

PART B – SPECIFICATIONS FOR OTHER MICR ENCODED PAYMENT ITEMS

7. PAPER AND PRINTING SPECIFICATIONS

7.1 Paper Quality

Please see Part A, Section 3.1

7.2 Multiple Part Sets

The requirement for multiple copies can be met in a number of ways: with carbonless papers; by interleaving separate carbon tissues; or by carbonizing the back of paper copies. There are many circumstances under which either the original copy, or one of the multiple copies from these form sets will be encoded and therefore find its way into the payments system. For that reason, the way in which the special characteristics of these papers may affect the reader-sorter function must be considered.

7.3 Carbonless Papers

Carbonless (CB) papers are those which carry a dye that develops a legible image upon writing or impact. Some coatings which make this possible may result in coating buildup on feed rollers in the equipment. Care should therefore be exercised in the selection of carbonless paper.

Financial institutions should be aware that customer endorsement on CB paper cheques is not always legible to the naked eye and/or camera (on microfilm) when done with a ballpoint pen. It is recommended that such items always be endorsed with a felt-tipped or fountain pen.

7.4 Carbonized Form Sets

Carbonized form sets are those which contain one or more copies having a carbon coating applied directly to the paper. Care should be exercised in the selection and placement of the carbon strips on the back of documents to avoid materials that transfer to adjacent documents and the sorter transport systems.

Where optical character recognition (OCR) technology is being used, the possibility exists that an excessive transfer of carbon material in areas that are to be read optically may interfere with the optical reading process.

The use of carbon strips on the back of MICR-encoded documents must be cleared through the CPA member's Quality Assurance Department.

7.5 Carbon Interleaved Forms

Carbon interleaved sets are no problem for automated document handling if it is only the original copy that is sorted. If a subsequent (duplicate) copy is to be sorted (as is true with the register copy of many money orders), problems in sorting may be encountered if there is an appreciable transfer of carbon to the face of the automation copy.

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7.6 Sizes

Note: In converting the Imperial measurements to Metric measurements in this Standard, some of the Metric figures have been rounded off, in most cases to the nearest hundredth of a centimetre.

7.6.1 Document Sizes

All documents, excluding any detachable portions, are to be rectangular in shape. The following minimum and maximum dimensions shall be adhered to:

	Length	Depth
Minimum	15.88 cm (6¼")	6.99 cm (2¾")
Maximum	21.59 cm (8½")	9.53 cm (3¾")

7.6.2 Type Sizes

Printing outside the MICR band may be set in small but legible type with minimum standards for specific items as follows:

- a) name of deposit-taking financial institution -- minimum of 6 point type; and
- b) branch address, city, province, postal code -- minimum of 6 point type.

7.7 Magnetic Ink

Ink used for MICR encoding must contain 50% to 60% iron oxide.

7.8 Attachments

The addition by printers or corporate clients of any attachments, however affixed to the document, is prohibited.

A document bearing an attachment of any nature prior to processing by a financial institution will be considered as an item not conforming to the standards.

7.9 Continuous Forms

7.9.1 Perforations - Voucher and Pin-fed Documents

To avoid processing problems due to skew caused by irregular tears, any detachable statement should be placed to the left, or at the top, of the document. While some document issuing methods may make such a format impracticable, as, for example, where continuous pin-fed documents are used, clean perforations are essential to reduce the chances of mutilating such documents.

It is essential in press perforations that no magnetic ink be deposited along the bottom 1.59 cm (⁵/₈") band or right-hand edges of documents, such as would happen with inked press perforations.

Where document alignment holes are used, as for continuous pin-fed documents, the portions containing the holes on both edges of the document are to be perforated and detachable so they can be removed from the document before it is presented for payment.

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7.9.2 Guide Marks

Selvedge on continuous forms should be perforated. When this is not possible, guide marks must be provided to indicate the correct guillotining position. These guide marks must not infringe upon the 1.59 cm ($\frac{5}{8}$ ") MICR band, as they introduce extraneous ink into the readable area.

7.9.3 Edge Notching

Documents intended for computer sorting may not be produced with notches or other types of indentation on any edge, as these can create equipment jams and interlocking of documents during processing.

7.9.4 Holes in Documents

Because of the constraints of electronic processing equipment, holes of any shape or size in documents are not desirable. The use of holes in any type of MICR encoded document must be cleared with your CPA member Quality Assurance Department.

7.9.5 Detachable Borders

All detachable borders (e.g., voucher stubs and perforated pin-fed margins) must be removed before negotiation. All pin-fed borders on both edges of the document must be removable.

