IBM Equipment Summary

The following pages contain brief descriptions of the more common IBM punched card equipments and special devices for each of these equipments. It is intended for familiarization purposes; more adequate descriptions can be obtained from the IBM "Manuals of Operation" obtainable from the local IBM sales agency.

Prices indicated for equipment and special features are subject to change at any time. In estimating costs using these figures, 10 per cent Federal Excise Tax must be added in all cases.

Included in this manual are descriptions of:

Types 024-026	Key Punches
Types 046-047	Tape-to-Card Punches
Type 056	Verifier
Type 063	Card-to-Tape Punch
Types 065-066	Data Transceivers
Types 077-089	Collators
Types 082-083	Sorters
Type 101	Electronic Statistical Machine
Types 402-403-419	Accounting Machines
Types 407-408	Accounting Machines
Type 514	Reproducing Punch
Type 519	Document Originating Machine
Type 523	Gang Summary Punch
Type 528	Accumulating Reproducer
Type 552	Alphabetic Interpreter
Type 557	Alphabetic Interpreter
Types 604-607	Electronic Calculating Punch
Types 824-826	Typewriter Card Punches
Type 858	Cardatype Accounting Machine

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IBM 24 CARD PUNCH

The IBM 24 Card Punch is used for recording alphabetic, numerical, and special character data in IBM cards. It is designed for the operator's comfort and the utmost in production.

* Numerical or alphabetic-numerical punching

* Automatic or manual card feeding

* Continuous touch operation

* One keyboard for all keys, including controls

* Movable keyboard for maximum operator convenience

* Automatic high-speed skipping and duplicating by predetermined program control

* Visibility for dual card punching

* Powered back-spacing

IBM DATA PROCESSING

IBM 26 PRINTING CARD PUNCH

The IBM 26 Printing Card Punch is used for recording alphabetic, numerical, and special character data in IBM cards. Keyed information is punched and simultaneously interpreted along the top edge of the card.

* Numerical or alphabetic-numerical punching

* Numerical or alphabetic interpretation

* Automatic or manual card feeding

* Continuous touch operation

* One keyboard for all keys, including controls

* Movable keyboard for maximum operator convenience

* Automatic high-speed skipping and duplicating by predetermined program control

* Visibility for dual card punching

* Powered back spacing

* Printing may be suppressed for entire card or for predetermined fields only

IBM DATA PROCESSING

Type 024-026 - Key Punch

Note: Type 026 is similar to type 024 except that it interprets the punching, printing along the top of the card.

Machine Characteristics:

Speed - Manual	approximately 10,000 columns per hour
Automatic Duplicating	approximately 60-70,000 columns per hour

Monthly Charge:

024	numeric	$35
024	alphanumeric	40
026	numeric	55
026	alphanumeric	60

Special Features - Charges:

	Monthly Charge	Single Use Charge
Alternate Program	$ 3.00	
Auxiliary Duplication	8.00	
Additional Program Drum - each		$3.50
Card Insertion Device	5.00	
Card Order - Converting Device	75.00	
Card Reverser	3.00	
Decimal Tabulation	12.00	
Interspersed Gang Punching	15.00	
Program Card Preparation (024 only)	3.00	
Self Checking Number Punching	25.00	
Self Checking Number Punch Elimination	10.00	
Variable Length Feed	20.00	

Special Features - Descriptions:

Alternate Program - This is used to provide two program setups in one program card, selection of the second or alternate program being controlled by the operator.

Auxiliary Duplication - This device permits duplication from a master card placed on an auxiliary program drum.

Card Insertion Device - This is designed to simplify manual insertion of master cards for interspersed duplication or for subsequent operations.

Card Order - Converting Device - This provides a method whereby as many as 54 detail cards can be created automatically from a single marked-sensed, punched master card.

Card Reverser - Used to permit stacking of cards in output hopper in their original or reversed sequence under manual control of the operator.

Decimal Tabulation - Provides a fast and accurate method of punching (or verifying) zero's to the left of the first significant digit in a card field.

Interspersed Gang Punching - Used to permit interspersed gang punching (duplication) with standard upper corner cut master cards.

Program Card Preparation - This provides a fast and accurate method of preparing program cards on 024 machines equipped with the Decimal Tabulation Device.

Self Checking Number Punching - This is used to punch a predetermined checking digit after a numeric field in order to verify that the number in the field was punched properly.

Self Checking Number Punch Elimination - This allows the use of the Self Checking Number Device without sacrificing a card column for the check digit.

Variable Length Feed - To provide a means of processing IBM cards of 51, 60, 66 or 80 column lengths.

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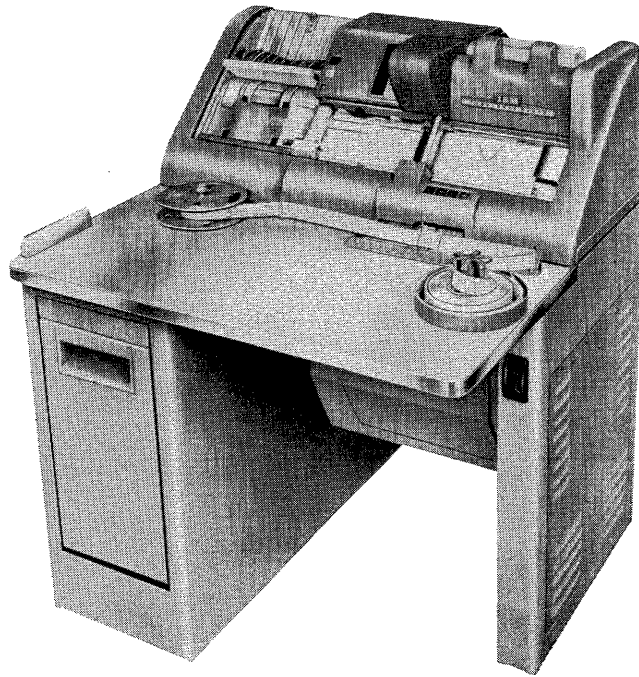
IBM 46 TAPE-TO-CARD PUNCH
AND
IBM 47 TAPE-TO-CARD PRINTING PUNCH

These machines read numerical or alphabetic information from a punched paper tape and convert it to IBM cards. Information can be read interchangeably from either an 8-channel paper tape or a 5-channel telegraphic punch tape.

* Will punch into the cards all or part of the data from the tape

* Will allow control of automatic duplication of data common to a group of cards

* Contains special circuits for automatically checking accuracy of 8-channel tape reading

* The 46 operates at a rate of 20 columns a second

* The 47 performs the same functions as the 46 and in addition interprets the information across the top of the card. It operates at a speed of 17 columns a second

IBM DATA PROCESSING

Type 046-047 - Perforated Tape to Punched Card Converter

Note: Type 047 is similar to Type 046 except that it interprets the cards.

Machine Characteristics:

Speed - 046	20 columns per second
047	17 columns per second
Program Control	4 levels of programming
Print Control - 047	controlled through control panel wiring
Distributors (filters)	10 2-position
Selectors	10 2-position

Monthly Charges:

046	5 and 8 channel tape	$140
046	8 channel tape only	135
047	5 and 8 channel tape	160
047	8 channel tape only	155

Special Features - Charges

	Monthly Charge
Card Reverser	$3.00
Distributors (filters) - five additional	3.00
Field Definition Exits - four additional	2.00
Selectors - five 2-position (maximum of 20)	5.00

Special Features - Description

Card Reverser - Permits stacking cards in original or reversed sequence.

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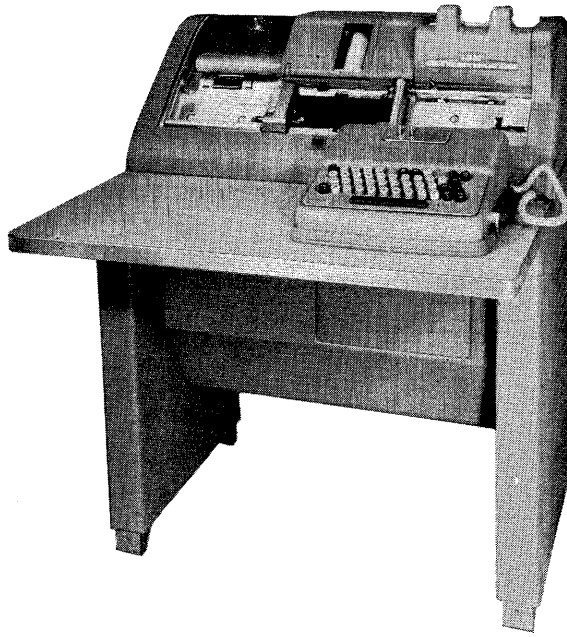
IBM 56 CARD VERIFIER

This verifier, which embodies the same basic machine features as the IBM 24 and 26 Card Punches, is used to check the accuracy of alphabetic, numerical, and special character data punched into IBM cards.

* Numerical or alphabetic-numerical verification

* Automatic or manual card feed

* One keyboard for all keys, including controls

* Continuous touch operation

* Movable keyboard for maximum operator convenience

* Automatic or manual skipping and verification of duplicated information

* Visibility for dual card verification

* Error column notched — no-error card notched 80 column edge

Type 056 - Key Verifier

Machine Characteristics:

Speed - Manual	approximately 10,000 columns per hour
Automatic Verification	approximately 60,000 columns per hour

Monthly Charges:

Numeric	$45
Alphanumeric	50

Special Features - Charges:

	Monthly Charge	Single Use Charge
Alternate Program	$ 3.50	
Auxiliary Verification	8.00	
Additional Program Drum (each)		$3.50
Card Insertion Device	5.00	
Card Reverser	3.00	
Decimal Tabulation	12.00	
Variable Length Feed	20.00	

Special Features - Description:

Auxiliary Verification - This permits verification from a master card rather than the card preceding the card being verified

Note: Other special features are similar to those described under Type 24-26.

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IBM 63 CARD-TO-TAPE PUNCH

The IBM 63 Card-to-Tape Punch is a card reading and tape punching unit. It reads alphabetic and numerical information punched in IBM cards and translates the information into a 5-channel punched tape. One roll of punched tape is equivalent to approximately 1500 cards.
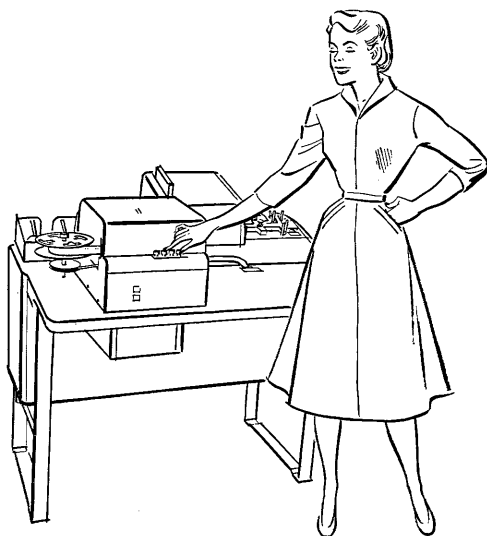
* High-speed card-to-tape punching

* Produces 5-channel telegraph transmission tape

* Receiving telegraphic equipment prepares page prints of transmitted data together with a punched tape which can be reconverted to punched cards

* Automatic skipping of unrequired card data

* Automatic card feed and eject

IBM ® | DATA PROCESSING

Type 063 - Card-to-Tape Punch

Machine Characteristics:

Speed	10 columns per second
Program Units	2
Distributors (filters)	10
Selectors	10 2-position

Monthly Charge: $75

Special Features - Charges:

|	
Distributors - group of 5 (2 groups maximum)	$2.50

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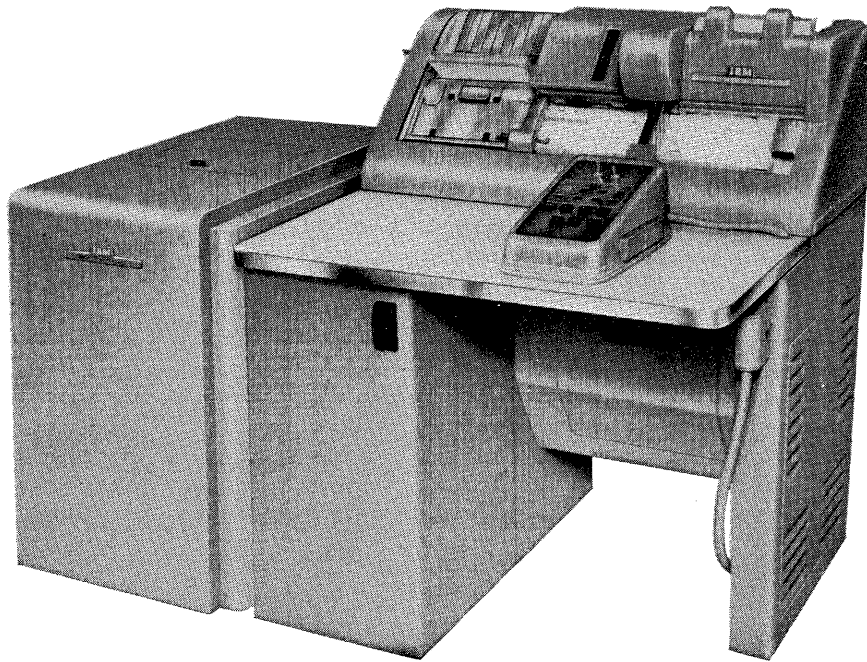
IBM 65-66 DATA TRANSCEIVER

The IBM 65-66 Data Transceiver is a transmitting-receiving unit that communicates data punched in IBM cards directly without conversion to punched tape, creating a punched card at the receiving end. Data may be sent over telephone lines, telegraph wires, or private lines.

