

## 6360 DISKETTE UNIT

### PURPOSE

The Diskette Unit is used for loading programs into memory and for housing work diskettes for the 6580 Displaywriter. It is available with either one or two diskette drives for use with either Displaywriter Diskette 1 or 2D. Information created at the keyboard can be read onto the diskette.

### MODELS

<b>Model 010</b>	Single Diskette Unit - uses Diskette 1 only
<b>Model 011</b>	Dual Diskette Unit - uses Diskette 1 only
<b>Model 020</b>	Single Diskette Unit - uses Diskette 1 or 2D
<b>Model 022</b>	Dual Diskette Unit - uses Diskette 1 or 2D

**Limitations:** The data formats of these diskettes are not compatible with other IBM diskettes.

**Prerequisites:** The customer must have at least Textpack 2 to use the Diskette 2D.

### HIGHLIGHTS

#### Diskette Characteristics:

- Diskette 1 provides 284,160 bytes of customer-usable characters and control codes; up to 144 2,000-character pages.
- Diskette 2D provides 985,088 bytes of customer-usable characters and control codes.

#### Diskette Unit Configurations:

- Diskette 1 configuration - one or two diskette drives, 284,160 byte capacity per diskette.
- Diskette 2D configuration - one or two diskette drives, 985,088 bytes per diskette.

#### Benefits:

- Modular design accommodates left- or right-handed operators.
- Modular packaging provides for easy upgrading.
- Single-drive model provides low - cost option.
- Dual-drive model helps reduce diskette handling.
- Diskette 2D provides larger storage capacity.

#### Physical Specifications:

Width: 254mm (10 in.)  
 Depth: 398mm (15.7 in.)  
 Height: 292mm (11.5 in.)  
 Weight (Single): 11kg (24 lb.)  
 (Dual): 16kg (35 lb.)  
 Cable Length: 1 meter (3.3 feet)

**Customer Setup:** Yes (Single or Dual Diskette Unit).

### SPECIFY

- Color: Pearl White (no specify required).

### SPECIAL FEATURES

#### Non-Communications Features

**Modification Feature for Single Diskette Unit (#6990) and for Dual Diskette Unit (#6993):** Available with 50 Hz or 60 Hz power. Designed to help protect the security of information being processed. Available for sales, delivery, installation and maintenance in the United States and to agencies of the United States Government located outside the US, and to governments of NATO countries plus Australia and New Zealand. There are no functional or operational differences between standard Displaywriter and those equipped with the modification. Information regarding Modification Features must not be released, reproduced or distributed outside the United States or divulged to non-US citizens other than those authorized by the US government. **Maximum:** One per device. **Field Installation:** No. (The power selected must match the electronics module power.)

#### Communications Features

**Local Device Controller (LDC) (#1630):** Allows limited distance Attachment up to 5,000 feet of Twinaxial® Cable to one other Displaywriter System on the 6670, for communication with Binary Synchronous Protocol at 2400 bps only. Both units must be equipped with an LDC. Customer is responsible for supplying, installing and maintaining the Twinaxial® cable and station protectors (if required). **Maximum:** One. **Field Installation:** Yes.

**Add'l EIA Interface for External Modem (#3704):** Provides an additional EIA interface for an external modem for either Binary Synchronous, Asynchronous or SDLC (3270 Data Stream Compatibility) communications. **Limitations:** This device is for use only with the Local Device Controller (#1630) and cannot be used with the Single on Dual EIA Interface for external modems (#3705 or #3707). **Maximum:** One. **Field Installation:** Yes.

**Dual EIA Interface for Two External Modems (#3707):** Provides communications capability for Binary Synchronous, Asynchronous or SDLC (3270) Data Stream Compatibility communications in one workstation. Similar to the single EIA interface, but includes an additional EIA interface to allow for two modems. See M6580 pages for information on the Single EIA interface (#3705). **Maximum:** One per workstation. **Field Installation:** Yes.

**Modification Feature for Communication Interface (#4964):** Designed to help protect the security of information being processed. Available for sales, delivery, installation and maintenance in the United States and to agencies of the United States Government located outside the US, and to governments of NATO countries plus Australia and New Zealand. There are no functional or operational differences between standard Displaywriter and those equipped with the Modification Feature. Information regarding Modification Features must not be released, reproduced or distributed outside the United States or divulged to non-US citizens other than those authorized by the US government. **Limitations:** Order one of these features in place of other communications interfaces. **Maximum:** One per device. **Field Installation:** No.

