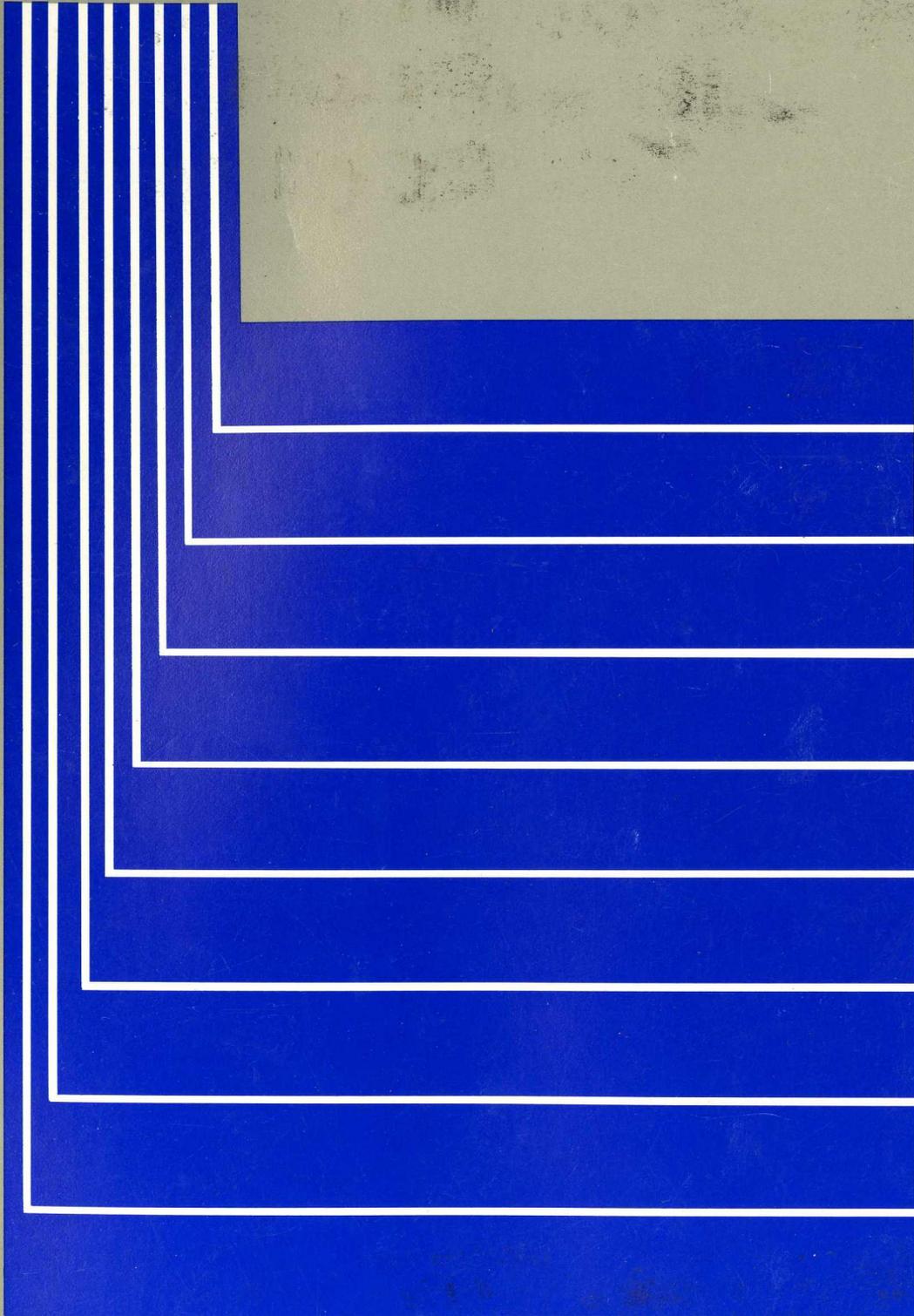


Setup

IBM 3708
Network
Conversion Unit



Setup

IBM 3708 Network Conversion Unit

GA27-3611-01
6405469

Federal Communications Commission (FCC) Statement

Warning: This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Second Edition (January 1987)

This is a major revision of GA27-3611-0, which is now obsolete. Information about how to connect cables to the 3708 has been removed from this manual and is now available in the 3708 Planning and Installation manual, GA27-3766.

