THE OMR GUIDE FOR INTELLIGENT MAILING SYSTEMS

Section 1 Introduction

Section 2 OMR Class 1 All Functions

Section 3 OMR Class 2 Principles
    Functions (by unit)

Section 4 Print areas (by unit)

Section 5 Printers Principles

Section 6 OMR marks (by unit)
Section 1 Introduction

This specification covers the requirements for OMR marking specifically relating to the PFE Automailer range of mailing machines. This specification relates to the OMR functions available, the mark size and positioning on the forms. The full range of OMR facilities is referred to as the Class 1 OMR system, and is only available on the Automailer 2 and 3. To support the full range of OMR functions the Automailer 2 and 3 must be used with the PC option. There is also a simpler OMR system referred to as Class 2 OMR, which can be used for the intelligent Automailer 1 units, and Automailer 2 and 3 when a computer is not used. Class 2 OMR does not support the complete range of functions.

This specification consists of six sections.

Section 1. This introduction.

Section 2. OMR Class 1.
This section describes all the OMR functions that are available.

Section 3. OMR Class 2.
This section describes the principles of OMR Class 2 operation, and the functions that are available for each unit.

Section 4. Print areas. This section deals with the dimensional details and layout requirements for the marks for each of the OMR reading units.

Section 5. Printers. This section describes the features of laser printers and continuous forms printers that are relevant to the type and positioning of OMR marks.

Section 6. OMR marks.
This section details how specific marks should be used and coded on the forms to achieve the various functions available. It is specific to each unit and takes into account the type of folding which is used for specific applications.
Principles.
As Class 1 OMR marking requires the use of a computer, there is complete freedom to position the OMR marks on the documents in any position subject to the mechanical reading limitations of specific units (refer to section 4), and the following basic rules.
   a) The gate mark should be the first mark to be scanned.
   b) The separation of the marks should be at least 3mm.

2. FUNCTION DESCRIPTIONS

2.1 Gate Mark 1 mark
Within the sequence of OMR marks the gate mark must be the first mark to be scanned by the OMR reader. This ensures that the position of the marks on the form is synchronised to the lead edge of the form, for reliable reading of the following function marks. Additionally, as the OMR system needs to find a gate mark on each page, it will detect unprinted blank pages.

2.2 Grouping of Multi-page Prime Documents 1 mark
Multiple pages can be grouped together for insertion into the same envelope. The function mark required is an "End of Group" mark on the last page of the group to be fed from the feed hopper. This is not necessarily the last printed page of a group (e.g. page 3 of a three page group), as it depends on the feed method and paper loading orientation.
(Refer to the section 6 for additional details.)

2.3 Parity Mark 1 mark
The function of the parity mark is to check if the correct number of marks have been read. For example, if even parity is being used then on all pages there will be an even number of marks printed, which means that if all the function marks printed excluding the parity mark add up to an odd number, then the parity mark is printed.
If all the function marks printed excluding the parity mark add up to an even number, then the parity mark is not printed.

The options for the parity marking are
   a) Even parity marking.
   b) Odd parity marking.
   c) No parity marking.
2.4 Diverting Forms 3 marks

The Class 1 OMR system allows programming for up to six divert bins, which may be fitted to an Automailer System. The divert destination is defined by means of a binary coded set of marks. The combinations of the three marks indicate which divert bin the unfolded forms will go into. The following mark scheme indicates the coding.

<table>
<thead>
<tr>
<th>Divert Bin destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark No.</td>
</tr>
<tr>
<td>(Divert Mark1)</td>
</tr>
<tr>
<td>(Divert Mark2)</td>
</tr>
<tr>
<td>(Divert Mark3)</td>
</tr>
</tbody>
</table>

2.5 Envelope Marking 2 marks

Combinations of two marks can be used to program the ink marking unit to mark the edge of the filled envelope with an ink mark in one of three different positions.

<table>
<thead>
<tr>
<th>Envelope Mark Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marks</td>
</tr>
<tr>
<td>(Envelope Mark 1)</td>
</tr>
<tr>
<td>(Envelope Mark 2)</td>
</tr>
</tbody>
</table>

N.B. Currently Envelope Marking is only available on the Automailer 3, and only in one undefined position on the top edge of the envelope.

2.6 Envelope No Seal 1 mark

A single mark may be used to program the wetter inhibit function. If an OMR mark is detected in the Envelope No Seal position on the prime document, when that form is inserted into the envelope, the wetter is lifted clear to inhibit sealing of the envelope. This facility could be used where additional manually inserted items need to be added to the envelope, or if an operator audit of the envelope contents needs to be carried out periodically.
2.7 Envelope Outsort 4 mark
A set of up to 4 marks may be used to define one of fifteen outsort bins as the destination of the filled envelope. The binary combination of the four marks to define the outsort bin is shown below.

<table>
<thead>
<tr>
<th>Envelope Outsort Bin</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Envelope Outsort Mark 1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Envelope Outsort Mark 2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Envelope Outsort Mark 3</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Envelope Outsort Mark 4</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

N.B. Currently only one twin-bin envelope outsort is available giving Outsort Bin 1 and Outsort Bin 2. To use these two outsort bins, only marks 1 and 2 need to be programmed.

2.8 Selective Feeding of Inserts 7 marks
The selective feed facility allows the selection of up to seven inserts to be added to the prime document depending on the OMR marks printed on the prime document. The maximum number of selective feeds is limited to the maximum number of additional feed units fitted, which on an Automailer 2 system, is three.