* Direct card-to-card transmission

* Self-checking features determine that four impulses are received for each character before punching

* End of card check assures that transmitter and receiver are in step

* Each unit both transmits and receives

* Transmission speed per transceiver unit—
   VIA telegraph line, 3 to 5 eighty-column cards per minute
   VIA telephone wire, 11 eighty-column cards per minute on the IBM 65; 10 cards per minute on the IBM 66

* Four sending and receiving units can be operated simultaneously over a single telephone wire

* Transmits numerical, alphabetic, and all 407 special character information as well as special 12-0 code for use in EDPM

* Card hopper and stacker capacity, 500 cards each

* Automatic card feed and eject

* All skipping, duplicating, and printing functions of machine under control of program card mounted on drum

* 65 is non-printing punch, 66 prints on top edge of card

154
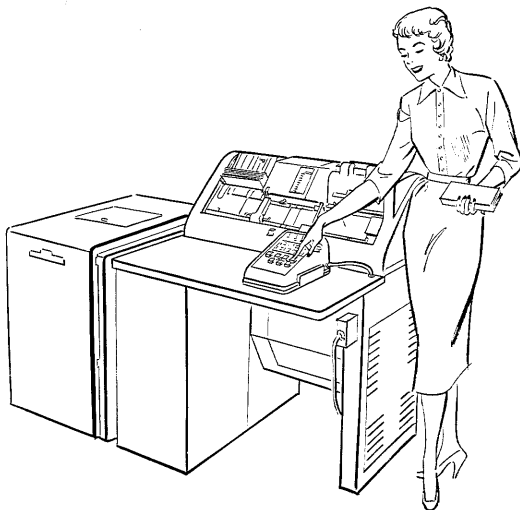
Type 065-066 - Data Transceivers

Note: Type 066 is similar to type 065 except that it interprets the card punching.

Machine Characteristics:

Speed

Type 065 with telegraph signal unit - up to 400 characters per minute
065 with telephone signal unit - up to 900 characters per minute
066 with telegraph signal unit - up to 400 characters per minute
066 with telephone signal unit - up to 800 characters per minute

Note: Up to 8 Transceivers may operate on one telephone circuit; that is 4 transmitting and 4 receiving.
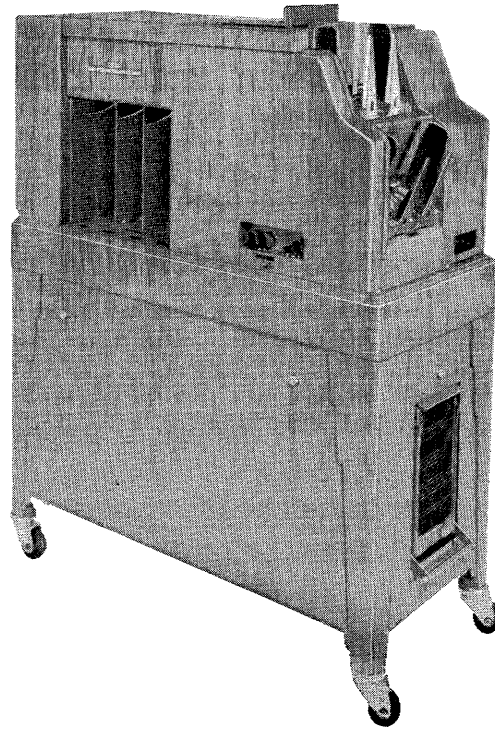
Monthly Charges:

065	$175
066	195

Special Features - Charges:

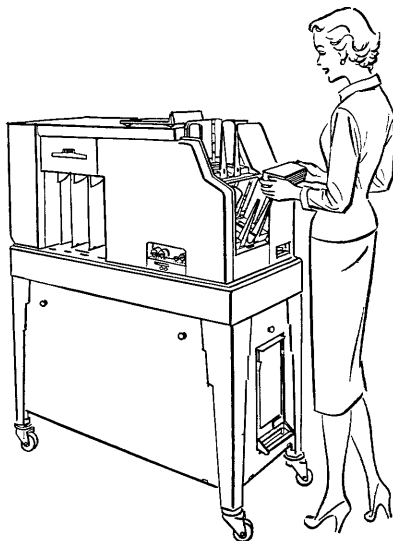|	Monthly Charge
Auxiliary Card Counter	$5.00

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IBM 77 COLLATOR

The IBM 77 Collator performs many card filing and selection operations. It can simultaneously feed two sets of IBM punched cards, merging the matched cards and selecting the unmatched cards. During this processing, the machine can also check the sequence of the prime file.

* Pulls or files cards automatically

* Interfiles cards in sequence

* Substitutes new cards for old

* Selects predetermined cards in random sequence

* Merges master and detail cards

* Separates matched and unmatched cards

* 16 control positions

* Equipped with flexible control panel

* Speed 240 to 480 cards per minute

* Checks sequence of cards

IBM DATA PROCESSING
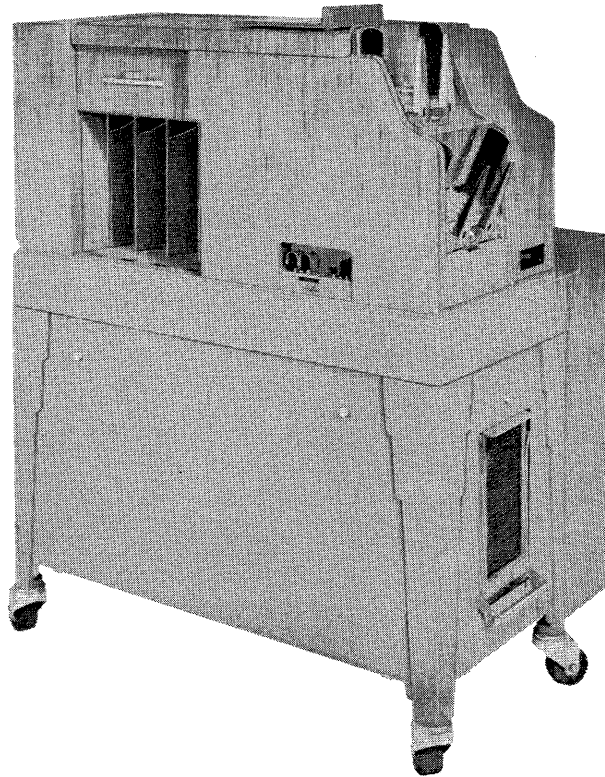
IBM 89 ALPHABETIC COLLATOR

The IBM 89 Alphabetic Collator simultaneously feeds two sets of IBM punched cards and compares the alphabetic, numerical, and special character data.

* Separates matched and unmatched cards
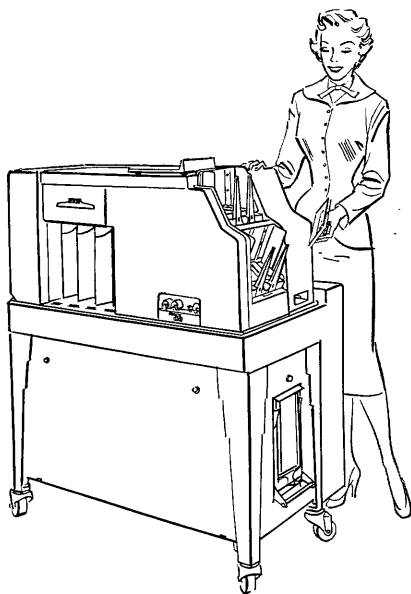
* Pulls or files cards automatically

* Interfiles in sequence

* Substitutes new cards for old

* Selects predetermined cards in random sequence

* Either 16 or 19 control positions

* Recognizes 47 different characters either alone or in combination

* Speed 240 to 480 cards per minute

* Equipped with flexible control panel

* Merges master and detail cards

IBM DATA PROCESSING

Type 077-089 - Collators

Note: Type 089 is similar to Type 077 except that it has enlarged capacity and operates with alphanumeric information.

Machine Characteristics:

Speed		240 to 480 cards per minute
Selectors		5 single position control impulse
		2 single position "X" selectors
		1 cycle delay selector
Control Units	077	2 16 position - numeric
	089	2 16 position - alphanumeric or
		2 19 position - alphanumeric

Monthly Charges:

077		$100
089	16 position	190
089	19 position	220

Special Features - Charges:

	Monthly Charge
Alphanumeric Collating - 077	$35.00
Auxiliary Card Counter - 077	5.00
Collator Counting - 077-089	15.00
Cycle Delay - additional	2.00
Interchangeable Feeds - per feed	10.00
Post Card Stock - fixed feed	-
Split Units - 077	-

Special Features - Description

Alphabetic Collating - Permits collating cards punched with alphanumeric information.

Collator Counting - Permits applications involving counts of cards such as:

1. Insertion of a fixed or variable number of cards behind a single master card.
2. Insertion of initial and overflow heading cards for continuous form listings.
3. Two column consecutive number checking.

Interchangeable Feeds - Similar to Type 514.

Post Card Feed - Fixed - Similar to Type 514

Split Units - Divides the sequence and selector units into several smaller groups for controlling on more than one field simultaneously.
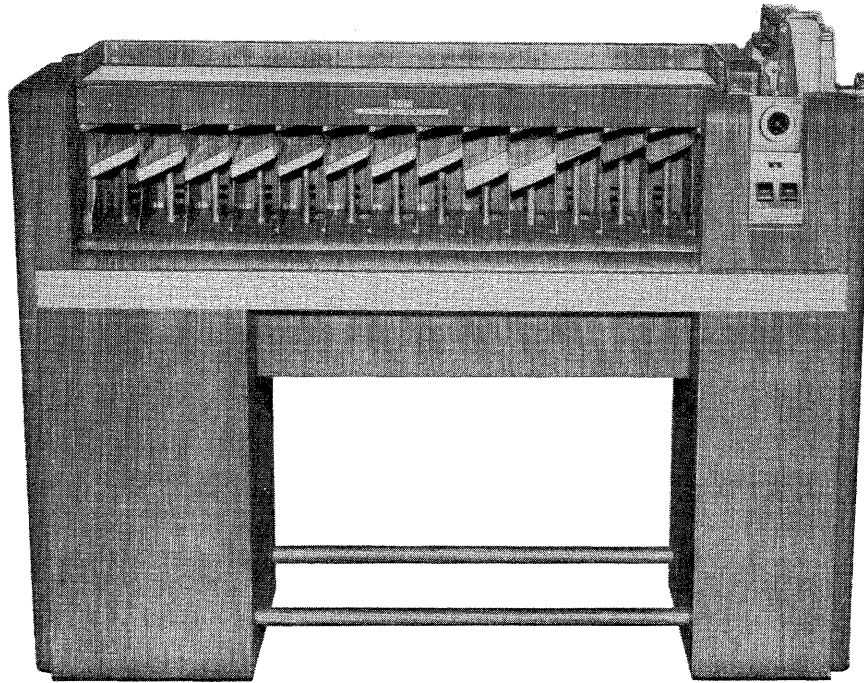
IBM 82 SORTER

The IBM 82 Sorter groups all cards of similar classifications, arranging such classifications in numerical or alphabetic sequence. Alphabetic sorting is accomplished by the double sorting of each column.