Changes are made periodically to the information herein; before using this publication in connection with the operation of IBM systems or equipment, consult the latest *IBM System/370, 30XX and 4300 Processors Bibliography*, GC20-0001; *System/38 Bibliography*, GH30-0233; and *8100 Bibliography*, GC20-8100, for the editions that are applicable and current.

Any reference to an IBM licensed program in this document is not intended to state or imply that only IBM's licensed product may be used. Any functionally equivalent program may be used instead. It is possible that this material may contain reference to, or information about, IBM products (machines and programs), programming, or services that are not announced in your country. Such references or information must not be construed to mean that IBM intends to announce such IBM products, programming, or services in your country.

Publications are not stocked at the address given below; requests for IBM publications should be made to your IBM representative or to the IBM branch office serving your locality.

A form for reader's comments is provided at the back of this publication. If the form has been removed, comments may be addressed to IBM Corporation, Communication Products Information Development, Department E02, PO Box 12195, Research Triangle Park, North Carolina, U.S.A. 27709. IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation whatever. You may, of course, continue to use the information you supply.

About This Manual

This manual describes the procedures for setting up a newly purchased or a relocated IBM 3708 Network Conversion Unit. Problem handling procedures are provided to help customer personnel correct problems that occur during the setup process only. For problems that occur during 3708 installation and configuration or when the 3708 is installed and operating, refer to *IBM 3708 Network Conversion Unit Problem Determination*, GA27-3767.

Related Information

The following list describes manuals and information for the 3708:

- *IBM 3708 Network Conversion Unit Planning and Installation* manual, GA27-3766, describes how you can plan for and install the 3708.
- *IBM 3708 Network Conversion Unit Description* manual, GA27-3768, describes the 3708 functions and interfaces.
- *IBM 3708 Network Conversion Unit Problem Determination* manual, GA27-3767, describes the procedures for solving a problem or isolating the source of a problem with an installed 3708.
- Unpacking instructions are printed on the 3708 shipping carton and show how to unpack the 3708.
- *IBM 3708 Network Conversion Unit Problem Report*, GA27-3638, which is shipped with the 3708, provides a way for you to record problem diagnosis information, which is used by the repair center representatives.
- *IBM 3708 Network Conversion Unit End-User Reference* manual, GA27-3765, describes the procedures for operating the 3708 and the 3708 screens.
- *IBM 3708 Network Conversion Unit Registration Address Form*, GA27-3734, is shipped with the 3708. **This form must be completed and returned to IBM for you to automatically receive notification of changes in the 3708 microcode.**
- IBM 3708 reference cards describe the keyboard functions of ASCII displays that can be connected to a 3708 and describe the general procedures for terminal users. Refer to the 3708 Planning and Installation manual for a list of end-user devices and reference card order numbers.

Contents

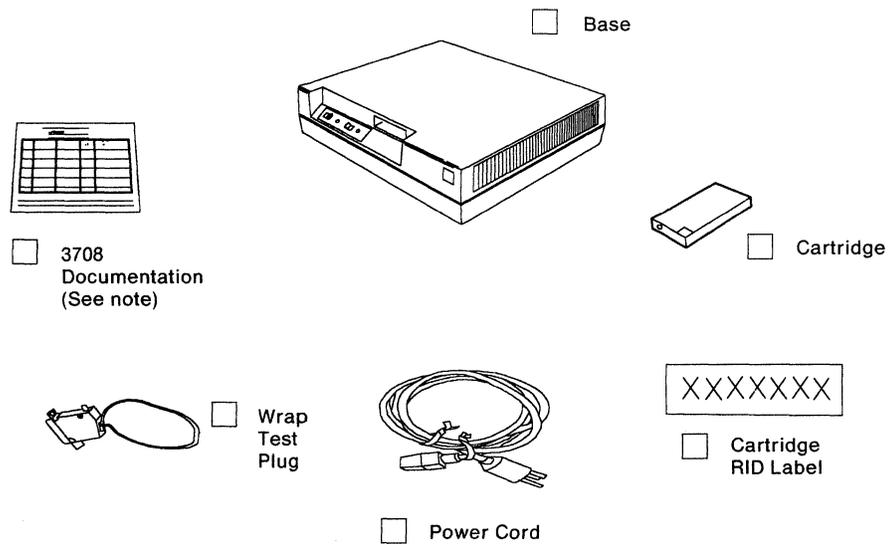
Chapter 1. Setting Up the 3708	1-1
--describes how to set up a new or replacement 3708.	
Chapter 2. Identifying and Handling 3708 Setup Problems	2-1
--provides procedures to help you correct problems that may occur during setup of the 3708.	
Chapter 3. Preparing the 3708 for Relocation	3-1
--describes how to prepare the 3708 for shipment to another location.	
Appendix A. Running the 3708 Initial Wrap Test	A-1
--describes how to test 3708 ports during setup.	