<table>
<thead>
<tr>
<th>Select from Feed Station</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select Feed Mark 1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Select Feed Mark 2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Select Feed Mark 3</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Select Feed Mark 4</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Select Feed Mark 5</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Select Feed Mark 6</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Select Feed Mark 7</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>
2.9 Form Security Numbering  

The purpose of this mark function is to code each page of a print run with a number sequence running from 0 up to 31 and then restarting at 0. This number sequence is printed on each page of a print run, in sequence, regardless of the document sets and customer identities. Therefore, as soon as a loss of sequence is detected, it indicates an error in the page order and stops the Automailer so that the operator can rectify the fault. This ensures that integrity of document sets is maintained, and that each envelope is filled correctly. This function is achieved by programming up to five marks and printing them as a binary sequence as shown below. If a smaller number of marks is required then it is possible to use either four, three, two or one mark, in which case the numbering goes from 0 to 15, 0 to 7, 0 to 3 or 0 to 1 respectively. It is not generally recommended to use less than three marks.

As on some of the Automailer 2 infeed units the forms are fed from the back of the form stack, the OMR Class 1 mark system can check the numbering in either a count up sequence, or a count down sequence. Additionally, if the forms are printed with no zero, for example, 1 to 7, or 1 to 15, then the checking system can be programmed to exclude zero from the number sequence.

<table>
<thead>
<tr>
<th>Mark No.</th>
<th>Page Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15</td>
</tr>
<tr>
<td>FSN Mark 1</td>
<td>— — — — — — — — — — — — — — — —</td>
</tr>
<tr>
<td>FSN Mark 2</td>
<td>— — — — — — — — — — — — — — — —</td>
</tr>
<tr>
<td>FSN Mark 3</td>
<td>— — — — — — — — — — — — — — — —</td>
</tr>
<tr>
<td>FSN Mark 4</td>
<td>— — — — — — — — — — — — — — — —</td>
</tr>
<tr>
<td>FSN Mark 5</td>
<td>— — — — — — — — — — — — — — — —</td>
</tr>
</tbody>
</table>

cont.

<table>
<thead>
<tr>
<th>Mark No.</th>
<th>Page Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31</td>
</tr>
<tr>
<td>FSN Mark 1</td>
<td>— — — — — — — — — — — — — — — —</td>
</tr>
<tr>
<td>FSN Mark 2</td>
<td>— — — — — — — — — — — — — — — —</td>
</tr>
<tr>
<td>FSN Mark 3</td>
<td>— — — — — — — — — — — — — — — —</td>
</tr>
<tr>
<td>FSN Mark 4</td>
<td>— — — — — — — — — — — — — — — —</td>
</tr>
<tr>
<td>FSN Mark 5</td>
<td>— — — — — — — — — — — — — — — —</td>
</tr>
</tbody>
</table>
2.10 Group Security Numbering  

The purpose of this function is to code each page of a group of forms with a number sequence running from 0 up to 15 and then restarting at 0 for groups which exceed 16 pages. This number sequence is printed on each page of a group, which is to be inserted into an envelope. Therefore, as soon as a loss of sequence is detected, it indicates an error in the page order and stops the Automailer so that the operator can rectify the fault. This ensures that integrity of document sets is maintained, and that each envelope is filled correctly. This function is achieved by programming up to four marks and printing them as a binary sequence as shown below.

As on some of the Automailer 2 infeed units, with a top-feed system the forms are fed from the back of the form stack, the numbering should be in the feed order of the forms. So, for a five page group, the last page should be numbered 0, with the page count increasing towards page one of the group. If the forms are printed with no zero, i.e. starting at a count of one, then the checking system can be programmed to exclude zero from the number sequence.

**Note:** The normal security system for ensuring that all the printed pages are processed correctly through the Automailer is Form Security Numbering. Group Security Numbering should only be considered when Forms Security Numbering cannot be used.

<table>
<thead>
<tr>
<th>Mark No.</th>
<th>GSN Mark 1</th>
<th>GSN Mark 2</th>
<th>GSN Mark 3</th>
<th>GSN Mark 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>3</td>
<td>—</td>
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<td>—</td>
<td>—</td>
</tr>
<tr>
<td>4</td>
<td>—</td>
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<td>—</td>
</tr>
<tr>
<td>5</td>
<td>—</td>
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<td>—</td>
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<tr>
<td>6</td>
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<tr>
<td>7</td>
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<td>—</td>
</tr>
<tr>
<td>8</td>
<td>—</td>
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</tr>
<tr>
<td>9</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>10</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td>11</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td>12</td>
<td>—</td>
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<td>—</td>
<td>—</td>
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<tr>
<td>13</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>14</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>15</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>
When personalised documents are being fed from more than one OMR station for insertion into the same envelope, it is possible to code the individual pages with the same five mark pattern to indicate that the pages belong together. In this situation the OMR marks are read on each individual page at each of the OMR stations. When the two, or more personalised sets of marked documents are merged on the insert track the control system checks if the match marks are the same. If there is a mis-match of the match marks the machine stops with an error message displayed on the computer and Automailer display panel. For the system to continue operation all the forms with OMR match marks with are to be inserted together into one envelope must have the same match code. Any difference in the match code on any page indicates that that page does not belong with the others and stops the inserter until the operator corrects the problem and restarts the system. The match codes can be generated randomly, no particular sequence or order is required. In the table below all the 32 possible mark combinations are shown with their numerical values.

<table>
<thead>
<tr>
<th>Mark No.</th>
<th>Equivalent Numerical Value.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Match Mk 1</td>
<td>—</td>
</tr>
<tr>
<td>Match Mk 2</td>
<td>—</td>
</tr>
<tr>
<td>Match Mk 3</td>
<td>—</td>
</tr>
<tr>
<td>Match Mk 4</td>
<td>—</td>
</tr>
<tr>
<td>Match Mk 5</td>
<td>—</td>
</tr>
</tbody>
</table>

cont.

