



Operator Manual



This operator manual is designed for users who have been instructed in the operation of the Inserting System KS 4000 OL/OLC.

This operator manual is one part of the complete documentation available for the Inserting System KS 4000 OL/OLC. It describes **typical operating procedures** for configurations

- with a single-sheet feeder
- with a single-sheet feeder and supplement feeder
- with automatic cutter (for processing continuous-feed paper)
- with automatic cutter and supplement feeder
- with automatic cutter and cross-fold function (for processing continuous-feed A3 and broadsheet formats)
- with automatic cutter, cross-fold function and supplement feeder.

Detailed descriptions (about functions, technical data, installation, maintenance, programming) of individual components can be found in the “Instruction Manual Inserting System 4000” and in the for “Operating Instructions Cut-Sheet-Feeder” and/or “Operating Instructions Automatic Forms Cutter” (depending on the configuration of your system).

Keep this operator manual readily available and near the machine.

The following symbols and cautions represent important safety warnings in this manual:



Warning! indicates a potential hazard which may result in injury.



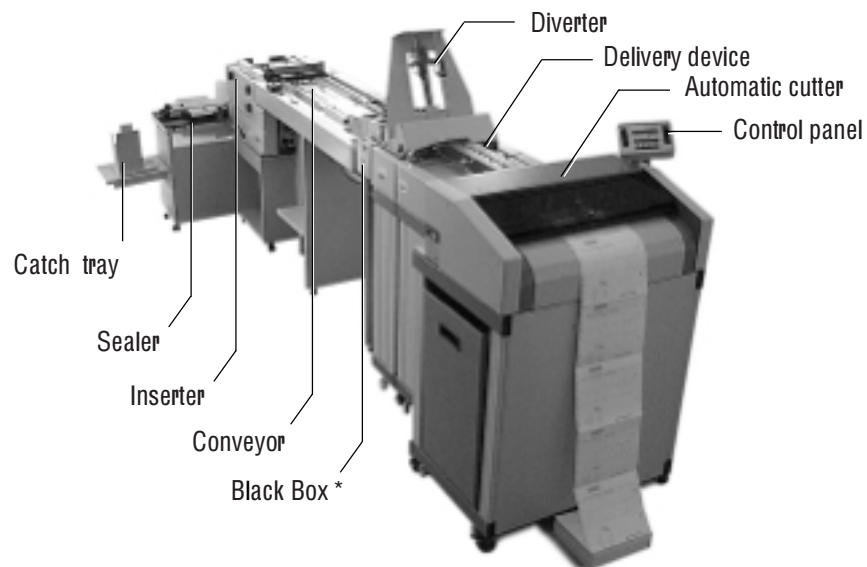
Caution! indicates a potential hazard that may result in damage to your inserting system or which may impair the processing of documents.



Tips marked in this way offer advice and suggestions on the efficient and troublefree use of the inserting system.

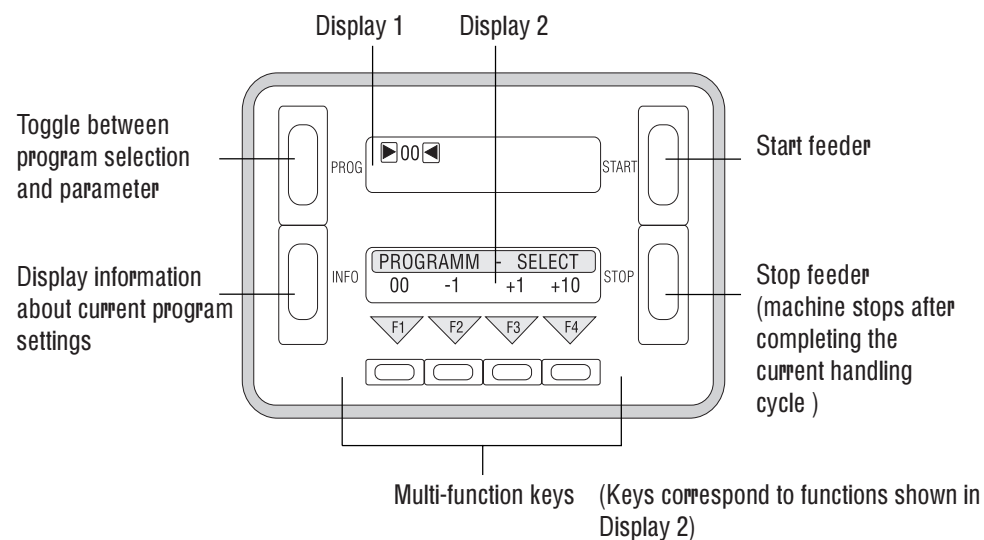
Inserting system KS 4000 OL / OLC

KS 4000 OL (with automatic cutter)

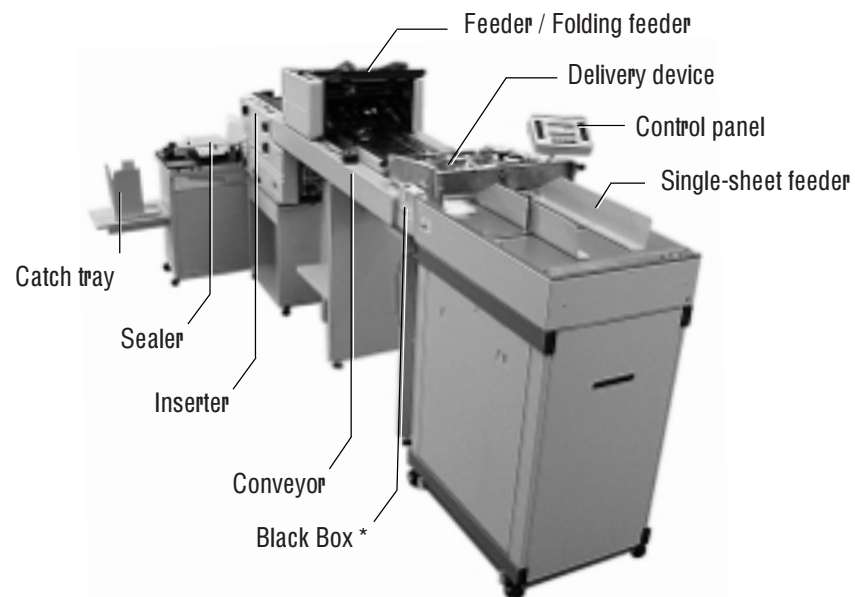


The control panel

Single-sheet feeder / automatic cutter

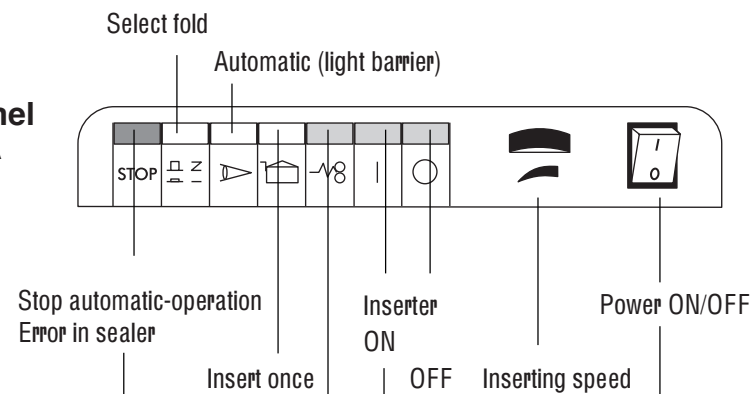


KS 4000 OL (with single-sheet feeder)



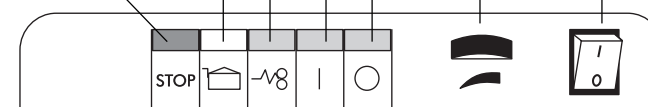
Control panel

Inserter type A



Control panel

Inserter type VA



* location may vary depending on configuration



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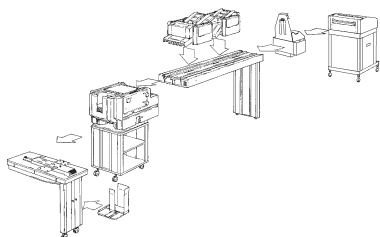


1 Safety information

The Inserting System KS 4000 OL/OLC is constructed to comply with all standard safety regulations for office equipment of this type. The following safety information is important. To prevent injury or damage to the system this information should be familiar to all persons that may use the machine.

- The system may be installed and moved only by service technicians who have been trained and authorized by Francotyp-Postalia.
- The Inserting System KS 4000 OL/OLC may be used only by staff who have been instructed in the system's operation.
- Never remove or disable safety devices or guards.
- Make sure the mains supply conforms to power requirements shown on the machine's serial number plate.
- Never connect or disconnect cables between components while the machine is in operation.
- Never place hands on any moving parts and keep long hair, loose clothing or scarves and jewelry safely away from moving parts.
- Never reach hands into areas or spaces marked as danger zones.
- Use caution and care when closing the sequencer. Never reach between the roller mounting and the sequencer's upper part. Fingers may be crushed if the top slams closed.
- Make sure other people stay at a safe distance when remedying errors in the folding unit.
- Ensure that no liquids or objects enter the interior of any component. Disconnect all power cables if such an accident occurs and have the inserting system checked by your local servicing dealer before resuming operation.
- All repairs and maintenance work should be carried out only by service technicians who have been trained and authorized by Francotyp-Postalia. Work performed by unauthorized persons may void the warranty. FP will not be held liable for any resulting damages.

2 Useful information about the KS 4000 OL / OLC



The KS 4000 OL/OLC is a sophisticated mail processing system for finishing computer-generated mass mailings. The system can collect material, divert office duplicates, fold, insert and seal material in a finished envelope.

Each KS 4000 OL/OLC inserting system consists of modular components configured according to the customer's requirements, and can be easily expanded at any time.

Important performance characteristics are:

- Simple and sure operation using fully-electronic document controls. The inserting system signals errors and empty feeder stations.
- Program memory. All parameters that govern the system's operations (e.g. document length, transport speed, marks recognition routines) are stored in program memories.
- Feeds EDP-generated documents reliably and quickly from the single-sheet feeder (laser printed, stacked single sheets) or from the automatic cutter (continuous-feed paper).
- FP-folding flap principle. The folding-flap in the inserter makes it possible to fold and insert various kinds of material in a single handling cycle. Material that is stapled or paperclipped or has a rigid plastic card affixed can be processed safely and reliably.
- Seals envelopes and deposits finished letters in a catch tray or stacking tray.

Available options include:

- OMR* – Optical marks recognition (OMR). Code marks printed on each sheet being processed instruct the system to collect and check material addressed to a single address and / or to divert material that should not be mailed.
- Feeder/Folding feeder* – Feed unfolded or folded supplementary materials from a feeder/folding feeder placed on the conveyor.
- Crossfold unit* – Fold oversized or broadsheet material in the crossfold unit (lateral transport unit and folder) before inserting.

Three **common system configurations** are shown on the fold-out pages 3 and 124.

- KS 4000 OL with automatic cutter* – For processing online continuous-feed material (e.g. invoices, circulars, account statements)
- KS 4000 OL with single-sheet feeder* – For processing laser-printed single-sheet material
- KS 4000 OLC with automatic cutter and crossfold unit* – For processing oversized online continuous-feed material with a crossfold unit.



3 Inserting System KS 4000 OL with single-sheet feeder

3.1 Insert stacked material


3.1.1 Starting operation

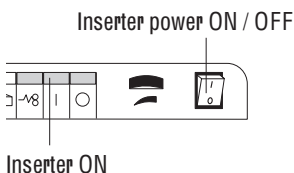


Detailed instructions on configuring the inserting system for a job can be found in Chapter 7 in descriptions of individual modules and in the “Instruction Manual Inserting System 4000”.



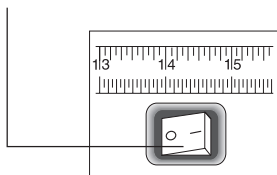
Caution! Make sure that no material from the previously run job remains in the machine.

- Set all paper guides according to the width of the material being handled (c. 2 mm gap on each side). Begin making settings at the inserter and then move upstream.
- Load envelopes.
- Switch inserter power to ON.
- Press  button on the inserter.



The inserter ON button lights up. The inserting system tests all interfaces.

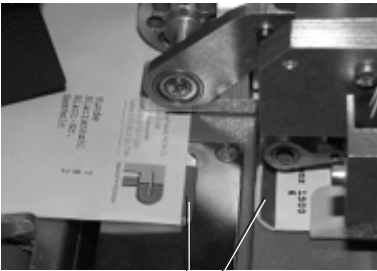
Single-sheet feeder power ON / OFF



- Switch single-sheet feeder power ON.

The red signal buttons on the individual modules will light up briefly. The conveyor will move to its starting position. The red signal button on the Black Box blinks.

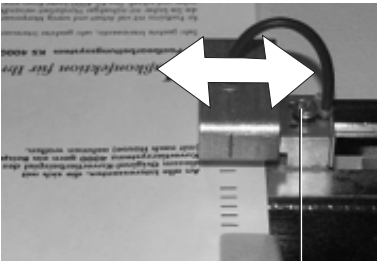
The upper display field (*Display 1*) on the operator panel shows the last program to have been run. The program number blinks.



Markings (red)

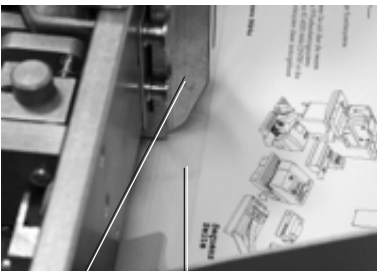
- Check settings of the single-sheet sheet separator sluice.

The single-sheet separator sluice is adjusted correctly when both red marks for automatic operation are visible.



Reading head tightening screw

- Adjust the optical marks reading head when using **marks recognition programs (OMR)**: The red mark on the reading head should be aligned to the center of the printed marks.



Pre-sluice (lowered)

Wedge-shaped leading edge of stack

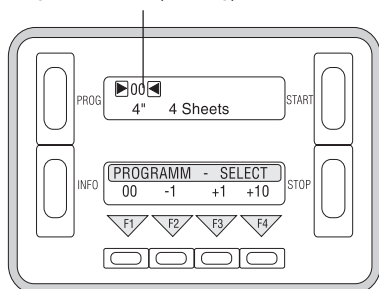
- Make sure the separator pre-sluice is lowered.
- Fan out a stack of sheets (c. 20 to 30 mm high) so that the leading edges form a wedge to the pre-sluice.

Thin paper = a smaller stack of sheets
Thick paper = a larger stack of sheets

- Push the leading edge of the wedge of sheets into the pre-sluice (see Chapter 7.1.4).



Program number (blinking)



- If you wish to change the program, use the $\nabla F1 - \nabla F4$ function keys to select the desired program number.

F1 – Set programm “00”.

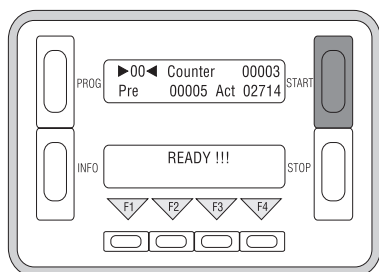
F2 – To reduce by “1” the shown program number.

F3 – To increase by “1” the shown program number.

F4 – To increase by “10” the shown program number.



Please read the single-sheet feeder operator manual for instructions on changing a program or creating a program for a new job.



- Press the START button on the control panel.

The single-sheet feeder will draw (separate from stack) the first sheet. The lower display (*Display 2*) will show READY !!!



If more than one sheet is drawn by the separator, the display will show an error message. Please refer to Chapter 8.2 “Single-sheet feeder faults” for instructions on remedying errors.

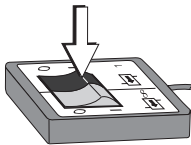
- Press the START button to start the job.

The first complete document set to be processed will be deposited on the conveyor. The signal button on the Black Box will turn off.

- Check to make sure the first set of documents is complete and correct.

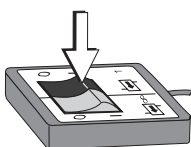
If the document set on the conveyor is complete, you can start automatic operation. How you do this depends on the inserter model used in the system.

Systems with type VA inserter

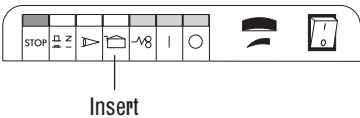



- Press the black button on the hand-held conveyor control repeatedly until the first set enters the inserter and automatic operation begins.

Systems with type A inserter




- Press the black button on the hand-held conveyor control repeatedly until the first set has arrived in the inserter. The single-sheet feeder will automatically start processing the following sets.





- Press the  button on the inserter machine. The first document set will be folded and inserted into an envelope. The following set enters the inserter and the system stops.




Start automatic operation only after making sure that each handling step is performed correctly. You can use the  button to start a **single** insertion cycle.

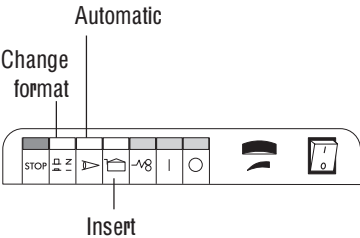
Starting automatic operation:

- Press the  button – button lights up.
- If necessary: Switch material format to match material.

A4, 2/3 A4 =  is not pressed

1/3 A4 =  is pressed (lights up)

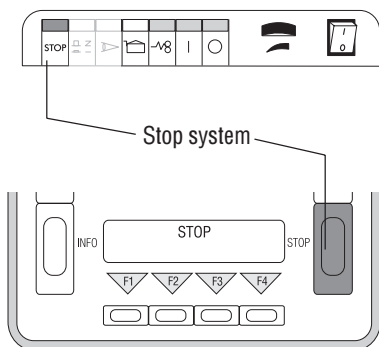
- Press  button – Button lights up and automatic operation begins.





3.1.2 Stop automatic operation

You can interrupt automatic operation at any time.



- Press the **STOP** button on the inserter

or

- Press the **STOP** button on the control panel of the single-sheet feeder.

Resuming automatic operation after interruption

To continue automatic operation press the stop-button that was used to stop operation.

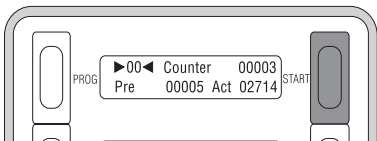
If the **STOP** button on the **inserter** has been pressed (the red button is lit up):

- Press the **STOP** button on the inserter.

If the **control panel STOP** has been pressed (the lower display shows STOP and SPEED PAUSE alternately):


- Press the **START** button on the control panel (single-sheet feeder).

NO PAPER ???



3.1.3 Reload paper

The system stops. An error message at the single-sheet feeder indicates that stacked supply of single sheets has been exhausted.

- Fan out a stack of material and load it into the single-sheet feeder.
- Press the  button on the control panel (single-sheet feeder).

The system will resume automatic operation.

3.1.4 Conclude job and shut system down


When the last sheet has been fed from the single-sheet feeder and the last complete document set is on the conveyor, the system stops.

- Check that the last set is complete and correct.
- Turn OFF the single-sheet feeder.

The inserting system will automatically finish all sets that remain along the material handling path and then stop.

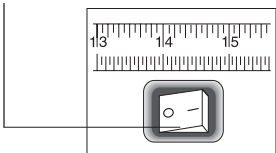
- Press the “last envelope” button on the sealer.

The sealer delivers the last sealed envelope.

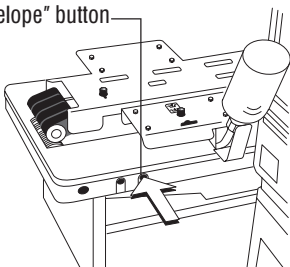
- Press the  button on the inserter.
- Turn OFF the power switch on the inserter machine.

