Introducing the 29 Card Punch and 59 Card Verifier

The IBM 29 Card Punch and IBM 59 Card Verifier are the key entry machines to support the IBM System/360. These machines process the expanded character set associated with the new programming language. A modern appearance, increased throughput, increased operator acceptance, increased servicable, and a more quiet operation, are a result of; new covers, new internal circuitry, and new operating features.
Highlights

- **Expanded Character Set**: Allows punching, printing, and verifying of additional codes required for IBM System/360.
- **New Covers**: Enhance appearance and reduce noise.
- **Two Separate Program Levels**: Allow multiple changes between program levels within a card as well as at the start of a card.
- **Clear Key**: Causes multiple register and release cycles without feeding until the card transport is clear of all cards.
- **Left-Zero Function**: Provides automatic punching and verification of zeros to the left of significant digits under program control.
- **Erasability**: In conjunction with left-zero function, allows the operator to correct the information in a left-zero field before it is punched in the card.
- **Printing**: Available on the IBM 29, as a pluggable feature, through the interchange of base units.
- **High Speed Verification**: Allows automatic verification of a card at 80 column per second under program control.
- **Automatic Verification of Blank Columns**: Possible at auto verify speed under key control.

Technology

**IBM 29 and IBM 59**

- **Reed Relays and Printed Circuit Techniques**: Replace wire contact relays and tubes.
- **Major Units are Pluggable**: An aid for feature installation and servicability.
- **Print Unit**: Capable of printing entire 64 character set.
- **Punch Unit**: Capable of punching more than three holes per column.

**IBM 59**

- **Optical Sensing**: Eliminates the mechanical verifier drive and pin-sense assemblies. This will significantly lower the machine maintenance requirements by reducing the number of adjustments.
- **A Photoemitter**: Replaces the program cam contacts and gates the impulses through the starwheel contacts to improve reliability.

CE Features

**IBM 29**

- **Switch**: Single-cycle (on automatic left zero machine).

**IBM 59**

- **Indicator Lights**: Display functional information, such as data comparison and operation being performed.
- **Switches**: Single-cycle  
  Error-retention  
  Motor-disable