### MODEL CONVERSIONS

<b>From/To:</b>	11	20	22
10	Y	Y	Y
11			Y
20			Y

### ACCESSORIES (None)

### SUPPLIES

**IBM Displaywriter Diskette 1:** Reorder No. 4498905. The diskette consists of a thin, flexible disk and a protective plastic jacket. The diskette is protected by a plasticized envelope when it is not in use. **Size:** Approximately 203.2mm x 203.2mm (8" x 8"). **Packaging:** Permanently enclosed in a protective envelope identified by a permanent gray label with a bold numeral 1. **Recording/Storage Capability:** 284,000 customer usable characters.

**IBM Displaywriter Diskette 2D:** Reorder No. 4498959. The diskette consists of a thin, flexible disk and a protective plastic jacket. The diskette is protected by a plasticized envelope when it is not in use. **Size:** Approximately 203.2mm x 203.2mm (8" x 8"). **Packaging:** Permanently enclosed in a protective envelope identified by a permanent terra cotta (burnt orange) label with a bold numeral 2D. **Recording/Storage Capability:** 985,000 customer usable characters.

*Note: The IBM Displaywriter Diskettes 1 and 2D are pre-initialized diskettes for the IBM Displaywriter. Initialization is the prerecording of data which organizes a diskette into fields, tracks and sectors conforming to the unique logic of the IBM Displaywriter. If the customer desires un-initialized Diskettes 1 and 2D, which are commonly used in various IBM Products. See IBM.)*



MACHINES

**6361 MAG CARD UNIT**

**PURPOSE**

Provides magnetic card input and output for the 6580 Displaywriter System.

**MODELS**

Model 001

**Limitations:** 50 magnetic card capacity.

**Maximum:** One Mag Card unit per 6580 System.

**Prerequisites:** Require Minimum of 192KB memory and Textpack 2.

**Dimensions:**

Width: 305mm (12 in.)  
Depth: 483mm (19 in.)  
Height: 673mm (27 in.)  
Weight: 30kg (65 lbs.)  
Cable Length: 4.5m (15 feet)

**Note:** The 6361 is a reconditioned product (not in new production) that does not qualify for new investment tax credit.

**HIGHLIGHTS**

Reads and records information using 50 track magnetic cards. Reading is at the maximum rate of 20 seconds/card (102 char/track). Recording is at the maximum rate of 30 seconds/card (102 char/track). Mag card products may be used to prepare the cards to be read by the 6361. Playback of the cards recorded by the 6361 can be on Mag Card Selectric® Typewriters, Mag Card 11, 6640 Document Printer, Mag Card/A, 6240 Communicating Mag Card Typewriter, and the 6670 Information Distributor. The input hopper holds a maximum of fifty cards and the output stacker a maximum of 200 cards.

Information on magnetic cards can be read and recorded on the 6580 Displaywriter System diskette for revision, printing, or storage. In some cases, information from magnetic cards may need to be edited before information is revised or printed.

**Bibliography:** See *KWIC Index* (G320-1621).

**SPECIFY**

- Voltage: 115V AC, 1-phase, 60 Hz (no specify required).
- Power Cord: 2.4 meters
- Color: Pearl White Covers with Black Face Plate (no specify required).

**SPECIAL FEATURES**

**Modification Feature for Mag Card Unit (#6989):** Order in addition to a Mag Card Unit. Available with 60 Hz 110V power only. The Modification Features are designed to help protect information being processed. These features are applicable to 6580 Displaywriter Systems equipped with 60 Hz power supplies and are available for sales, delivery, installation and maintenance in the United States, and to agencies of the United States Government located outside the US, and to governments of NATO countries plus Australia and New Zealand. Information regarding Modifications Features must not be released, reproduced, distributed outside the United States or divulged to non-US citizens other than those authorized by the US government.

**MODEL CONVERSIONS** (None)

**ACCESSORIES** (None)

**SUPPLIES**

**Magnetic Cards:** Only diagnostic magnetic cards are shipped with the 6361. Magnetic cards for customer applications must be separately ordered. For IBM magnetic cards and erase magnetics, see IBM.

