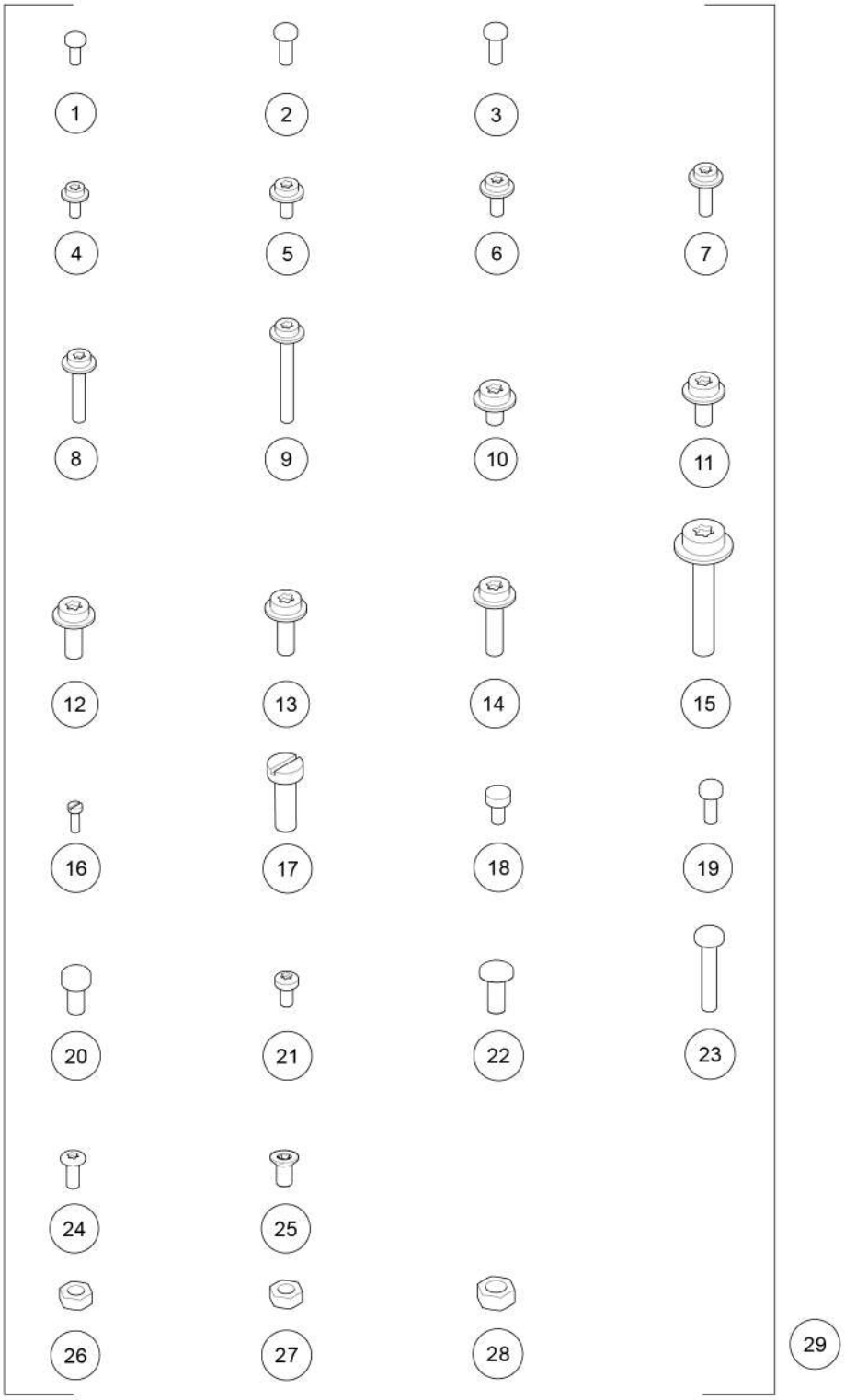
No.	Description	Part No.	Qty.	Spare	Remarks
1	CYLINDRICAL PIN D=1x5	GOU00014	20	No	
2	CYLINDRICAL PIN D=2x8	GOU00196	20	Yes	
3	CYLINDRICAL PIN D=2.5x12	GOU00745	150	Yes	
4	ELASTIC PIN D=2.5x12	GOU34240	10	No	
5	CYLINDRICAL PIN D=1x6	GOU34701	20	No	
6	CYLINDRICAL PIN D=1x8	GOU34702	10	No	
7	CYLINDRICAL PIN D=2x10	GOU34709	40	No	
8	CYLINDRICAL PIN D=2.5x14	GOU34710	200	Yes	
9	SPARE KIT	A0070350	-	Yes	