7.10 Machine Language

See Part A, Section 4.1

7.11 Background Screening

Printed background screening or designs anywhere on the front and back of MICR encoded documents shall be of a colour and a pattern which will not interfere with the legibility of any information, either printed or written, on the original document, or any reproduction of it through use of microfilm, imaging or photocopying equipment.

It is strongly recommended that light pastel colours or standard safety tints be used and that clay "inorganic" and highly reflective inks, heavy inking and dark colours be avoided. Printed information should appear in the specified locations, and the 1.59 cm ($\frac{5}{8}$ ") band must be used only for E-13B characters.

7.12 Steel Engraving

Because steel engraving can damage the read head on certain makes of electronic processing equipment, steel engraving on MICR encoded documents should not appear within 2.54cm (1") of the bottom edge of the document.

7.13 Informational Printing on Back of Documents

Informational printing on the back of MICR encoded documents shall be of a colour which will not interfere with the legibility of any CPA member-required endorsements. This includes the placement of carbon strips.

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7.14 Customized Items

Where scenic or special customized item design is involved, printers should consult with the nearest Quality Assurance Department of their client's CPA member (as shown in the referral list in Appendix V) before proceeding with expensive design work or production which may prove unacceptable to the CPA members.

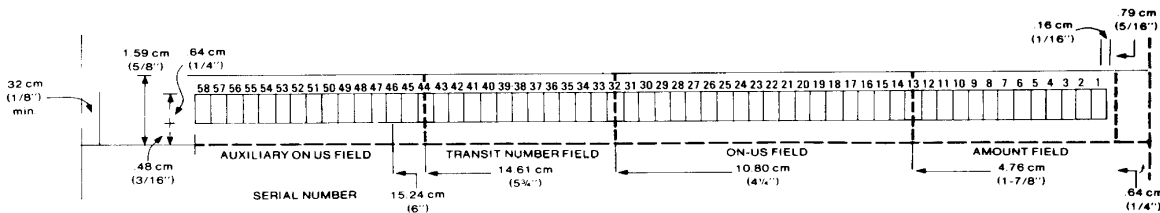
7.15 MICR-Encoding Area

Below is a detailed diagram of the 1.59 cm ($\frac{5}{8}$ ") MICR area, an important part of the document format. There are placement specifications governing the location of the encoded characters printed in this area.

The area containing the MICR band measures 1.59 cm ($\frac{5}{8}$ ") from the bottom edge of the document. In the MICR band, the use of magnetic ink is restricted to the printing of the prescribed E-13B characters. **No other printing shall appear anywhere in this area on the face of the document except the prescribed E-13B characters.** It is strongly recommended that the MICR band remain clear of background screening. Borders are not permitted within the 1.59cm ($\frac{5}{8}$ ") clear MICR band.

No magnetic ink printing should appear on the reverse side of the document within the 1.59 cm ($\frac{5}{8}$ ") area along the bottom of the document.

For purposes of this Standard, the right and left characters in any field are referred to as the opening and closing characters respectively.



(Diagram not to scale)

7.16 Reference Edges

See Part A, Section 4.3

7.17 Fields or Areas of the Encoding Line

See Part A, Section 4.4

7.17.1 Amount Field

See Part A, Section 4.4.1

7.17.2 On-Us Field

See Part A, Section 4.4.2

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7.17.3 Transaction Code Section

Note : This section deals with transaction codes applicable to non-imageable MICR encoded documents.

Subject to the exceptions listed below, the Transaction Code Section may be blank or consist of a maximum of four (4) digits located between the closing symbol of the amount field and the opening symbol of the Account Number Section. Where applicable, spaces should be provided to accommodate combinations of pre-encoded and post-encoded information.

Exceptions:

- Transaction code 96 shall be encoded on bill payment remittances;
- Transaction code 28 shall be encoded on Returned Item Carrier Envelopes, in accordance with CPA Rule A4;
- Transaction code 45 shall be encoded on all U.S. Dollar Items² except items having an ABA routing number in the Transit Number Field, paper pre-authorized debits, and certain other items that may use a different transaction code in this field. Contact the financial institution's Quality Assurance Division (See Appendix V) for details.

[Note: transaction code 05 is reserved for future use.]

Please see Appendix VII for a listing of all transaction codes for paper items reserved for CPA use.