The system is now completely shut down.

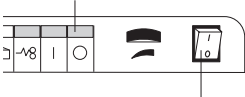
Single-sheet feeder power switch



“Last envelope” button



Inserter OFF button



Inserter power ON / OFF



3.2 Insert stacked material with supplement

3.2.1 Starting operation



Detailed instructions on configuring the inserting system for a job (loading paper, setting paper guides, adjusting reading head, etc.) can be found in Chapter 7 in descriptions of individual modules and in the “Instruction Manual Inserting System 4000”.



Caution! Make sure that no material from the previously run job remains in the machine.


- Set all paper guides according to the width of the material being handled (c. 2 mm gap on each side).

Begin making settings at the inserter and then move upstream.

Inserter power ON / OFF

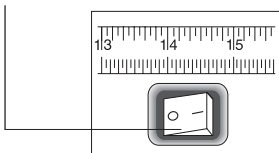


Inserter ON button

- Load envelopes.
- Switch inserter power to ON.
- Press  button on the inserter.

The inserter ON button lights up. The inserting system tests all interfaces.

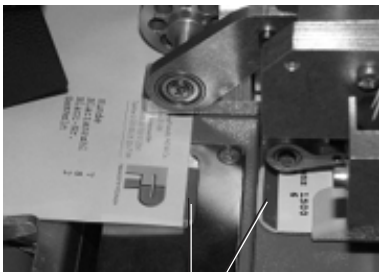
Single-sheet feeder power switch



- Switch single-sheet feeder power ON.

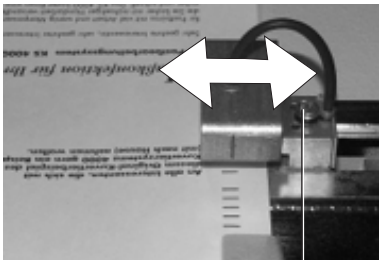
The red signal buttons on the individual modules will light up briefly. The conveyor will move to its starting position. The red signal button on the Black Box blinks.

The upper display field (*Display 1*) on the operator panel shows the last program to have been run. The program number blinks.



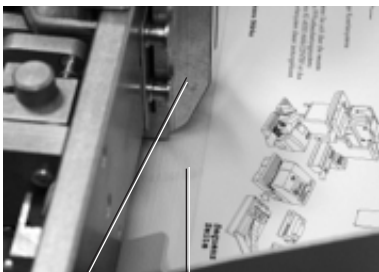
Marks (red)

- Check settings of the single-sheet separator.
- The single-sheet separator sluice is adjusted correctly when both red marks for automatic operation are visible.



Reading head tightening screw

- Adjust the optical reading head when using **marks recognition programs (OMR)**: The red mark on the reading head should be aligned to the center of the printed marks.



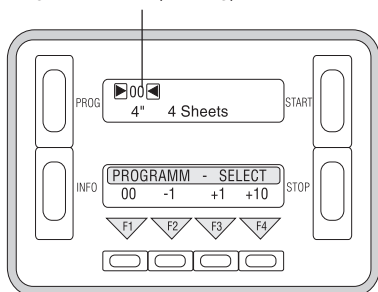
Pre-sluice
(lowered)

Wedge-shaped
leading edge of stack

- Make sure the separator pre-sluice is lowered.
- Fan out a stack of sheets (c. 20 to 30 mm high) so that the leading edges form a wedge to the separator.
Thin paper = a smaller stack of sheets
Thick paper = a larger stack of sheets
- Push the leading edge of the wedge of sheets into the pre-sluice (see Chapter 7.1.4).



Program number (blinking)



- If you wish to change the program, use the $\nabla F1$ – $\nabla F4$ function keys to select the desired program number.

F1 – Set program “00”.

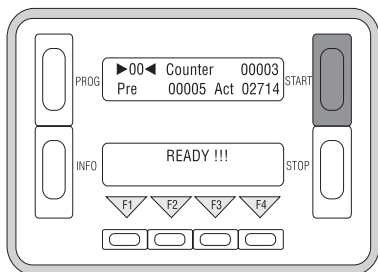
F2 – To reduce by “1” the shown program number.

F3 – To increase by “1” the shown program number.

F4 – To increase by “10” the shown program number.



Please read the “Operating Instructions Cut-Sheet-Feeder” for instructions on changing a program or creating a program for a new job.



- Press the **START** button on the control panel.

The single-sheet feeder will draw (separate) the first sheet. The lower display (*Display 2*) will show READY.

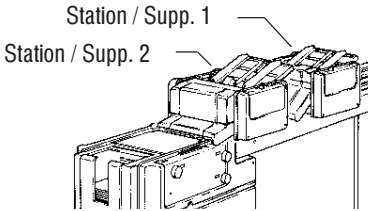


If more than one sheet is drawn by the separator, the display will show an error message. Please refer to Chapter 8.2 “Single-sheet feeder faults” for instruction on remedying errors.

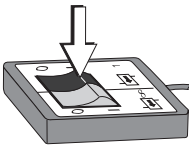
- Press the **START** button to start the job.

The first complete set to be processed will be deposited on the conveyor. The signal button on the Black Box will turn off.

- Check to make sure the first set of documents on the conveyor is complete and correct.



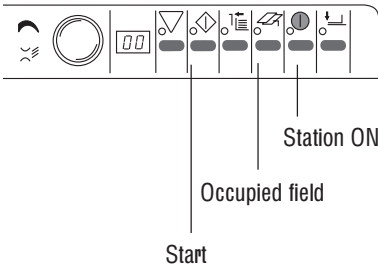
Example: Two supplements per set







Additional stations (feeder / folding feeder) may be present on the conveyor. These can add supplementary sheets to each set.

How you use any supplement station depends on how the system is configured and the job being processed.

- Use the black button on the hand-held conveyor control to move the set into position for receiving the supplement. If **adding supplements from more than one station** move the first set to the first active supplement feeder station.



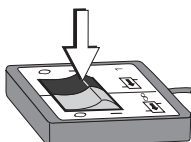
At the station (first supplement):

- Press  button.
- Set up station and load with supplement material.
- Press  button.
- Press  button. One supplement will be fed to determine reference value.
- If the station feeds the supplement correctly, press the  to confirm.

If additional supplements are to be fed:

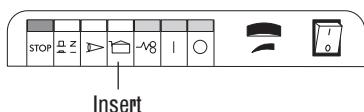
- Use the black button on the hand-held conveyor control to move the set into position for receiving the next supplement.
- Repeat the procedure described above for feeding a supplement to the set.


Systems with type VA inserter




- Press the black button on the hand-held conveyor control repeatedly until the first set enters the inserter and automatic operation begins.

Systems with type A inserter




- When the first document set is complete in the inserter machine, press the  button. The first set will be folded and inserted into an envelope. The system then stops.



Start automatic operation only after making sure that each handling step is performed correctly. You can use the  button to start a **single** insertion cycle.

Starting automatic operation:

- Press the  button – button will light up.
- If necessary: Switch material format to match material.

A4, 2/3 A4 = $\begin{pmatrix} \square & Z \\ \square & - \end{pmatrix}$ is not pressed

1/3 A4 =  is pressed (lights up)


- Press  button – button lights up and automatic operation begins.

Diagram of a control panel with buttons labeled STOP, F, A, V, 1/8, I, and O. Labels "Automatic" and "Change format" point to the top of the panel, and "Insert" points to the V button.

Regulate speed



If supplements are drawn into the inserter with too much force and slam into the chute, use the speed setting wheel to reduce speed so that supplements are gently delivered to the inserter.

3.2.2 Stop automatic operation

There are several different ways to stop automatic operation.

Inserter • Press the  button on the inserter.

or


Feeder/Folding feeder • Press the  button on the supplement feeder station

or

Single-sheet feeder • Press the  button on the control panel of the single-sheet feeder.

Resuming automatic operation after interruption

To continue automatic operation press the stop-button that was used to stop operation.

If the  button on the **inserter** has been pressed (the red button is lit up):

- Press the  button on the inserter again.



If the **Station STOP** was pressed
(▽ indicator lamp is ON):

- Press  button on the station.

If the **control panel STOP** has been pressed
(the lower display shows STOP and SPEED
PAUSE alternately):


- Press the  button on the control panel
(of the single-sheet feeder).

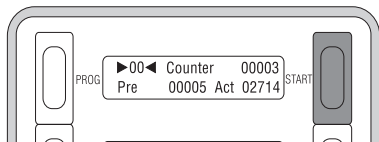
3.2.3 Replenish paper supply

Single-sheet feeder empty

NO PAPER ???

The system stops. An error message at the
single-sheet feeder indicates that the stacked
supply of single sheets has been exhausted.


- Prepare a stack of material and load it into
the single-sheet feeder.
- Press the  button on the control
panel.

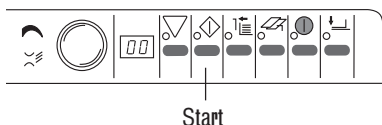


Station empty



The system stops. The feeder / folding feeder
display shows Error “11” when the station is
empty.

- Reload supplement material into station.
- Press the  button of the station
(feeder / folding feeder).



The system will resume automatic operation.

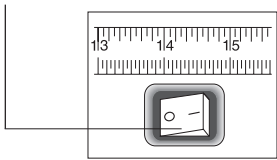
3.2.4 Conclude job and shut system down

When the last sheet has been fed from the single-sheet feeder and the last complete set is on the conveyor, the system stops.

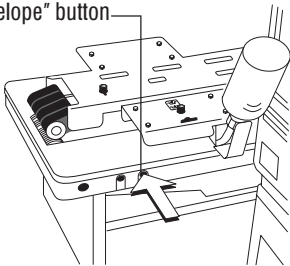
- Check that the last set is complete and correct.
- Turn OFF the single-sheet feeder.

The inserting system will automatically finish all sets that remain along the material handling path and then stop.

Single-sheet feeder power switch

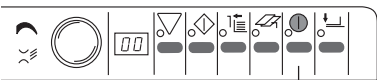


"Last envelope" button




- Press the "last envelope" button on the sealer.

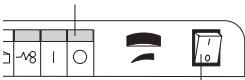
The sealer delivers the last sealed envelope.




Station OFF

- Press the  button to turn OFF the feeder / folding feeder.

Inserter OFF button



Inserter power ON / OFF

- Press the  button on the inserter.
- Turn OFF the power switch on the inserter machine.

The system is now completely shut down.



4 Inserting System KS 4000 OL with automatic cutter

4.1 Cut and insert continuous-feed paper

4.1.1 Starting operation




Detailed instructions on configuring the inserting system for a job (setting up the cutter, adjusting the reading head, etc) can be found in Chapter 7 in descriptions of individual modules and in the “Instruction Manual Inserting System 4000”.

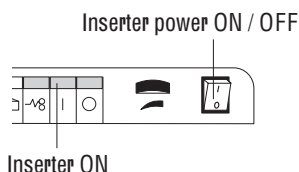


Caution! Make sure that no material from the previously run job remains in the machine.

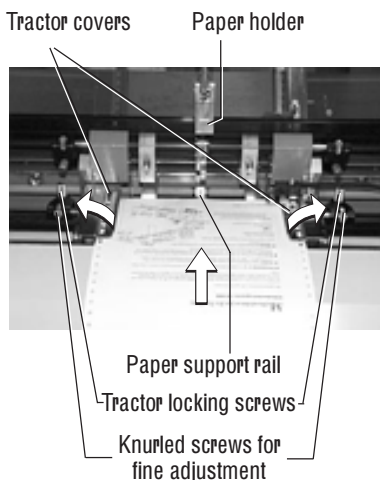
- Set all paper guides according to the width of the material being handled (c. 2 mm gap on each side).

Adjust paper guides in the inserter first and then continue “upstream” with adjustments.

- Load envelopes.
- Switch inserter power ON.
- Press  button on the inserter.



The inserter ON button lights up. The inserting system tests all interfaces.



Load continuous-feed material in the automatic cutter's tractor drive:

- Lift transparent hood on the automatic cutter.
- Open both tractor drive covers.
- Loosen both set screws.
- Load the continuous-feed material. Match the holes in the paper's side strips with the pins on the transport belt.
- Close tractor covers.
- Align paper to the middle of the machine. (Paper center line = Centered to paper center paper guide.)
- Tighten set screws to lock both tractors into position.
- If necessary, make fine adjustments with the knurled set screws.



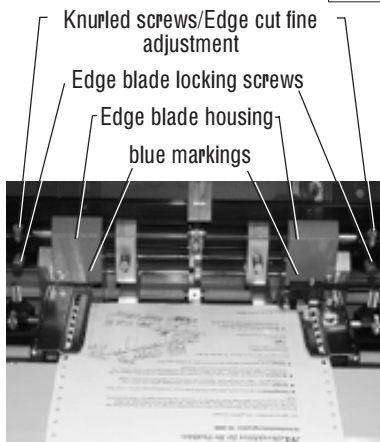
The paper should lay flat without being under tension or sagging in the middle.

Adjust edge blades:

- Loosen edge blade locks.
- Set edge blades left and right by sliding the trimmer housing to the desired position.

The blue marks on each edge blade housing show where the edge will be cut.

- Lock edge blades into the desired position by tightening the set screws.
- If necessary, make fine adjustments with the knurled set screws.
- Close transparent cover.



Caution! The paper holder may not cover the end-of-paper light barrier.



Power switch automatic cutter

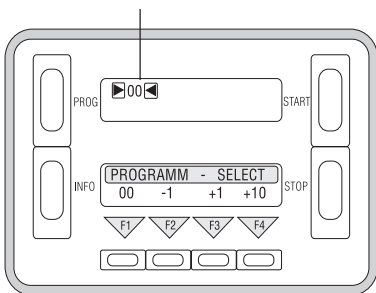


- Turn automatic cutter power switch ON.

The red signal buttons on the individual modules will light up briefly. The conveyor will move to its starting position. The red signal button on the Black Box blinks.

The upper display (*Display 1*) on the control panel shows the last program to have been run. The program number blinks.

Program number (blinking)



- If you wish to change the program, use the $\nabla F1$ – $\nabla F4$ function keys to select the desired program number.

F1 – Set program “00”.

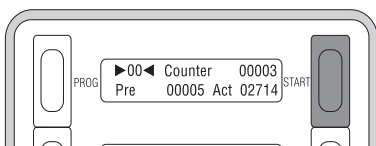
F2 – To reduce by “1” the shown program number.

F3 – To increase by “1” the shown program number.

F4 – To increase by “10” the shown program number.



Please read the “Instruction Manual Inserting System 4000” and the “Operating Instructions Automatic Forms Cutter” for instructions on changing a program or creating a program for a new job.



- Press the **START** button on the control panel.

The automatic cutter will position the continuous-feed paper for the first cut.

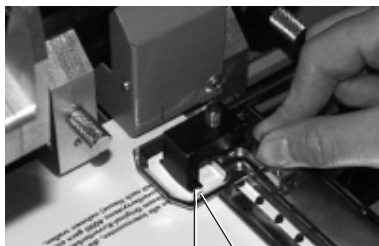
With OMR

ADJUST!

If a **program for optical marks reading** is selected, the lower display will show the message ADJUST! after the program has been started. Then:

- Adjust the reading head.

The reading head is positioned correctly when the adjustment line (the first printed optical mark) can be seen in the reading head's notch.



Notch 1st mark

Without OMR

READY!!!

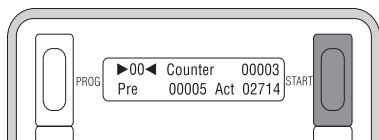
If **programs without optical marks reading** are to be run, the lower display will show the message READY !!! after the program has been selected.

- Press the **START** button to start the job.

The first sheet to be inserted will be cut and transported to the conveyor. The signal button on the Black Box turns off.

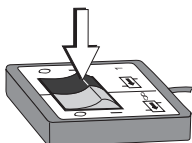
- Check to make sure the first document set on the conveyor is complete and correct.

If the document set on the conveyor is complete, you can start automatic operation. How you do this depends on the inserter model (type **A** or type **VA**) used in the system.



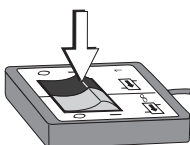


Systems using type VA inserter

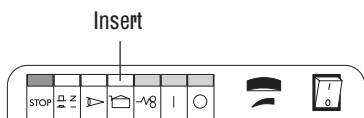



- Press the black button on the hand-held conveyor control repeatedly until the first set enters the inserter and automatic operation begins.

Systems using type A inserter




- Press the black button on the hand-held conveyor control repeatedly until the first set has arrived in the inserter. The automatic cutter will automatically deliver the following sets of material.

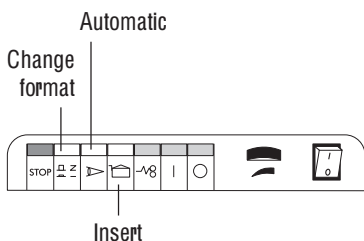






- Press the  button on the inserter machine. The first set will be folded and inserted. The following set enters the inserter and the system stops.



Start automatic operation only after making sure that the entire process is performed correctly. You can use the  button to start a **single** insertion cycle.

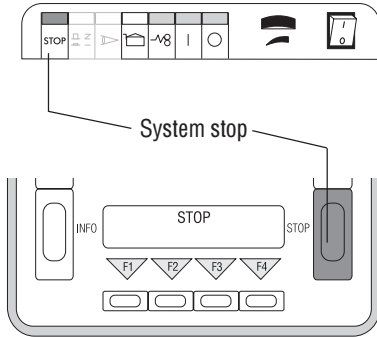
Start automatic operation:




- Press the  button – the button will light up.
- If necessary: Switch material format to match material.
 A4, 2/3 A4 =  is not pressed
 1/3 A4 =  is pressed (lights up)
- Press  button – button lights up and automatic operation begins.


4.1.2 Stop automatic operation

You can interrupt automatic operation at any time.




- Press the  button on the inserter.


or

- Press the  button on the control panel of the automatic forms cutter.


Resuming automatic operation after interruption

To continue automatic operation press the stop-button that was used to stop operation.

If the  button on the **inserter** has been pressed (the red button is lit up):

- Press the  button on the inserter.

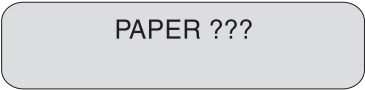
If the **control panel STOP** has been pressed (the lower display shows STOP and SPEED PAUSE alternately):

- Press the  button on the control panel (automatic cutter).

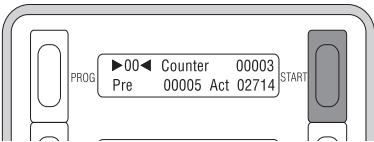


4.1.3 Conclude job and shut system down

When the automatic cutter reaches the end of the continuous-feed paper, the lower display in the cutter control panel will show the message PAPER ??? and the system will stop.



To replenish with paper and continue the job, please refer to Chapter 4.3.



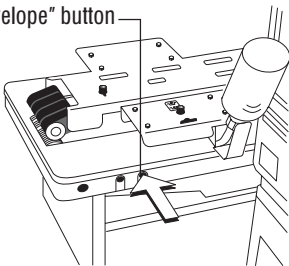
- Press the **START** button on the cutter's control panel. The last cut sheet will be delivered to the conveyor.
- Check that the last document set is complete and correct (corrections can be made manually, if necessary).
- Turn OFF the automatic cutter.

Power switch automatic cutter



The inserting system will automatically finish all sets that remain along the material handling path and then stop.

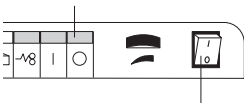
"Last envelope" button



- Press the "Last envelope" button on the sealer.

The sealer delivers the last sealed envelope.