<table>
<thead>
<tr>
<th>Mark No.</th>
<th>Equivalent Numerical Value.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Match Mk 1</td>
<td>—</td>
</tr>
<tr>
<td>Match Mk 2</td>
<td>—</td>
</tr>
<tr>
<td>Match Mk 3</td>
<td>—</td>
</tr>
<tr>
<td>Match Mk 4</td>
<td>—</td>
</tr>
<tr>
<td>Match Mk 5</td>
<td>—</td>
</tr>
</tbody>
</table>
2.12 **Halt Function** 1 mark

The halt function consists of one mark which when detected by the OMR system completes the collation of the document group and all other actions until the document set is ejected on to the track. It then stops the inserter without indexing the track. This allows operator intervention for whatever purpose, for example, to periodically confirm correct operation of the mailing run.

**Note:** If the document with the halt mark also has a divert mark, then as that document never reaches the insert track, it will not cause the system to stop. Hence, the halt mark should not be used in a set of documents which are marked for diversion.

2.12 **Force Fold** 1 mark

This mark is used with multi-page documents, when it is required to break the document group into specific sets, earlier than the maximum fold limit which has been set. When the page with the Force Fold mark arrives in the collator part of the feed unit, the document set up to that page is immediately sent to the folder and on to the track. The track is not indexed along as the complete set of documents up to the form with the end of group mark has not been processed.

2.13 **Page Count Verification** 4 marks

This is a security facility to ensure that the correct number of pages has been fed from the hopper. The pages are fed from the hopper until the 'End of Group' mark is detected, it will know how many pages have been fed by the feed unit, as it has issued the feed instructions. It will also read the four bit page count that has been printed on the forms by the application software, which will decode to a total page count. If there is a discrepancy between these two numbers it will indicate that an error has occurred. The total page count can appear on any page of the set and will be a number between 0 and 15. If the number of pages in the group is greater than 15, the coded number to be printed is the remainder part when the number of pages is divided by 16.

<table>
<thead>
<tr>
<th>Page Count No.</th>
<th>Number of pages in the group.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page Count Mk 1</td>
<td>0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 etc.</td>
</tr>
<tr>
<td>Page Count Mk 2</td>
<td>— — — — — — — — — — — — — — — — — — — — — —</td>
</tr>
<tr>
<td>Page Count Mk 3</td>
<td>— — — — — — — — — — — — — — — — — — — — — —</td>
</tr>
<tr>
<td>Page Count Mk 4</td>
<td>— — — — — — — — — — — — — — — — — — — — — —</td>
</tr>
</tbody>
</table>
2.14 End of Run

This mark may be used at the end of the job when it is required to automatically enter the 'Autoend' mode. This will only apply to the Automailer 2 and 3, which have these modes. The system operates by detecting this mark in the last document set, and then setting the 'Autoend' mode so that the marked document set, is the last to be enveloped and ejected on to the conveyor, for example. This mark may also be used when there is a requirement to interrupt a job into well defined parts, for example, to batch work by post code, or any other defined criterion.
3.1 Principles

Class 2 OMR has been produced to enable a number of OMR functions to be used on machines where a computer is either not used, or cannot be used. In these situations only a limited number of functions is available, and there are programming constraints imposed as a numeric keyboard is not available for programming.

This is a much simpler OMR system in which the marks have to be printed in specific areas on the form. The marks must be printed in the correct order after the synchronising gate mark, but if any of the available functions is not required those marks may be omitted. The marks also have to be programmed on one of six defined pitches (i.e. from the centre of one mark to the centre of the next programmed mark). The pitches are 1/6", 1/5", 1/4", 1/3", 5mm and 10mm.

Each function is allocated one or more marks which have specific Mark No. references. The only mandatory mark is the gate mark, which with the stop mark achieves grouping of forms in variable numbers. Therefore, practically, the minimum number of marks to be programmed is two.

The function descriptions are as for class 1 (see section 2). Class 2 OMR is applicable to the following list of units:-

Automailer 1 IS
Automailer 1 IS Plus
Automailer 1 Tower Plus

Automailer 2 Feeder
Automailer 2 Folder
Automailer 2 IS
Automailer 2 IS On-Line
Automailer 2 Sheet feed A3 Folder

Automailer 3 Feeder
Automailer 3 Folder
Automailer 3 IS
Automailer 3 IS On-Line
Automailer 3 Sheet feed A3 Folder
3.2 Order of Programmed Marks
The functions available vary from machine to machine, as listed below.

3.2.1 Automailer 1 IS
The facilities available on this unit are:-

a) grouping of multipage documents, using the end of group mark,
b) selective feeding of the insert from the second station, using the select feed mark,
c) manual outsorting, using the 'halt' mark to stop the machine with the document set in the collate unit and
d) form security numbering, using up to three marks, which allows number sequences 0 to 1, 0 to 3, and 0 to 7. There is no option to omit the zero.

The OMR marks are read in the numbered sequence, with the gate mark first.
1. Gate Mark
2. End of Group (Stop)
3. Parity
4. Select Feed
5. Halt
6. Form Sequence Numbering 1
7. Form Sequence Numbering 2
8. Form Sequence Numbering 3

3.2.2 Automailer 1 IS Plus
The facilities available on this unit are:-

a) grouping of multipage documents, using the end of group mark,
b) selective feeding of the insert from the second station, using the select feed mark,
c) manual outsorting, using the 'halt' mark to stop the machine with the document set in the collate unit and
d) form security numbering, using up to five marks, which allows number sequences 0 to 1, 0 to 3, 0 to 7, 0 to 15 and 0 to 31. There is no option to omit the zero.
e) no seal, using the 'unseal' mark, to inhibit sealing of the envelope.