Chapter 1. Setting Up the 3708

This chapter contains procedures you must perform sequentially to ensure a successful setup of the 3708. Save the shipping carton for relocating the 3708 or shipping the 3708 for repair or replacement.

Refer any questions or problems you have with these procedures to your supervisor.

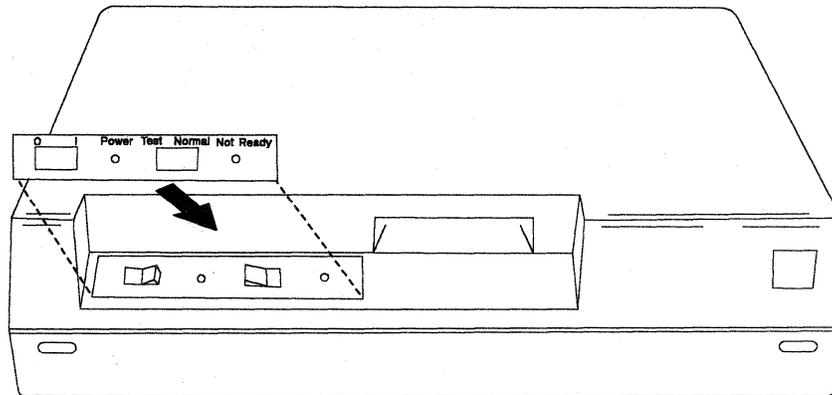
1. Inspect the 3708 for shipping damage. Report any damage to your supervisor.
2. Make sure you have all the parts shown.



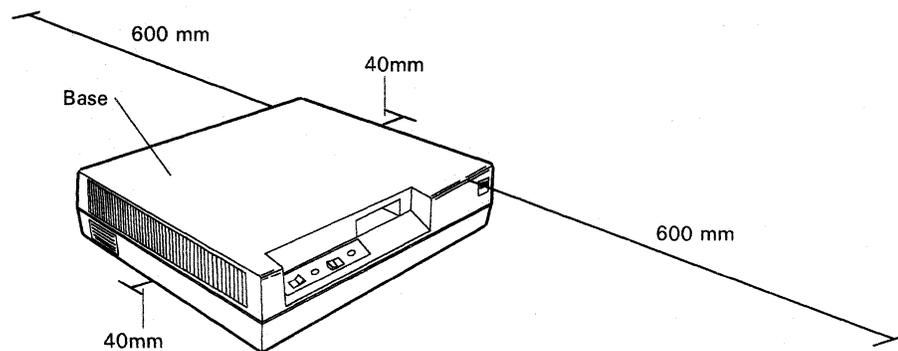
Note: If any of the items are missing, contact your marketing representative.

You need this 3708 Setup manual and a 3708 Address Registration Form to complete setup of the 3708. If you have problems with setup, you will also need a 3708 Problem Report.

3. If you have the front panel sticker, position it as shown. (The sticker is a 3708 option for non-USA countries only.)



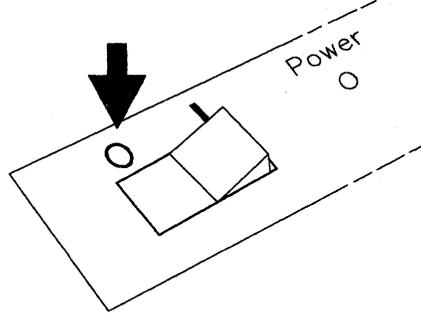
4. Position the 3708 base on the table, rack, or stand that has been selected for its location. Allow 600 mm (24 in.) of front and back clearance for service access.



