

About MICR

What is MICR? It's those mysterious, funny characters at the bottom of a cheque, sometimes referred to as the MICR line. These characters are the key by which all cheques are automatically processed. This automated process is based on a technology called Magnetic Ink Character Recognition or MICR, \my-kur\. As the name indicates, this technology uses magnetic reading to identify these unique numbers and characters.

MICR technology was developed in the mid-1950's to address the volume of cheques that were being processed manually. The goal was to accelerate the cheque routing process to route the cheque back to the location where the funds exist. WHY? A cheque is a financial transaction. The institutions (or banks) that are involved are sometimes within the same province, but often are out of province or even out of the country. The goal is to settle the transfer of funds as soon as possible.

To address this problem, a group of individuals from the American Bankers Association and Stanford University developed a set of 14 unique characters called E13B MICR Fonts. These fonts are printed with magnetic ink or toner that when magnetized, will emit a magnetic signal that identifies each unique character. What do the characters mean? The digits 0-9 are self explanatory. However, the E13B fonts have four special symbols with the following meanings:

00003290 *987654325* 0775*76543* *000023861*
 Auxiliary Route & On-Us Field Amount Field
 On-Us Field Transit Field

|| ■ Auxiliary On-Us Symbol

This character and all the numbers between the two symbols displayed are referred to as the Auxiliary On-Us Field. "On-Us" means the sorting criterion is determined by the organization who will be sorting on this field, usually the originating bank or your bank. This field is optional and does not exist on a personal cheque (there is not enough space for this field on a personal cheque). Typically, the auxiliary on-us field contains the document serial number (or cheque number) that is also printed at the upper right hand corner of the cheque. The cheque serial number is repeated to assist the bank in reconciling your account. (On Xyntax cheques, the company number and cheque number is in this field)

|| ■ Route & Transit Symbol

This character and all the numbers between the two symbols displayed are referred to as the Route and Transit Field. This field contains directions on how to clear the cheque. This field indicates the region and institution from which the cheque should be cleared.

|| ■ On-Us Symbol

This character and all the numbers between the two symbols displayed are referred to as the On-Us Field. This field contains your account number and possibly your bank's branch number and/or cheque number. (Personal cheques usually have the cheque number here.) The format is flexible and is specified by your bank.



Amount Symbol

This character and all the numbers between the two symbols displayed are referred to as the amount field. Although the most self-explanatory field, it seldom receives notice. This field contains the amount of the cheque and is MICR encoded by the bank of first deposit.

So Why Magnetic Ink?

MICR documents are processed within the banking industry on special Reader/Sorter machines.

The magnetic signal's shape is developed from two key elements:

The character shape - the characters' horizontal and vertical attributes

The magnetic content - the amount and distribution of magnetic material in the ink or toner from which the character is formed.

If the shape and/or magnetics of the characters do not meet specified standards, the reader/sorter will reject the cheque. The rejected cheque will then require manual handling which will delay the automated process. (If you have received processed cheques with a white strip attached to the bottom of the cheque, that was a rejected cheque.)