The OMR marks are read in the numbered sequence, with the gate mark first.
1. Gate Mark
2. End of Group (Stop)
3. Parity
4. Unseal
5. Select Feed
6. Halt
7. Form Sequence Numbering 1
8. Form Sequence Numbering 2
9. Form Sequence Numbering 3
10. Form Sequence Numbering 4
11. Form Sequence Numbering 5
### 3.2.3 Automailer 1 Tower Plus

The facilities available on this unit are:-

- a) grouping of multipage documents, using the end of group mark,
- b) selective feeding of inserts from the station 1, 'b' and 'c' hoppers and the station 2 hopper, using the select feed marks, 1b.1c and 2.
- c) manual outsorting, using the 'halt' mark to stop the machine with the document set in the collate unit and
- d) form security numbering, using up to five marks, which allows number sequences 0 to 1, 0 to 3, 0 to 7, 0 to 15 and 0 to 31. There is no option to omit the zero.
- e) no seal, using the 'unseal' mark, to inhibit sealing of the envelope.

The OMR marks are read in the numbered sequence, with the gate mark first.

1. Gate Mark
2. End of Group (Stop)
3. Parity
4. Unseal
5. Select Feed 1b
6. Select Feed 1c
7. Select Feed 2
8. Halt
9. Form Sequence Numbering 1
10. Form Sequence Numbering 2
11. Form Sequence Numbering 3
12. Form Sequence Numbering 4
13. Form Sequence Numbering 5

### 3.2.4 Automailer 2

The following Class 2 marks may be read on the Automailer 2 OMR Feeder, OMR Folders, 2263/66 IS, and 2264/67 On-Line IS units.

The facilities available on these units are:-

- a) grouping of multipage documents, using the end of group mark,
- b) selective feeding of inserts from feed stations 1, 2 and 3, using the select feed marks 1, 2, and 3.
- c) form security numbering, using up to five marks, which allows number sequences 0 to 1, 0 to 3, 0 to 7, 0 to 15 and 0 to 31. There is no option to omit the zero.
- d) outsorting, using the divert marks 1, 2, and 3 to divert the unfolded forms into any of the fitted divert units (1 to 6 diverts, subject to unit fitted).

1. Gate Mark
2. End of Group (Stop)
3. Parity
4. Select Feed 1
5. Select Feed 2
6. Select Feed 3
7. Form Sequence Numbering 1
8. Form Sequence Numbering 2
9. Form Sequence Numbering 3
10. Form Sequence Numbering 4
11. Form Sequence Numbering 5
12. Divert mark 1
13. Divert Mark 2
14. Divert Mark 3

3.2.5 Automailer 3

The following Class 2 marks may be read on the Automailer 3 OMR Feeder, OMR Folders, 1363 IS, and 1364 On-Line IS units.

The facilities available on these units are:-

a) grouping of multipage documents, using the end of group mark,
b) selective feeding of inserts from feed stations 1, 2 and 3, using the select feed marks 1, 2, and 3.
c) form security numbering, using up to five marks, which allows number sequences 0 to 1, 0 to 3, 0 to 7, 0 to 15 and 0 to 31. There is no option to omit the zero.
d) outsorting, using the divert marks 1, 2, and 3 to divert the unfolded forms into any of the fitted divert units (2 to 6 diverts, subject to unit fitted).

1. Gate Mark
2. End of Group (Stop)
3. Parity
4. Select Feed 1
5. Select Feed 2
6. Select Feed 3
7. Form Sequence Numbering 1
8. Form Sequence Numbering 2
9. Form Sequence Numbering 3
10. Form Sequence Numbering 4
11. Form Sequence Numbering 5
12. Divert mark 1
13. Divert Mark 2
14. Divert Mark 3
3.3 OMR PROGRAMMING

To programme an OMR application a number of parameters have to be set by the operator. These are:-

1. Each of the mark functions have to be individually selected to be functional or not, as required.

2. Additionally, the number of marks used for form security is programmed. This may be any number from 0 to 5 (subject to the OMR machine). Programming '0' indicates to the system that Form Security Numbering is not being used on the job currently being programmed.

3. The distance to the gate mark from the lead edge of the document, in millimetres.

4. The mark pitch, which may be 1/6", 1/5", 1/4", 1/3", 5mm or 10mm.

3.4 PRINTING POSITIONS FOR OMR MARKS.

When all of the functions are not being used, and therefore all the marks are not required, the remaining marks should be printed in the print order specified in section 3.1, but with no gaps allowed for the unused functions.

For example, taking the Automailer 1 Tower Plus as an example, if from the complete set of OMR functions, only grouping, parity checking, select feeding from station 2 and three mark form security numbering is required, the marks shown on the right should be programmed and printed in sequential print positions after the 'gate mark'.

<table>
<thead>
<tr>
<th>Automailer 1 Tower Plus (All Marks)</th>
<th>Automailer 1 Tower Plus (Programmed Marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gate Mark</td>
<td>1. Gate Mark</td>
</tr>
<tr>
<td>2. End of Group (Stop)</td>
<td>2. End of Group (Stop)</td>
</tr>
<tr>
<td>3. Parity</td>
<td>3. Parity</td>
</tr>
<tr>
<td>4. Unseal</td>
<td>4. Select Feed 2</td>
</tr>
<tr>
<td>5. Select Feed 1b</td>
<td>5. Form Sequence Numbering 1</td>
</tr>
<tr>
<td>6. Select Feed 1c</td>
<td>6. Form Sequence Numbering 2</td>
</tr>
<tr>
<td>7. Select Feed 2</td>
<td>7. Form Sequence Numbering 3</td>
</tr>
<tr>
<td>8. Halt</td>
<td></td>
</tr>
<tr>
<td>9. Form Sequence Numbering 1</td>
<td></td>
</tr>
<tr>
<td>10. Form Sequence Numbering 2</td>
<td></td>
</tr>
<tr>
<td>11. Form Sequence Numbering 3</td>
<td></td>
</tr>
<tr>
<td>12. Form Sequence Numbering 4</td>
<td></td>
</tr>
<tr>
<td>13. Form Sequence Numbering 5</td>
<td></td>
</tr>
</tbody>
</table>

It can be seen that the area of space on the form required for OMR marks is kept to a minimum. In this example, thirteen print positions have been reduced to seven consecutive print pitch positions by removing the unused functions.
This section details the position on the document where the OMR marks can be correctly read. The print area will be specific to each unit. For machines which can operate either under class 1 or class 2 conditions, the print area will apply to both operating modes.