## 6580 DISPLAY STATION

### PURPOSE

The 6580 is the Display Station for the 6580 Displaywriter System. It consists of an Electronic Module (contains specified bytes of random access memory), a Display Module (either a 25-line display or a 66-line large display) and a Keyboard (either 96 or 92 characters).

The 25-line display has 80 characters per line. The 66-line large display has 100 characters per line.

Attachable to the 6580 Display Station are:

5215 Selectric® Element (15 cps) Printer, 5218 Printwheel Printer (40 or 60 cps) or 5228 Printwheel Printer - Wide Carriage (60 cps).

6360 Single or Dual Diskette Unit.

One 6361 Mag Card Unit per 6580.

Up to two other Display Stations may be attached to the master Display Station and thereby share one Printwheel printer.

### MODELS

Model	Memory	Display Size
A0E	128KB	25-Line
A01	160KB	25-Line [WITHDRAWN]
A02	192KB	25-Line
A03	224KB	25-Line [WITHDRAWN]
A04	256KB	25-Line
A06	320KB	25-Line
A08	384KB	25-Line (Required to operate RPQ/PRPQ 3277 Device Emulation Adapter concurrently with Textpack 6.
A10	448KB	25-Line
B0E	128KB	Large Display
B02	192KB	Large Display
B04	256KB	Large Display
B06	320KB	Large Display
B08	384KB	Large Display (Required to operate RPQ/PRPQ 3277 Device Emulation Adapter concurrently with Textpack 6.
B10	448KB	Large Display

### HIGHLIGHTS - 6580 DISPLAYWRITER SYSTEM

Displaywriter System consists of at least one workstation. Each workstation has a display station (a display module, a keyboard module, and an electronics module) and a diskette unit for reading and recording information on data diskettes. A printer is recommended for a full text processing system, but is not required. A Mag Card Unit is also available for organizations that already have mag card typewriters.

The Displaywriter System is a family of software-driven, key-to-display products, with several important concepts incorporated in its design:

- Shared resource system - Up to three workstations may share a single, high-speed printwheel printer, thus increasing throughput and reducing the cost per typing station.
- Designed to be easy-to-learn and use - Simple-language labelling, logical leading prompts, and straightforward presentation of menus all add to ease of learning and use, and help increase operator productivity.
- Modular architecture - Hardware components and software programs are packaged individually, allowing customers to select programs as needed.
- Ergonomically designed - Applying the science of adapting work and working conditions to the worker helps to reduce operator fatigue, make the system easier to use, and contribute to its attractive look.
- Designed to provide excellent price performance - The user buys only the hardware components and software programs needed, and expands the system as needs change.

### Customer Objectives and Applications:

- Heavy original typing production
- Repetitive text production
- Heavy revision production
- Columnar and math operations
- Foreign-language spelling check
- Enhancement of IBM products
- Participation in a communications network
- Low cost per workstation
- Designed to provide excellent price performance
- Proofreading aid

### Hardware:

The Displaywriter System hardware consists of several modules, cable-connected by the user:

- Workstation
  - Electronics Module
  - Display
  - Keyboard
  - Diskette Unit
- Printers
  - Selectric Element (15 cps)
  - Printwheel (40 or 60 cps)
  - Printwheel - Wide Carriage (60 cps)
- Optional equipment
  - Sheet-Feed Paper Handler - Available for the Printwheel Printers
  - Tractor Feed - Available for the Printwheel Printers
  - Mag Card Unit

### Software:

Tasks are performed through licensed programs, available for a license fee. Programs are packaged on program diskettes, and may be obtained as the customer needs them. Although the programs themselves cannot be modified by the customer, formatting defaults and the Spelling Dictionary may be personalized.

### Benefits:

The highly modular nature of the hardware and software offers several user benefits:

- Logical configuring to meet current needs
- Flexible system upgrading and expansion in the field as customer needs change
- Fast and convenient field hardware maintenance
- Good system price performance
- Convenient placement of system modules

### COMMUNICATIONS

Communications on the 6580 System is available with the following licensed programs:

- Asynchronous Communication, 5608-SR1
- Binary Synchronous Communication, 5608-SR2
- IBM 3270 Data Stream Compatibility, 5608-SR6

Using one of the licensed programs and the communications feature, the 6580 System can send information from another 6580 System workstation or other compatible communication equipment, including a suitably programmed host computer. The equipment involved in the 6580 System communication process can be located in the office next door or on another continent.