* Sorts 650 cards per minute per card column

* Card hopper may be refilled while machine is in operation

* Card pockets equipped with automatic stop and have capacity for approximately 550 cards

* Selection dial permits sorting out cards with any individual punch or punches while remaining cards are sorted into reject pocket without disturbing sequence

* After card hopper is empty, sorter continues to operate until all cards are in correct pocket

* 13 pockets, one for each of the twelve punching positions of a card column and one for unpunched cards

IBM DATA PROCESSING
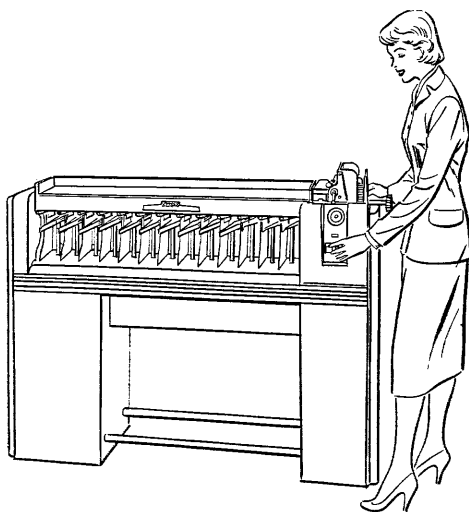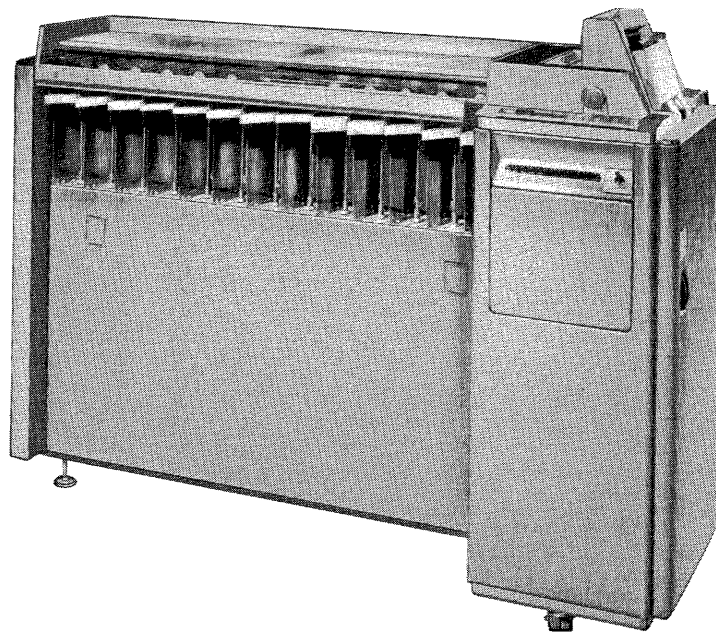
IBM 83 SORTER

The IBM 83 Sorter is a highly versatile card sorting machine. It classifies punched cards and places each class in numerical or alphabetic sequence. The machine is a high speed unit equipped with self-checking features that assure accuracy in sorting.

* 80 column

* 1,000 cards per minute

* Card feed hopper capacity, 1,200 cards

* 13 sorting pockets, including one reject pocket

* Capacity of sorting pockets, 900 cards. Stacker stop adjustable from 400 to 900 cards. Cards stack nearly flat, for easy removal

* Convenient knob for positioning sorting brush

* Dial switches for type of sorting

* 12 switches to cut out any or all of the 12 sorting positions

* One card cycle between sensing position and chute blades allows check of proper sensing

* Positive card jam detection device which stops machine within three card cycles

* Double punch, blank column detection editing
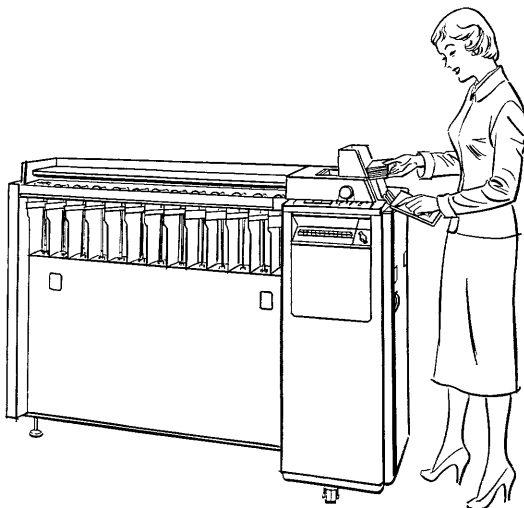
Type 082-083 - Sorters

Machine Characteristics:

	082	083
Speed	650 cpm	1,000 cpm
Double Punch, Blank Column Detection	No	Yes

Monthly Charges:

082	$ 55
083	110

Special Features - Charges:

	Monthly Charge
Alphabetic Sorting Device - 083	$15.00
Auxiliary Card Counter - 082	5.00
- 083	7.00
Card Counting Unit	30.00
Card Matching Device - 082	10.00
File Feed - 083	20.00
Group Sorting Device - 082	10.00
Interchangeable Feeds - 082	10.00
Multiple Column Selector - 082	25.00

Special Features - Description:

Alphabetic Sorting Device - This device provides a method of reducing the number of passes and amount of card handling required for alphabetic or alpha-numerical sorting.

Auxiliary Card Counter - A separate counter for counting the number of cards passing through the feed of the machine.

Card Counting Unit - 082-083 - This unit has fourteen five-digit adding counters, one for each digit, one for rejected cards, and one for subtotals. It is used to count (with or without sorting) the holes punched in any given column of the card and the number of cards not punched in that column.

Card Matching Device - Used to separate master cards from detail cards when the master cards have a different corner cut from the details.

File Feed - Used to increase the capacity of the 083 hopper to accommodate approximately 3,500 cards.

Group Sorting Device - Used to sort groups of two or more cards in accordance with the punching in the "group leader" card.

Interchangeable Feeds - Similar to the device described under Type 514.

Multiple Column Selector - Used for selecting cards from a file which are punched with a predetermined alphanumeric key.

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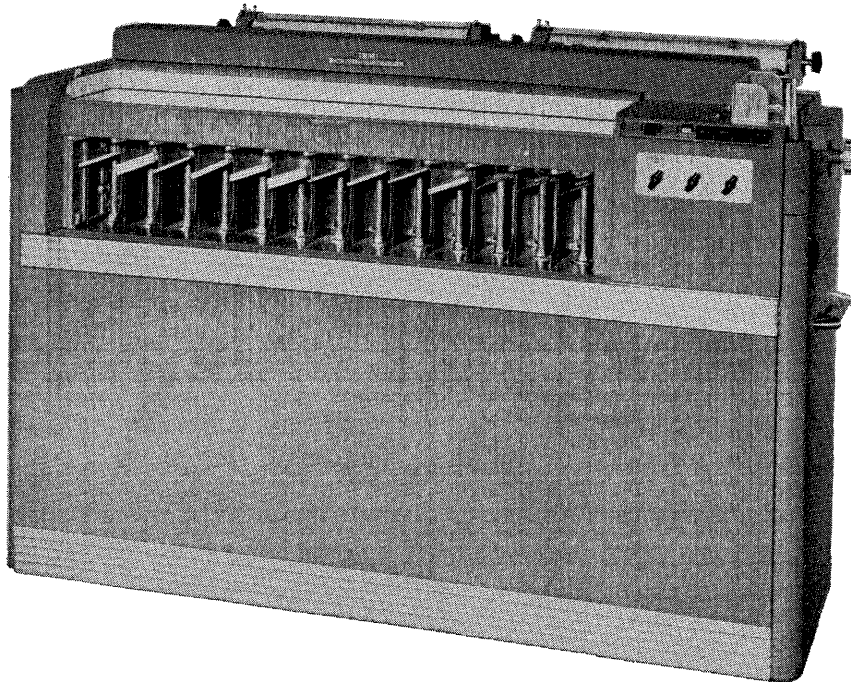
IBM 101 STATISTICAL MACHINE

The IBM 101 Statistical Machine is designed for the purpose of high speed classifying and counting and for the preparation of printed statistical reports. There is combined in one unit the functions of selecting, editing, counting, accumulating, printing and balancing. It is available in two models: one with a single printing unit and fifteen 4-position unit counters, another with two printing units and sixty 4-position unit counters. The machine automatically distributes IBM cards into 13 pockets according to the type of data being selected.

* Operates at 450 cards per minute

* Automatically checks accuracy of sorting

* Unusual flexibility provides range from ordinary sorting to complex selection involving multiple columns

* Reduces alphabetic sorting

* Checks cards for consistency of coded information

* Counts simultaneously with selection

* Accumulates amounts in cards from 5 digit field to provide 8 digit total

* Two counters are standard on the large model; one or two counters are optional on the small model

* Counts cards for as many as 60 (or 15 on small model) different classifications in one run

* Final results printed on one or two reports of convenient size

* Equipped to accept one or two summary punches for punching of total cards

* Flexible control panel

* Checks sequence

* Checks distributed counts with total counts and prints check symbol on each line of report
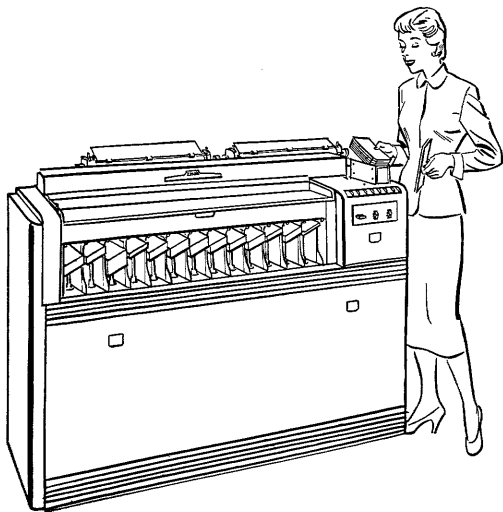
Type 101 - Electronic Statistical Machine

Machine Characteristics:

	Model 1	Model 2
Speed	450 cpm	450 cpm
Counters	60	15
Print Units - 4 Positions	2	1
Recode Selectors	6	2
Digit Emitters	14.	6
Group Indicators - Positions	4	4
Column Distributors	6	2
Units - Tens Device	1	-

Monthly Charges:

Model 1	Model 2
$500	$245

Special Features - Charges:

|	Monthly Charge
Accumulating Counter - High Speed - Model 2 only	$25.00
Auxiliary Card Counter	5.00
Column Distributors - two additional on Model 2 only	10.00
Recode Selectors - ten additional on Model 2 only	10.00
Sample Selection	10.00
Units - Tens Device - Model 2 only	10.00

Special Features - Description:

Accumulating Counters - High Speed - Provides 5 positions of high speed entry and 8 positions of total accumulation. If two counters are installed, they may be coupled to provide 9 positions of entry and 12 positions of total accumulation. The counters are non-net balance; a maximum of two can be installed.
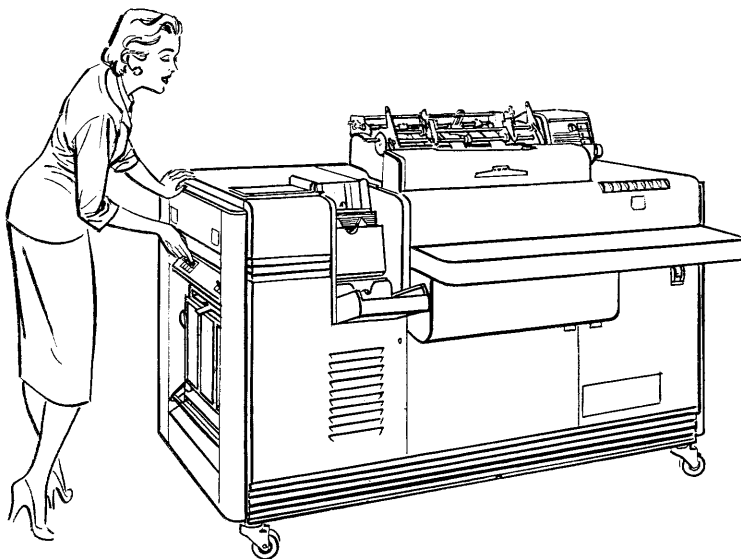
Sample Selection - Provides a means of selecting a sample from a file at regular or irregular intervals.