Automailer 1 IS
Automailer 1 IS Plus
Automailer 1 Tower Plus

Automailer 2 Feeder
Automailer 2 Folder
Automailer 2 IS
Automailer 2 IS On-Line (OMR Reading in the Forms Cutter)
Automailer 2 Sheet Feed A3 Folder

Automailer 3 Feeder
Automailer 3 Folder
Automailer 3 IS
Automailer 3 IS On-Line (OMR Reading in the Forms Cutter)
Automailer 3 Sheet Feed A3 Folder
Distance from the lead edge of the document to the first mark (Gate Mark): 17 mm

Clear space: 12 mm

Mark spacing: \( \frac{1}{6} \), \( \frac{1}{5} \), \( \frac{1}{4} \), \( \frac{1}{3} \), 5mm or 10mm

Clear space: 5 mm

Minimum mark size:
- thickness: 0.5 mm
- width: 8 mm

Direction of paper travel

OMR marks to be printed in the shaded area.

Distance from the last mark to the trailing edge of the document: 10 mm
Distance from the lead edge of the document to the first mark (Gate Mark) 17 mm

Clear space 12 mm

Mark spacing 1/6", 1/5", 1/4", 1/3", 5 mm or 10 mm

Clear space 5 mm

Minimum mark size
thickness 0.5 mm
width 8 mm

OMR marks to be printed in the Shaded area.

Distance from the last mark to the trailing edge of the document 10 mm

Direction of paper travel
4.3 Automailer 1 Tower Plus

- Distance from the lead edge of the document to the first mark (Gate Mark): 17 mm
- Clear space: 12 mm
- Mark spacing: $\frac{1}{6}''$, $\frac{1}{5}''$, $\frac{1}{4}''$, $\frac{1}{3}''$, 5mm or 10mm
- Clear space: 5 mm, 2.5 mm
- Minimum mark size: thickness 0.5 mm, width 8 mm
- OMR marks to be printed in the Shaded area.
- Distance from the last mark to the trailing edge of the document: 10 mm

Direction of paper travel
4.4 Automailer 2 OMR Feeder

- Distance from the lead edge of the document to the first mark (Gate Mark): 17 mm
- Distance from the last mark to the trailing edge of the document: 10 mm
- Mark spacing: 1/6", 1/5", 1/4", 1/3", 5mm or 10mm
- OMR marks to be printed in the shaded area.
- Clear space: 5 mm
- Minimum mark size: thickness 0.5 mm, width 8 mm
- Clear space: 12 mm
- Clear space: 5 mm
- Clear space: 2.5 mm
- Direction of paper travel
4.5 Automailer 2 OMR Folder

Distance from the lead edge of the document to the first mark (Gate Mark) 17 mm

Clear space 12 mm

Mark spacing $\frac{1}{6}''$, $\frac{1}{5}''$, $\frac{1}{4}''$, $\frac{1}{3}''$, 5mm or 10mm

Clear space 5 mm

Minimum mark size thickness 0.5 mm

Width 8 mm

Direction of paper travel

OMR marks to be printed in the Shaded area.

Distance from the last mark to the trailing edge of the document 10 mm

Clear space 2.5 mm

Clear space 5 mm

5 mm

5 mm
4.6 Automailer 2 IS

Distance from the lead edge of the document to the first mark (Gate Mark): 17 mm

Clear space: 12 mm

Mark spacing: 1/6", 1/5", 1/4", 1/3", 5 mm or 10 mm

Clear space: 5 mm

Minimum mark size:
- Thickness: 0.5 mm
- Width: 8 mm

Distance from the last mark to the trailing edge of the document: 40 mm

OMR marks to be printed in the shaded area.

Direction of paper travel:
- 5 mm
- 5 mm
4.7 Automailer 2 IS On-Line (OMR Reading in the Forms Cutter)

Distance from the lead edge perforation of the document to the first mark (Gate Mark) 12 mm

Mark spacing $\frac{1}{6}''$, $\frac{1}{5}''$, $\frac{1}{4}''$, $\frac{1}{3}''$, 5 mm or 10 mm

Clear space 5 mm

Minimum mark size thickness 0.5 mm

Width 8 mm

OMR marks to be printed in the Shaded area.

Distance from the last mark to the trailing edge perforation of the document 12 mm

Clear space 2.5 mm

Clear space 12 mm

Direction of paper travel

N.B. When the paper web is stationary during the cutting cycle, no OMR mark should be closer than 7.5 mm to the reading line of the OMR head.
Distance from the lead edge of the document to the first mark (Gate Mark) 95 mm

Clear space 12 mm

Mark spacing 1/6", 1/5", 1/4", 1/3", 5 mm or 10 mm

Clear space 5 mm

Minimum mark size thickness 0.5 mm

width 8 mm

Direction of paper travel

OMR marks to be printed in the Shaded area.

Distance from the last mark to the trailing edge of the document 10 mm

OMR Guide
4.9 Automailer 3 OMR Feeder

Distance from the lead edge of the document to the first mark (Gate Mark) 17 mm

OMR marks to be printed in the Shaded area.