Communications on the 6580 System is an important capability because:

- Documents that are typed and stored can be translated into electronic signals sent over telephone lines at transmission speeds up to 9600 bps.
- Documents that are received at a 6580 System workstation can be stored and printed or can be revised by the operator. (Documents received from compatible communication equipment may need additional editing or reformatting if revisions are necessary.)
- With the Asynchronous, Binary Synchronous, and communication programs, text and control codes can be created and edited offline on the 6580 System. This ensures faster, more accurate transmission and can reduce line and computer connect charges. (The 3270 Data Stream Compatibility licensed program allows the operator to communicate while directly connected and online to a host computer.)
- When the communication program is not needed, the 6580 System can be used to perform other word processing applications.

### Equipment Required

The communication function requires a:

- Licensed text program
- Communication adapter on the 6580 System (includes a 3.8 meter/12.5 foot EIA cable)
- Licensed communication program

**6580 Display Station (cont'd)**

- An external modem (depending on the modem selected, a data coupler may be required)
- Communication line

The 6580 System can optionally support two external modems. The modem is selected by menus provided by the licensed program. Each modem can support a different linespeed and/or protocol. Only one modem and communication licensed program can be active at one time.

**Security Capabilities**

An optional security keylock may be installed to prevent unauthorized access to the communication function.

The 3845/3846 encryption devices support the 6580 System. When connected between the 6580 System and the external modem at each end of a communication line, these devices secure the privacy of the data transmitted by automatically encrypting (scrambling) and decrypting (unscrambling) the data.

In addition to these optional security features, a terminal identifier (terminal ID) may be preset by the customer. Depending on the licensed product, user IDs are also available and may be assigned for additional communication security.

**Communication Protocols**

Three communication protocols, Asynchronous, Binary Synchronous, and SNA/SDLC Communications, are available.

The Asynchronous Communication licensed program uses the asynchronous protocol. The Binary Synchronous Communication licensed program uses binary synchronous protocol. The 3270 Data Stream Compatibility licensed program uses the SNA/SDLC protocol.

*Asynchronous Communication*

In most applications, Asynchronous Communication is used for interactive terminal operations; however, it can also be used for batch communications because data can be stored in advance on diskette and received to diskette. During an active communication session, both interactive and batch communications can be intermixed.

The 6580 System provides three operating modes that emulate the characteristics of the following asynchronous devices:

- IBM Communicating Mag Card Selectric Typewriter
- IBM 2741 Communications Terminal
- Teletypewriters similar to the Teletype 33, 35, or 43 KSR (Keyboard Send-Receive) mdls.

*Binary Synchronous Communication*

In Binary Synchronous Communication (BSC) protocol, the 6580 System emulates the characteristics of either a 2770/3780 or 2780 terminal. This communication function enables the 6580 System to communicate with the following:

- Mag Card II Typewriter - Communicating
- 6240 Mag Card Typewriter - Communicating
- 6640 Document Printer - Communicating
- Office System/6 - Communicating
- 6670 Information Distributor
- 5520 Administrative System
- 6580 Displaywriter System - Communicating
- System/36
- A suitably programmed computer.

Binary Synchronous Communication licensed program utilizes batch transmission of data. All information, including any necessary control language, is prepared before beginning the communication session. After the session has begun, the information is sent and received with minimal operator intervention.

*3270 Data Stream Compatibility*

The 3270 Data Stream Compatibility licensed program allows a 6580 System to access suitably programmed IBM host computer systems using 3270 application programs. (In most cases, no changes to the computer application programs are required.) Communications to the suitably programmed IBM host is through SNA/SDLC communication protocol.

A communicating 6580 System using the 3270 Data Stream Compatibility licensed program appears as a 3270 Information Display System to the following suitably programmed IBM host systems:

- System/370
- 3031/3032/3033/3081 Processor Complexes
- 4300 Processors

The 3270 Information Display System emulated consists of a single 3278 mdl 2 or 4 Display, a 3274 mdl 51C Controller, and, optionally, a single 3287 Printer.