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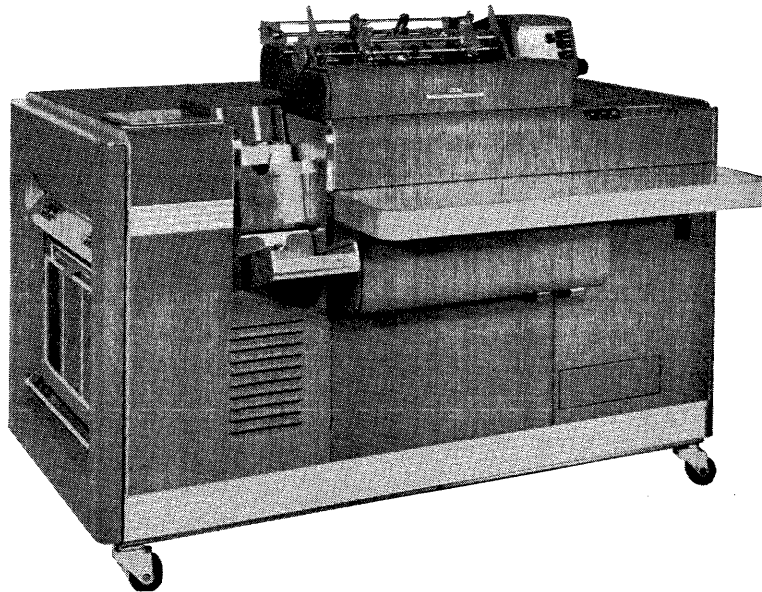
IBM 402 ACCOUNTING MACHINE

The IBM 402 Accounting Machine prepares reports and records from punched IBM cards. The machine reads 80-column cards, positions forms, records details, adds or subtracts, and prints any desired combination of totals.

* 88 type bars, 45 numerical and 43 alpha-numerical

* Detail printing at 80 or 100 lines per minute

* Accumulates totals at 80 or 150 cards per minute

* Major, intermediate, and minor control

* Flexible control panel

* Tape controlled automatic carriage for feeding continuous forms

* Direct subtraction or net balance counters

* Can be equipped with bill feed to print single forms

* Arranged for summary punching

IBM DATA PROCESSING

IBM 403 ACCOUNTING MACHINE

The IBM 403 Accounting Machine prepares reports and records from punched IBM cards. It is a versatile unit whose flexibility and other features make it a fast production machine. The 403 reads 80 column cards, positions forms, records details, and adds or subtracts to print any desired combination of totals.

* 88 type bars, 45 numerical and 43 alpha-numerical

* Three line printing from a single card

* Detail printing at 80 or 100 lines per minute

* Accumulates totals at 80 or 150 cards per minute

* Capable of crossfooting 3 amounts from one card

* Major, intermediate and minor control

* Flexible control panel

* Tape controlled automatic carriage for feeding continuous forms and for printing designed reports

* Direct subtraction or net balance counters

* Can be equipped with bill feed device to print single forms

* Arranged for summary punching
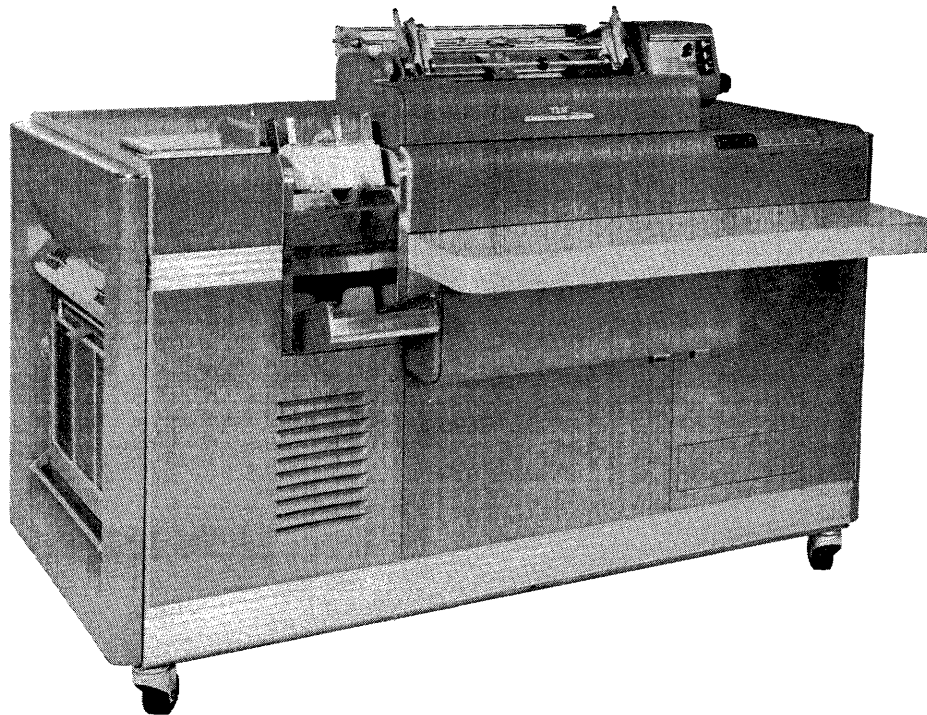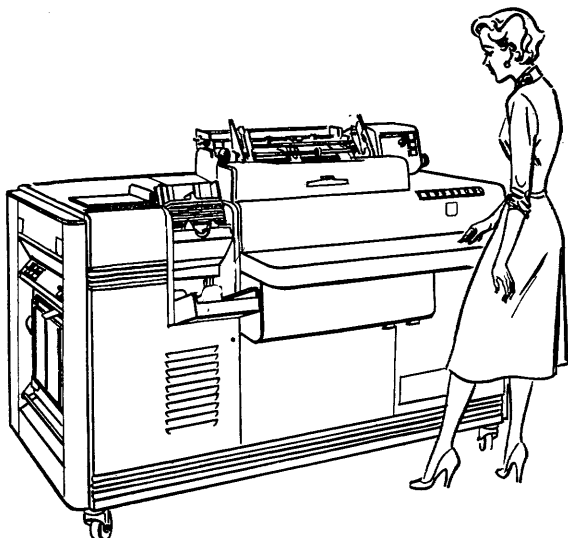
IBM DATA PROCESSING

IBM 419 NUMERICAL ACCOUNTING MACHINE

The IBM 419 Numerical Accounting Machine prepares reports and records from punched IBM cards. This machine reads 80 column cards, positions forms, records details, adds or subtracts and prints any desired combination of totals.
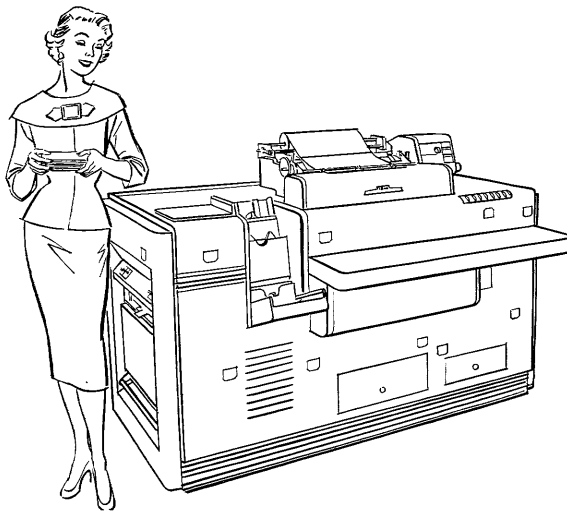
* 56, 71 or 89 type bars
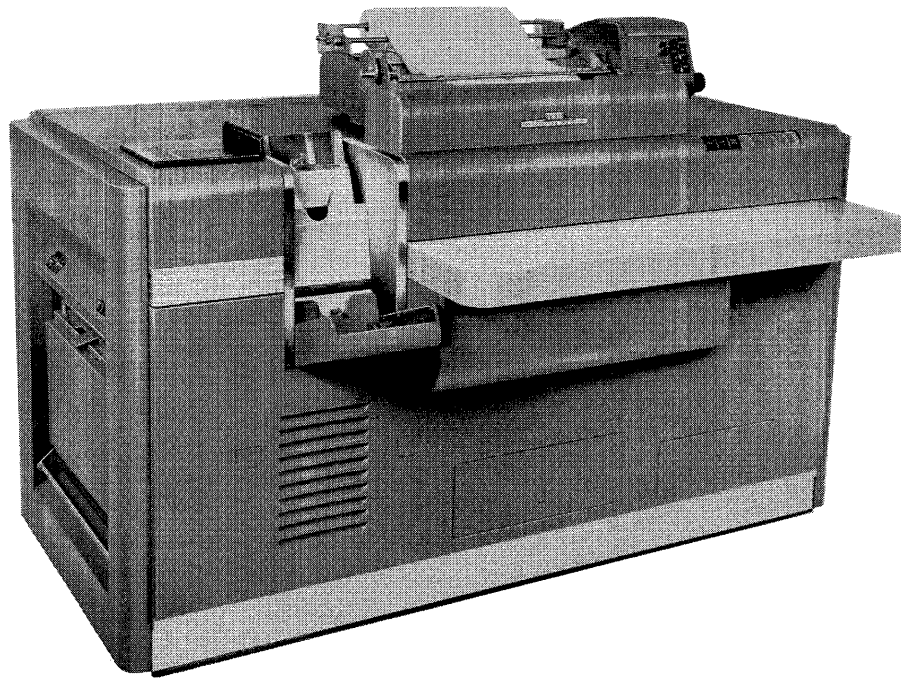
* Detail prints at 150 cards per minute

* Accumulates totals at 150 cards per minute

* 20 positions for major, intermediate or minor control

* 56 or 80 net balance counters

* Tape controlled automatic carriage for feeding continuous forms and for printing designed reports

* Flexible control panel

* Can be equipped with bill feed to print single forms

* Arranged for summary punching

IBM DATA PROCESSING

Type 402, 403, 419 - Accounting Machines

Machine Characteristics

	Standard	Maximum	Minimum
Speed (List/Tabulate)	100/150	100/150	80/80
Counters	80	80	32
Print Unit			
Alpha	43	43	25
Numeric	45	45	30
Carriage or Bill Feed	Tape Controlled Carriage	Tape Controlled Carriage plus Bill Feed	Tape Controlled Carriage
Control Positions	20	40	10
Selectors			
Pilot (2 pos.)	11	16	6
Co-selector (5 pos.)	8	12	-
Digit Selector	-	2	-
Column Splits	4	4	4

Monthly Charges

	Standard	Maximum	Minimum
402 Net Balance	$420	$545	$255
402 Subtract	410	515	-
402 A&S Only	-	-	235
403 Net Balance	470	595	315*
403 Subtract	460	565	-
403 A&S Only	-	-	-
419 Net Balance	425	550	250
419 Subtract	415	520	240
419 Add Only	-	-	230

    * Includes a minimum of 20 control positions.

Special Features - Charges

	Monthly Charge	Single Use Charge
Alphabetical Summary Punching	$ 10	$ -
Asterisk Protection		125
Dual Feed Carriage	25	
Comparing Device for Bill Feed	30-60	
Complement Reconversion	3	
Consecutive Number Control	7	
Counter Reset to a Predetermined Digit (per counter)	5	
Demountable Type Bars (per bar)		
Alpha		25
Additional Clips		10
Numeric		15
Additional Clips		5

	Monthly Charge	Single Use Charge
Folded Form Feeding Device for Bill Feed	15	
Fractions	5	Varies by type
Interchangeable Feed (51-80 column)	5	
Line Selection (automatic carriage)	25	
Special Program	3	
Semi Fixed Control Panel		50
Single Column Month Listing	5	
Storage Units - Auxiliary (16 pos.)	35	
Storage Units - Auxiliary (32 pos.)	50	

Special Features - Descriptions

Alphabetical Summary Punching - This permits summary punching of from one to eight positions of alphabetic information read from the tabulator. Up to four devices of eight position capacity can be installed.

Asterisk Protection - This is used for printing asterisks to the left of money amounts as a protective feature.

Dual Feed Carriage - This carriage is designed to control the feeding of two different sizes and types of continuous forms concurrently and independently. Each type of form may be either single or multiple copy.

Comparing Device for Bill Feed - This device permits comparing pre-punched cards in the Bill Feed with cards passing through the feed of the tabulator.

Complement Reconversion - This is used on net balance machines where one or more progressive totals are required. It permits the reconversion of a counter to a complement if the total printed is a progressive total with a credit (negative) balance.

Consecutive Number Control - This is used to indicate, by means of a printed symbol, the points at which numbers are missing in a supposedly consecutive number listing.