Inserter OFF



Inserter power ON / OFF

- Press the **OFF** button on the inserter.
- Turn OFF the power switch on the inserter.

The system is now completely shut down.

4.2 Process continuous-feed paper and add supplement

4.2.1 Starting operation



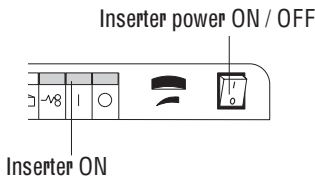
Detailed instructions on configuring the inserting system for a job (loading paper, setting paper guides, adjusting reading head, etc.) can be found in Chapter 7 in descriptions of individual modules and in the “Instruction Manual Inserting System 4000”.




Caution! Make sure that no material from the previously run job remains in the machine.

- Set all paper guides according to the width of the material being handled (c. 2 mm gap on each side).

Begin making settings at the inserter and then move upstream.

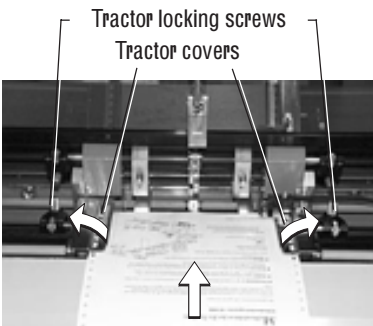


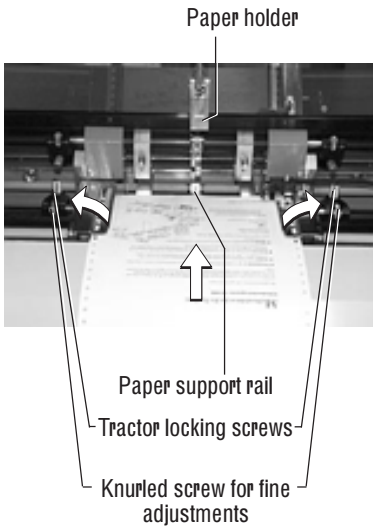
- Load envelopes.
- Switch inserter power to ON.
- Press  button on the inserter.

The inserter ON button lights up. The inserting system tests all interfaces.

Load continuous-feed material in the automatic cutter's tractor drive:

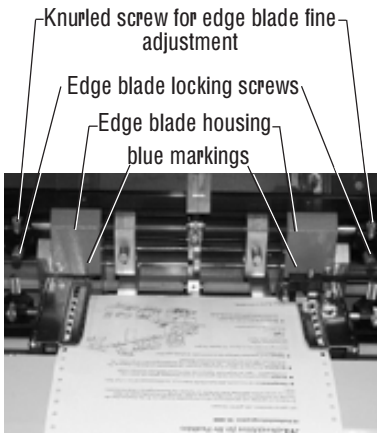
- Lift transparent hood on the automatic cutter.
- Open both tractor drive covers.
- Loosen both set screws.
- Load the continuous-feed material. Match the holes in the paper's side strips with the pins on the transport belt.
- Close tractor covers.





- Align paper to the middle the of the machine.
Paper center line = Centered to paper center paper guide.
- Tighten set screws to lock both tractors into position.
- If necessary, make fine adjustments with the knurled set screws.

The paper should lay flat without being under tension or sagging in the middle.



Adjust edge blades:

- Loosen edge blade locks.
- Set edge blades left and right by sliding the trimmer housing to the desired position.

The blue marks on each edge blade housing show where the edge will be cut.

- Lock edge blades into the desired position by tightening the set screws.
- If necessary, make fine adjustments with the knurled set screws.
- Close transparent cover.



Caution! The paper holder may not cover the end-of-paper light barrier.

Power switch automatic cutter

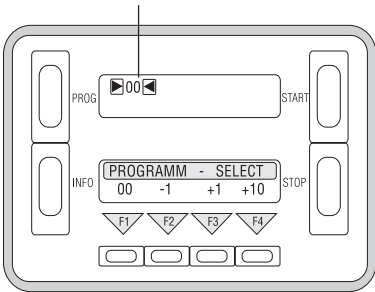


- Turn automatic cutter power switch ON.

The red signal buttons on the individual modules will light up briefly. The conveyor will move to its starting position. The red signal button on the Black Box blinks.

The upper display (*Display 1*) on the control panel shows the last program to have been run. The program number blinks.

Program number (blinking)

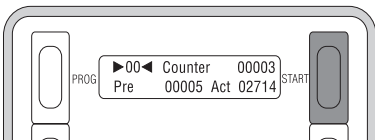


- If you wish to change the program, use the $\nabla F1$ – $\nabla F4$ function keys to select the desired program number.

- F1 – Set program “00” .
- F2 – To reduce by “1” the shown program number.
- F3 – To increase by “1” the shown program number.
- F4 – To increase by “10” the shown program number.



Please read the “Instruction Manual Inserting System 4000” and the “Operating Instructions Automatic Forms Cutter” for instructions on changing a program or creating a program for a new job.



- Press the **START** button on the control panel.

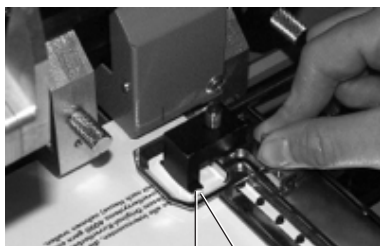
The automatic cutter will position the continuous-feed paper for the first cut.

With OMR

ADJUST!

If a **program for optical marks reading** is selected, the lower display will show the message ADJUST! after the program has been started. Then:

- Adjust the reading head.



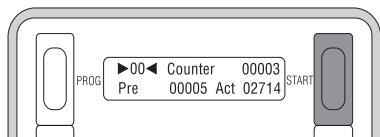
Notch 1st mark

Without OMR

READY!!!

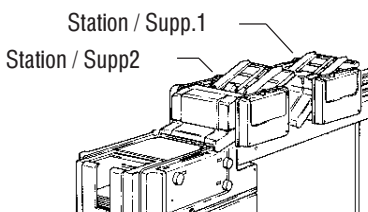
The reading head is positioned correctly when the adjustment line (the first printed optical mark) can be seen in the reading head's notch.

If **programs without optical marks** reading are to be run, the lower display will show the message **READY!!!** after the program has been selected.



- Press the **START** button to start the job.

The first sheet to be inserted will be cut and transported to the conveyor. The signal button on the Black Box turns off.

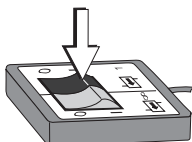


Example: Two supplements per set

- Check to make sure the first document set on the conveyor is complete and correct.

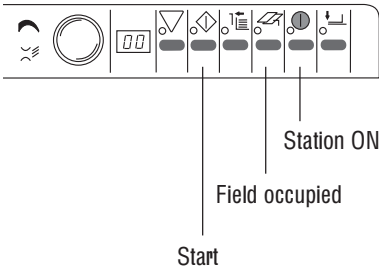
Additional stations (feeder / folding feeder) may be present on the conveyor. These can add supplementary sheets to each set.

How you use any supplement station depends on how the system is configured and the job being processed.







- Use the black button on the hand-held conveyor control to move the set into position for receiving the supplement. If **adding supplements from more than one station** move the first set to the first active supplement feeder station.

Subsequent (following) sets will automatically be fed from the automatic cutter.



At the station (first supplement):

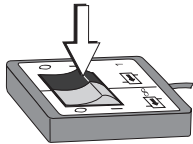
- Press  button.
- Set up station and load with supplement material.
- Press  button.
- Press  button. One supplement will be fed to determine reference value.
- If the station feeds the supplement correctly, press the  to confirm.

If additional supplements are to be fed:

- Use the black button on the hand-held conveyor control to move the set into position for receiving the next supplement.
- Repeat the procedure described above for feeding a supplement to the set.

When the first set is complete on the conveyor and includes all supplements, you can start automatic operation. How you do this depends on the inserter model used in the system (type **A** oder type **VA** inserter).

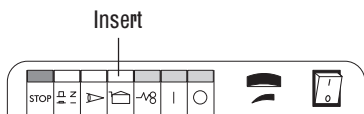
Systems with type VA inserters



- Press the black button on the hand-held conveyor control repeatedly until the first set enters the inserter and automatic operation begins.



Systems with type A inserters

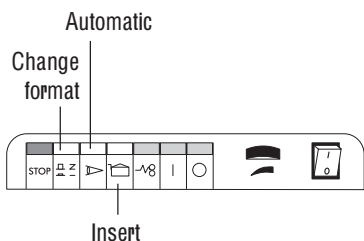


- When the first document set is complete in the inserter machine, press the button. The first set will be folded and inserted into an envelope. The system then stops.



Start automatic operation only after making sure that each handling step is performed correctly. You can use the button to start a **single** insertion cycle.

Starting automatic operation:



- Press the button – button will light up.
- If necessary: Switch material format to match material.

A4, 2/3 A4 = is not pressed

1/3 A4 = is pressed (lights up)

- Press button – button lights up and automatic operation begins.

Speed regulation



If supplements are drawn into the inserter with too much force and slam into the chute, use the speed setting wheel to reduce speed so that supplements are gently delivered to the inserter.

4.2.2 Stop automatic operation

There are several different ways to stop automatic operation.

Inserter • Press the  button on the inserter.

or


Feeder/Folding feeder • Press the  button on the supplement feeder station.

or


Automatic cutter • Press the  button on the control panel of the automatic cutter.

Resuming automatic operation after interruption

To continue automatic operation press the stop-button that was used to stop operation.


If the  button on the **inserter** has been pressed (the button is lit up in red):

- Press the  button on the inserter again.

If the **station STOP** was pressed ( indicator lamp is ON):

- Press  button on the station.

If the **control panel STOP** has been pressed (the lower display shows STOP and SPEED PAUSE alternately):

- Press the  button on the control panel (of the automatic cutter).



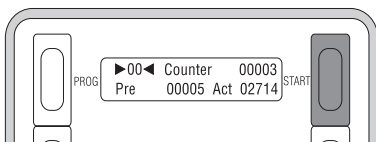
PAPER ???

4.2.3 Conclude job and shut system down

When the automatic cutter reaches the end of the continuous-feed paper, the lower display in the cutter control panel will show the message PAPER??? and the system will stop.



To replenish with paper and continue the job, please refer to Chapter 4.3.



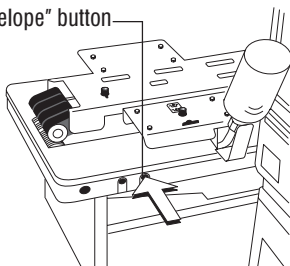
- Press the **START** button on the cutter's control panel. The last cut sheet will be delivered to the conveyor.
- Check that the last document set is complete and correct (corrections can be made manually, if necessary).
- Turn OFF the automatic cutter.

Power switch automatic cutter



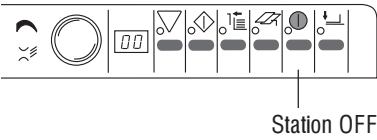
The inserting system will automatically finish all sets that remain along the material handling path and the stop.

"Last envelope" button

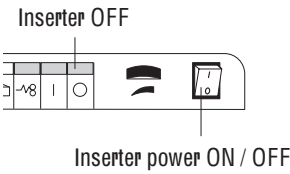



- Press the "Last envelope" button on the sealer.

The sealer delivers the last sealed envelope.



- Press the  button to turn OFF the feeder / folding feeder.

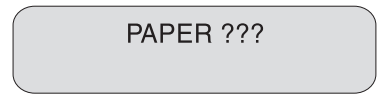


- Press the  button on the inserter.
- Turn OFF the power switch on the inserter machine.

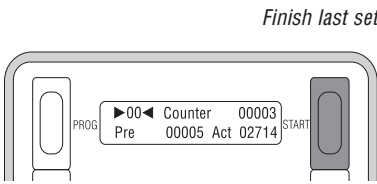
The system is now completely shut down.


4.3 Reload paper

4.3.1 Continuous-feed paper



The system stops. The message PAPER ??? appears in the lower display of the automatic cutter control panel. The last cut page remains in the cutter.

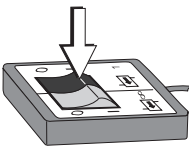


- Press the  button on the cutter control panel – the last page will be transported to the conveyor.

- Check that the last set is complete and correct.



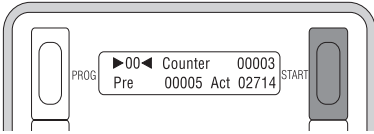
Caution! If the last document set is not complete, remove and finish it by hand to avoid inserting errors.



- Press the black button on the hand-held conveyor control repeatedly until the set reaches the inserter and is inserted into an envelope.



Resume operation

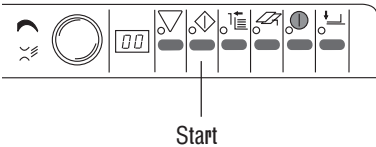


- Load new continuous-feed paper into the automatic cutter.
- Press the **START** button on the control panel.
- When running OMR programs, adjust the reading head if necessary.
- Press the **START** button to resume automatic operation.
- If necessary, press the black button on the hand-held conveyor control repeatedly until the system starts automatic operation.

4.3.2 Supplement



The system stops. The feeder / folding feeder display shows Error “11” when the station is empty.



- Reload supplement material into station.
- Press the **◇** button of the station (feeder / folding feeder).

The system will resume automatic operation.



5 Inserting system KS 4000 OLC with automatic cutter

5.1 Cut and insert continuous-feed paper

5.1.1 Starting operation




Detailed instructions on configuring the inserting system for a job (setting up the cutter, adjusting the reading head, etc) can be found in Chapter 7 in descriptions of individual modules and in the “Instruction Manual Inserting System 4000”.

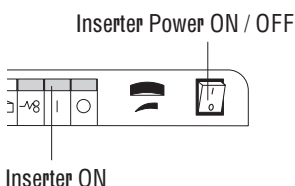


Caution! Make sure that no material from the previously run job remains in the machine.

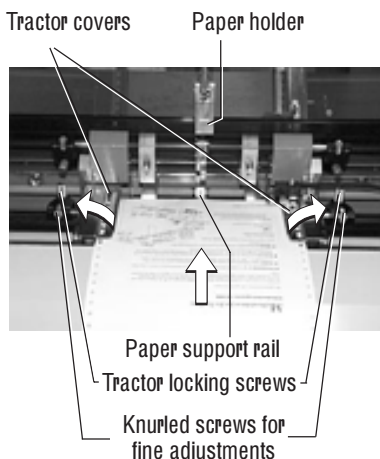
- Set all paper guides according to the width of the material being handled (c. 2 mm gap on each side).

Adjust paper guides in the inserter first and then continue “upstream” with adjustments.

- Load envelopes.
- Switch inserter power ON.
- Press  button on the inserter.



The inserter ON button lights up. The inserting system tests all interfaces.

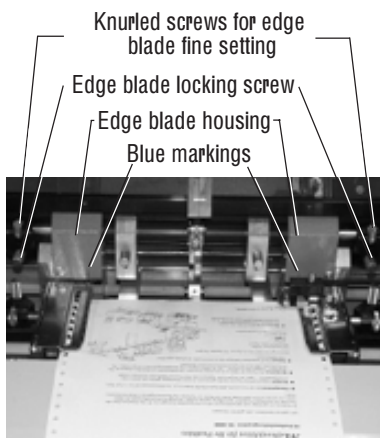


Load continuous-feed material in the automatic cutter's tractor drive:

- Lift transparent hood on the automatic cutter.
- Open both tractor drive covers.
- Loosen both set screws.
- Load the continuous-feed material. Match the holes in the paper's side strips with the pins on the transport belt.
- Close tractor covers.
- Align paper to the middle the of the machine. (Paper center line = Centered to paper center paper guide.)
- Tighten set screws to lock both tractors into position.
- If necessary, make fine adjustments with the knurled set screws.



The paper should lay flat without being under tension or sagging in the middle.



Adjust edge blades:

- Loosen edge blade locks.
- Set edge blades left and right by sliding the trimmer housing to the desired position.

The blue marks on each edge blade housing show where the edge will be cut.

- Lock edge blades into the desired position by tightening the set screws.
- If necessary, make fine adjustments with the knurled set screws.
- Close transparent cover.



Caution! The paper holder may not cover the end-of-paper light barrier.



Power switch automatic cutter

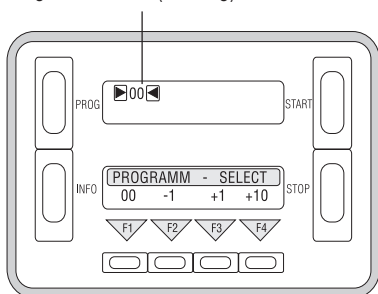


- Turn automatic cutter power switch ON.

The red signal buttons on the individual modules will light up briefly. The conveyor will move to its starting position. The red signal button on the Black Box blinks.

The upper display (*Display 1*) on the control panel shows the last program to have been run. The program number blinks.

Program number (blinking)



- If you wish to change the program, use the $\nabla F1$ – $\nabla F4$ function keys to select the desired program number.

F1 – Set program “0” .

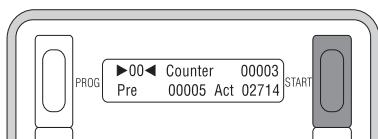
F2 – To reduce by “1” the shown program number.

F3 – To increase by “1” the shown program number.

F4 – To increase by “10” the shown program number.



Please read the “Instruction Manual Inserting System 4000” and the “Operating Instructions Automatic Forms Cutter” for instructions on changing a program or creating a program for a new job.



- Press the **START** button on the control panel.

The automatic cutter will position the continuous-feed paper for the first cut.

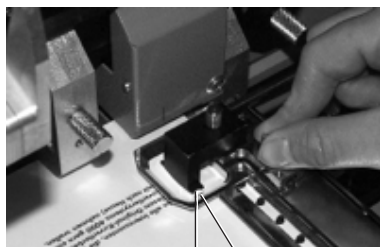
With OMR

ADJUST!

If a **program for optical marks reading** is selected, the lower display will show the message ADJUST! after the program has been started. Then:

- Adjust the reading head.

The reading head is positioned correctly when the adjustment line (the first printed optical mark) can be seen in the reading head's notch.

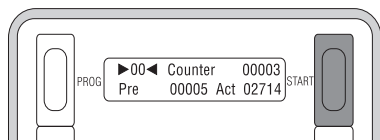


Notch 1st mark

Without OMR

READY!!!

If **programs without optical marks reading** are to be run, the lower display will show the message READY !!! after the program has been selected.



- Press the **START** button to start the job.

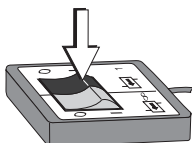
The cutter delivers the first set of documents to the lateral conveyor (or sequencer), which moves the material through the folding device and onto the conveyor. Following sets are automatically delivered by the cutter. The signal button on the Black Box turns off.

- Check to make sure the first set on the conveyor is complete and correct.

If the set on the conveyor is complete, you can start automatic operation. How you do this depends on the inserter model (type **A** or type **VA**) used in the system.

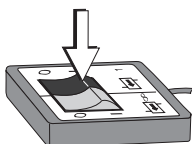


Systems with type VA inserter

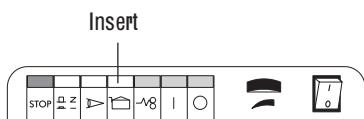



- Press the black button on the hand-held conveyor control repeatedly until the first set enters the inserter and automatic operation begins.

Systems with type A inserter




- Press the black button on the hand-held conveyor control repeatedly until the first set has arrived in the inserter. The automatic cutter will automatically deliver the following sets of material.