**HIGHLIGHTS - 6580 DISPLAY STATION***STANDARD FEATURES***Electronic Module:**

The Electronics Module, a component of the Display Station, contains most of the logic for the Displaywriter System. This module includes replaceable plug-in cards which provide the system with specific functional capabilities. Some of these cards are:

- Microprocessor - The powerful high-speed microprocessor provides each workstation with independent intelligence. Its technology allows sophisticated system architecture and true foreground/background concurrency. This means that printing can take place in the background, while keyboarding or revising occur in the foreground.
- ROS Memory - The Basic Assurance Test and the logic necessary to load programs into memory from program diskettes are contained in Read-Only Storage (ROS).

**Main Storage Memory Card:**

This card contains the Random Access Memory (RAM) for the system. Minimum RAM capacity is 128K bytes, and it is expandable in 64K-byte increments. RAM is used for storage of both program instructions and customer information. RAM is a volatile memory; its contents are lost when the power is turned off.

*Highlights of the Electronic Module*

- Processing capability provides good performance and the capability for system expansion.
- Logic is at the workstation level, independent of other stations.
- Concurrency of foreground and background tasks to increase operator productivity.
- ROS memory provides system checkout functions and start-up procedures, to help reduce setup time.
- RAM accommodates programs and customer information.
- Ergonomic design provides low levels of heat and noise.
- Flexibility accommodates a variety of hardware modules and software licensed programs.

**Specifications of Electronic Module**

Width: 483mm (19 in.)  
Depth: 356mm (14 in.)  
Height: 178mm (7 in.)  
Weight: 14kg (30 lbs.)

**Display:**

A display is the primary means of visual interaction between the operator and the system. There are two models available: a 25-line display and a 66-line large display. The 6580 Display's ergonomic design and functional features help to enhance the system's effectiveness and minimize operator fatigue. The Display, a component of the 6580 is used to:

- Present menus
- Prompt the operator
- Give messages
- Provide system status information
- Display information

**Functional Characteristics:**

- Horizontal segmentation up to 255 characters, with 20-character overlap
- Vertical scrolling across page boundaries
- One level of Half Index
- Character brightening when censored
- Video-reversing of unrecognized words following spelling checking

**Physical Characteristics of Display Station:**

- 25-line capacity, 80 characters per line or 66-line capacity, 100 characters per line
- Operator-adjustable contrast and brightness (25-line display)
- Operator-adjustable brightness (66-line display)
- 30-degree rotate range

**6580 Display Station (cont'd)**

- 20-degree vertical tilt
- 8x16 dot character box
- Monopitch
- Symbol graphics displayed

**Specifications of 25-Line Display:**

Width: 381mm (15 in.)  
Depth: 348mm (13.7 in.)  
Height: 292mm (11.5 in.)  
Weight: 6.6kg (15 lbs.)  
Cable Length: 610mm (24 in.)

**Specifications of 66-Line Large Display:**

Width: 316mm (12.4 in.)  
Depth: 404mm (15.9 in.)  
Height: 404mm (15.9 in.)  
Weight: 17.55kg (39 lbs.)  
Cable Length: 483mm (19 in.)

**Keyboard:**

The Keyboard, a component of the 6580 is the primary means of entering new information into the system. The 6580 Keyboard's logical layout is designed to be easily learned and productively used.

**Physical Characteristics:**

- Standard 96-character, optional 92-character
- Minimal inboard coding
- Function keys grouped and labelled logically

**Keyboard Specifications:**

Width: 538mm (21 in.)  
Depth: 213mm (8 in.)  
Height: 101mm (4 in.)  
Weight: 5kg (11 lbs.)  
Cable Length: 1m (3.3 ft.)

*ATTACHABLE COMPONENTS*

**DISKETTE UNIT**

The Diskette Unit is used for loading programs into memory and for housing work diskettes for the 6580 Displaywriter. It is available with either one or two diskette drives for use with either Displaywriter Diskette 1 or 2D. Information created at the keyboard can be read onto the diskette. See M6360 pages for details.