Counter Reset to a Predetermined Total - This device causes a counter position to reset to a predetermined significant digit such as a "5" for rounding off the next position to the left to the closest integer.

Demountable Type Bars - These provide a means of quickly changing the characters printed from any type bar or bars without making the change permanent.

Folded Form Feeding Device for Bill Feed - This device permits changing a Bill Feed to accommodate the feeding of folded forms having a thickness in excess of .016" but not in excess of .046".

Fractions - This is used to provide a means of handling 1/2, 1/3, 1/4, 1/5, 1/6, 1/8, 1/12, 1/16, 1/20 or 1/60 fractional values. All these fractions can be key punched, summary punched, added, subtracted, net-balanced and printed.

Interchangeable Feeds - This provides a means of feeding cards from which the stub has been removed to leave a 51 column card. This is not a permanent change, it permits feeding of either 51 column or 80 column cards however not mixed together.

Line Selection - This permits printing on selected lines of a preprinted form under control of punching in the cards passing through the machine feed.

Special Program - This provides additional program steps for operations where the normal three program steps are insufficient.

Semi Fixed Control Panel - This is a small auxiliary control panel attached to the main control panel. Its purpose is to facilitate making minor changes in the plugging of the machine without removing the cover from the control panel or the control panel from the machine.

Single Column Month Listing - This provides a means of translating the month column, punched 0-9, 11, or 12 in a single card column, into two columns for listing.

Storage Units - Auxiliary - This provides a means of storing alphabetical or numerical information in the accounting machine without using counters. This information may be used for listing, summary punching, or as a factor in a total accumulation.

August 20, 1957
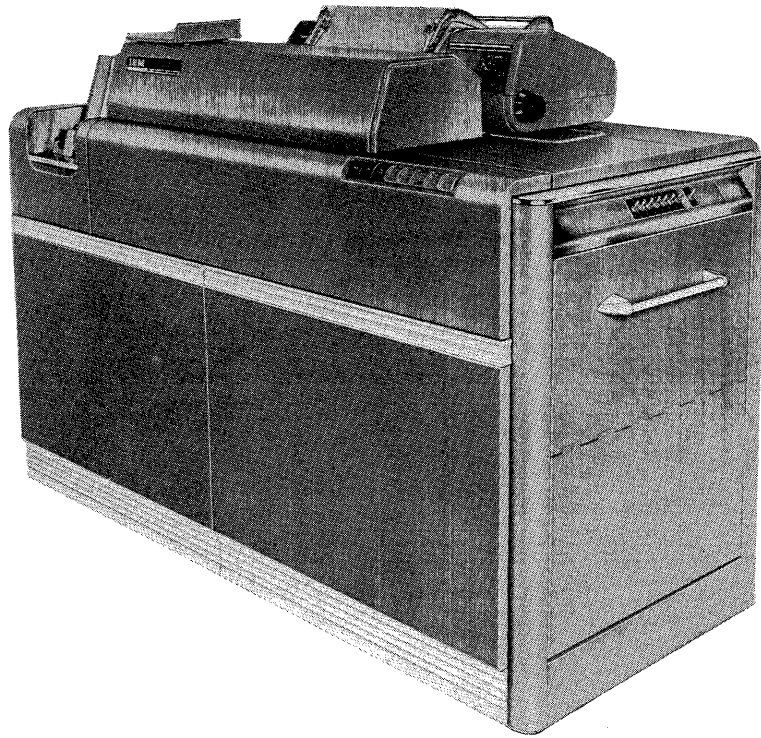
IBM 407 ACCOUNTING MACHINE

Punched Card Input-Line Printed Output for IBM 650 Data Processing System

The IBM 407 Accounting Machine provides punched card input and line printed output for the IBM 650. A total of three of the following input output units, in any combination, can be provided with the 650: 407 Accounting Machine; 533 Card Read Punch, and 537 Card Read Punch.

* Input speed—150 eighty-column cards (12,000 digits) per minute, maximum

* Output speed—150 printed lines per minute, maximum

* 120 type wheel positions

* 10 characters per inch printed horizontally

* Control Panel provides flexibility for input-output

* Alphabetic and Special Character Devices can be added

* Conventional Summary Punches can be used

* Independent operation retains all 407 Accounting Machine features

* Capacities of 112 and 126 counters are available.

32—5986

Printed in U. S. A.

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IBM DATA PROCESSING

Type 407, 408 - Accounting Machines

Note: Type 408 is a 407 with Bill Feed.

Machine Characteristics

	Standard	Maximum
Speed	150 cpm	150 cpm
Counters	112	168
Type Wheels	120	120
Carriage or Bill Feed	Tape Controlled Carriage	Tape Controlled Carriage
Company Positions	20	30
Selectors		
Pilot (2 pos.)	15	20
Co-selector (5 pos.)	16	36
Digit Selectors	2	6
Column Splits	12	
Filters	10	20
Storage Units (16 pos. each)	4	

Monthly Charges

	Standard	Maximum
Type 407	$ 800.00	$ 987.50
Type 408	1,055.00	1,242.50

Special Features - Charges

	Monthly Charge	Single Use Charge
Card Reverser (408 only)	10.00	
Special Type Wheels		
First Wheel (one character)		50.00
First Wheel (additional char., ea.)		15.00
Other Identical Wheels (per wheel)		3.00
Single Card Total Elimination Device	10.00	
Twelfth Counter (first)	25.00	
(each additional	5.00	
Zero and Special Character Control		
(per group)	5.00	

Special Features - Description

Card Reverser - Permits reversing the sequence of cards in the carriage (Bill Feed) feed before they are stacked. For example, post card bills can be reversed to permit addressing on the next run.

Single Card Total Elimination Device - This is used to eliminate minor total cycles on single card groups.
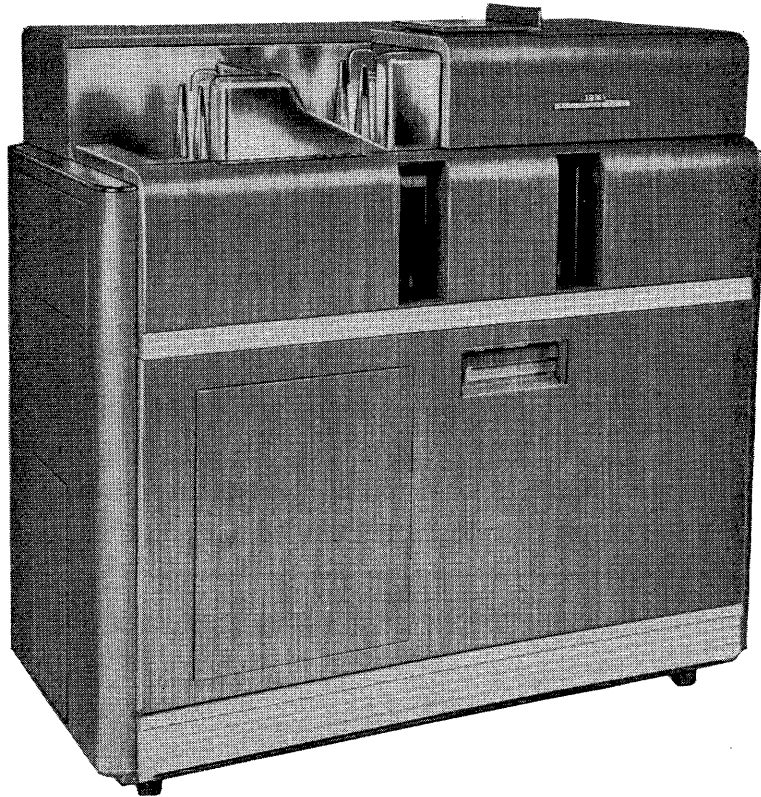
IBM 514 REPRODUCING PUNCH

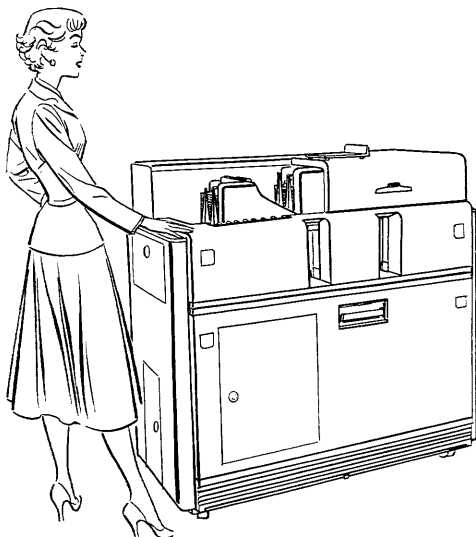The IBM 514 Reproducing Punch combines the features of gang punching, reproducing and comparing. For summary punch operations, the machine is attached to an electric accounting machine by means of a flexible cable.

* Reproduces numeric or alphabetic information from one set of cards to another

* Gang punches repetitive data—simultaneous reproducing possible

* Punching verified by comparing circuits

* Operates at 100 cards per minute speed

* Total or new balance cards punched when attached to an electric accounting machine

* Flexible control panel

* Pencil marks can be converted to punched holes when equipped with mark sensing device

IBM DATA PROCESSING

Type 514 - Reproducing Punch

Machine Characteristics

	Standard	Maximum	Minimum
Speed	100 cpm	100 cpm	100 cpm
Company Unit	80 columns	80 columns	45 columns
Selectors (10 pos.)	-	2	-
Column Splits	8	12	8
Summary Punching	Yes	Yes	No
Monthly Charge	$125	$133	$85

Special Features - Charges

	Monthly Charge	Single Use Charge
Auxiliary Card Counter (one or two)	$ 5	
Consecutive Number Punching and Checking	10	
Double Punch and Blank Column Detection (10 pos.)	8	
Folded Stub Card Feeding	15	
Interchangeable Feeds (51 or 80 column) (per feed)	15	
Interchangeable Stub Card Read Feed (22-60 columns)	25	
Mark Sensing		
Read Feed (10 pos.)	30	
Read Feed (26 pos.)	70	
Punch Feed (10 pos.)	30	
Punch Feed (27 pos.)	70	
Read and Punch Feeds (10 pos.)	45	
Read and Punch Feeds (26 pos. read) (27 pos. punch)	105	
Offset Stacker (punch feed)	10	
(read feed)	10	
Post Card Stock Feed - Interchangeable	15	
Split Column Device		$50

Special Features - Description

Auxiliary Card Counter - Used for counting the total number of cards passed through one feed of the machine.

Consecutive Number Punching and Checking - This is used for punching consecutive numbers into an individual series of cards, or punching a consecutive group number into the master card of a group and its associated detail cards.

Double Punch and Blank Column Detection - This device is used for detecting double punching in a card column or a blank column which should be punched. Up to 30 positions may be installed on one machine. It is always installed when the machine is equipped for mark sensing.

Folded Stub Card Feeding - This device permits the feeding of an 80 column card which is attached to a stub of 7-1/2" or 6-3/8" in length, folded back. It is readily changed by the operator to permit feeding single thickness cards.

Interchangeable Feeds (51 or 80 column) - Similar to the device described under Type 402, 403, 419.

Interchangeable Stub Card Read Feed - This device permits reading of information which has been prepunched in a stub card of any size from 22 columns to 60 columns. It will only accommodate one size stub card as well as the normal 80 column card.

Mark Sensing - This is designed to convert, to punched hole form, data marked on cards with Electrographic Ink or Lead. Double Punch and Blank Column Detection is provided to check the punching.

Offset Stacker - Used to offset error cards 3/8" toward the front of the machine from the normal stack of cards in the stacker.

Post Card Stock Feed - Interchangeable - Permits feeding standard IBM cards or post card stock. Adjusted by machine operators.

Split Column Device - A selector used to transfer control between two specified digits, such as between 12 and 11 or 6 and 7.

August 20, 1957
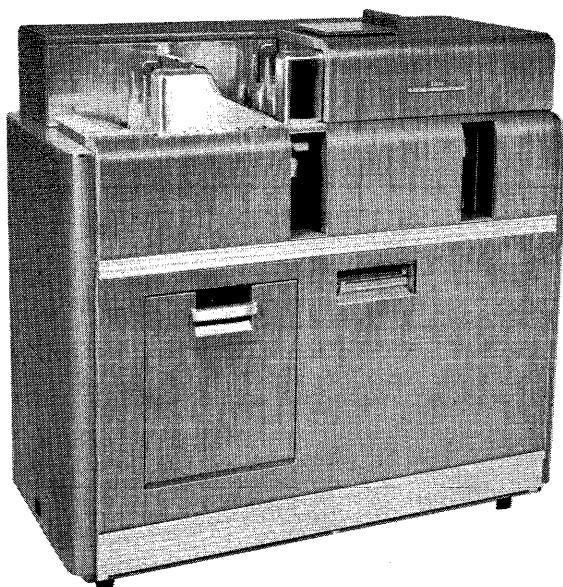
IBM 519 DOCUMENT ORIGINATING MACHINE

The IBM 519 Document Originating Machine punches IBM cards automatically from another set of punched cards or, when attached to an accounting machine, punches summary cards for totals. Comparing, summary punching, and the mark sensing device are optional features.