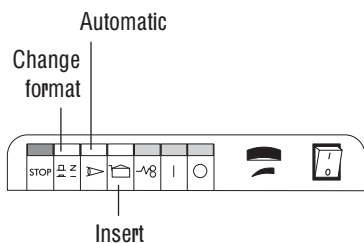



- Press the  button on the inserter machine.
The first document set will be folded and inserted. The following set enters the inserter and the system stops.






Start automatic operation only after making sure that the entire process is performed correctly. You can use the  button to start a **single** insertion cycle.

Start automatic operation:



- Press the  button – the button will light up.
- If necessary: Switch material format to match material.

A4, 2/3 A4 =  is not pressed
1/3 A4 =  is pressed (lights up)

- Press  button – button lights up and automatic operation begins.

5.1.2 Stop automatic operation

You can interrupt automatic operation at any time.

Inserter • Press the  button on the inserter.

or


Automatic cutter • Press the  button on the control panel of the automatic forms cutter.

or

Lateral conveyor/ sequencer • Press the red signal button on the lateral conveyor / sequencer. The signal button blinks.


Resuming automatic operation after interruption

To continue automatic operation press the stop-button that was used to stop operation.

If the  button on the **inserter** has been pressed (the button is lit up in red):

- Press the  button on the inserter.

If the **control panel STOP** has been pressed (the lower display shows STOP and SPEED PAUSE alternately):

- Press the  button on the control panel (automatic cutter).

If the **red signal button** on the lateral conveyor / sequencer has been pressed (the signal button blinks steadily):

- Press the signal button again. It will turn off.



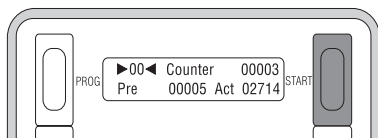
PAPER ???

5.1.3 Conclude job and shut system down

When the automatic cutter reaches the end of the continuous-feed paper, the lower display in the cutter control panel will show the message PAPER ??? and the system will stop.



To replenish with paper and continue the job, please refer to Chapter 4.3.



- Press the **START** button on the cutter's control panel. The last cut sheet will be delivered to the conveyor.
- Check that the last document set is complete and correct (corrections can be made manually, if necessary).



Caution! If the last set is incomplete, remove and finish it by hand to avoid inserting errors.

Last set complete?

- Wait until the lateral conveyor transport motors shut down.
- Then press the signal button on the lateral transport. The last sheet will be delivered to the conveyor.

or

Complete by hand the last set on the conveyor.

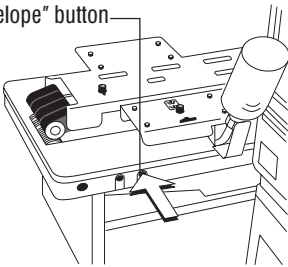
Power switch automatic cutter



- If the last set is complete on the conveyor, the automatic cutter can be switched OFF.

The inserting system will automatically finish all sets that remain along the material handling path and then stop.

"Last envelope" button




- Press the "last envelope" button on the sealer.

The sealer delivers the last sealed envelope.

Insertor OFF



Insertor Power ON / OFF

- Press the  button on the inserter.
- Turn OFF the power switch on the inserter.

The system is now completely shut down.

5.2 Process continuous-feed paper and add supplement

5.2.1 Starting operation



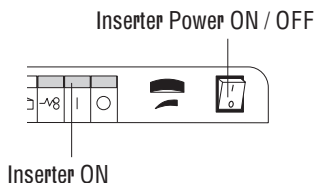
Detailed instructions on configuring the inserting system for a job (loading paper, setting paper guides, adjusting reading head, etc.) can be found in Chapter 7 in descriptions of individual modules and in the "Instruction Manual Inserting System 4000".




Caution! Make sure that no material from the previously run job remains in the machine.

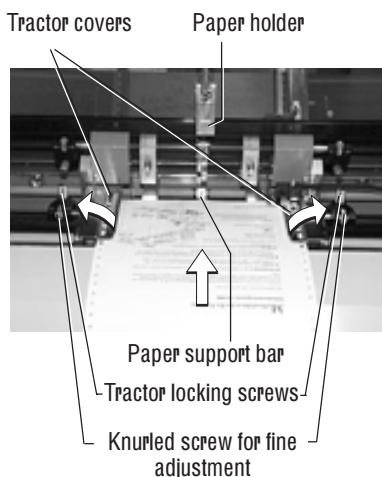
- Set all paper guides according to the width of the material being handled (c. 2 mm gap on each side).

Begin making settings at the inserter and then move upstream.



- Load envelopes.
- Switch inserter power to ON.
- Press  button on the inserter.

The inserter ON button lights up. The inserting system tests all interfaces.



Load continuous-feed material in the automatic cutter's tractor drive:

- Lift transparent hood on the automatic cutter.
- Open both tractor drive covers.
- Loosen both set screws.
- Load the continuous-feed material. Match the holes in the paper's side strips with the pins on the transport belt.
- Close tractor covers.

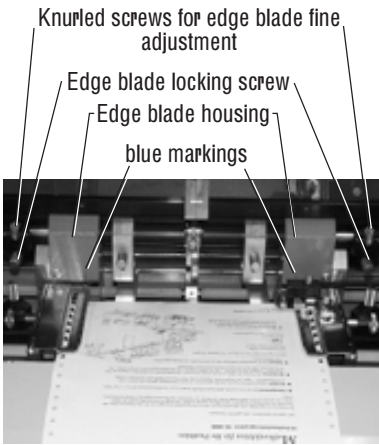
- Align paper to the middle the of the machine.

Paper center line = Centered to paper center paper guide.

- Tighten set screws to lock both tractors into position.
- If necessary, make fine adjustments with the knurled set screws.



The paper should lay flat without being under tension or sagging in the middle.



Adjust edge blades:

- Loosen edge blade locks.
- Set edge blades left and right by sliding the trimmer housing to the desired position.

The blue marks on each edge blade housing show where the edge will be cut.

- Lock edge blades into the desired position by tightening the set screws.
- If necessary, make fine adjustments with the knurled set screws.
- Close transparent cover.

Caution! The paper holder may not cover the end-of-paper light barrier.



Power switch automatic cutter



- Turn automatic cutter power switch ON.

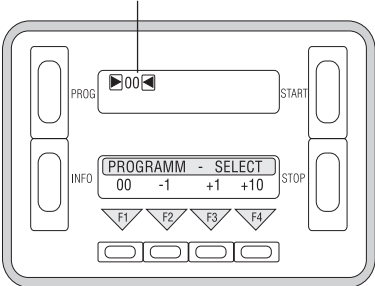
The red signal buttons on the individual modules will light up briefly. The conveyor will move to its starting position. The red signal button on the Black Box blinks.

The upper display (*Display 1*) on the control panel shows the last program to have been run. The program number blinks.

- If you wish to change the program, use the  –  function keys to select the desired program number.

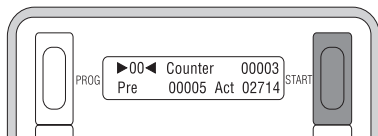
- F1 – Set program “00” .
- F2 – To reduce by “1” the shown program number.
- F3 – To increase by “1” the shown program number.
- F4 – To increase by “10” the shown program number.

Program number (blinking)





Please read the „Instruction Manual Inserting System 4000 “ and the „Operating Instructions Automatic Forms Cutter“ for instructions on changing a program or creating a program for a new job.

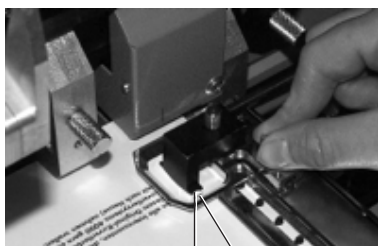


- Press the **START** button on the control panel.

The automatic cutter will position the continuous-feed paper for the first cut.

With OMR

ADJUST!



Notch 1st mark

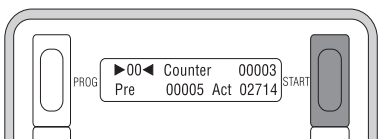
If a **program for optical marks reading** is selected, the lower display will show the message **ADJUST!** after the program has been started. Then:

- Adjust the reading head.

The reading head is positioned correctly when the adjustment line (the first printed optical mark) can be seen in the reading head's notch.

Without OMR

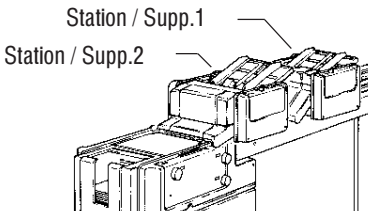
READY!!!



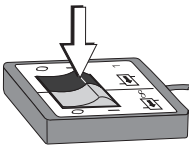
If **programs without optical marks reading** are to be run, the lower display will show the message **READY !!!** after the program has been selected.

- Press the **START** button to start the job.

The cutter delivers the first set of documents to the lateral conveyor (or sequencer), which moves the material through the folding device and onto the conveyor. Following sets are automatically delivered by the cutter. The signal button on the Black Box turns off.



Example: Two supplements per set



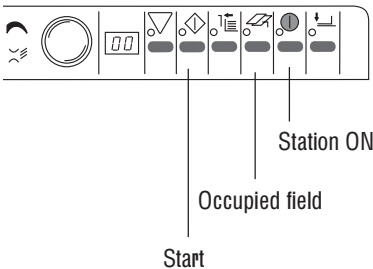
- Check to make sure the first set on the conveyor is complete and correct.





Additional stations (feeder / folding feeder) may be present on the conveyor. These can add supplementary sheets to each set.

How you use any supplement station depends on how the system is configured and the job being processed.

- Use the black button on the hand-held conveyor control to move the document set into position for receiving the supplement. If **adding supplements from more than one station** move the first set to the first active supplement feeder station.

At the station (first supplement):



- Press  button.
- Set up station and load with supplement material.
- Press  button.
- Press  button. One supplement will be fed to determine reference value.
- If the station feeds the supplement correctly, press the  to confirm.

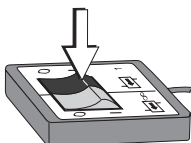
If additional supplements are to be fed:

- Use the black button on the hand-held conveyor control to move the set into position for receiving the next supplement.
- Repeat the procedure described above for starting the station and feeding a supplement to the set.



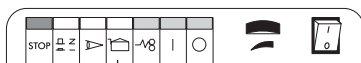
When the first set is complete on the conveyor and includes all supplements, you can start automatic operation. How you do this depends on the inserter model used in the system (type **A** oder type **VA** inserter).

Systems with type VA inserter



- Press the black button on the hand-held conveyor control repeatedly until the first set enters the inserter and automatic operation begins.

Systems with type A inserter



Insert

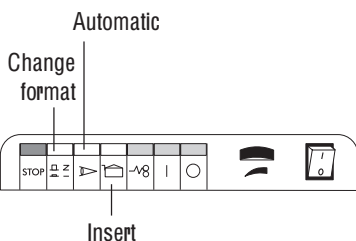


- When the first set is complete in the inserter machine, press the button. The first set will be folded and inserted into an envelope. The system then stops.

Start automatic operation only after making sure that each handling step is performed correctly. You can use the button to start a **single** insertion cycle.

Starting automatic operation:

- Press the button – button will light up.
- If necessary: Switch material format to match material.
 A4, 2/3 A4 = is not pressed
 1/3 A4 = is pressed (lights up)
- Press button – button lights up and automatic operation begins.



Regulate speed



If supplements are drawn into the inserter with too much force and slam into the chute, use the speed setting wheel to reduce speed so that supplements are gently delivered to the inserter.

5.2.2 Stop automatic operation

There are several different ways to stop automatic operation.

Inserter • Press the  button on the inserter.

or

Feeder/Folding feeder • Press the  button on the supplement feeder station.


or

Automatic cutter • Press the  button on the control panel of the automatic cutter.


or

Lateral conveyor/sequencer • Press the red signal button on the lateral conveyor / sequencer. The signal button will blink.

Resume automatic operation after STOP To **resume** automatic operation press the stop-button that was used to interrupt operation.

If the  button on the **inserter** has been pressed (the button is lit up in red):

• Press the  button on the inserter again.

If the **station STOP** was pressed ( indicator lamp is ON):

• Press  button on the station.

If the **control panel STOP** has been pressed (the lower display shows STOP and SPEED PAUSE alternately):

• Press the  button on the control panel (of the automatic cutter).

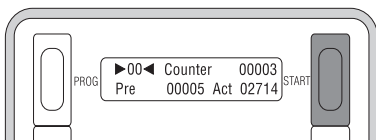
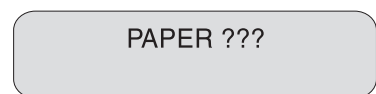


If the **red signal button** on the lateral conveyor / sequencer was pressed to stop the system (signal button blinks steadily):

- Again press the signal button. The signal button light will go out.

5.2.3 Conclude job and shut system down

When the automatic cutter reaches the end of the continuous-feed paper, the lower display in the cutter control panel will show the message PAPER ??? and the system will stop.



- Press the **START** button on the cutter's control panel. The last cut sheet will be delivered to the conveyor.
- Check that the last set of documents is complete and correct (corrections can be made manually, if necessary).



Caution! If the last set is incomplete, remove and finish it by hand to avoid inserting errors.

Manually complete the last set

- Wait until the lateral conveyor transport motors shut down.
- Then press the signal button on the lateral transport. The last sheet will be delivered to the conveyor.

or

Complete by hand the last set on the conveyor.

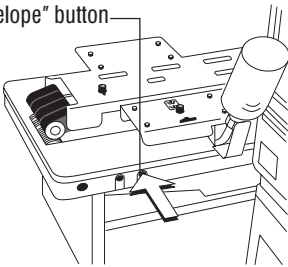
- If the last set is complete on the conveyor, the automatic cutter can be switched OFF.

Power switch automatic cutter



The inserting system will automatically finish all sets that remain along the material handling path and then stop.

"Last envelope" button



- Press the "last envelope" button on the sealer.

The sealer delivers the last sealed envelope.



Station OFF

- Press the  button on the inserter.

Inserter OFF



Inserter power ON / OFF

- Turn OFF the power switch on the inserter.

The system is now completely shut down.

5.3 Reload paper

If the inserting system runs of paper either at the automatic cutter or one of the supplement feeder stations, the system will stop and show an error message.

Detailed instruction on reloading paper and resuming a job that has been started can be found in chapter 4 "Inserting System KS 4000 OL with automatic cutter.

If the automatic cutter has run out paper, please:

- Consult Chapter 4.3.1.

If a feeder or folding feeder has run out of paper, please:

- Consult Chapter 4.3.2.



6 Inserting from Stations (feeder / folding feeder)




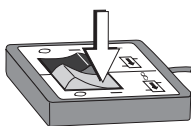
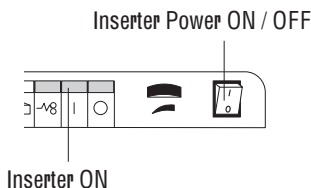
Detailed instructions on configuring the inserting system for a job can be found in Chapter 7 in descriptions of individual modules and in the “Instruction manual Inserting system 4000”.

6.1 Inserting from a single station

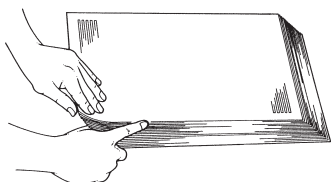
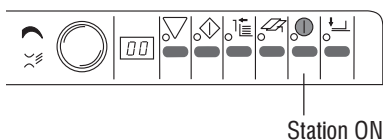



Caution! Make sure that no material from the previously run job remains in the machine.

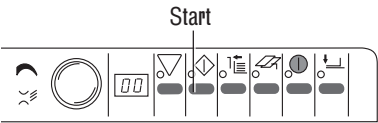
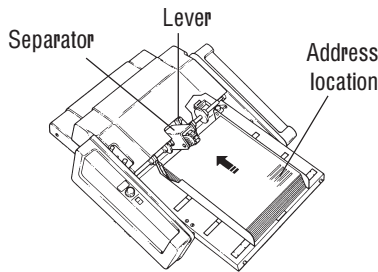
- Set up sealer and inserter.
- Load envelopes.
- Switch inserter power ON.
- Press  button on the inserter.



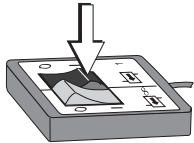
- Set the orange-coloured button on the hand-held conveyor control to I – the conveyor is now turned ON. The on-line extension of the inserting system is now deactivated.



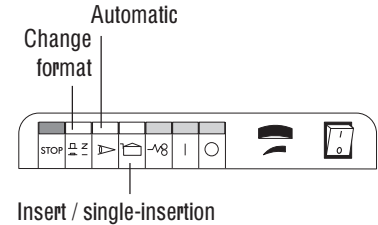
- Press the  button to turn ON the station.
- Set the station up for the job (letter width, fold locations, separators).
- Prior to loading, prepare a neat, fanned out stack of material (max. 500 sheets). The leading edge of the top page should lead the wedge, the stack's sides should be even and straight.



Systems with type VA inserter



Systems with type A inserter



- Swing the separator head upward until it snaps out of the way.
- Load the prepared fanned stack into the paper bin and move it close to the separating head.
- Lower the separating head by pressing the lever upward.
- Press button. One sheet (page) will be drawn from the stack to generate a reference value.
- Verify that only a single sheet was drawn.
- Press the button to confirm.
- Press the black button on the hand-held conveyor control repeatedly until the first set enters the inserter and automatic operation begins.

The first set has reached the inserter. Start automatic operation:

- Press the button – the button will light up.
- If necessary: Switch material format to match material.
A4, 2/3 A4 = is not pressed
1/3 A4 = is pressed (lights up)
- Press button – button lights up and automatic operation begins.

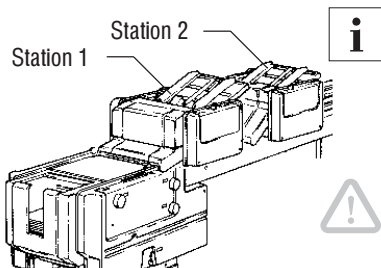


If supplements are drawn into the inserter with too much force and slam into the chute, use the speed setting wheel to reduce speed so that supplements are gently delivered to the inserter.

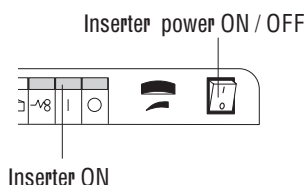



6.2 Inserting from multiple stations

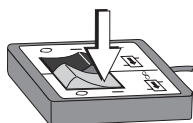
When processing material from two or more stations, the page that bears the receiver's address must always be loaded into Station 1.



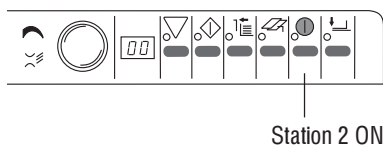
Caution! Make sure that no material from the previously run job remains in the machine.




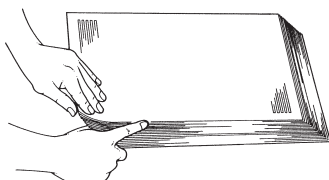
- Set up sealer and inserter.
- Load envelopes.
- Switch inserter power ON.
- Press  button on the inserter.



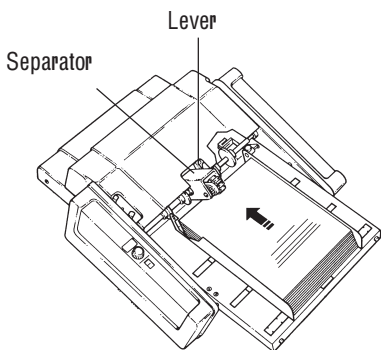
- Set the orange-coloured button on the hand-held conveyor control to **I** – the conveyor is now turned ON. The on-line extension of the inserting system is now deactivated.