Spare part kit E-ring



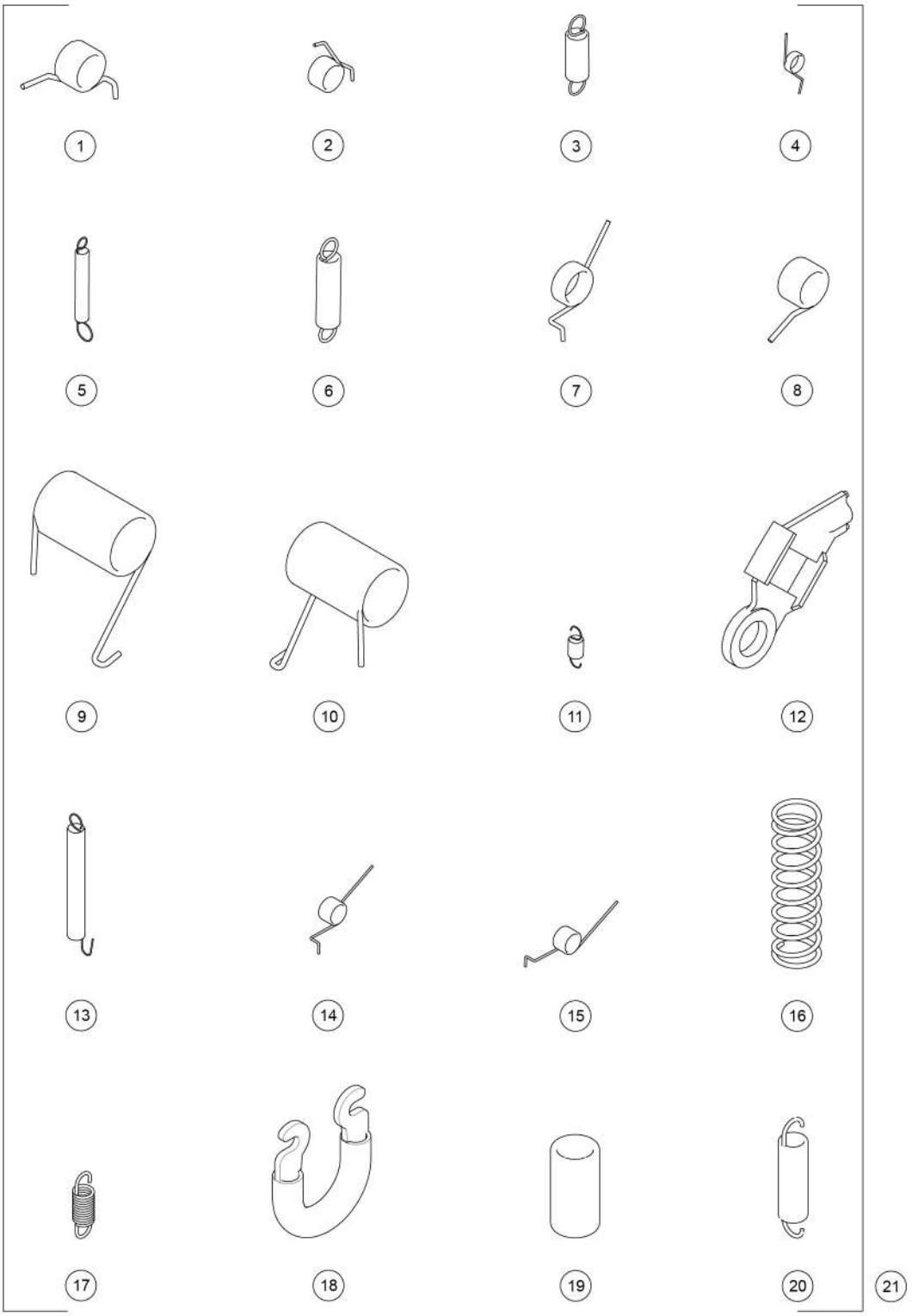
No.	Description	Part No.	Qty.	Spare	Remarks
1	E-RING D=2	CIR35169	30	Yes	
2	E-RING D=3	CIR35171	150	Yes	
3	E-RING D=4	CIR35180	40	Yes	
4	E-RING D=5	CIR35181	200	Yes	
5	E-RING D=6	CIR35182	200	Yes	
6	SPARE KIT	A0070370	-	Yes	