**PRINTERS**

**Selectric Element Printer**

- Rated burst speed of up to 15.5 cps.
- Well suited for standalone workstation configuration.
- Compatible with many Selectric Typewriter 10 and 12 pitch elements.
- System software provides "Trail Printing" capability allowing playout of one job, while another is being keyed.
- The Selectric Element Printer is a reconditioned product and may not qualify for new investment tax credit. This statement should be included in all proposals.

See M5215 pages for details.

**Printwheel Printers**

- Rated burst speeds of up to 40 or 60 cps (in 10 pitch).
- Prints with 10 pitch, 12 pitch, PSM, or 15 pitch printwheels.
- System software and a hardware prerequisite allow a "shared resource" arrangement with up to three workstations.
- Snap-in ribbon cartridge and printwheel cartridges are designed for easy insertion and removal of printwheels and ribbons.
- Bidirectional printing.

See M5218 and M5228 pages for details.

**Mag Card Unit**

- 50 magnetic card capacity.
- Serves as added information resource by taking information from magnetic cards.
- Functions as a media link with compatible IBM mag card products.
- The Mag Card Unit is a reconditioned product that does not qualify for new investment tax credits. This statement should be included in all proposals.

See M6361 pages for details.

**Customer Setup Responsibilities for CSU designated products:**

- Adequate site, system and other vendor preparation.
- Receipt at the customer's receiving dock, unpacking and placement.

- Physical setup, connection of cables to TP lines/modems.
- Notify IBM of intent to relocate, advise IBM of the new location and follow IBM instructions for relocation.
- Other specific responsibilities as outlined in the IBM Planning and Site Preparation Guide.
- Attend Customer Orientation Seminar for demonstration setup.
- Notify IBM in advance if setup assistance is required.

**Bibliography:** See *KWIC Index* (G320-1621).

**SPECIFY**

- Voltage: 110V 60 Hz, grounded receptacle, 15 amp, single phase. Power cord: 3 meter (9.8 ft).
- Color: Pearl White with Pebble Gray (no specify required).

The Display and Keyboard Module which are available above as a feature for the Display Station need not be installed on the same terms as the Electronics Module and are available separately. See 6580 Displaywriter System elements in Country Keyboards section.

**SPECIAL FEATURES**

*Non-Communications Features*

**Communication Keylock (#6500):** Allows a level of security to help prevent unauthorized personnel from using the communication feature. **Maximum:** One. **Field Installation:** Yes.

**Chartpack Display Adapter (#6955):** Required to support Chartpack licensed program (PP 5608-SRA) with either 25-line or large display. **Maximum:** One per displaystation. **Field Installation:** Yes, by CSD. **Customer Setup:** Yes, if shipped with the display station.

**Modification Feature for Electronics Module Mdl's A0(x) (#7022) and for 25-Line Display Module (#4961):** Order in addition to an Electronics Module. Available with 50 Hz or 60 Hz power. Designed to help protect the security of information being processed. These features are available for sales, delivery, installation and maintenance in the United States, and to agencies of the United States Government located outside the US, and to governments of NATO countries plus Australia and New Zealand. There are no functional or operational differences between standard Displaywriters and those equipped with Modification Feature. Information regarding Modification Features must not be released, reproduced, or distributed outside the United States or divulged to non-US citizens other than those authorized by the US government. **Maximum:** One per device. **Field Installation:** No.

**Note:** It is IBM's opinion based upon test data filed with the US Government\*, that the Keyboard Module (features #5330, #5331, or #5349), Printer Sharing Feature, and its associated cables do not require modification for use in an environment requiring Modification Features.

\* It is IBM's opinion and not a warranty that these components do not require modification. This shall be communicated orally and in writing prior to accepting an order from the customer. If a customer does not have access to the US Government classified test data, IBM may be unable to sell the Modification Features because the customer cannot obtain the necessary data that is required to support a buying decision.

**Printer Sharing Prerequisite (#7997):** A logic card that is placed in a designated master 6580 Display Station that will assume control of the printer in a shared printer configuration with up to three workstations. **Specify:** #7998 for a 60 meter (196.8 ft) cable, and #7992 for a 30 meter (98.4 ft) cable, and #7999 for a 5 meter (16.4 ft) cable to connect the second or third workstation to the designated master workstation in a printer sharing environment. **Maximum:** For printer sharing only, one prerequisite in the master workstation is required. A second prerequisite may be installed as backup if desired in one of the other two Display Stations. **Field Installation:** Yes. **Customer Setup:** Yes.

