IBM 50 Magnetic Data Inscriber

General Information
The IBM 50, Magnetic Data Inscriber, is a magnetic tape key entry machine employing a 16mm, sprocketed tape and an incremental tape drive. The tape cartridge is the same one used with the magnetic tape selectic type writer (MT/ST).

The IBM 50 uses EBCDIC coding (8 tracks plus parity) and recording density is 20 bits per inch.

The basic functions (Modes) are: Write, Read, Verify and Search. The IBM 50 includes all of the basic functions of the IBM 29 Card Punch in addition to left zero (fill), eight program levels and a character display active during readout. Field backspace and Record backspace are standard and can be used during write mode to correct keying errors. Data errors may be corrected during the verify operation and key entry operation. The tape moves with each keystroke during a key entry

IBM 2495 Tape Cartridge Reader

General Information
The IBM 2495 is a Magnetic Tape Cartridge Reader used to read tapes generated on the IBM 50 (Magnetic Data Inscriber) or the MT/ST (Magnetic Tape Selectic Typewriter). The IBM 2495 will be coupled to the Multiplexer Channel of Systems/360 Model 30, 40, 50.

The 2495 consists of a magnetic tape reader with an autoloader and a control unit packaged in the same cabinet.
The Reader can accept either EBCDIC or MT/ST coding. Translation for the MT/ST code is provided by system programming. The two codes are not intermixed on a single tape.
The rated speed is 900 characters per second for reading and rewind and approximately 5 seconds cartridge change time.
The autoloader hopper and stacker each accommodates up to 12 cartridges of tape. Tape
or verification operation. Automatic functions such as skip, duplication and left zero function are executed at 100 characters per second. The program unit uses an optically sensed program drum and card for control of automatic functions and field definition. There are 50 fields available on the program card.

Serviceability Features

The IBM 50 employs functionally packaged 700 nanosecond SLD* circuitry. Functional packaging permits complete functions to be packaged on a single SLT card. The major assemblies, magnetic tape unit, program unit, keyboard and logic gate are connectorized allowing removal of the entire units for diagnostics and repair.

A CE switch enables the display unit to display the tape code in write mode as well as readout mode. This ability will assist in isolating failures to the keyboard, logic gate or magnetic tape unit.

cartridges are loaded, read, rewound, unloaded and stacked automatically, under program control.

Serviceability Features

The IBM 2495 is designed with a CE diagnostic panel to simulate channel operation. It has complete off line capabilities for diagnostics, repair and verification.

The 2495 employs functionally packaged 700 nanosecond SLD* circuitry.

*SLD - Solid Logic Technology (Dense)