Spare part kit plastic Torx



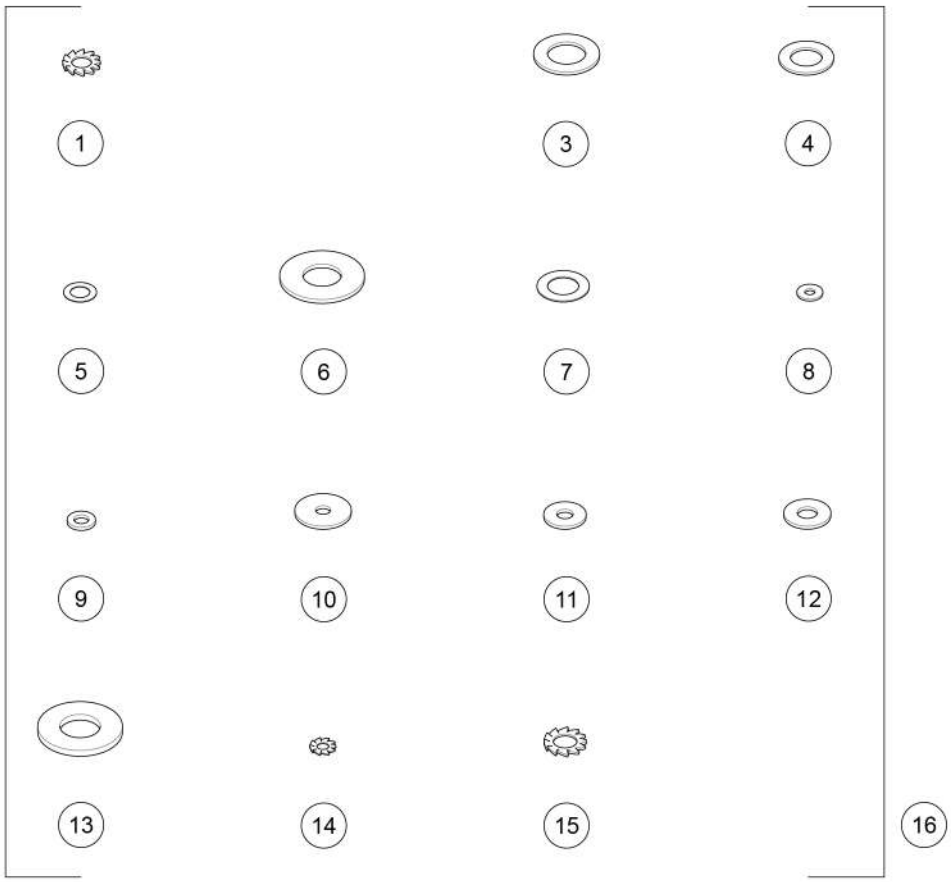
No.	Description	Part No.	Qty.	Spare	Remarks
1	ECO-syn TORX HEAD SCREW 2.5x6	1004742F	150	Yes	
2	ECO-syn TORX HEAD SCREW D=3x8	VIS30250	100	Yes	
3	ECO-syn BLACK TORX HEAD SCREW D=3x8	1007148M	200	Yes	
4	ECO-FIX TORX SCREW M2.5X6	1007732V	80	No	
5	ECO-FIX TORX SCREW M3X5	1007746K	20	No	
6	ECO-FIX TORX SCREW M3X6	1007738B	60	Yes	
7	ECO-FIX TORX SCREW M3x8	VIS35779	350	Yes	
8	ECO-FIX TORX SCREW M3X16	1007744H	30	No	
9	ECO-FIX TORX SCREW M3X25	1007743G	20	No	
10	ECO-FIX TORX SCREW M4X6	1007742F	30	No	
11	M4*8 ECO-FIX TORX SCREW	VIS35781	200	Yes	
12	ECO-FIX TORX SCREW M4X10	1007735Y	10	No	
13	ECO-FIX TORX SCREW M4X12 (CL.10.9)	1007741E	100	No	
14	ECO-FIX TORX SCREW M4X16	1007740D	40	No	
15	ECO-FIX TORX SCREW M5X30	1007786B	40	No	
16	CYLINDRICAL HEAD SCREW M2x8	VIS35424	30	Yes	
17	CYLINDRICAL HEAD SCREW M5x15	VIS35747	100	Yes	
18	CYLINDRICAL CAPSCREW TORX M3x6	VIS30675	40	No	
19	HEXALOBULAR SOCKET CYLINDRICAL HEAD M3X8	1007739C	40	No	
20	HEXALOBULAR SOCKET CYLINDRICAL HEAD M4X8	1007748M	60	No	
21	TORX PLASTIC SCREW M3x6 Black	4131178K	50	No	
22	PAN HEAD SCREWS TORX M3,5X8	1007734X	30	No	
23	PT®-PAN HEAD SCREWS TORX D=3,5x20	1007747L	20	No	
24	FLAT COUNTERSUNK HEAD SCREWS F/90° TORX D=3X8	VIS30252	40	Yes	
25	SCREW, M/C, CSK HD, TORX, M3 X 6	3100346B	10	No	
26	HEXAGONAL NUT H M4	VIS35304	30	Yes	
27	HEXAGONAL NUT HM M4	VIS35321	70	Yes	
28	HEXAGONAL NUT H M5	VIS35305	80	Yes	
29	SPARE KIT	A0070368	-	Yes	