* Speed—100 cards per minute

* Reproduces numerical or alphabetic data from one set of cards to another

* Gang punches repetitive data in multiple cards—simultaneous reproducing possible

* End-printing of as many as 8 punched characters in the same card or transferred to another card

* Printing on one or two positions of card

* Total or new balance cards summary-punched when machine is attached to a 400 series accounting machine

* Punching verified by comparing circuits in either gang punching or reproducing operation

* Pencil marks converted to punched holes when equipped with mark sensing device

Type 519 - Document Originating Machine

Machine Characteristics

	Standard	Maximum	Minimum
Speed	100 cpm	100 cpm	100 cpm
Comparing Unit	80	80	-
Summary Punching	No	Yes	No
Selectors	-	2	-
End Printing	Yes	Yes	No
Column Splits	12	12	12
Monthly Charges	$110	$143	$85

Special Features - Charges

|	Monthly Charge	Single Use Charge
Consecutive Number Punching and Checking	$10	$ -
Count Controlled Punching and Serial Number Printing	30	-
Double Punch and Blank Column Detection (10 pos.)	8	-
Right End Printing	-	-
Inverted End Printing	-	50
Folded Stub Card Feeding	15	-
Interchangeable Feeds (51 or 80 column) (per feed)	15	
Interchangeable Stub Card Read Feed	25	
Mark Sensing (Same price schedule as Type 514)		
Offset Stacker (per feed)	10	
Type Wheels - Special (per character)		10
(per wheel)		50

Special Features - Description

Count Controlled Punching and Serial Number Printing - Used to prepare prepunched and/or preprinted master cards and a specified number of detail cards for each master. The number of detail cards to follow each master may vary. This number is specified in a trailer card.

Right End Printing - Used for End Printing on the right end of the card instead of the left end. One machine may not be equipped with both right and left end printing.

Inverted End Printing - Used for normal End Printing with the characters reversed.
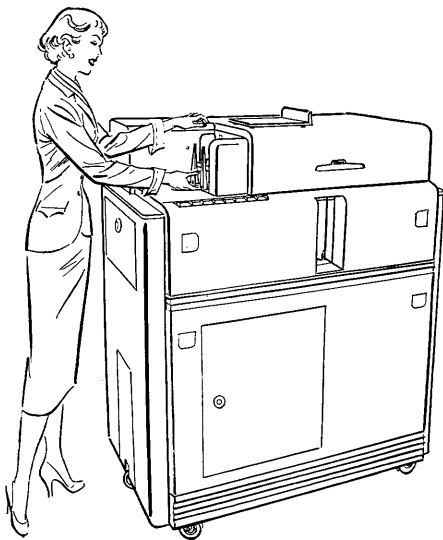
Note: Other special devices shown under the cost table are similar to those described for Type 514.

August 20, 1957
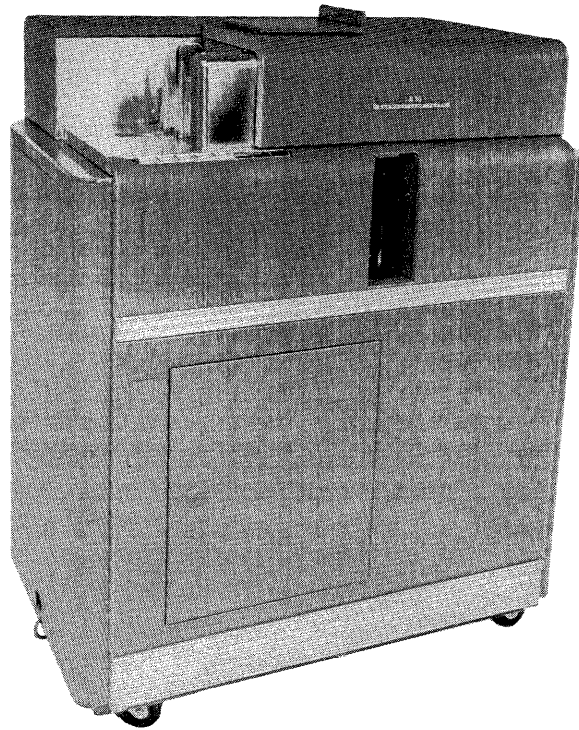
IBM 523 GANG SUMMARY PUNCH

The IBM 523 Summary Punch is a dual function machine capable of performing summary and gang punching operations.

* Gang punches repetitive data at the rate of 100 cards per minute

* Gang punches numerical or alphabetical information

* Summary punches total or new balance cards when attached to IBM 402, 403, 407, 408, or 419 Accounting Machine

* Flexible control panel

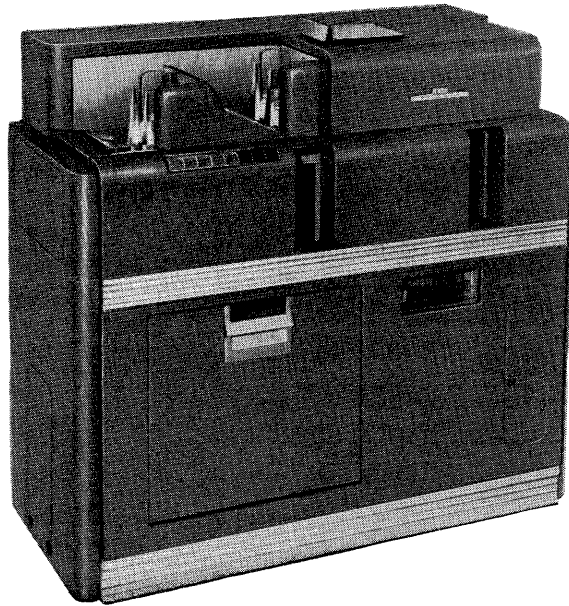* Gang punching and summary punching operations can be performed simultaneously

IBM | DATA PROCESSING

Type 523 - Gang Summary Punch

Machine Characters

	Standard	Maximum
Speed - Normal	100 cpm	100 cpm
- Summary Punching	1.2 sec/card	
Summary Punching	Yes	Yes
Balance Selectors	-	2
Column Splits	8	12
Independent Operation	No	Yes
Monthly Charges	$85	$93

Special Features

The 523 Special Features are similar to Type 514 special features which are applicable to the punch unit of the 514.

August 20, 1957

IBM 528 ACCUMULATING REPRODUCER

In a single operation, the Accumulating Reproducer will—within its capacity—accumulate totals, punch summary cards, check the totals and their punching, and balance the total of all summary cards to the final accumulated total.

In addition to its straight reproducing operations, it will select and reproduce only those cards desired, without disturbing the arrangement of a file.
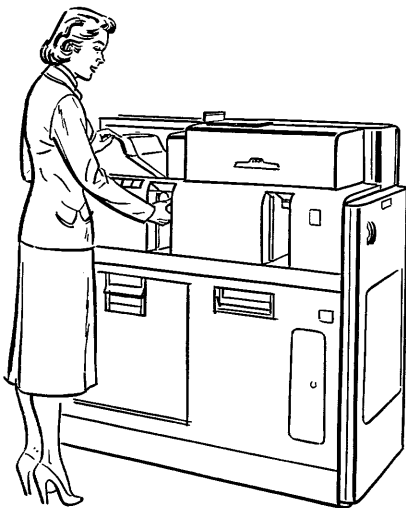
* Accumulates totals from cards at a rate of 200 cards a minute

* Punches summary cards at a rate of 100 cards a minute

* Balance-checks its own punched totals

* A maximum of 48 counters available, in groups of 12

* Selectively reproduces cards from a file at a rate of 100 cards a minute—passes all others at a rate of 200 cards a minute

* Gang punches cards at a rate of 100 cards a minute

* Automatically compares cards to prove agreement of original and reproduced data

* Automatically reproduces any card as many times as the card itself specifies

* Punches cards with serial numbers

IBM DATA PROCESSING

Type 528 - Accumulating Reproducer

Machine Characteristics

	Standard	Maximum	Minimum
Speed - Read	200 cpm	200 cpm	200 cpm
- Punch	100 cpm	100 cpm	100 cpm
Comparing Unit	80	80	45
Group Control	10	10	-
Selectors - Pilot	6	16	6
- Co-Selector	4	8	4
- Digit	-	1	-
Counters	48	48	-
Summary Punching	Yes	Yes	No
End Printing	Yes	Yes	Yes
Monthly Charges	$440	$480	$195

Special Features - Charges

|	Monthly Charge
Alphabetic Indication Storage (2 pos.)	$10
(6 pos.)	25
(12 pos.)	40
Auxiliary Card Counter (1 or 2)	5
Counter Read Back (25 counters)	20
(48 counters)	25
Program Device	10

Note: Other special features such as Double Punch and Blank Column Detection, Mark Sensing, etc. are similar to and cost the same as those described under Type 514.

Special Features - Description

Alphabetic Indication Storage - Used to store the zone information contained in the alphabetic field of the indicative information.

Counter Read Back - Used to accumulate sub-totals from the accounting machine in the 528 counters and for reading the accumulated totals back into the accounting machine counter and/or type bars.

Program Device (Additional Program Cycles) - Used for crossfooting and limited multiplication by repetitive addition.

August 20, 1957
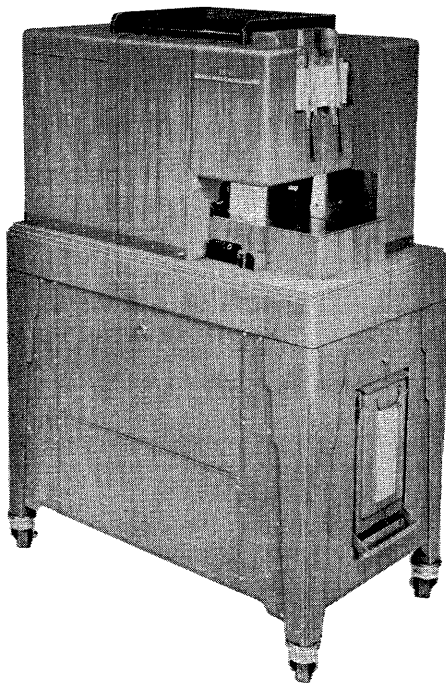
IBM 552 ALPHABETIC INTERPRETER

The IBM 552 Alphabetic Interpreter translates the holes punched in IBM cards and prints the corresponding data across the face of the card. Both numerical and alphabetic characters are printed.
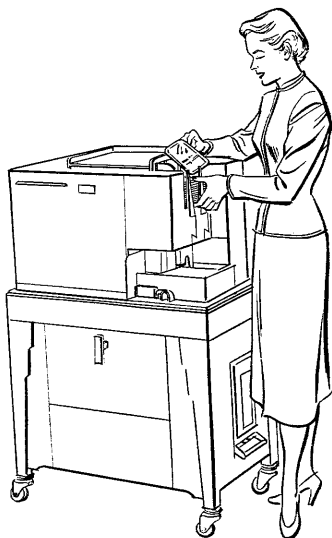
* Two lines available for printing at top of card

* 60 characters may be printed on each line.

* Speed 60 cards per minute

* Feed hopper capacity, 700 cards; stacker approximately 900 cards

* Automatic stacker stop

* Flexible control panel

IBM® DATA PROCESSING

Type 552 - Alphabetic Interpreter

Machine Characteristics

Speed	60 cards per minute
Type Bars	60
Printing Positions	Two, one line across the top of the card, one line between the "11" and "12" punch position.
Split Column Control Selectors	Two optional at a monthly cost of $4 each

Monthly Charge $75

Special Features - Charges

	Monthly Charge	Single Use Charge
Auxiliary Counter	$5	
Post Card Feed - Fixed	-	
Split Column Control (additional - 10 pos.)	5	
Zero Elimination (20 pos.)		$75

Special Features - Description

Post Card Feed - Fixed - Permits feeding cards of post card thickness but not standard cards.