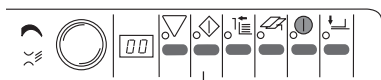
- Press the  button to turn ON **Station 2**.
- Set the station up for the job (letter width, fold locations, separators).





- Prior to loading, fan out a stack of material (max. 500 sheets). The leading edge of the top page should lead the wedge, the stack's sides should be even and straight.

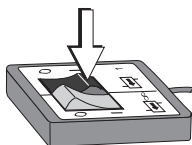


- Swing the separator head upward until it snaps out of the way.
- Load the fanned stack into the paper bin and move it close to the separating head.
- Lower the separating head by press the lever upward.

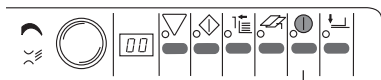


Start

- Press  button. One sheet (page) will be drawn from the stack to generate a reference value.
- Verify that only a single sheet was drawn.
- Press the  button to confirm.

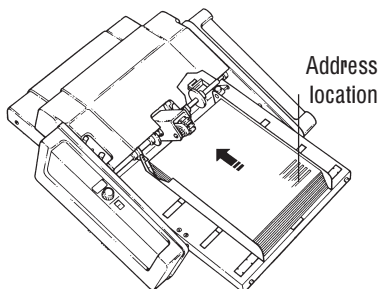


- Use the black button on the hand-held conveyor control to move the set along the conveyor to the position “feed from Station 1”.

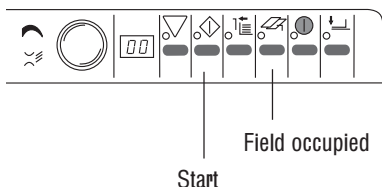


Station 1 ON

- Press the  button to turn ON **Station 1**.

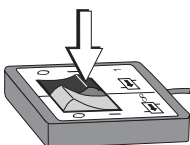


- Set up Station 1 load with material (with recipient's address).



- Press the button.
- Press the button. One sheet (page) will be drawn from the stack to generate a reference value.
- Verify that only a single sheet was drawn.
- Press the button to confirm.

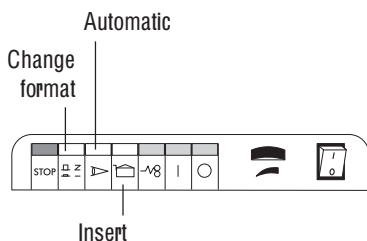
Systems with type VA inserter



- Again use the black button on the hand-held conveyor control to transport the set until it reaches the inserter and automatic operation begins.

Systems with type A inserter

The first set has reached the inserter. Start automatic operation:



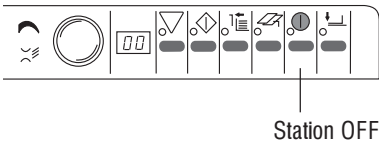
- Press the button – the button light will come on.
- If necessary: Switch material format to match material.
 A4, 2/3 A4 = is not pressed
 1/3 A4 = is pressed (lights up)
- Press button – button lights up and automatic operation begins.


Regulate speed

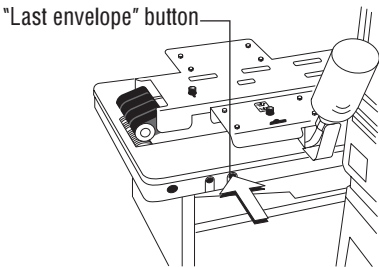


If supplements are drawn into the inserter with too much force and slam into the chute, use the speed setting wheel to reduce speed so that supplements are gently delivered to the inserter.

6.3 Conclude job and shut system down

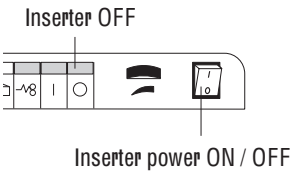



- Turn off the feeder / folding feeder station(s) by pressing the  button(s).
- Make sure the last set is complete and correct.



- When the last set has been inserted: Press the "last envelope" button on the sealer.

The sealer delivers the last sealed envelope.



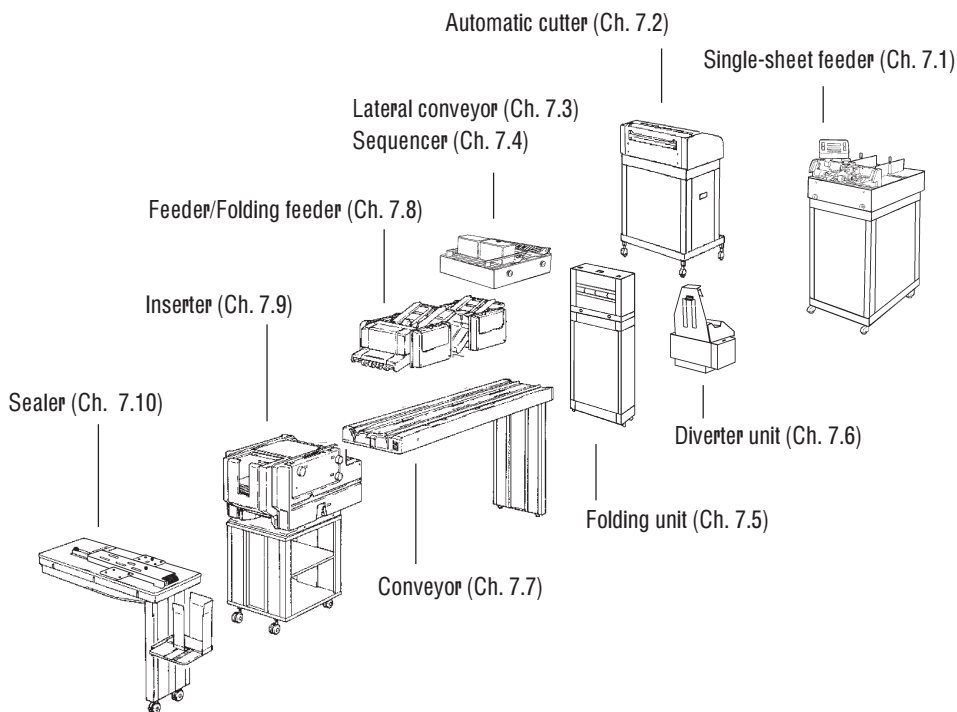
- Press the  button on the inserter.
- Turn OFF the power switch on the inserter.

The system is now completely shut down.

7 Inserting system KS 4000 OL / OLC modules

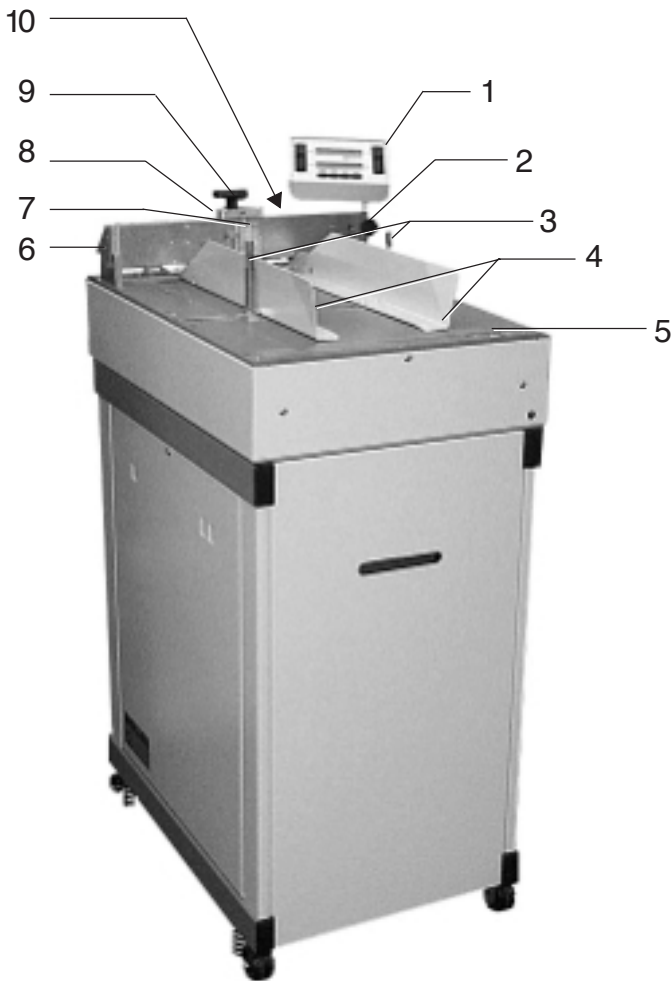
This chapter introduces each of the modules available for configuring specialized KS 4000 inserting systems. The operation and adjustment possibilities for each module will be briefly described.

More detailed information can be found in the “Instruction Manual Inserting System 4000”, “Operating Instructions Cut-Sheet-Feeder” and in the “Operating Instructions Automatic Forms Cutter”.



7.1 Single-sheet feeder

7.1.1 Operating and adjustment controls





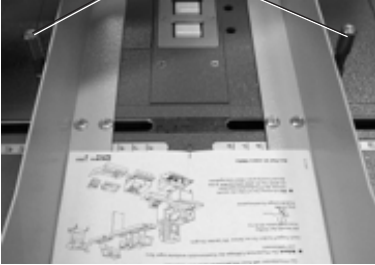
Operator controls	Function
1 Control panel	Controls inserting system (Please refer to page 4 for a description of buttons and their functions)
2 Open latch (sluice bridge)	Holds the sluice bridge in its open position
3 Locking pins (for paper guides)	Lock paper guides into place
4 Paper guides	Keep paper aligned to machine center
5 Power ON / OFF	Switches single-sheet feeder ON / OFF
6 Closed latch (sluice bridge)	Locks sluice bridge into its lowered, normal position
7 Pre-sluice	Makes sure only a single sheet of paper is drawn from the bottom of the stack of material and delivered to the inserting system
8 Sluice bridge with separator sluice	
9 Setting wheel	Adjusts pre-sluice
10 Reading head (behind the separator gate)	Optical marks reading device for use with optical marks reading programs

7.1.2 Adjust paper guides



Caution! The paper guides must always be aligned to the center to make sure paper is separated and transported flawlessly.

Paper guide locks



- Loosen paper guide locks so that the paper guides can easily be moved.
- Fold a sample sheet of paper lengthwise to find the centerline of the sheet.

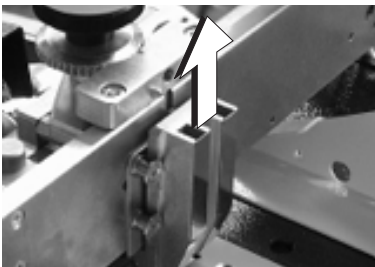


Center marking

Scale

- Lay the sample sheet into the paper tray so that the center line meets the center markings of the single-sheet feeder.
- Move the two paper guides one after the other up to the sample sheet so that a gap of about 2 mm remains between the guide and the sample sheet.
- Check the scale (ruler) to verify that the two paper guides are equidistant from the center line: The two scale readings should be the same.
- Tighten paper guide locking screws.

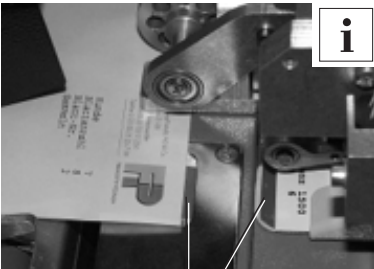
7.1.3 Adjust separator sluice



- Switch the inserting system ON to set up the single-sheet feeder (refer to Ch. 3.1.1).
- Pull the pre-sluice upward until it clicks into place securely.



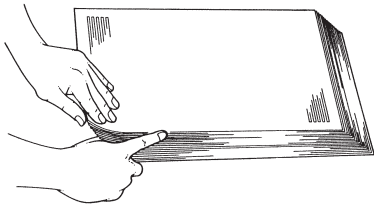
- Push a sample sheet between the two separator rollers in the separator sluice assembly.
- Turn the setting wheel in the + direction (sets sluice “wider”).
- Then turn the setting wheel in the other (-) direction until the separator drums start pulling on the sample sheet. The sample sheet should gently be tugged.



Marks (red)

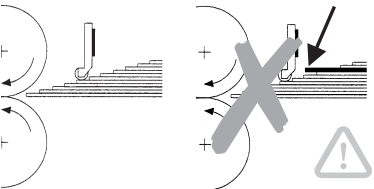
- Now turn the setting wheel two more “clicks” in the - direction. This is the correct separator setting.
- Lower the preliminary separator gate.

If the separator gate is set correctly, the two red markings should be visible during automatic operation.



Correct!

Wrong!



7.1.4 Load paper

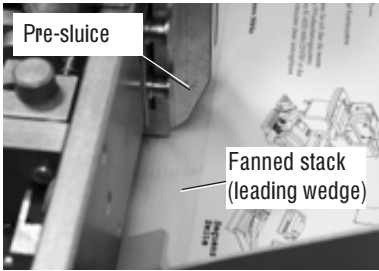
- A stack of paper (about 20 to 30 mm tall) should be neatly fanned with the leading side forming a wedge. The wedge should be even and the sides of the stack should be straight.

The height of the stack depends on the paper being processed. A rule of thumb:

Thin paper = a shorter stack
Thicker paper = a larger stack.

- Always be sure the paper in the stack is oriented correctly for insertion.

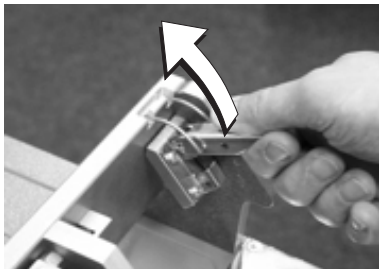
Caution! The stack’s wedge shape must be even and clean. Avoid sheets higher up in the stack being sloppily stacked. The result will be paper handling errors and system crashes.



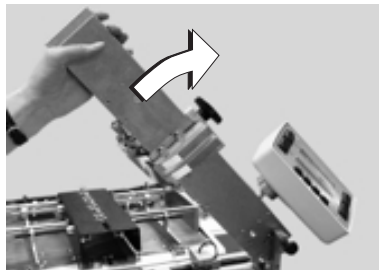
- Make sure the pre-sluice separator gate is lowered into its normal position.



- Lay the prepared stack of paper into the paper tray. Make sure the address location is correct.

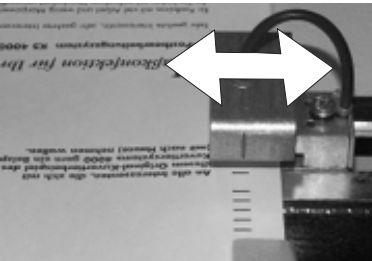


- Open clamps that hold the separator bridge assembly into position.

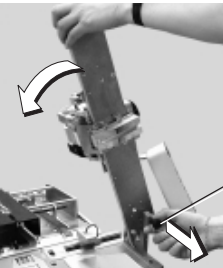




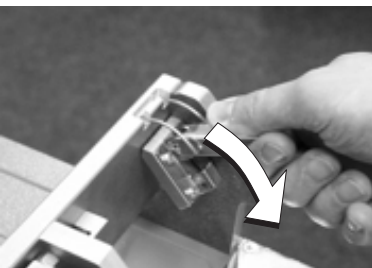
- Slide on page with optical marks under the reading head.
- Loosen the locking screw on the reading head. The reading head can be moved laterally.



- Slide the reading head so that the red markings on the reading head align with the middle of the optical marks on the sheet of paper.
- Now tighten the reading head down with the locking screws.



Catch



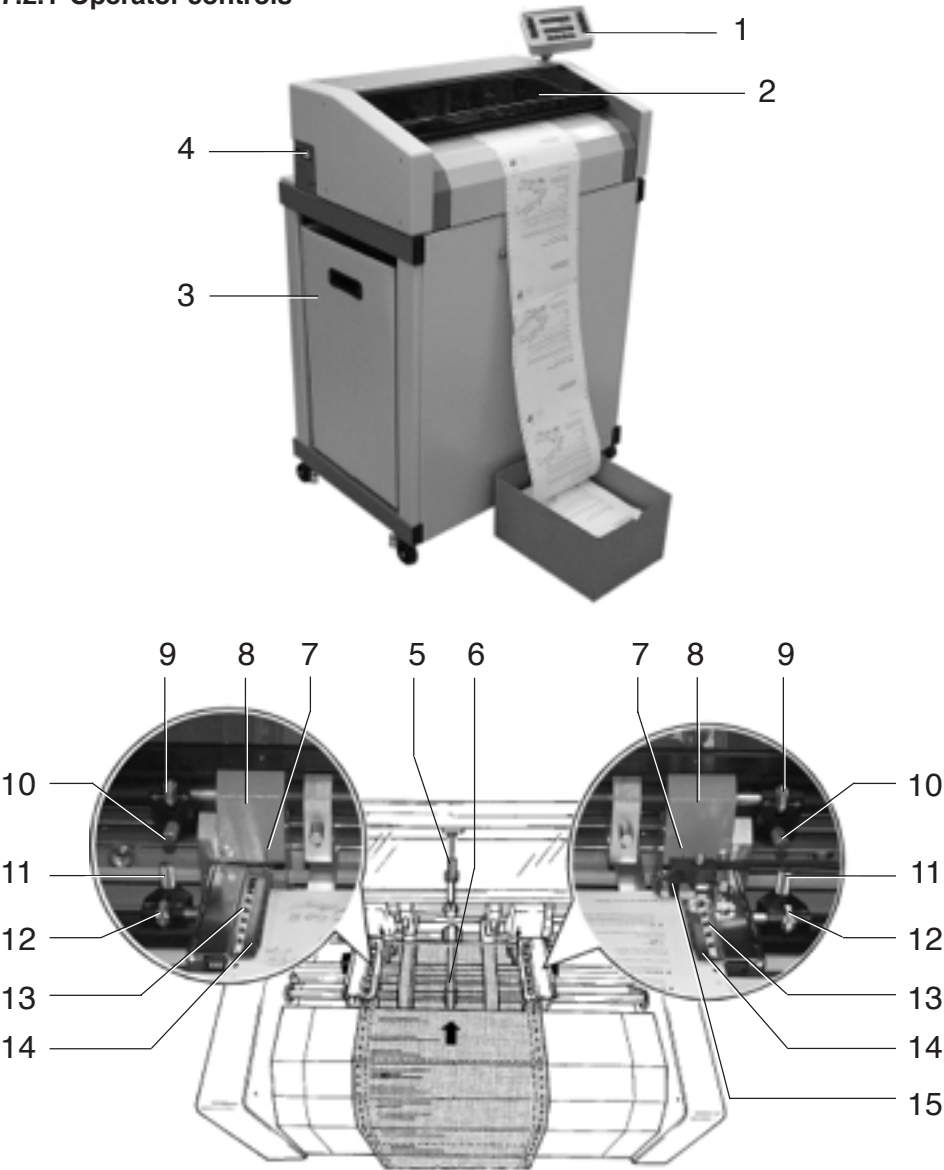
- Release the sluice bridge assembly and lower the bridge back into its normal working position.
- Clamp the bridge into position.



When **Reading from below**: Use a punch pliers to mark the location of the adjustment line and adjust the reading head as described above.

