The photograph shows the 3525 Card Punch on the left, and the 3505 Card Reader on the right.
Product Description:
The 3505-3525 subsystem consists of an 80 column card reader and card punch that attaches to the 370 systems. The subsystem is designed to provide increased customer availability by reduction of service time and auto retry capabilities.

The 3505 is a serial card reader using an optical read system. It is available in two models. The B1 reads at 800 CPM and the B2 reads at 1200 CPM. The basic machine contains the following functional units:

- File Feed
- Hopper
- Cornering Station
- Read Station
- Two Alternating Stackers
- Vacuum Unit
- Power Supplies
- Micro-Programmed Control Unit

The 3525 is a parallel 80-column card punch utilizing the latest design improvements and technologies. The 3525 is available in three models:

- P1 - 100 CPM
- P2 - 200 CPM
- P3 - 300 CPM

The basic machine contains the following functional units:

- Hopper
- Pre-Punch Transport
- Punch
- Post-Punch Transport
- Stacker

The card punch interfaces to the 370 channel through the control unit housed in the 3505.

Optional Features:
3505
- Optical Mark Read
- Read Column Eliminate
- Selective Stacker
- Special Feature Adapter
- 3525 Card Punch Adapter
- 3525 Card Read Punch Adapter
- 3525 Multi-Line Print Control
- 3525 Two-Line Print Control

3525
- Card Read Feature

Maintenance Features:
The 3505-3525 subsystem is designed to meet the following objectives:

- Rapid removal, replacement and adjustment of components which history has shown to normally require service.
- Error information is collected at the time of failure and is stored in the subsystem control unit. Over 30 different machine malfunctions can be recorded for each machine. These error records are automatically formatted and displayed by indicators for CE or customer use.

- The error log information is used as an entry point into the documentation which will assist the CE in defining and repairing the problem. The error information is also stored on Sys 1 Log Rec.
- A small error pocket is located under the cover of the 3525 to retain cards which have been incorrectly punched. A correctly punched card will automatically be stacked over the error card for later comparison by the CE. A successful punch retry operation of this nature will not interrupt the customer job.

- The 3505 Card Reader utilizes a vacuum assisted friction feed roll. This allows up to three feed retries of each card without a misfeed indication to the customer.
- Due to the following design considerations, scheduled PM is not necessary:
  - Sealed bearings
  - Teflon coated surfaces
  - Flat belt drive
  - Minimum lubrication points
  - Cleaning and any required lubrication will be performed during a customer initiated call. Vacuum cleaners are built into each machine for customer or CE use.

* Tradename of E.I. du Pont de Nemours & Co. (Inc.)

Technology:
- Control Unit—Monolithic Systems Technology (MST-1)
- Sense Amps, Drivers, and Solid Logic Technology Dense (SLD-100)
- Control Storage—Small Transformer Read Only Storage (STROS)
- Main Storage—Monolithic Storage

This is a CE Career Path "General Systems" product.
The CE Panel functions which may be used concurrently with customer operation of the subsystem are:
- Display registers, buffers, checks
- Display control unit operations
- Timing Analysis Procedures
- Display error log information
- Micro-Program trace

In addition, the following CE Panel functions may be performed on either machine while the other machine is being used by the customer:
- Set and load registers and main store
- Micro-Diagnostic programs to verify all machine functions.

With the subsystem in an off-line mode, the CE Panel will perform all the previously identified operations as well as:
- Display ALU output
- Read Only Storage (ROS) scan
- Set Control Storage Address Register (CSAR)