Direction of paper travel

Distance from the last mark to the trailing edge of the document 10 mm

Clear space 5 mm

Mark spacing \( \frac{1}{6} \), \( \frac{1}{5} \), \( \frac{1}{4} \), \( \frac{1}{3} \), 5mm or 10mm

Minimum mark size thickness 0.5 mm

Clear space 12 mm

Clear space 2.5 mm

Width 8 mm

OMR Guide

Section 4 - page 10
4.10 Automailer 3 OMR Folder

Distance from the lead edge of the document to the first mark (Gate Mark) 17 mm

Mark spacing 1/6", 1/5", 1/4", 1/3", 5 mm or 10 mm

Clear space 5 mm

Minimum mark size thickness 0.5 mm

Width 8 mm

OMR marks to be printed in the shaded area.

Distance from the last mark to the trailing edge of the document 10 mm

Direction of paper travel

Clear space 12 mm

Clear space 2.5 mm

5 mm

5 mm
4.11 Automailer 3 IS

Distance from the lead edge of the document to the first mark (Gate Mark) 17 mm

Clear space 12 mm

Mark spacing 1/6", 1/5", 1/4", 1/3", 5 mm or 10 mm

Clear space 5 mm

Minimum mark size thickness 0.5 mm

Width 8 mm

OMR marks to be printed in the Shaded area.

Distance from the last mark to the trailing edge of the document 10 mm

Direction of paper travel

OMR Guide
4.12 Automailer 3 IS On-Line (OMR Reading in the Forms Cutter)

Distance from the lead edge perforation of the document to the first mark (Gate Mark) 12 mm

- Clear space 12 mm
- Mark spacing 1/6", 1/5", 1/4", 1/3", 5mm or 10mm
- Clear space 5 mm
- Minimum mark size thickness 0.5 mm
- Width 8 mm

OMR marks to be printed in the Shaded area.

Distance from the last mark to the trailing edge perforation of the document 12 mm

N.B. When the paper web is stationary during the cutting cycle, no OMR mark should be closer than 7.5mm to the reading line of the OMR head.
Distance from the lead edge of the document to the first mark (Gate Mark) 95 mm

Clear space 12 mm

Mark spacing 1/6", 1/5", 1/4", 1/3", 5 mm or 10 mm

Clear space 5 mm

Minimum mark size thickness 0.5 mm

Width 8 mm

OMR marks to be printed in the Shaded area.

Direction of paper travel

Distance from the last mark to the trailing edge of the document 10 mm

Clear space 2.5 mm

5 mm

5 mm
5.1 Introduction
The forms which constitute the prime documents processed through PFE Automailers will be printed either on laser printers or impact printers. Impact printers will in turn divide into two categories. The first, printers where each character is composed of an array of dots, and hence there is a graphics capability. The second, where each character is printed as a single impact of one of a set of predefined characters, which generally does not include any graphics symbols.

5.2 Impact printing on continuous forms.
With this type of printing there is generally no page composition before printing. The computer software application interrogates the database and sends the information to the printer sequentially. Typical applications would be the printing of invoices, statements etc. where there would be a variable number of entries in the body of the form. In considering the printing of OMR marks, the disadvantage of this type of printing is that when any particular page is being printed there is no information available to indicate whether it will be the last page of a set going to one addressee, until the last line entry of the invoice, statement, etc. has been printed. Depending on fold type and which Automailer the form is to be processed on, this may be a disadvantage.

Order of Printing. Generally, the output of this type of application is in order. The order may alphabetic (Addressee A through to addressee Z), account order (account 0001 to 9999) or more recently, the print output may be in mailsort order to obtain a discount from Royal Mail. Whichever order is being used, a set of pages to one addressee will always be printed in page sequence starting with page 1.

Order of Processing. Depending on the presentation required and hence fold format the forms may be processed either in the print order, or in reverse print order. Additionally, there is the choice of processing the forms on-line through a cutter, or the forms may be cut or burst off-line and then processed as cut sheet material. Because the forms can be loaded on the cutter or burster either face up or down, and starting at the beginning of the print sequence or at the end of the print sequence, it allows the forms to be re-ordered, before being loaded on the Automailer. This detail must be known before the OMR coding is defined.
Printed characters used as OMR marks. Typical printed marks that can be read by our OMR readers:

for portrait documents the marks should be horizontal,

___ underscore — three underscores next to each other, usually no gaps between them. As long as the thickness is adequate this is usually the best option.

=== 'equals sign' — this can sometimes be used when the underscore is too thin as it doubles the thickness. It has a disadvantage due to the gaps between each character, but this will depend on the actual printer used.

for landscape documents the marks need to be vertical.

Where the character pitch is 10 c.p.i. (characters per inch) or 12 c.p.i., the OMR characters should be printed with a character space between them. Additionally, the vertical print spacing should be reduced by printing at 8 lines per inch. The best character to use is usually an upper case 'I'. The characters should be repeated on three successive lines to give an acceptably 'long' mark as shown :-

```
I I I
I I I
I I I
```

direction of paper feed

These three 'I's are equivalent to one mark in the direction of paper movement.
5.3 Laser printing
With laser printing the whole page is composed before printing is started. Consider the example of printing the first page of a statement which may overflow on to a second page. Before the page has started to be printed the total information to be printed, including any OMR marks, must be known. This allows the OMR marks to be positioned practically anywhere on the form. The printing that can be used to generate OMR marks can be either suitably sized text characters, or graphics characters specifically designed for OMR use.

Order of Printing. Generally, the output of this type of application is in order. The order may alphabetic (Addressee A through to Addressee Z), account order (account 0001 to 9999) or more recently, the print output may be in mailsort order to obtain a discount from Royal Mail. Whichever order is being used, a set of pages to one addressee will always be printed in page sequence starting with page 1. The presentation of the printed paper stack is face up, with the first printed page uppermost.

Order of Processing. Depending on the presentation required and hence fold format the forms may be processed either in the print order, or in reverse print order. The processing order may also vary between different Automailers. *This detail must be known before the OMR coding is defined.*
Section 6 Introduction

This section deals with the placement of OMR Marks on the forms for different mailing feed units processing OMR printed forms.