**3274/3276 Attached Workstation Adapter (#8332):** Permits dual coaxial cable attachment of the Displaywriter workstation to a 3274 or 3276 Control Unit, in order to emulate the 3278 Display and 3287 Printer. Refer to the 3270 Attached Workstation licensed program (PP 5608-SR9) for description of the capabilities. May coexist with feature #3705 in display station and feature #3707 in diskette unit, but can not coexist with printer sharing feature (#7997) or DW-3277-DE RPO (#8D0098). **Maximum:** One per display station, but not in master display station in printer sharing environment. **Field Installation:** Yes, by CSD. **Customer Setup:** Yes, if shipped with display station.

*Communications Features*

**Single EIA Interface for External Modem (#3705):** Provides communication capability in either Asynchronous, Binary Synchronous or SDLC (3270 Data Stream Compatibility) modes. It includes an EIA interface attachment for an external modem. This attachment requires a customer provided modem. **Maximum:** One. **Field Installation:** Yes. **Customer Setup:** Yes.

**6580 Display Station (cont'd)****MODEL CONVERSIONS**

**Electronic Module:** Field upgradeable in size of RAM (in 32K byte or 64K byte increases) and from model A to model B.

**ACCESSORIES**

**Display Station Platform (#3000):** Facilitates installation of Displaywriter workstations on desks with limited space (minimum 18 in. depth). Incorporates cable raceway and includes rear cover for electronics module to conceal external cables and connectors. Keyboard can be tilted and locked up when not in use. **Color:** Pebble Gray. The Display Station Platform may be ordered with initial machine order. **Field Installation:** Yes. **Customer Setup:** Yes. For pricing and followon order contact IBM.

**Displaywriter Work Station Standard Configuration (#3001-#3003):** This configuration consist of an adjustable terminal base, a rectangular extension, and a printer stand. The configuration may be ordered with the initial machine order. Specify #3001 for Pearl White, #3002 for Oak, or #3003 for Walnut coloring. **Adjustable Terminal Base:** Has separate platforms for the Displaywriter unit and keyboard. Each platform can be raised or lowered individually by simple controls. In addition the keyboard can be moved toward or away from the operator. **Rectangular Extension:** This height adjustable extension attaches to the Adjustable Terminal Base for extra work-space and is used to support the Displaywriter Diskette Drive. **Printer Stand:** Supports any of the 6580 attachable printers. The stand is designed so that the operator can operate the printer and view printed output from a seated position. **Field Installation:** Yes. **Customer Setup:** Yes. Workstations are also available with triangular extensions. For variations, individual P/N, specifications, prices and followon orders contact IBM.

**SUPPLIES**

**Starter Pac (#5879):** 6580 "Selectric" Element Printer/Low Density Diskette Unit. Each starter Pac contains 30 diskettes (6580 Diskette 1) with protective envelopes packaged in sturdy diskette "Fiftifile" with durable tab dividers and job identifier labels. It also includes 1/2 dozen IBM Tech III Ribbons.

**Starter Pac (#5884):** 6580 "Selectric" Element Printer/High Density Diskette Unit. Each starter Pac contains 30 diskettes (6580 Diskette 2D) with protective envelopes packaged in sturdy diskette "Fiftifile" with durable tab dividers and job identifier labels. It also includes 1/2 dozen IBM Tech III Ribbons.

**Starter Pac (#5885):** 6580 Printwheel Printer/Low Density Diskette Unit. Each starter Pac contains 30 diskettes (6580 Diskette 1D) with protective envelopes packaged in sturdy diskette "Fiftifile" with durable tab dividers and job identifier labels. It also includes one dozen 463 Ribbons.

**Starter Pac (#5886):** 6580 Printwheel Printer/High Density Diskette Unit. Each starter Pac contains 30 diskettes (6580 Diskette 2D) with protective envelopes packaged in sturdy diskette "Fiftifile" with durable tab dividers and job identifier labels. It also includes one dozen 463 Ribbons.

Contact IBM.