Spare part kit spring



No.	Description	Part No.	Qty.	Spare	Remarks
1	RH LOADING ROLLER SPRING	11PIA0087.2	10	Yes	
2	INSERTION FINGER SPRING	11PIA0088.2	60	Yes	
3	DEFLECTOR SPRING	11PIA0132.2	20	Yes	
4	POCKET ROLLER SPRING	11PIA0163.2	40	Yes	
5	MOISTENER SPRING	11PIA0223.2	40	Yes	
6	MOISTENER COMPENSATION SPRING	11PIA0225.2	20	Yes	
7	PRE TENSIONER LEVER SPRING	11PIA0319.2	10	Yes	
8	LH LOADING ROLLER SPRING	11PIA0343.2	10	No	
9	RH DOCUMENT ENTRY SPRING	11PIA0468.2	10	No	
10	LH DOCUMENT ENTRY SPRING	11PIA0469.2	10	Yes	
11	MOBILE DEFLECTOR SPRING	11PIC0138	10	Yes	
12	SEALING SPRING	11PIC0232	20	Yes	
13	PRE-SEALING SPRING	11PIC0247	10	Yes	
14	RH DOCUMENT ENTRY END SPRING	11PID0054	10	Yes	
15	LH DOCUMENT ENTRY END SPRING	11PID0055	10	Yes	
16	PRESSURE SPRING D=1MM	2031114T	10	Yes	
17	LOCKING SPRING	4147036D	20	No	
18	FEEDER A SEPARATION BENDING SPRING	4147173W	25	No	
19	FOLDING SPRING	4147618K	20	No	
20	ENVELOPPE BELT TENSIONNER SPRING	A0000099	10	No	
21	SPARE KIT	A0070369	-	Yes	

Spare part kit washers



No.	Description	Part No.	Qty.	Spare	Remarks
1	FAN TYPE LOCKWASHER D4.3x8x1.5	1007112Z	30	No	
2	NOT USED	Unnamed item	-		
3	WASHER Ø 14 X Ø 8.2 X 0.8 MM	2040141W	200	Yes	
4	FLAT WASHER	7470_0002	40	No	
5	WASHER d=4.2x7x0.2	CAL31252	10	No	
6	WASHER d=8.2x18x1	CAL31668	40	No	
7	WASHER d=5.2x10x0.5	CAL32046	20	No	
8	WASHER d=2x5.5x0.5	RON31081	50	Yes	
9	WASHER ZU d=3x6x0.8	RON31140	150	Yes	
10	WASHER LU d=3x12x0.8	RON31142	10	Yes	
11	WASHER d=3.5x9x0.8	RON31191	40	No	
12	WASHER MU d=4x10x0.8	RON31281	20	Yes	
13	WASHER MU d=8x18x1.5	RON31681	80	No	
14	WASHER OR TYPE DE d=2.55x5.5x0.9	RON32021	30	Yes	
15	WASHER OR TYPE DE d=5.1x9x1.5	RON32022	80	No	
16	SPARE KIT	A0070191	-	Yes	