Split Column Control - Used to prevent X or 12 punching over a digit from being read as alphabetical punching.

Zero Elimination - Provides for suppression of zero printing to the left of the highest significant digit of a field.

August 20, 1957
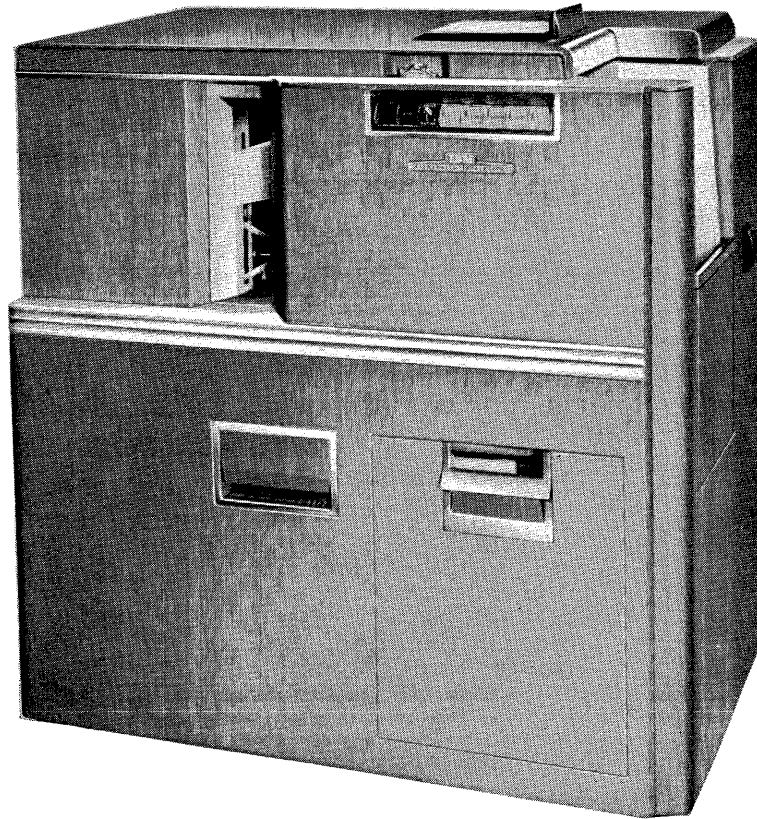
IBM 557 ALPHABETIC INTERPRETER

The IBM 557 Alphabetic Interpreter translates holes punched in IBM cards and prints the corresponding alphabetic, numerical and special character data on the face of the card.

* Speed — 100 cards per minute
* Sixty characters per line may be printed
* Printing on any one of 25 lines
* Dial set printing line
* Three special characters in each print wheel
* Controlled zero printing
* Printing may be suppressed
* Cards stacked in original sequence

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Type 557 - Alphabetic Interpreter

Machine Characteristics

Speed	100 cards per minute
Type Wheels	60
Printing Lines	Any one of 25 possible lines across the card
Selectors	Four five-positions are standard
Column Splits	Two single-position splits are standard

Monthly Charge

$165

Special Features - Charges

	Monthly Charge	Single Use Charge
Auxiliary Card Counter	$ 3	
Check Protection	5	
Fixed 51 Column Feed	15	
Pre-Sensing	10	
Print Entry Control	5	
Proof Device	30	
Repetitive Printing	10	
Special Character Printing	10	
Special Type Wheels (one wheel)		$50
Each added character		15
Each additional identical wheel		3

Special Features - Description

Check Protection - Provides for printing up to six adjacent check protection asterisks in a fixed eight-position amount field.

Fixed 51 Column Feed - Allows interpretation of 51 column cards.

Pre-Sensing - Permits field selection of alphabetic information by sensing "X" control punches ahead of the reading brushes.

Print Entry Control - Allows two control panel setups to be wired on one panel permitting field or class selection of information on a subsequent run of the cards.

Proof Device - This device checks that the correct character is positioned for printing.

Repetitive Printing - Permits printing information from master cards into following detail cards.
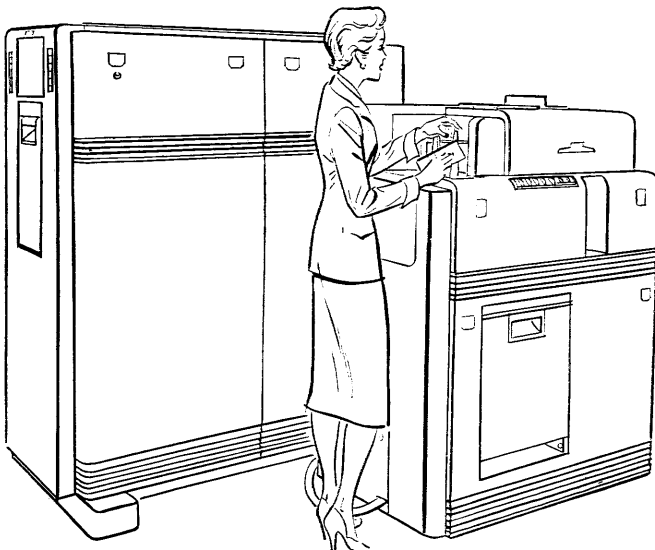
Special Character Printing - Allows the printing of eight additional special characters.

August 20, 1957
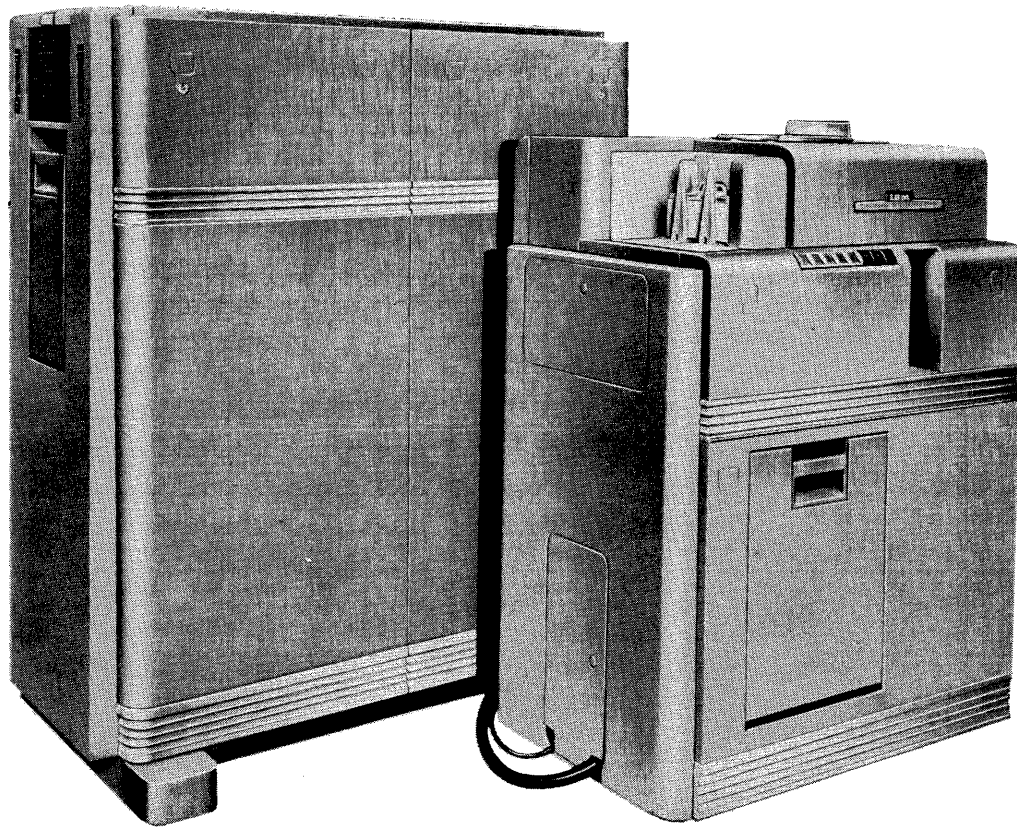
IBM 604 ELECTRONIC CALCULATING PUNCH

The IBM 604 Calculating Punch is designed for high speed performance. It will read factors from an IBM card and perform any addition, subtraction, multiplication, or division and punch the result in the card.


* Multiplies one factor from card by another obtained from same card or a preceding master card

* Product can be used for additional calculations

* Punches result in same or following card

* Calculations verified under program control

* Capable of rounding off product to any decimal position

* Performs direct division to calculate desired decimal position quotient

* Cross-adds and cross-subtracts

* Programs series of basic operations to calculate desired result

* Gang punches common data in all cards

* Constant speed of 100 cards per minute

* 13 position counter to develop product during multiplication or for dividend during division operation

* Larger products or quotients may be obtained by repeated use of basic capacity through programming

IBM | DATA PROCESSING
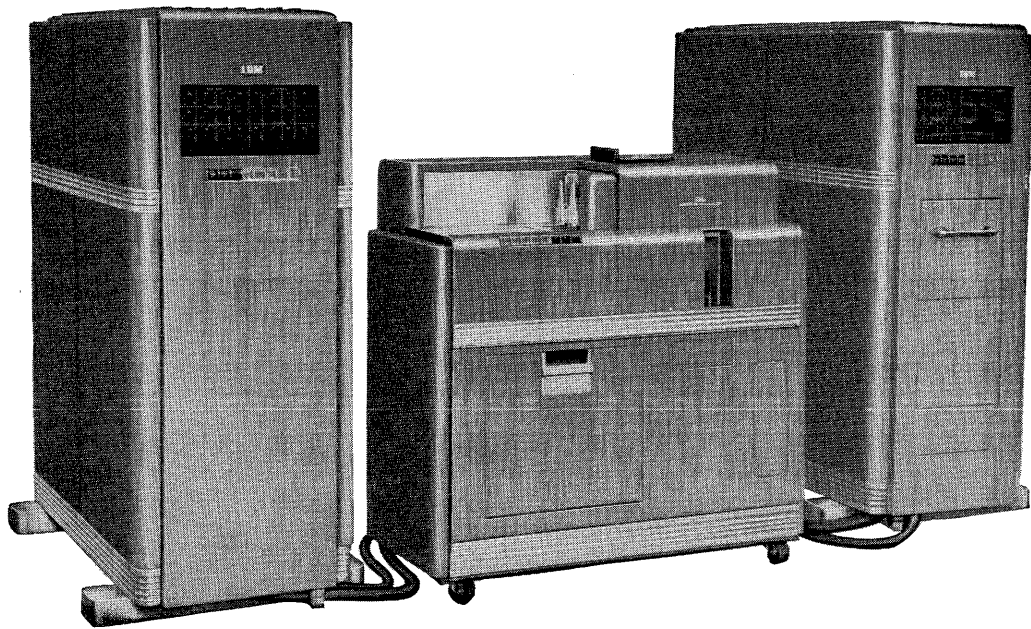
IBM 607 ELECTRONIC CALCULATOR

This computer is available in five models of varying storage and programming capacity. Because of these possible capacity variations and its high-speed arithmetic operation, the machine can perform large volumes of both routine and complex calculations—usually in a single run of the punched cards through the machine.

* Standard storage capacity—66 positions Optional storage capacity—up to 162 positions

* Standard program capacity—40 steps Optional program capacity—up to 140 steps

* Punches cards at a basic speed of 100 a minute

* Completes calculations in one operation

* Verifies its punched results under many conditions

* Automatically alters normal routine of calculations to meet special situations

* Performs straight, interspersed, offset, and forward gang punching automatically during calculating process

* Uses amounts punched in cards or calculated intermediate results as factors in calculation

* Automatically enters into calculation data not punched into cards originally, such as tax percentages, discount rates, and overtime factors

* Simultaneously computes and records the results of several unrelated steps, such as hours $\times$ standard rate $=$ standard earnings and pieces $\times$ piecework rate $=$ piecework earnings

* Basic capacity for multiplying 8 digits by 5 digits for a 13-digit product, and dividing 13 digits by 8 digits for a 5-digit quotient. Larger results can be obtained by repeated use of this basic capacity.

IBM DATA PROCESSING
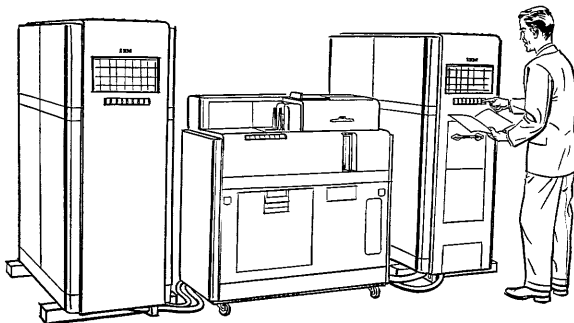
Type 604, 607 - Electronic Calculating Punch

Note: The primary difference between the 604 and 607 is in machine capacity.