7.17.4 Account Number Section

See Part A, Section 4.4.2.2

7.17.5 Transit Number Field

(a) MICR Encoded Documents

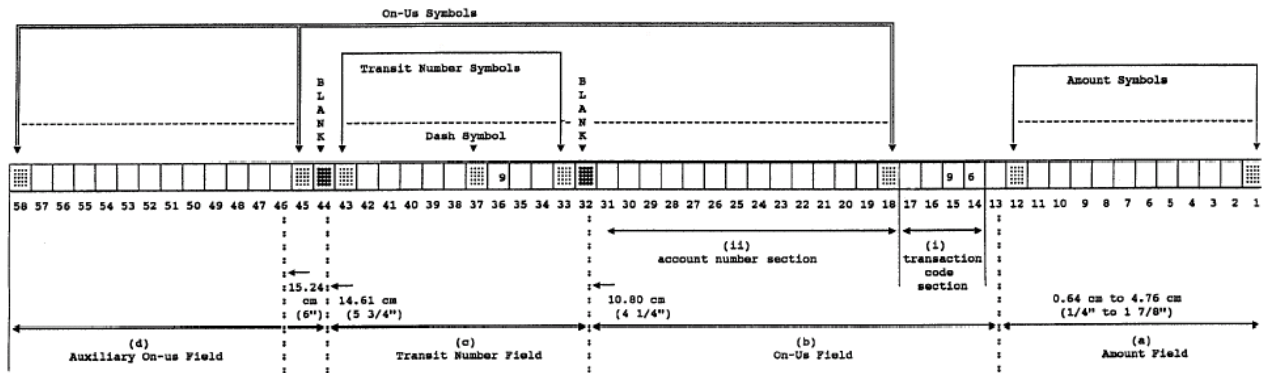
See Part A, Section 4.4.3

(b) MICR Encoding of Corporate Creditor Identification Numbers (CCINs)

Corporate Creditor Identification Numbers shall be MICR encoded on bill payment Remittances only (in accordance with CPA Rule H6, Part II), and shall not be MICR encoded on cheques or other payment items. Please see diagram below for MICR line specifications for bill payment Remittances

² The following Institutions are temporarily exempt from the requirement to encode transaction code 45 on U.S. Dollar items: La Caisse centrale Desjardins du Québec (currently using transaction code 11) and its members, the Credit Union Central of Nova Scotia (currently using transaction code 90) and its members, and the Credit Union Central of Canada (currently using transaction codes 644 and 6404) and its members. These institutions will work towards migrating to the new transaction code on a best efforts basis as soon as possible.

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* the blank in position 32 is optional if (b) and (c) are printed at the same time using the same printing technique.

Maximum Allowable Size Shown

Diagram not to Scale

7.17.6 Auxiliary On-Ups Field (also referred to as Serial Number Field)

Boundaries: 14.61 cm (5³/₄") from the right edge of the document continuing left to .32 cm (1¹/₈") from the left edge of the document.

This variable length field is used for serial numbering when documents are of sufficient length. The maximum number of characters is fourteen (14) -- twelve (12) digits plus two (2) on-us symbols. This field must open with an on-us symbol. The field also closes with an on-us symbol, unless otherwise specified by the drawee financial institution. Blanks or dashes may replace one or more of these twelve digits. The closing symbol must be adjacent to the left-most digit.

If this information is printed at the same time and using the same printing technique as the Transit Number Field, the blank normally required between the Auxiliary On-Ups and Transit Number Fields may be omitted.

Exception: The opening and closing on-us symbols may be omitted on MICR-encoded documents when there is no data present in this field.

Customers must not use the Auxiliary On-Ups Field without the prior consent of their financial institution Quality Assurance Department (see Appendix V).

Note: Customers should consult their financial institution Document Quality Assurance Department (refer Appendix V) for information regarding the maximum number of characters in any one field a MICR reader/sorter can classify.

7.18 Positioning

See Part A, Section 4.5

7.18.1 Alignment

See Part A, Section 4.5.1

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7.18.2 Character and Line Skew

See Part A, Section 4.5.2

7.18.3 Spacing Requirements

See Part A, Section 4.5.3

7.19 Cutting

See Part A, Section 3.7

7.20 Perforations

See Part A, Section 3.6.1

7.21 Window Envelope Documents

See Part A, Section 3.5

7.21.1 Window Envelope Limitations

See Part A, Section 3.5.1.

7.22 Business Reply Envelopes

The minimum size of documents established for the magnetic ink character recognition program is 15.88 cm x 6.99 cm (6¹/₄" x 2³/₄"), and the maximum size is 21.59 cm x 9.53 cm (8¹/₂" x 3³/₄").

Since folded documents and creases through MICR characters increase the possibility of jams, misreads and rejects in reader-sorters, it is recommended that undersized business reply envelopes not be used.