13 Appendix

13 Appendix 253

Recommended spare parts 254
CRM Coding 256
Checklist training operator 259
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Recommended spare parts

Drawing ref.	Legend no.	Description	Part No	Stock per number of installed machines			Remarks	
				1	10	50		
Top covers and display on page 154	19	FD 6104 ASSY	A0115572			1	0	0
Feeder 1-2 covers on page 158	8	PAPER GUIDE LH	4151730T			4	2	1
	9	PAPER GUIDE RH	4151728R			4	2	1
Frames and external parts 2/6 on page 162	8	MAIN PCB (MAIN BOARD)	A0115524			1	0	0
Frames and external parts 3/6 on page 164	26	LETTER-OUTPUT SENSOR ASSEMBLY	4149852M			1	1	0
Envelope feed 2/4 on page 174	15	SEPARATION KIT	4149873J		3	101		
Document feeder 1-2 1/6 on page 180	7	FEEDER BOARD	4149862X			1	1	0
Document feeder 1-2 3/6 on page 184	12	ASSY DFC	2951256Z			1	1	1
	34	SEPARATION MODULE 1 ASSY.	4151616Z			8	3	1
	36	INSERT PATH SENSOR ASSEMBLY	4149849J			1	1	0
Document feeder 1-2 4/6 on page 186	9	SEPARATION MODULE 2 ASSY.	4149874K			8	3	1
	18	FLAG SWITCH	4152761S			1	1	0
Document feeder 1-2 5/6 on page 188	23	CLUTCH CCW	4148250T			1	1	1
	25	CLUTCH CW	14PIC0002			2	1	1
	26	SEPARATION AXLE ASSY (DAILY MAIL)	4149871G		3	101		

Document feeder 1-2 6/6 on page 190	27	SEPARATION FLAG SWITCH FEEDER 2	4149872H	0	1	1	
Feeder 1-2 document transport 2/3 on page 194	28	ENV-REFERENCE SENSOR ASSEMBLY	4149837W	0	1	1	
Feeder 1-2 document transport 3/3 on page 196	2	STOP FIXED SPINDLE BRACKET	11PIA0020.2	0	1	1	
	18	INSERTING ROLLER	21PIA0035.2	0	1	1	
	19	STOP FIXED SPINDLE ASSY	21PIA0034.2	0	1	1	
	20	LOWER DEFLECTOR PLATE ASSY.	4149854P	1	3	10	
	22	MOBILE STOP ROLLER	21PIA0001.2	0	1	1	
	23	TONGUE LH + RH	4149880R	1	3	10	
	29	FLAP SCRAPER ASSEMBLY	4149843C	0	1	1	
Feeder 3 (insert/BRE feeder) 1/3 on page 198	18	PUSHER ASSEMBLY	4149864Z	1	2	4	
Feeder 3 (insert/BRE feeder) 3/3 on page 202	12	SENSOR ASSEMBLY	4149869E	0	1	1	
	15	SEPARATION ROLLER	4151281A	2	5	15	
	29	ROLLER	4150009A	1	3	10	
Insert-moistening-exit 2/5 on page 228	29	INSERT FINGERS ASSEMBLY	4149883U	0	1	1	
	30	SHORT INSERT FINGER (ROUNDED)	4152001A	2	6	12	
	31	SHORT INSERT FINGER (SHARP)	4147188M	4	12	40	
	32	LONG INSERT FINGER (SHARP)	4147189N	4	12	40	
	33	SENSORS	4149870F	0	1	1	

Insert-moistening-exit 4/5 on page 232	3	MOISTENER BRUSH HOLDER ASSY.	21PIA0027.2	3	9	30	
	6	MOISTENER TANK AS-SEMBLY	4149859U	0	1	1	
	10	BRUSH KIT (3 BRUSHES)	4124581N	1	3	10	