Machine Characteristics

Calculator	604	607
Program Steps	20	40
Storage - Factor	16 positions	16 positions
- General	16 positions	16 or 32 positions
Counter	1 13-position	1 13-position
Selectors - Calculator	8 5-position	8 5-position
- Balance	1 2-position	1 2-position
Monthly Charge	$400	$500-650

Punch	521	529
Column Splits	12	12
Digit Selectors	2	2
Double Punch and Blank Column Detection	10 positions	20 positions
Pilot Selectors	5	5
Punch Selectors	8	8
Monthly Charge	$150	$300

Auxiliary Storage Unit - Type 942	Model 1	Model 2	Model 3	Model 4
Storage Positions	96	96	64	32
Monthly Charge	$800	$800	$500	$200

Special Features - Charges

	Monthly Charge
Calculator Selector Split - 604	$ 5
Program Exit Expansion - 604, 607	10
Additional Program Steps - 604, 607	30 per 20 steps
Program Repeat - 604	10
Punch Delay - 521	10
Zero Test - 604	15

Note: The 521 and 529 punches also can use many of the special features listed under Type 514.

Special Features - Description

Calculator Selector Split - Provides more selectors of smaller capacity.

Program Exit Expansion - Provides additional exit hubs for a program step.

Additional Program Steps - Provides up to 40 additional program steps on a 604, 40 on a 607 model 1 or 5, and 100 on 607 model 2, 3 or 4.

Program Repeat - Provides a means of returning the program unit to step one after the last program step is completed.

Punch Delay - Delays punching of a card until calculation for that card is completed.

Zero Test - Makes possible the recognition of zero and non-zero balances in the counter on any program step.

August 20, 1957
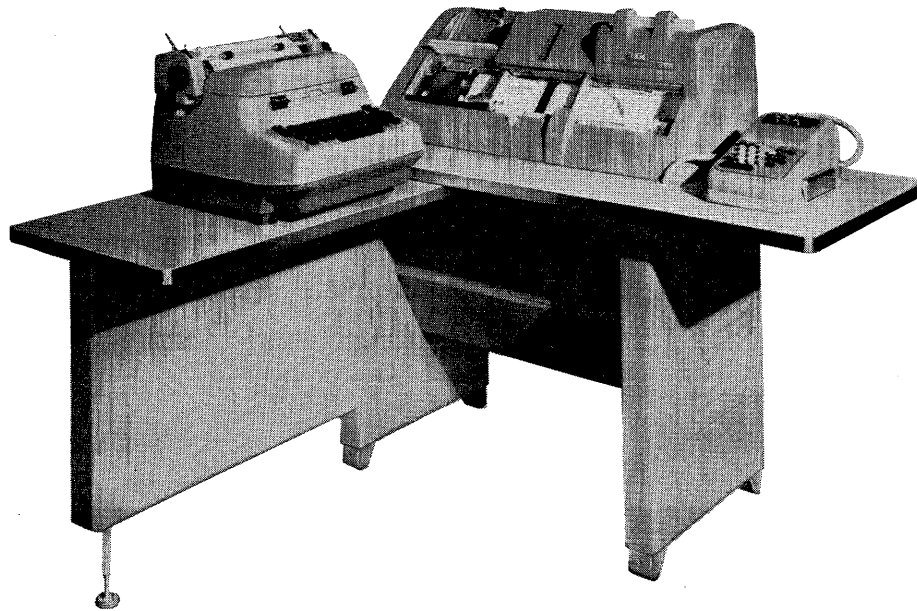
IBM 824-826 TYPEWRITER CARD PUNCH

The IBM 824-826 Typewriter Card Punch is a dual purpose machine that types documents and punches IBM cards simultaneously. It consists of two units, an IBM electric typewriter and a card punch. When the shift key on the typewriter is depressed, information is typed in capital letters and punched in a card. When the shift key is normal, information is typed in slightly smaller capitals and is not punched.

* Document typed and card punched simultaneously provides automatic agreement of typed and punched data

* Fast, easy electric typing

* 824 is non-printing punch; 826 is printing punch

* Automatic skipping and duplicating of cards under control of punch program unit

* Alternate program device on punch unit provides for two different card forms at one writing

* Units operate independently when typewriter shift is normal

* Variable length typewriter carriages—12 inch is standard; 16 and 20 inch are optional

* Both machines are furnished in two models:
  Model 1   Numerical keyboard only
  Model 2   Combination numerical and alphabetic keyboard

* Tab Device permits tabulating and spacing without corresponding action in the punch. The purpose is to eliminate the necessity of shifting to "punch off" before depressing the tab or space keys (or, as an alternate, sacrificing a card column

* Optional Check Device permits creation of reconciliation card during preparation of card check and automatic punching of card check from reconciliation card

* Check Remittance Device, an optional feature, prepares remittance statement, card check, reconciliation card, and accounting cards for each detail item shown on the remittance statement

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Type 824, 826 - Typewriter Card Punches

Note: Type 826 is similar to Type 824 except that it interprets and prints
       the punching on the cards.

Machine Characteristics

Speed   Punch speeds are similar to Type 024, 026
Program Control
   Models 3 and 4   Permit punching two different cards
   Models 5 and 6   Permit punching three different cards
Tabulation   Available only on Models 1 and 2
Print Control (826)   Available only on Models 1 and 2
Alphabetic Keyboard
   (824, 826)   Available only on Models 2, 4 and 6

Monthly Charges

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
824	$ 95	$100	$115	$120	$120	$125
826	115	120	135	140	140	145

Special Features - Charges

|	Monthly Charge
Check Device	$ 6
Check Remittance Device	10
Tab Device	3

Special Features - Description

Check Device - Permits typing a check and punching the check and a recon-
ciliation card in two consecutive operations.

Check Remittance Device - Allows preparation of the following payment
records in one sequence of operations:

1. Typed and punched card check
2. Reconciliation card
3. Remittance statement
4. One or more accounting distribution cards

Tab Device - Eliminates the need for an extra card column when tabulating
the typewriter.

August 20, 1957
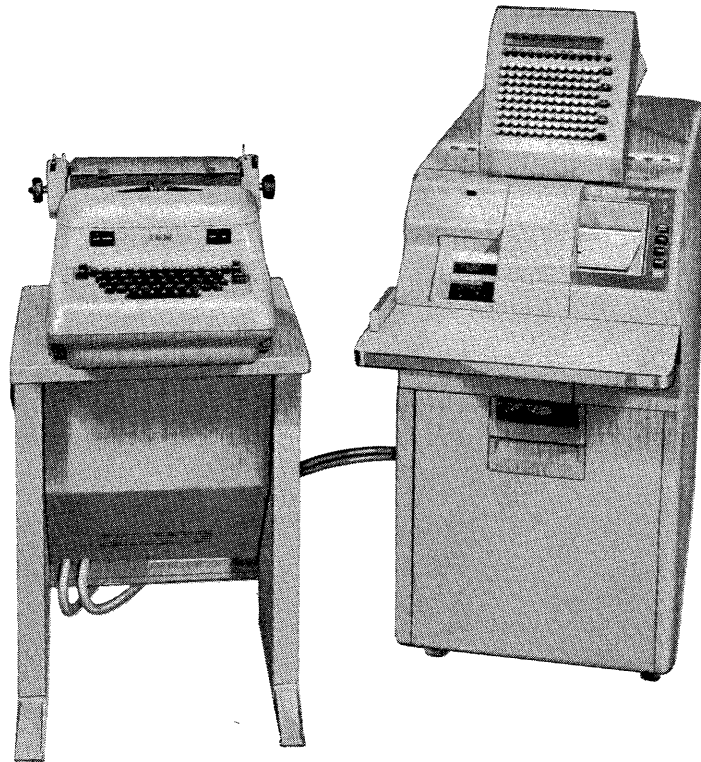
IBM 858 Cardatype® ACCOUNTING MACHINE

The IBM Cardatype Accounting Machine is a flexible series of machine units which produce multiple documents from a single action of the control operator. It operates from prepunched IBM cards with provision for manual interpolation of miscellaneous data. The machine can be expanded from the basic accounting machine, which consists of a punched card reader and IBM typewriter, to a complete assemblage of units in measure with requirements.
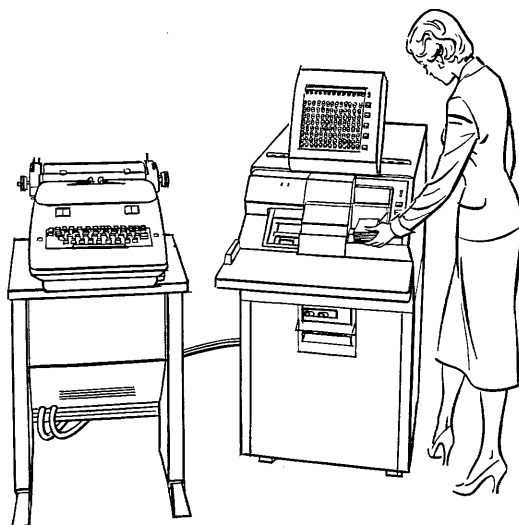
- Operates from prepunched IBM cards
- Rereads and records data requiring repetition
- Equipped with program control
- Auxiliary keyboard enters repetitive or variable numeric data
- Produces up to four differently designed documents simultaneously
- Utilizes single or continuous forms
- Transmitting typewriter enters alphabetic-numerical data
- Creates punched card or tape
- Adds, subtracts, multiplies and crossfoots
- All units controlled from one operating position

Type 858 - Cardatype Accounting Machine

Machine Characteristics

858 - Control Unit

Card Reading Speed	Ten columns per second
Program Unit	120 program steps
Selectors	Five two-position
Distributors (filters)	Ten double and ten triple exit distributors

868 - Transmitting Typewriter	One only can be used
866 - Non-Transmitting Typewriter	Up to four 866's or three 866's and one 868 may be used

Printing Speed	Ten characters per second
Case	Single case only on Type 868
	Single or double case on Type 866
Type Styles	Pica, Pica Gothic, Accounting Gothic
Platens	Solid or pin feed
Program	Plastic tape controlled programs on Type 868

972 - Auxiliary Keyboard for Manual Entry of Numeric Information	Twelve columns of keys
	Up to two keyboards may be used

534 - Cardatype Card Punch	Similar to 024, 026 punches except
536 - Cardatype Card Punch (Printing)	that the punch is under control of the 858

961 - Tape Punch (8 Channel)	
962 - Tape Punch (5 Channel)	

Speed	Ten characters per second
	Controlled by the 858

Note: Cardatypes may not be equipped with both tape punch and card punch.

863 - Arithmetic Unit	Capable of addition, subtraction and multiplication. Multiplying speed 1.5 to 2.75 seconds.
Storage Units	One six-position unit to allow entry of six-digit amounts into counters
Counters	Two ten-position net balance counters

Monthly Charges

858 - Control Unit	$195-$220
866 - Typewriter (single case)	30
866 - Typewriter (double case)	35
868 - Typewriter	50
972 - Auxiliary Keyboard	20

534 - Card Punch	55
536 - Printing Card Punch	75
863 - Arithmetic Unit	70-90
961 - Tape Punch (8 Channel)	25
962 - Tape Punch (5 Channel)	25

Special Features - Charges

	Monthly Charge
Automatic Carriage - 866, 868 - 16"	$ 8
20"	10
Automatic Start - 858	5
Check Device - 866 or 868	6
Color Control - 866 or 868	5
Counters - additional - 2 ten position - 863	15
Distributors (filters) - each group of 10 two position and 10 three position - 858	5
Additional Program Positions - 150 position - 858	15
Re-Read - 858	10
Additional Storage Positions - 863	5

Special Features - Description

Automatic Carriage - To move the form to pre-determined writing lines.

Automatic Start - For automatic feeding of cards when they are first placed in the hopper.

Check Device - Used to prepare an IBM card check completely typed and punched, together with a punched reconciliation card, in two operations.

Color Control - Provides a means of automatically controlling typewriter ribbon color.

Re-Read - Permits repetitive reading of all or part of a card, or reading of the card in a different sequence.

Storage Positions - Additional - Permit the entry of a ten digit amount into a counter.

August 20, 1957