7.2 Automatic cutter

7.2.1 Operator controls



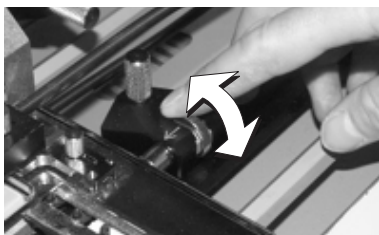
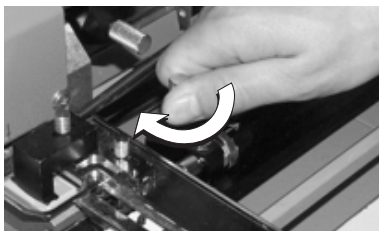
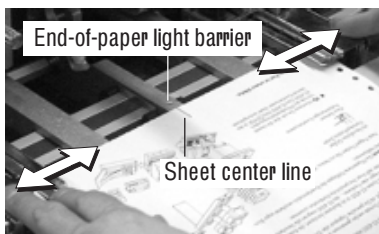


Operator controls	Function
1 Control panel	Controls inserting system (please refer to page 4 for a description of buttons and their functions)
2 Cover	Safety feature, covers paper transport and cutting areas
3 Waste paper container	Collects waste paper
4 Power ON / OFF	Turns automatic cutter ON / OFF
5 Paper holder	Precision paper guide
6 End-of-paper light barrier	Signals when paper supply is empty
7 Markings (blue)	Indicates edge blade cutting position
8 Edge blades and housing	Trims paper sides
9 Knurled screw for edge blade	Fine adjustments to edge blade position
10 Edge blade locking screw	Locks edge blade position
11 Transport tractor locking screw	Locks paper transport tractor into position
12 Knurled screw for transport tractor	Fine adjustments to paper transport tractor position
13 Tractor transport pins	Assures precise paper transport and guidance
14 Transport tractor cover	
15 Reading head	Optical marks recognition device for reading printed marks (OMR)

7.2.2 Load continuous-feed paper

- Open both transport tractor covers.
- Loosen locking screws on both transport tractors (turn counter-clockwise) so that the tractors can be moved laterally.
- Set transport tractors to paper width.
- Fold a piece of continuous-feed paper lengthwise down the middle to locate the sheet's center line.
- Load the piece of continuous-feed paper onto the tractors. Make sure guide-holes mesh correctly with the transport pins on the transport tractor belts.
- Close tractor covers.
- Move both tractors to correctly position the sheet of paper to the middle of the automatic cutter. The center is marked by the end-of-paper light barrier.
- Tighten both tractor locking screws. These lock the transport tractors into position and assure precise paper transport.
- If necessary, use the knurled screws to make fine adjustments to the tractor position.

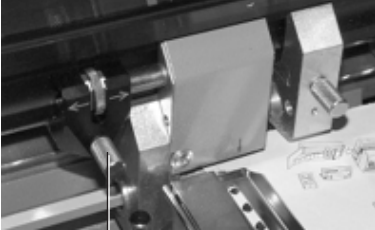
The continuous-feed paper should be held so that it is not under tension and does not sag in the middle.



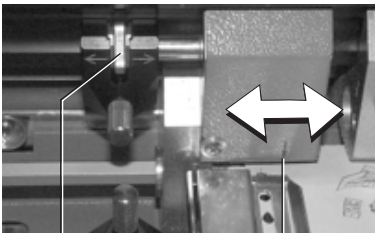


7.2.3 Adjust edge cut position

- Load paper as described in Chapter 7.2.2.
- Loosen the edge blade housing locking screws so that the blade housing can be moved laterally.



Locking screw



Knurled nut for fine adjustment

Mark showing cut location

- Slide the edge blade housing so that the blue mark is aligned to the desired cutting position.
- Tighten the blade housing locking screw. This locks the edge blade into position.
- If necessary, use the knurled screw to make fine adjustments to the edge blade cutting location.
- Repeat the adjustment with the second edge cutter.

7.2.4 Adjust reading head

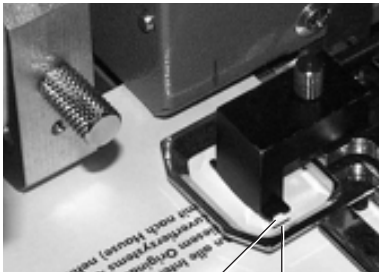
Optical marks recognition programs include a reading head adjustment step during the start-routine.

ADJUST!

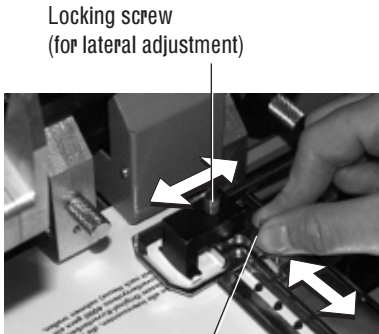
The automatic cutter positions the adjustment line to the reading head. The lower display will show the message ADJUST!

The adjustment line is the first printed mark that passes under the reading head during an optical marks recognition cycle.

This adjustment line must be exactly aligned with the notch in the reading head.



Notch Adjustment line



Locking screw
(for lateral adjustment)

Locking screw
(for up / down adjustment)

If necessary, adjust the reading head:

- Depending on the adjustment needed, loosen the lateral locking screw or the up / down locking screw on the reading head.
- Align the reading head to the adjustment line.
- Tighten locking screw(s).

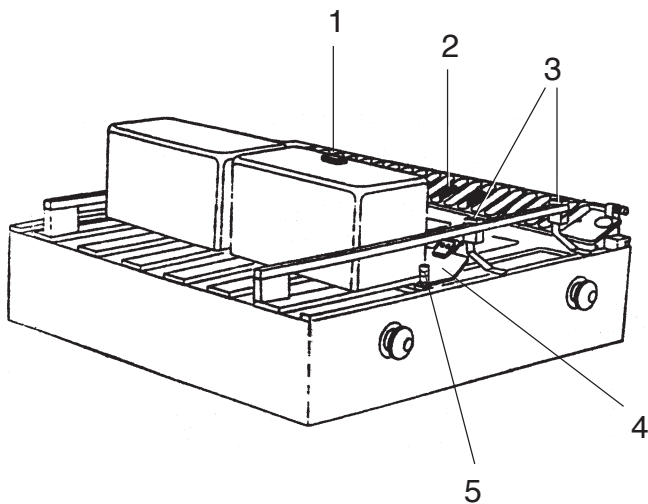


When **Reading from below**:

- Before loading the piece of continuous-feed paper, use a punch pliers to mark the location of the adjustment line.
- Adjust the reading head as described above. The marking hole must be visible in the reading head notch.

7.3 Lateral conveyor

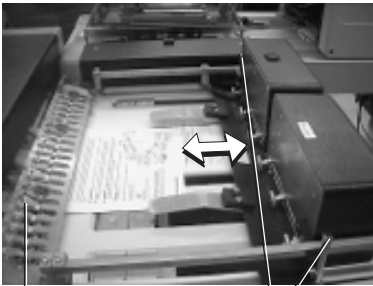
7.3.1 Controls



Controls	Function
1 Signal button (red)	Shows status and errors, press to acknowledge
2 Transport roller brace	Paper transport
3 Deflector	Assures correct paper transport
4 Paper stop	Paper transport guide
5 Locking screw	Locks paper stop position

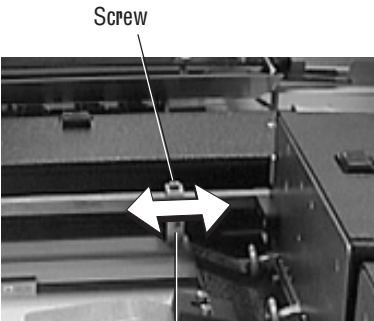


7.3.2 Adjust paper transport guides



Transport roller brace Locking screws
(paper stop)

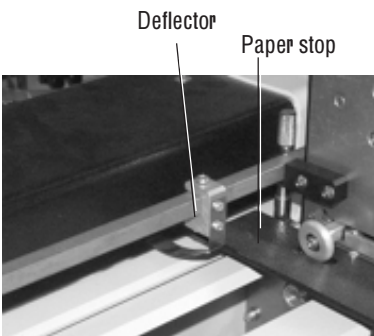
- Loosen locking screws on both sides.
- Swing transport roller brace into its open position and place a sample sheet of paper on the machine.
- Position the paper stop about 1 mm from the bottom edge of the page.
- Tighten locking screws to lock paper stop into position.
- Remove sample sheet.



Screw

Adjust deflector position:

- Use a screwdriver to loosen the screw on the deflector.
- Move the deflector to a position that safely guides the paper.
- Retighten deflector screw.
- Adjust the other deflector in the same manner.



Deflector

Paper stop

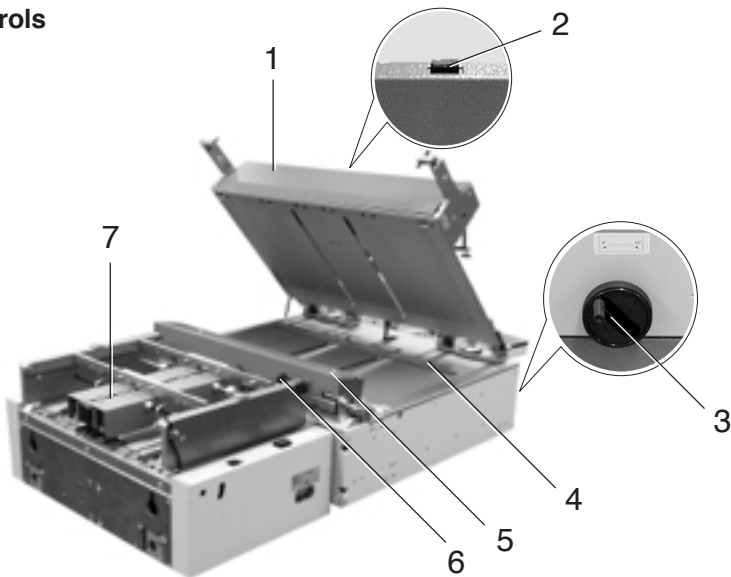
One of the deflectors should always be positioned directly in front of the paper stop, as shown in the picture.



The KS 4000 OLC inserting system can also be configured with a sequencer and delivery device in place of the lateral conveyor.

7.4 Sequencer and Delivery device

7.4.1 Controls



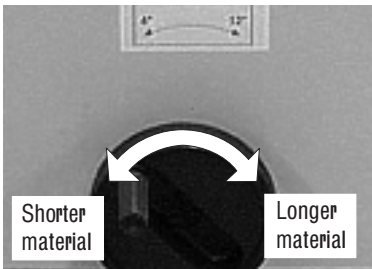
Controls	Function
1 Upper body / Sequencer	Paper guide and covering
2 Signal button (red)	Shows operating status and errors, press to acknowledge errors
3 Manual adjustment hand crank	Adjust to material length
4 Paper stop (adjustable)	Paper guide
5 Roller brace	Paper transport
6 Latch	Latch for delivery device
7 Upper section / delivery device	Paper guide



7.4.2 Adjust paper guide



- Swing the sequencer's upper body all the way open.
- Swing transport roller brace open and hold in place.
- Lay a sample sheet of paper flush to the edge.



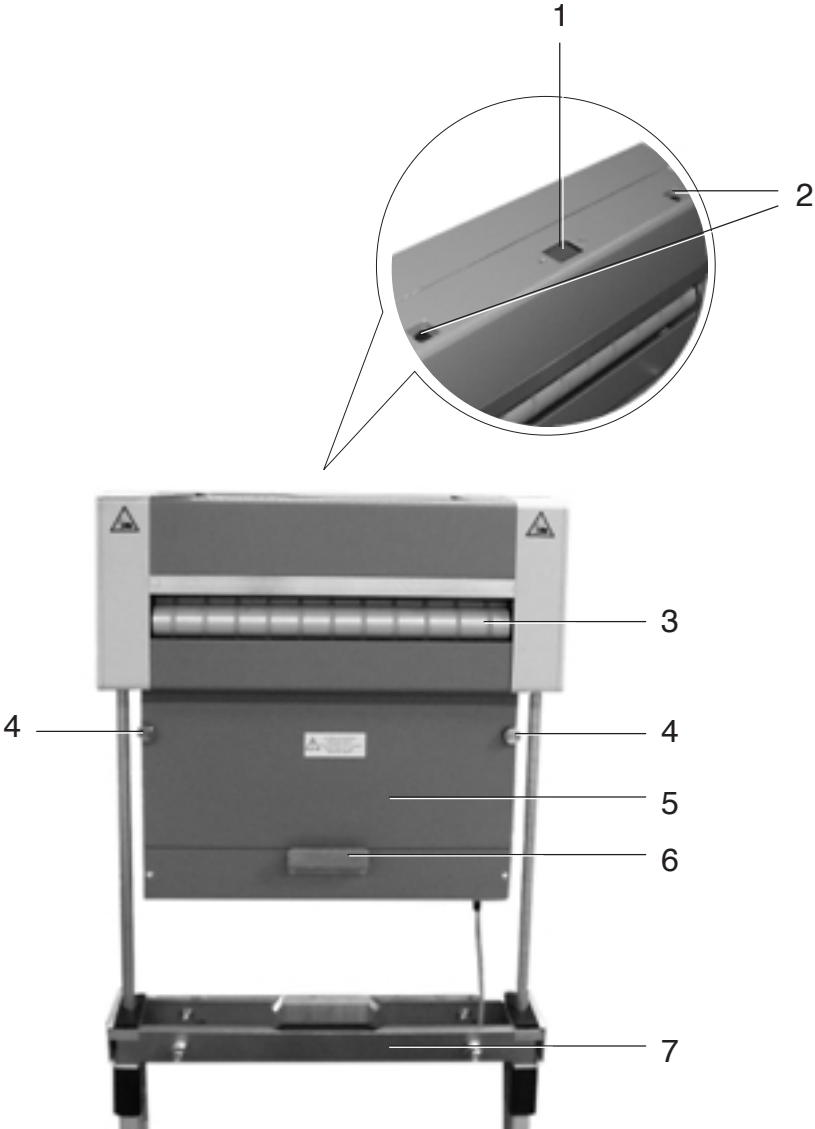
- Close transport roller brace.
- Use the manual adjustment crank wheel to adjust the back stop 2 to 3 mm from the sample's lower edge.
- Remove sample sheet.



Warning! Danger of injury! Use caution when closing the sequencer's upper body and do not reach between the roller brace and the upper body with your hand. The upper body is heavy and can cause injury if slams closed in an uncontrolled manner.

- Carefully lower the sequencer upper body into its closed position.

7.5 Folder





Controls	Function
1 Signal button (red)	Shows status and errors, press to acknowledge errors
2 Button	To remove and reinstall the folding pocket from the support stand for servicing purposes
3 Folding drums	Paper transport
4 Knurled screws	Fasteners for folding pocket covers
5 Folding pocket covers	Paper guides and folding pocket covers
6 Holding bracket	To hold folding pocket cover when open
7 Support stand	

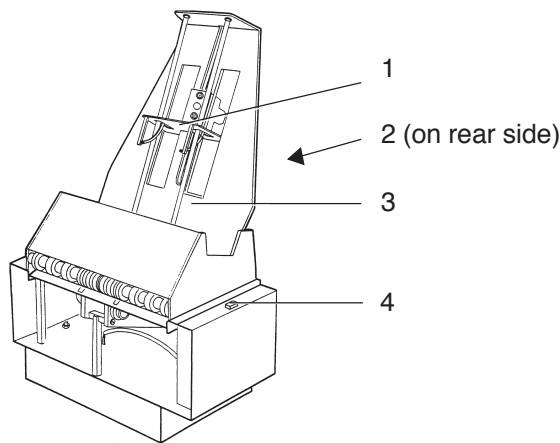


It is not necessary to manually adjust or set folding location, or to close the folding pocket if no fold is desired. Job program parameters provided by the material source (single-sheet feeder or automatic cutter) include these settings.

When starting a program, the single-sheet feeder / automatic cutter will automatically adjust the folding unit pocket to the programmed setting.

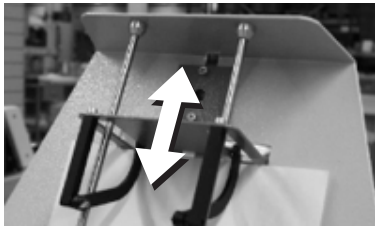
7.6 Diverter unit

7.6.1 Diverter for KS 4000 OL



Controls	Function
1 Paper stop	Guide for diverted paper
2 Slider	Adjusts paper stop
3 Paper tray	Collects diverted materials
4 Signal button (red)	Shows status and errors, clear errors

Adjust paper length

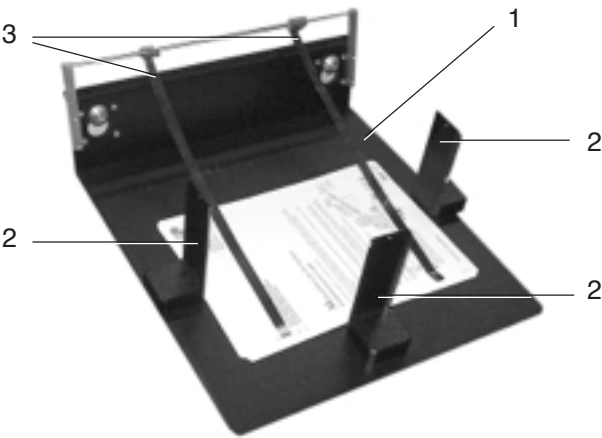


- Use the slider on the rear of the receptacle to adjust the paper stop to the material length.

Leave a 2 - 3 mm gap between the sheet's leading edge and the paper stop.

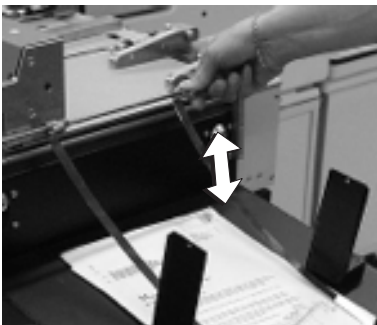


7.6.2 The catch tray (KS 4000 OLC)



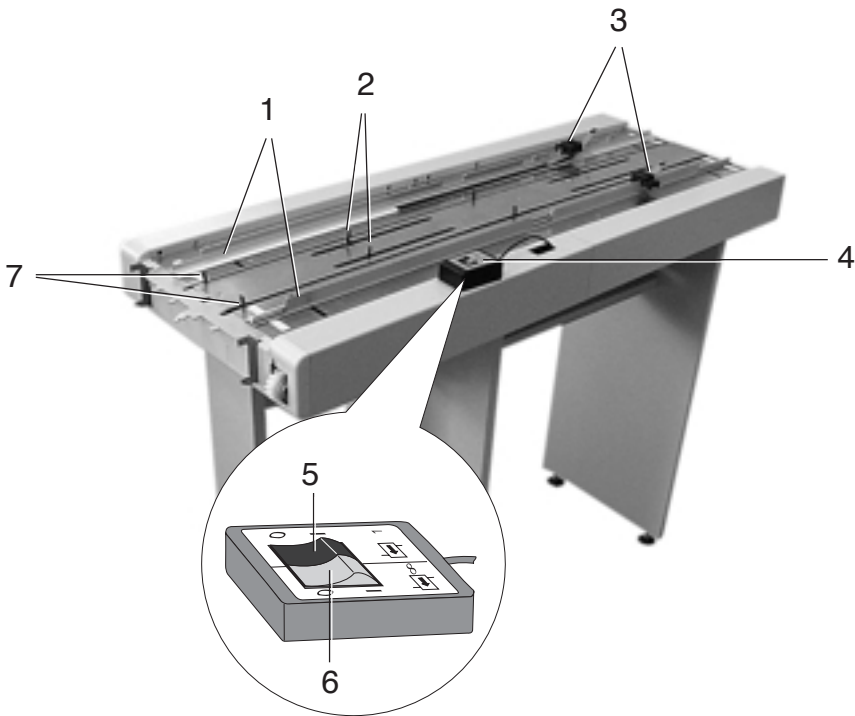
Controls	Function
1 Paper tray	Collects diverted material
2 Catch tray sides (magnetic)	Paper guides
3 Paper depressor	

Adjust catch tray



- Align the magnetic receptacle sides so that ejected material is neatly caught. Make sure the ejected pages do not bump against the receptacle sides on the side.
- Adjust the pressure with which the depressor springs hold paper down.
- Test settings and correct if necessary. Pages should be neatly caught to form an even stack.