The options that have to be selected for each unit are as follows:-

1. Is the form the prime (address carrying) document?
2. Has the document set been normally printed (A to Z) as a continuous form?
3. Has the document set been normally printed (A to Z, with A face up) as cut sheet?
4. Are the forms to be 'V' folded or 'C' folded or 'Z' folded?
5. Does the envelope have a conventional window in its front face?

The three features which have to be considered with regard to the OMR Marking are:-

1. Is the Gate Mark nearer to the top or bottom of the form for portrait printed forms? For landscape printed forms, is the Gate Mark nearer to the left or right side? As the position on the form of the OMR marks indicates which functions are required, it is important to know the precise position of the marks on the form. This is achieved by synchronising all the marks to the form using the gate mark as the reference mark. In general, this means that the gate mark should be the first mark to be read when the form passes the OMR read head.

2. Is the 'End of Group' Mark of the first page of a set (page 1) to any addressee, or is it on the last page of the set (i.e. on say, page 3 of a three page set)? When forms are fed from the feed hopper to the collating area, whether this is a separate unit or the insert track, the system must know when it should stop. It should stop feeding after processing a complete group to one recipient. This means that the End of Group mark should be on the last page to be fed from the hopper. Depending on the presentation of the forms at the hopper, and the feed method (i.e. top feed or bottom feed) this mark may be either on the page 1 form or the last page. This purely relates to which form is the last to leave the hopper.

3. Does the Divert Mark have to be printed on the first page of the set to be diverted, or on the last page of the set (i.e. on say, page 20 of a twenty page set)? In a situation where the set of forms needs to be diverted for alternative processing, the decision to divert must be signalled before the end of the first part-group in the collating area. Once again, as the forms may be processed from page 1 forwards, or from the last page towards page 1, the divert mark will have to be printed nominally on page 1 or on the last page.
6.1 Automailer 1 IS
Automailer 1 IS Plus
Automailer 1 Tower Plus

Document type: 1
Prime,
Portrait,
Cut sheet Laser,
A-Z face up,
'V' fold, or 'C' fold
Normal window env.

Document feed:
(Top Feed)
Face up, Feet first (address trailing)

OMR data:
Gate Mark  bottom of form
End of Group last page
Divert Mark  page 1
6.1 cont. Automailer 1 IS
Automailer 1 IS Plus
Automailer 1 Tower Plus

Document type: 2
Prime,
Portrait,
Cut sheet Laser,
A-Z face up,
'Z' fold,
Normal window env.

Document feed:
(Top Feed)
Face down, Head first (address leading)

OMR data: Only top reading OMR possible on the Automailer 1 IS,
therefore 'Z' fold and OMR reading is only possible with duplex printing.
Gate Mark top of form
End of Group page 1
Divert Mark last page
6.2 Automailer 2 Feeder

Document type: 1
Prime,
Cut sheet Laser,
A-Z face up,
Normal window env.

Document feed:
(Bottom Feed)
Face down, Feet first (address trailing)

OMR data:
Gate Mark  bottom of form
End of Group last page

direction of paper feed
6.3 Automailer 2 Folder

Document type: 1
Prime,
Portrait,
Cut sheet Laser,
A-Z face up,
‘V’ fold, or ‘C’ fold
Normal window env.

Document feed:
(Top Feed)
Face down, Feet first (address trailing)

OMR data:
Gate Mark bottom of form
End of Group page 1

Address location:  must be on each page, last page will show through the window.
6.3 cont.  Automailer 2 Folder

**Document type:** 2
Prime,
Portrait,
Cut sheet Laser,
A-Z face up,
'Z' fold
Normal window env.

**Document feed:**
(Top Feed)
Face up, Head first (address leading)

**OMR data:**  *Only bottom reading OMR possible on the Automailer 2 Folder, therefore 'Z' fold and OMR reading is only possible with duplex printing.*
Gate Mark  top of form
End of Grouplast page
6.4 Automailer 2 IS

Document type: 1
Prime,
Portrait,
Cut sheet Laser,
A-Z face up,
'V' fold, or 'C' fold
Normal window env.

Document feed:
(Top Feed)
Face down, Feet first (address trailing)
Under-Collation

OMR data:
Gate Mark bottom of form
End of Group page 1
Divert Mark last page

Address location: for page groups up to 8 pages, 'V' fold, page 1 address will show through the envelope window.
6.4 cont Automailer 2 IS

**Document type:**
Prime,
Portrait,
Cut sheet Laser,
A-Z face up,
'Z' fold
Normal window env.

**Document feed:**
(Top Feed)
Face up, Head first (address leading)
Under-Collation

**OMR data:**
Gate Mark top of form
End of Group last page
Divert Mark page 1

---

ABC Company Ltd.
High street
Anytown

---

Gate ——
E.o.G ——
Parity ——
(Divert) ——

---

Gate
E.o.G
Parity
(Divert)

---

page 1

---

ABC Company Ltd.
High street
Anytown

---

Gate ——
E.o.G ——
Parity ——
(Divert)

---

Gate
E.o.G
Parity
(Divert)

---

page 2

---

ABC Company Ltd.
High street
Anytown

---

Gate ——
E.o.G ——
Parity ——
(Divert)

---

Gate
E.o.G
Parity
(Divert)

---

page 3

---

direction of paper feed
6.5 Automailer 2 IS On-Line

**Document type:**
Prime,
Portrait,
Continuous,
Print sequence, A-Z,
'V' fold, or 'C' fold
Normal window env.

**Document feed:**
Feed sequence, Z-A,
Face down, Feet first (address trailing)
Under-Collation

**OMR data:**
Gate Mark  bottom of form
End of Group  page 1
Divert Mark  last page

Address location:  *for page groups up to 8 pages, 'V' fold, page 1 address will show through the envelope window.*
Document type: 1
Prime,
Portrait,
Continuous,
Print sequence, A-Z ,
'Z' fold
Normal window env.