CRM Coding

Worldwide CRM Coding

Symptom

Code	Symptom/Problem
P201	Envelope feeding/transport/stacking issue
P202	Envelope sealing
P203	Envelope not opened
P204	Printing issue
P205	Inserting issue
P206	Document feeding issue
P207	Document folding issue
P208	Document transport issue
P209	Display / Screen / Monitor issue
P210	External damage (dirty, broken,…)
P211	Noise issue
P212	Power issue
P213	(On Line) Connection issue
P214	Document not extracted
P215	Reading/Scanning issues

Cause / Module

Code	Main Cause / Module
C201	Customer environment/Operation
C202	Moistening/Sealing
C203	Infrastructure
C204	PC/Printer Hardware
C205	Internal Software/Firmware
C206	External Software Application (AIMS, OMS…)
C207	Envelope feeder
C208	Envelope transport
C209	Document feeder
C210	Document transport/sheet divert
C211	Main drive (motor, belts, gears,…)
C212	Electrical/Electro-mechanical/Electronic part
C213	Inserting Area
C214	Folding Area
C215	Cutting/Slitting
C216	Extractor
C217	Collator/Accumulator
C218	Insert feeder
C219	Conveyor/Output option
C220	Camera/Scanner/Reading Option

Main Action

Code	Main Action
A001	Adjustment/Setting
A002	Cleaning
A003	Change of software/Firmware
A004	Part change/repair
A005	Swap Module or Machine
A006	Configuration Update
A007	Consumable change
A008	Assistance/Training/Advice
A009	Escalation to Support
A010	Customer action
A011	Infrastructure Action
A012	Back Office action

Worldwide CRM Coding, Field Installation only

Complete Installation

Code	Activity Status	Code	Problem
AS1	Complete Installation	CI01	No issue

Troublesome Complete Installation

Code	Activity Status	Code	Problem
AS2	Troublesome Complete Installation	TC01	Missing parts
		TC02	Parts incorrectly mounted
		TC03	Part broken
		TC04	Wrong software
		TC05	Wrong machine/Module delivered
		TC06	Packaging damage
		TC07	Machine does not start up
		TC09	Service back-office preparation
		TC10	Server connection
		TC11	Modification default settings
		TC12	Customer environment

Incomplete Installation

Code	Activity Status	Code	Problem
AS3	Incomplete Installation	II01	Missing parts
		II02	Parts incorrectly mounted
		II03	Part broken
		II04	Wrong software
		II05	Wrong machine delivered
		II06	Packaging damage
		II07	Machine does not start up
		II08	Incorrect machine/Module delivered
		II09	Incomplete machine delivered
		II10	Not enough time
		II11	CustomerEnvironment/Availability
		II12	Server connection
		II13	Modification default settings

Checklist training operator

Check	Subject
	Introduction
	- Explain machine function
	- Operator manual: read it!
	Safety
	- Keep long hair, jewellery, fingers away from rotating parts
	- Power: earthing, local mains voltage
	Explain process flow
	Starting up
	- Install the envelope catch tray
	- Connect to mains, power on
	- Loading documents: document orientation, side guides
	- Loading curled documents: place the paper guides on the feeder
	- Loading envelopes: side guides, stacker side guides
	- Check finger configuration and replace if necessary
	- Sealing: fill sealing liquid reservoir
	Select a job
	- Job info, explain all icons

	- Test run
	- Counters
	Explain buttons on control panel
	Daily mail
	Create a new job with the job wizard
	Edit a job
	Delete a job
	Change settings
	- Language settings
	- Define new envelope settings
	- Job settings menu
	Fault finding
	- Error messages
	- Special errors (technical errors)
	- Warning screen (cover open)
	Clearing stoppages
	- Show all areas
	- How to remove jams
	Operator troubleshooting
	- Adjust envelope position, explain when and how
	- Adjust address position
	- Adjust sealing position, explain when and how
	Maintenance, daily
	- Clean exterior
	- Clean brushes
	- Clean rollers
	Maintenance, weekly
	- Replace brushes
	Envelope / paper characteristics:
	- Check dimensions
	- Storage (humidity and temperature)
	- Window quality
	- Glue
	- Internal/external glueing

Total view electronics FD 6104

Click here to download the Total View in pdf format.