7.7 Conveyor





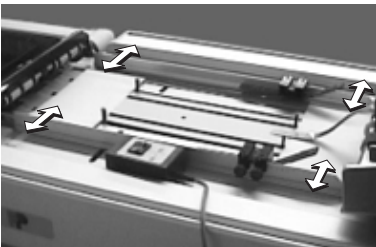
Controls	Function
1 Guide rails	Paper guides
2 Transport hooks	Push paper along conveyor
3 Depressor	Holds paper securely down
4 Hand-held conveyor controller	Conveyor control
5 Button: Black	Setting 0: Stop Setting 1: Transport one field forward
6 Button: Orange	Setting 0: Stop Setting 1: Constant operation (Online-branch is OFF)
7 Paper stop	Assures correct paper guidance

7.7.1 Adjust paper guides



- Slide paper guide rails to leave a 2 mm gap on both sides of a sample sheet (scales show half of the paper's width plus 2 mm).

Scales left and right are provided at both ends of the conveyor, with "0" corresponding to the centerline. The two guide rails should be centered equally on both left and right scales.



- Adjust the guide rails at both ends of the conveyor.



- Check the setting with a sample sheet: Material delivered to the inserter is centered to both machines.

Sample page passes paper guides with adequate leeway on both sides (c. 1 - 2 mm).

- Check paper depressors and set so that paper is securely guided along conveyor path.




Paper depressors



7.7.2 Adjust paper stops

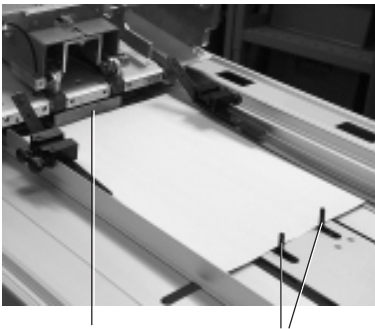
(only on KS 4000 OL-systems)

- To adjust the conveyor to material length, turn the inserter power ON and press the inserter  button.

The conveyor moves to its starting (or “zero”) position.

- Place a sample sheet at the front of the conveyor. The trailing edge of the sheet of paper should be flush to the fixed back stop on the conveyor.

The leading edge of the sample sheet should be 2 - 3 mm from the paper stop.



Back stop (fixed)

Paper stop



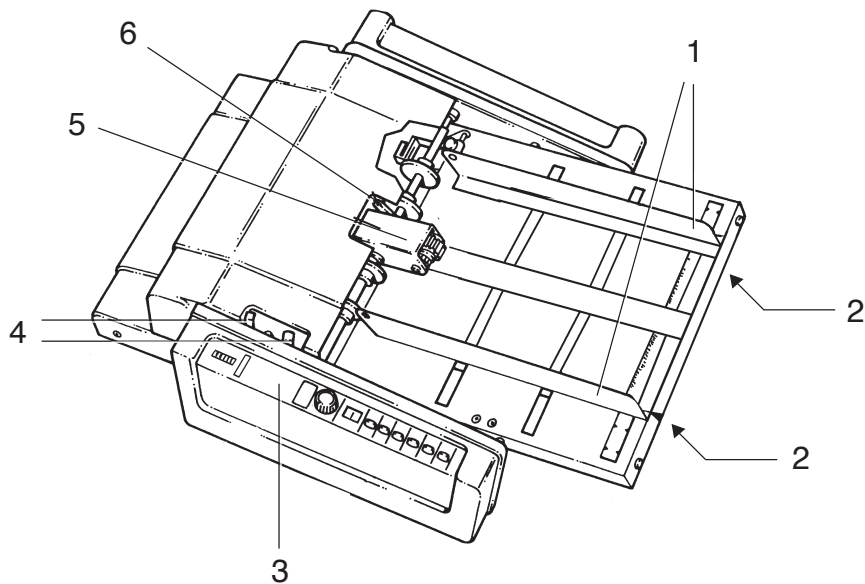
Knurled screw

If necessary, adjust the paper stop:

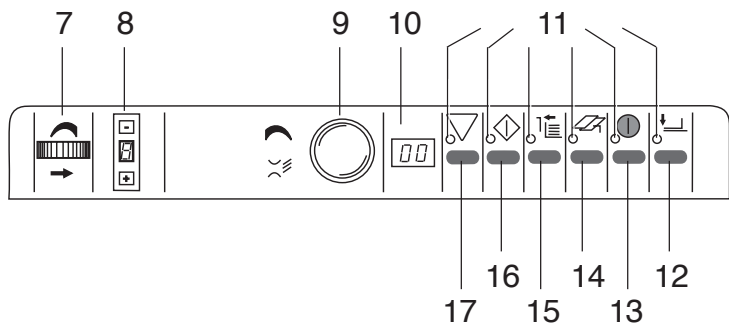
- Loosen the knurled screw on the underside of the conveyor.
- Position the paper stop 2 - 3 mm from the sample sheet's leading edge.
- Retighten knurled screw to lock the paper stop into position.

7.8 Feeder / folding feeder

7.8.1 Controls



Control panel

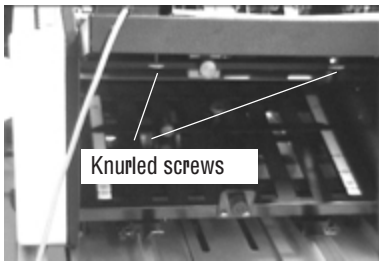




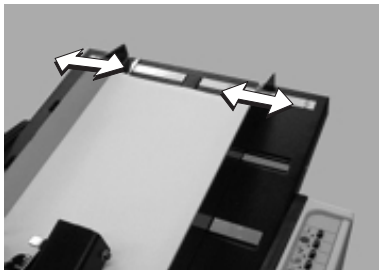
Controls	Function
1 Guide rails	Paper guides
2 Knurled screws (below)	Lock guide rails
3 Control panel	Controls inputs, shows operating status and errors
4 Folding pocket selector	<ul style="list-style-type: none"> - Activates / cancels folding pocket(s) - Button pressed = no fold
5 Separating head	Draws single sheets from stack
6 Lever	Lowers / raises separating head
7 Control wheel	Sets operating speed
8 Preset counter (optional)	Preselects the number of sheets to be processed
9 Knob	Adjusts separator gate
10 Display	Displays functions and error codes
11 LEDs	Show status of individual buttons
12 Delayed-feed button	Delays feed (multiple sheet feed)
13 ON / OFF button	Turns feeder / folding feeder ON / OFF
14 Occupied field button	Feeds to occupied field
15 Single-feed button	<ul style="list-style-type: none"> - Feeds single page for test purposes - Feeds a page after “faulty feed”
16 Start button	<ul style="list-style-type: none"> - Feeds one sheet to find reference value - Confirms reference value - Resumes automatic operation after clearing fault
17 Stop button	<ul style="list-style-type: none"> - Ends / interrupts automatic operation - Deletes reference value

7.8.2 Adjust paper guides

- Loosen knurled nuts on the guide rails.

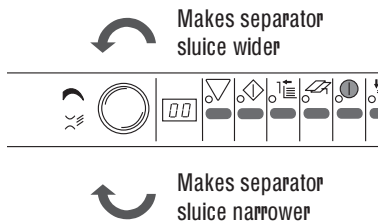


- Adjust the rails to a setting that is **half the paper's width + c. 2 mm**.
The correct setting can be read from the scale at the end of the paper tray.
- Check the setting with a sample sheet.
- Tighten knurled nuts to lock rails into position.



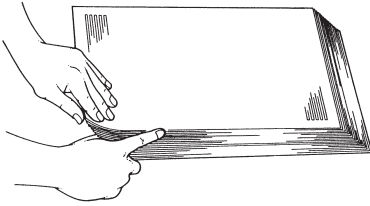
7.8.3 Adjust separator gate

- Swing the separator sluice upward until it clicks into position.
- Lay a sample sheet onto the tray.
- Turn the knob counterclockwise until the sample sheet can easily be pushed between the separator drum and the separator block.
- Now turn the knob in the other direction (clockwise) until the sample sheet meets light resistance when being pulled out.
- Press the lever upward and lower the separating head.

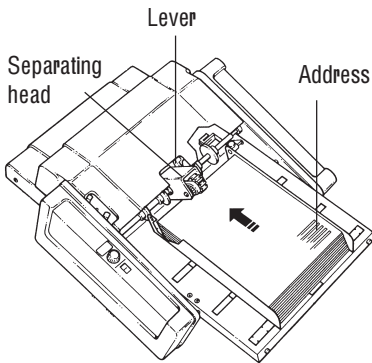




7.8.4 Load paper



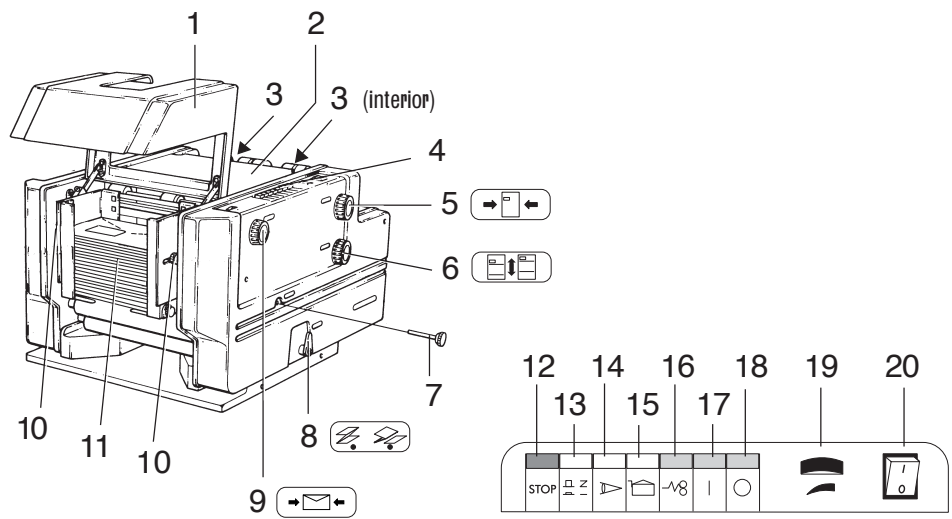
- Fan out a stack of max. 500 documents so that the sides are evenly straight and the leading edge of the top sheet is at the point of a wedge.



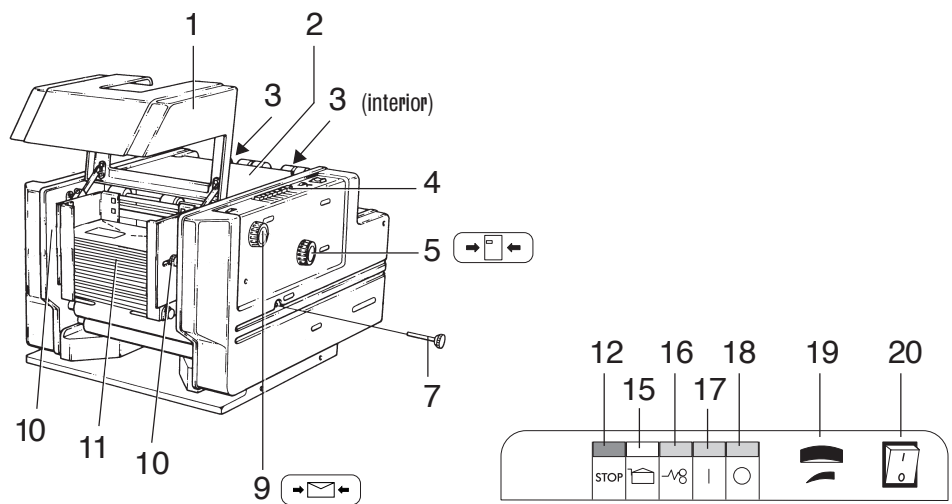
- Swing the separator head upward until it clicks out of the way.
- Lay the fanned-out stack of documents into the tray as shown and push up to the separating head. Note that address location is correct.
- Press lever upward and lower the separating head.

7.9 Inserter

7.9.1 Controls - type A inserter



7.9.2 Controls - type VA inserter






Controls		Function
1	Envelope hopper cover	Safety feature
2	Cover	Safety feature
3	Paper guide rails	For correct paper handling
4	Control panel	Makes operator inputs, shows and clear status and error messages
5	Material width knob	Sets paper guide rails to material width
6	Address location knob	Adjustment to compensate for unusual address location
7	Adjustment pin	Adjusts lower envelope opener
8	Change format lever	Selects between A4 / A5 sizes
9	Envelope width knob	Adjusts envelope hopper width
10	Knurled screws	Adjust envelope hopper depth (i.e. according to envelope height)
11	Envelope hopper	Envelope supply
12	Stop button (red)	Automatic operation EMERGENCY STOP, also indicates sealer unit error
13	Change format button (white)	Selects material size: - A4, 2/3 A4 = button not pressed - 1/3 A4 = button pressed (light ON)
14	Automatic button (white)	Engages / disengages automatic operation
15	Single insertion button (white)	Starts a single insertion
16	Error button (yellow)	Shows errors in the inserter and in all upstream devices
17	ON button (green)	Inserter ON
18	OFF button (red)	Inserter OFF
19	Control wheel	Regulates speed of operation
20	Mains power ON / OFF (green)	Power supply

7.9.3 Adjust paper guides



- Swing cover open.
- Place a sample sheet inside the inserter.



- Use the “material width”  knob to set the paper guide rails to the correct setting. The rails should leave a 2 mm gap on both sides of the stack.

The paper guide rails in the inserter are self-centering.

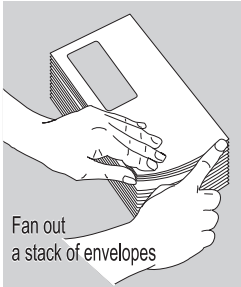


7.9.4 Load envelopes



Note:

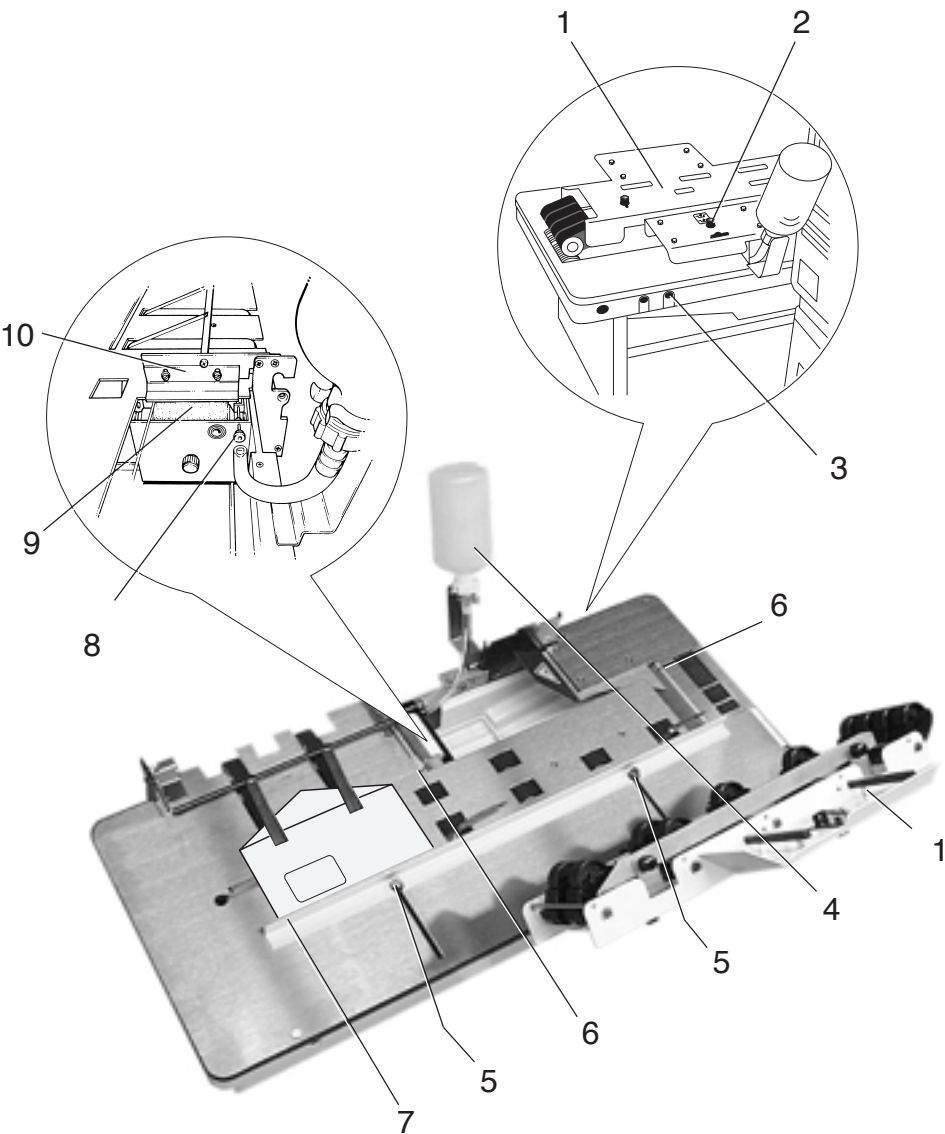
- All envelopes in the envelope hopper must be oriented the same way.
- The edges and corners of the envelopes must be clean and flat.
- Unpack envelopes 24 hours earlier for best results.
- Fan the envelopes through your fingers before loading to loosen them up before loading.



- Lay the envelopes into the hopper as shown. Be careful not to press any previously-loaded envelopes through the bottom when reloading.

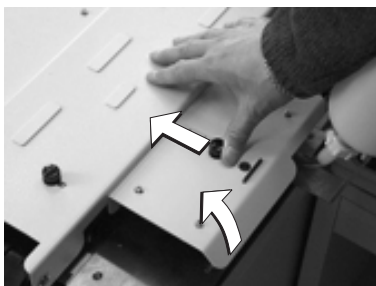
The envelope hopper can hold about 300 envelopes.

7.10 Sealer



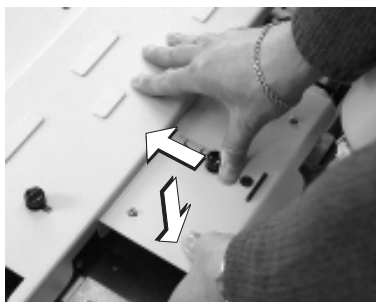


Controls	Function
1 Cover	Envelope transport, safety feature
2 Latch	Catch to hold sealer cover closed
3 “Last envelope” button	To finish and eject the last envelope of a job
4 Water bottle	Moistening
5 Knurled screws	Lock envelope-height rail into place
6 Markings	Adjustment aid for envelope guide rail
7 Envelope-height rail	Envelope guide
8 Set screw	Regulates moistener Turn clockwise for more water; counterclockwise for less water.
9 Felt drum	Moistens envelope flaps
10 Guide rail with knurled screw	Envelope moistener guide: Steers envelope flap over the moistening drum.



Opening the cover

- Push the latch as shown to release.
- Raise cover upwards.



Closing the cover

- Lower cover to normal position.
- Push the latch as shown with one hand while pressing the cover gently downward.
- Let the latch go and listen for it to click into place.



8 Trouble-shooting tips

8.1 General notes



Caution! All repairs and maintenance work should be carried out only by service technicians who have been trained and authorized by Francotyp-Postalia. Work performed by unauthorized persons may void the warranty. FP will not be held liable for any resulting damages.

In the event of a fault or problem, the Inserting System KS 4000 OL/OLC stops. With the assistance of the system's error signaling system you can locate the problem and identify causes.

We recommend the following steps:

Procedure: Remediating faults

Press the  button on the inserter.