Document feed:
Feed sequence, A-Z ,
Face up, Head first (address leading)
Under-Collation

OMR data:
Gate Mark top of form
End of Group last page
Divert Mark page 1
6.6 Automailer 2 Sheet Feed A3 Folder

Document type: 1
Prime,
Portrait,
Continuous forms (cut or burst), Cut sheet Laser,
A-Z face up,
'Single' fold, followed by either 'V' or 'C' fold
Normal window env.

Document feed:
(Top Feed)
Face up, Head first (address leading)
Over-Collation after first fold,

OMR data:
Gate Mark  top of form (towards address side)
End of Grouplast page
Divert Mark  page 1
6.6 cont. Automailer 2 Sheet Feed A3 Folder

Document type: 2
Prime,
Portrait,
Continuous forms (cut or burst), Cut sheet Laser,
A-Z face up,
'Single' fold, followed by either 'V' or 'C' fold
Normal window env.

Document feed:
(Top Feed)
Face up, Head first (address leading)
Over-Collation after first fold,

OMR data:
Gate Mark top of form (towards address side)
End of Grouplast page
Divert Mark page 1
6.7 Automailer 2
On-Line Cross Folder

Document type: 1
Prime,
Landscape,
Continuous forms,
Print sequence, A-Z,
'Single' fold, followed by either 'V' or 'C' fold
Normal window env.

Document feed:
Feed sequence, Z-A,
Face up, Feet first (address trailing)
Over-Collation,

OMR data:
Gate Mark  bottom of form
End of Grouppage 1
Divert Mark  last page

direction of paper feed
6.8 Automailer 3 Feeder

Document type: 1
Prime,
Cut sheet Laser,
A-Z face up,
Normal window env.

Document feed:
(Bottom Feed)
Face down, Feet first (address trailing)

OMR data:
Gate Mark  bottom of form
End of Grouplast page
6.9 Automailer 3 Folder

Document type: 1
Prime,
Portrait,
Cut sheet Laser,
A-Z face up,
'V' fold, or 'C' fold
Normal window env.

Document feed:
(Bottom feed)
Face down, Feet first (address trailing)

OMR data:
Gate Mark bottom of form
End of Grouplast page
6.9 cont. Automailer 3 Folder

Document type: 2
Prime,
Portrait,
Cut sheet Laser,
A-Z face up,
'Z' fold
Normal window env.

Document feed:
(Bottom Feed)
Face up, Head first (address leading)

Gate Mark   top of form
End of Group

Address location: must be on each page, last page will show through the window.
6.10 Automailer 3 IS

Document type: 1
Prime,
Portrait,
Cut sheet Laser,
A-Z face up,
'V' fold, or 'C' fold
Normal window env.

Document feed:
(Bottom Feed)
Face down, Feet first (address trailing)
Over-Collation

OMR data:
Gate Mark bottom of form
End of Grouplast page
Divert Mark page 1

direction of
paper feed

ABC Company Ltd.
High street
Anytown

ABC Company Ltd.
High street

(Alternating)
Parity
E.o.G
Gate

(Divert)

Page 1

Page 2

Page 3
Document type: 2
Prime,
Portrait,
Cut sheet Laser,
A-Z face up,
'Z' fold
Normal window env.

Document feed:
(Bottom Feed)
Face up, Head first (address leading)
Over-Collation

OMR data:
Gate Mark  top of form
End of Grouppage 1
Divert Mark  last page

Address location:  for page groups up to 4 pages, 'Z' fold, page 1 address will show through the envelope window.
6.11 Automailer 3 IS On-Line

Document type: 1
Prime,
Portrait,
Continuous,
Print sequence, A-Z ,
‘V’ fold, or ‘C’ fold
Normal window env.

Document feed:
Feed sequence, Z-A ,
Face down, Feet first (address trailing)
Under-Collation

OMR data:
Gate Mark bottom of form
End of Group last page
Divert Mark last page

Address location : for page groups up to 6 pages, 
‘V’ fold, 4 pages, ‘C’ fold, 
page 1 address will show through the envelope window.
Document type: 2
Prime,
Portrait,
Continuous,
Print sequence, A-Z ,
'Z' fold
Normal window env.

Document feed:
Feed sequence, A-Z ,
Face up, Head first (address leading)
Under-Collation

OMR data:
Gate Mark top of form
End of Group last page
Divert Mark page 1

direction of paper feed
6.12 Automailer 3 Sheet Feed A3 Folder

**Document type:**
Prime, Portrait, Continuous forms (cut or burst), Cut sheet Laser, A-Z face up, 'Single' fold, followed by either 'V' or 'C' fold Normal window env.

**Document feed:**
(Top Feed) Face up, Head first (address leading) Over-Collation after first fold,

**OMR data:**
Gate Mark top of form (towards address side) End of Grouplast page Divert Mark page 1
6.12 cont. Automailer 3 Sheet Feed A3 Folder

Document type: 2
Prime,
Portrait,
Continuous forms (cut or burst), Cut sheet Laser,
A-Z face up,
'Single' fold, followed by either 'V' or 'C' fold
Normal window env.

Document feed:
(Top Feed)
Face up, Head first (address leading)
Over-Collation after first fold,

OMR data:
Gate Mark top of form (towards address side)
End of Grouplast page
Divert Mark page 1
6.13 Automailer 3
On-Line Cross Folder

Document type: 1
Prime, Landscape, Continuous forms, Print sequence, A-Z, 'Single' fold, followed by either 'V' or 'C' fold Normal window env.

Document feed:
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