Identify the cause of the fault.



Remedy the fault (refer to Ch. 8.2 - 8.11).



Completely remove any sets of letter material involved in the crash / paper jam and complete the set by hand.



Clear (acknowledge) the error message.



Check the entire paper handling path for other possible errors.



Resume operation:

Release the  - button.



If a crash or paper jam occurs when processing jobs that use OMR (optical marks recognition) or a preset-counter, we recommend that all the material for the addressee involved in the crash be removed by hand and completed manually. Resume operation only after the complete document set has been removed and the next addressee is ready to start. This will help you avoid incorrectly or incompletely filled envelopes.

The following sections provide instructions and tips on avoiding and remedying faults. These are organized according to the various processing modules.

If you are unable to solve a problem, please consult your service technician.



8.2 Single-sheet feeder faults

Error messages

The inserting system signals a fault in the single-sheet feeder with:

- an error message in the display
and / or
- blinking red signal button on the Black Box.

Clearing error messages

After remedying the source of the fault, clear the error message:

- Press the blinking red signal button for about 1 second. The button will stop blinking.
- Clear the error message in the display by pressing the START button.

Paper jam in the single-sheet feeder



To clear a paper jam:

Caution! Raise the pre-sluice (preliminary separator block) before attempting to clear a paper jam or when removing loaded material.

PAPER JAM???

DOUBLE???



If the separating device draws more than a single sheet, the display will show an error message. Remedy:

- Raise the pre-sluice.
- Remove inserting material.
- Set the paper separator device (sluice) adjustment to a narrower position (turn the adjusting wheel toward –).
- Lower pre-sluice.
- Re-load inserting material.
- Clear the error message in the display by pressing the START button.

Error code / Fault	Cause	Remedy
PAPER ??? TOO SHORT	Programmed page length set too long. Page is ejected.	Check and correct, if necessary, program / program settings.
PAPER ??? TOO LONG	Paper-advance setting is programmed too short.	Remove sheet. Check and correct, if necessary, program / program settings
	Paper separator setting incorrect.	Remove sheet. Re-adjust paper separator setting.
	Page too long.	Remove sheet. Check size.
NO PAPER ???	Light barrier cannot locate paper in the single sheet feeder.	Check settings.
	Single-sheet feeder is empty.	Load with documents.
PAPER JAM ???	Paper jam.	Remove jam. Check paper path and separator sluice.
DOUBLE ???	Separator sluice malfunction: Draws more than one sheet.	Set separator sluice narrower.
Call Service 000		Note the 3-place error code and contact your service technician.
Interface	Defective interface.	Contact customer service.
ID-Chip	Main circuit board defect.	Contact customer service.



8.3 Automatic cutter faults

- Error messages*
- The inserting system signals a fault in the automatic cutter with:
- an error message in the display


and / or

– blinking red signal button on the Black Box.

- Clearing error messages*
- After remedying the source of the fault, clear the error message:
- Press the blinking red signal button for about 1 second. The button will stop blinking.

• Clear the error message in the display by pressing the START button.

Error code / Fault	Cause	Remedy
Crash in continuous-feed transport. Display 2: PAPER ???	Un-cut material is suspended too tightly between tractors, or too loosely.	Check and correct transport tractor settings.
	Paper scraps impede edge cutter function.	Clean edge cutter.
	Out of paper. Last page passed.	Reload.
Automatic cutter stops. Display 2: COVER ???	Cover is not closed, or was opened during operation.	Close cover and press START .
Documents are cut crookedly.		Contact customer service.

Error code / Fault	Cause	Remedy
Documents are not cut.	Incorrect program settings (cut width factor).	Check and correct program / program settings.
When cutter is started, paper transport runs backwards.	Paper depressor covers end-of-paper sensor.	Readjust paper depressor so that the sensor is not covered.
Automatic cutter does not stop after last cut page.	End-of-paper sensor is dirty.	Clean the light barrier.
In OMR mode: Automatic cutter stops. Display 2: READ ERROR ???	Programmed reading routines do not correspond to printed marks.	Check reading program.
	OMR reading head is not aligned with printed marks.	Adjust reading head.
	OMR reading head is not aligned with adjustment line.	Adjust reading head.
	Printed marks are too weak or not printed in black.	Use different endless-feed paper. Check printer settings to improve print quality.
In OMR mode: Automatic cutter stops Automatic cutter signal button blinks	Timing error: No return signal from inserter within 3 seconds. Fault may lie in inserter.	Identify fault, clear and then press signal button. Press  to resume operation.



8.4 Lateral conveyor faults

Error messages

A fault in the lateral conveyor is indicated when the lateral conveyor's red signal button is blinking. The red signal button on the Black Box may also blink.

Clearing error messages

After remedying the source of the fault, clear the error message:

- Press the lateral conveyor's blinking red signal button for about 1 second. The button will stop blinking.
- If the signal button on the Black Box is also blinking, press it also for about 1 second. The button will stop blinking.

The system is ready to resume operation.

Paper jam in the lateral conveyor

To clear a paper jam:

- Push the sheet of paper which is jammed in the lateral conveyor into the folding device by hand until you notice resistance.
- Press the signal button on the folding device. The sheet will be folded and deposited on the conveyor.
- Press the blinking signal button on the lateral conveyor. The next sheet will be drawn from the feeder component.
- If the signal button on the Black Box is also blinking, press the button.

The system is ready to resume operation.

Signal button/ lateral conveyor



Signal button / folder

Fault	Cause	Remedy
Red signal button on the lateral conveyor blinks	Light barriers do not detect a document.	Press lateral conveyor signal button to clear error.
		Check paper guides and compare with document length. Correct if necessary.
		If error recurs frequently: Contact customer service.

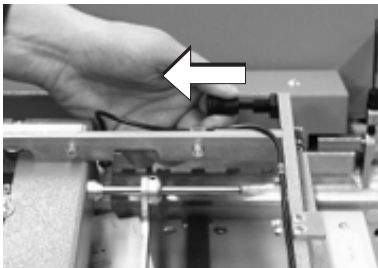
8.5 Delivery device faults

Faults in the delivery device are indicated when the red signal button on the Black Box is blinking.

Paper jam in the delivery device

To clear a paper jam:

- Unlatch the delivery device and raise the upper part fully.
- Carefully remove any jammed materials.





- Lower the upper part.
- Press the upper part gently down until the latch catches.
- Press the Black Box signal button to clear the error message.

The signal button will stop blinking and the system is ready to resume operation.

8.6 Sequencer faults

Error message

Faults in the sequencer are indicated when the sequencer's red signal button is blinking. The Black Box signal button may also blink.

Clearing error messages

After eliminating the cause of the fault, clear the error message:

- First press the sequencer signal button for about 1 second. The button will stop blinking.
- If the Black Box signal button is blinking, press it for about 1 second. The button will stop blinking.

The system is ready to resume operation.

To clear a paper jam:

Paper jam in the sequencer



- Raise the sequencer upper body to its fully-opened position. Use caution! The part is heavy and can cause injury if it slams closed.
- Flip the transport roller brace open and hold it with one hand.
- Remove any jammed materials.



Warning! Danger of injury! Use caution when closing the sequencer. Never reach between the roller mounting and the sequencer's upper part. Fingers may be crushed if the top slams closed.

- Carefully lower the sequencer upper part.
- Press the sequencer signal button. It will stop blinking.
- If the Black Box signal button is blinking, press it also. The button will stop blinking.

The system is ready to resume operation.

8.7 Folding machine faults

Error message

An error in the folding device is indicated by the red signal button on the following (downstream) module.

Clearing error messages

After clearing the source of the error, clear the error message:

- Press the blinking signal button on the adjacent device.

When all signal lamps have stopped blinking, the system is ready to resume operation.

Paper jam in the folder

To clear a paper jam:

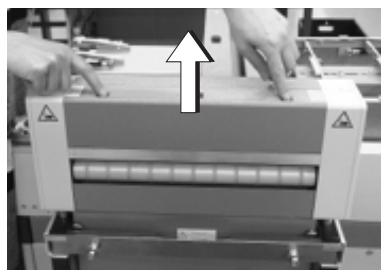


Warning! Danger of injury! Keep other people at a distance when working on the folding device or clearing jammed paper. Moving parts can cause injury.

- Remove all materials from the delivery device and the lateral conveyor / sequencer.



Power switch automatic cutter



- Turn online-feeder (cutter or single-sheet feeder) power switch OFF and then turn back ON.

The Black Box signal button will blink. The folding device folding pocket will move to its “zero” or starting position. The folder’s signal button will blink until the folding pocket reaches this position.

- **Now** (and not before!) open the folding pocket: Use both hands to simultaneously press the two black buttons and hold them pressed until the folding pocket has reached its upper position and automatically stops.

Releasing the two buttons stops the folding pocket drive motors. The next time the buttons are pressed, the pocket will move in the opposite direction. Whenever the buttons are pressed, the folding pocket will always move in the direction opposite to the last time the buttons were pressed.



Warning! Danger of injury! Turn OFF and disconnect the power supply cord before opening the folding pocket.



Knurled nuts

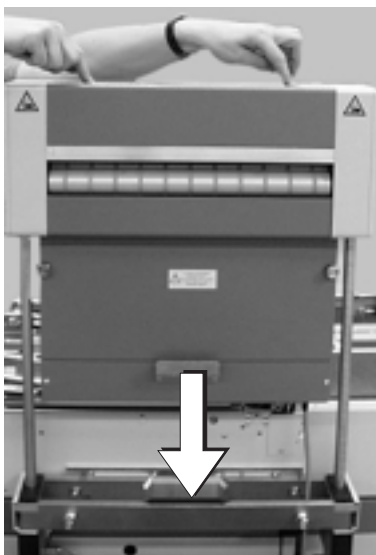
- Turn power switch on the feeder device OFF and disconnect the power supply cord.
- Unscrew the knurled nuts on the folding pocket cover.
- Carefully tilt the folding pocket cover forward and remove. A hanger is provided to support the folding pocket while you remove jammed paper.

- Carefully remove jammed papers.
- Reattach the folding pocket covering and tighten the knurled nuts.



Warning! Danger of injury! When switching the online feeder ON the folding drums will briefly be set in motion. Keep fingers, hair, scarves and jewelry safely away from the folder.

- Plug the power cord into the socket and the feeder device power switch ON.
- Use both hands to press the two black folding device buttons and hold them pressed until the folding pocket reaches its bottom position and stops.



Before resuming operation:

- Check all paper involved in the paper jam and make sure the document set is complete and correct.


Undamaged sheets can be folded manually and placed on the conveyor for automatic completion by the system.

Wrinkled or incorrectly folded sheets must be removed and inserted into an envelope by hand.

- If signal buttons on adjacent are blinking, press these also to clear the error status.

The system is ready to resume operation when all signal buttons are off. Restart the program.



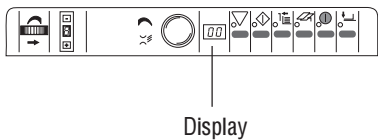
Fault	Cause	Remedy
Paper jam - red signal button on adjacent module blinks	<p>When clearing a paper jam, be sure to read the warnings and procedures described in this Chapter on pages 112 - 114.</p> <p> Warning! Danger of injury! Strictly follow all safety warnings and measures described in these pages and the warnings on the device itself.</p> <ul style="list-style-type: none"> – Too many pages in the folder. – Folding pocket(s) incorrectly set. – Deliver of material from upstream module failed. 	<p>Fold a maximum of 8 pages.</p> <p>Check and correct program and program settings.</p> <p>Check paper path</p>
The folder does not eject documents and the red signal button on the downstream device blinks.	Drive motor is overloaded, blocked or defective.	Clear paper jam (see “To clear paper jam”).
	Folding length pin is blocked.	Clear error by pressing the blinking red signal button.
Document does not pass the entry gate	Incorrect program settings in the feeder module.	Check and correct program or program settings.
Documents are folded unevenly or crookedly.	Incorrect folding pocket setting.	Contact customer service.
Folder emits loud noises	Folding drums incorrectly set or damaged.	Contact customer service.

8.8 Diverter unit faults





Fault	Cause	Remedy
Red signal button on diverter blinks	Page incorrectly diverted to catch tray.	Remove page. Press signal button (about 1 second).
	Diverter catch tray is full.	Empty. Press signal button (about 1 second).
Page was not diverted	Incorrect program settings in the feeder device.	Check and correct program or settings in the feeder device.








8.9 Feeder / folding feeder faults



The two-place error code in the feeder / folding feeder display provides information about the source of the error.






Error code / Fault	Cause	Remedy
 (blinking)	Defective light barrier.	Contact customer service.
 (blinking)	Dirty light barrier.	Clean the lense.
	Paper blocks light barrier.	Pull back paper.
 (blinking)	Paper jam in ejector area.	Clear paper jam.
	Defective sensor.	Contact customer service.
 (blinking)	Paper jam on the conveyor under the feeder station.	Clear paper jam.
	Station's position on the conveyor is incorrect.	Check and correct station position.
	Feed sensor defective.	Contact customer service.

Error code / Fault	Cause	Remedy
	Page missing (no page was fed).	Check paper path. Press  button to feed page.
	– Station empty.	Reload.
	– Loaded material is poorly fanned.	Remove, re-fan and flatten sides. Then reload.
	– Paper separator sluice incorrectly set.	Readjust.
	Document has holes or is printed in the light barrier area.	Move light barrier laterally.
	Double-feed (one page after the other) <u>with gap between sheets</u> .	Remove second sheet. Check paper path. <u>If error occurs repeatedly:</u> Readjust paper separator sluice.
	When setting reference value: Jam in the fork light barrier.	Clear paper jam. Check paper separator sluice setting.
	Double-feed (one page after the other) <u>without gap between sheets</u> .	Remove second sheet. Check paper path. Check separator sluice setting and then reset reference value. <u>If error occurs repeatedly:</u> Clean the separator block.
	Speed changes.	










Error code / Fault	Cause	Remedy
	Double sheet feed.	Remove extraneous page and check separator device settings.
	Paper path sensor detected an error (e.g. paper jam under the station).	Clear the paper jam and check folding pocket setting(s).
	Defective sensor.	Contact customer service.
	A page has been left on the conveyor under the station.	Remove the page. Press button
	Fold-location change.	Press button. <u>If error occurs repeatedly:</u> Repeat reference setting procedure.
 (Example)	Missing page when using preset counter. <i>In this example: The fourth of a total of 5 sheets is missing.</i>	Use the button to feed an additional sheet.

8.10 Inserter faults

Error code / Fault	Cause	Remedy
Inserter stops and  button is lit	Envelope hopper is empty.	Reload envelopes and press  button to continue operation.
	Envelopes jammed or stuck in hopper.	Turn system OFF. Remove jammed or glued envelopes.
	Envelopes incorrectly loaded.	Turn system OFF. Remove all envelopes and reload correctly.
	Document insertion failed (monitor only on model VA 5000).	Remove complete document set and press  to continue operation.
	Envelope jam in sealer unit or other downstream devices (e.g. postage meter).	Clear the jam and press  to continue operation.
Document set has reached the inserter but the inserter does not start the insertion cycle	Trailing edge of a document is blocking the sensor or photo-cell.	Remove document from sensor area and restart inserter.
		Press  button.
		<u>If error recurs frequently:</u> Check delivery from upstream device.



Fault	Cause	Remedy
Inserter does not start <u>or</u> breaks automatic operation off	Power cord incorrectly plugged or not plugged.	Check power supply.
	 not pressed.	Press  button – button lights.
	 not pressed.	Press  button – button lights.
	 incorrectly set.	Select according to documents being processed.
	 is pressed and lit.	Press  button again – light goes out.
	Inserter is empty.	Feed document sets from conveyor: Press the black button on the conveyor control repeatedly until a set reaches the inserter.
	Power surge fuse defective.	Contact customer service.
	Document delivery faults.	Check document delivery from upstream. Look for faults in other modules.

8.11 Sealing unit faults

Fault	Cause	Remedy
Envelope jam Sealing unit stops independently of inserter after two or three cycles	Envelope transport monitor detected a fault.	Check envelope height setting. Adjustment by service technician may be necessary.
Sealer does not transport envelope	No signal.	Check connection to inserter.
Envelopes are not sealed correctly	Guide set too high.	Adjust guide rail.
	No water.	Check moistening device. Refill water supply.

Declaration Of Conformity

We, Francotyp - Postalia AG & Co.,

located in D-16547 Birkenwerder, Triftweg 21 - 26

herewith declare in our own responsibility that our

Inserting System Model „KS 4000“

.....
(Type Designation)

is designed and assembled in conformity with the following harmonized standards:

EN 50081-1 / 1992, 50082-1 / 1992

EN 60950 / 1992,

EN 292 / 1991, EN 292 / 1994

.....
in accordance with the rules of European Directives

89 / 336 / EEC (Electromagnetic Compatibility Directive)

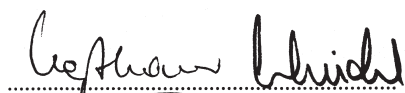
73 / 23 / EEC (Low Voltage Directive)

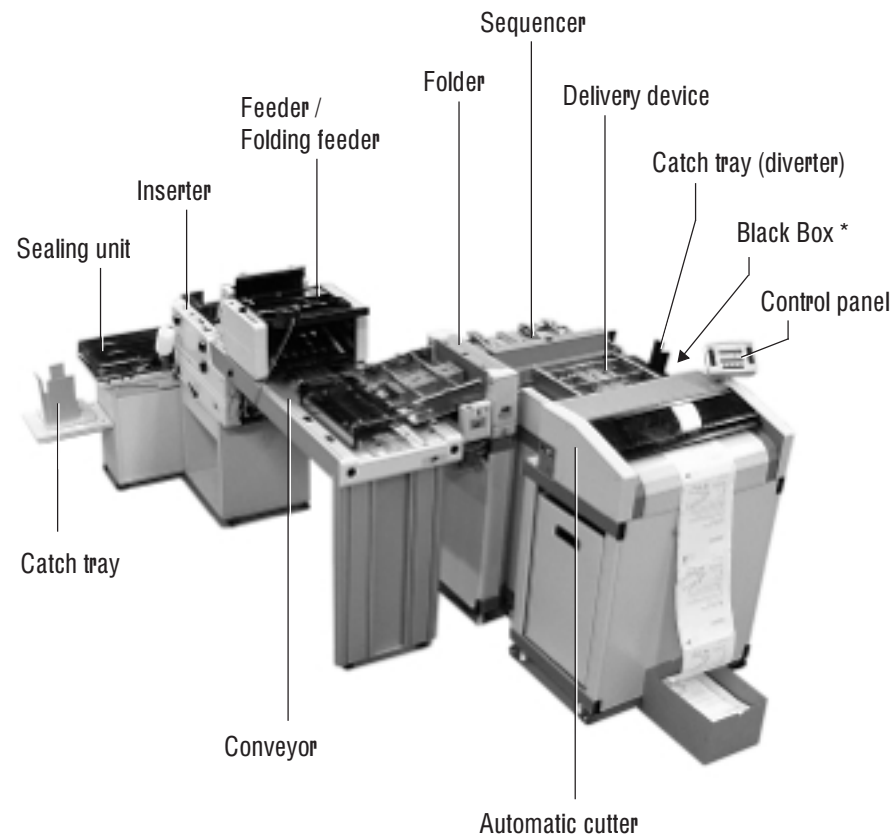
89 / 392 / EEC (Machinery Directive)

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(Name and authorized signature for the company)



* Location may vary depending on configuration



9 Service

Every KS 4000 OL/OLC inserting system is assembled in the factory and thoroughly tested before delivery. In the event of a fault becoming apparent despite our best quality control measures, please contact your customer service representative.

FP authorized dealer

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