Note: If the 3708 is shelf-mounted in a 19-inch rack, center it in the rack for proper ventilation. Ventilation slots are located on both sides of the 3708. If the 3708 is table-mounted, allow 40 mm (1.5 in.) on each side for proper ventilation.

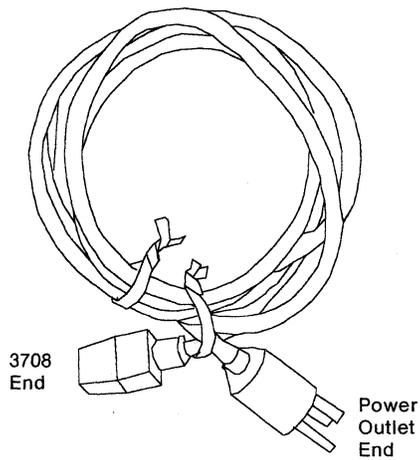
Warning: The cooling vents on the sides must not be blocked.

5. Press the Power switch to off (O).

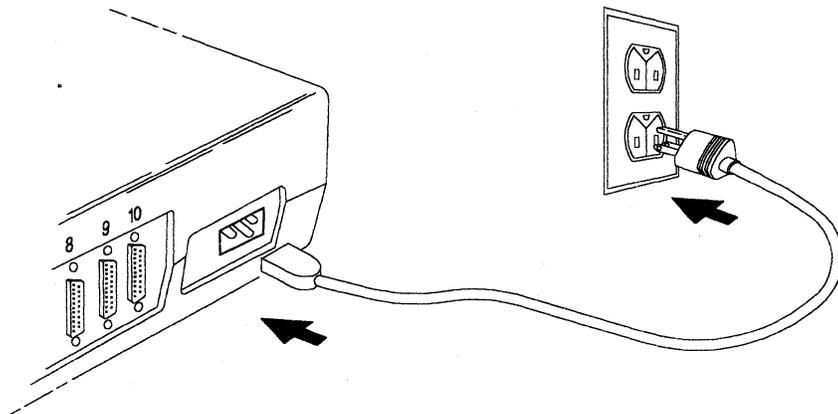


6. Remove the straps from the power cord.

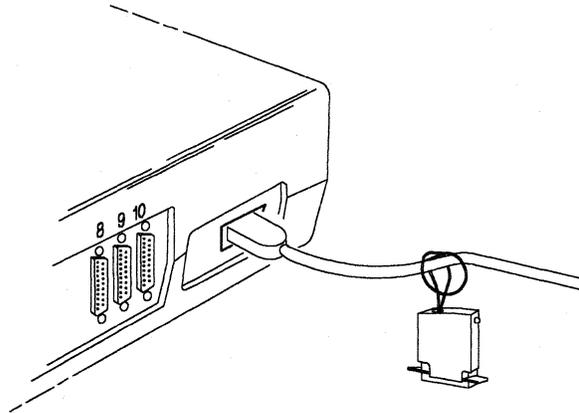
Warning: The 3708 power cord is equipped with a UL and CSA required and approved plug for the user's safety. It is to be used in conjunction with a properly grounded receptacle.



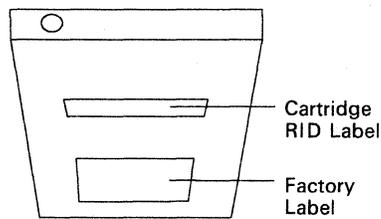
7. Refer to the power cord shown in step 6. Plug the 3708 end of the cord into the back of the 3708, and plug the other end of the cord into an appropriate power outlet.



8. If you are setting up a newly purchased 3708, find the wrap test plug among the items that were unpacked and attach it to the 3708 power cord for safekeeping and accessibility.

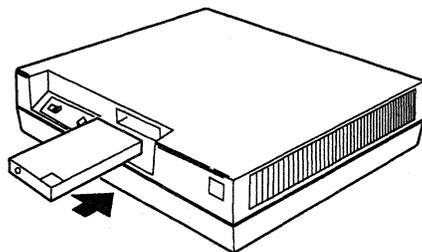


9. Locate the cartridge Repair ID (RID) label. Place the RID label above the factory label on the bottom of the cartridge.



10. Insert the cartridge (with the light on the cartridge to the left and the IBM logo on the cartridge facing up and to the right) into the base and push firmly.

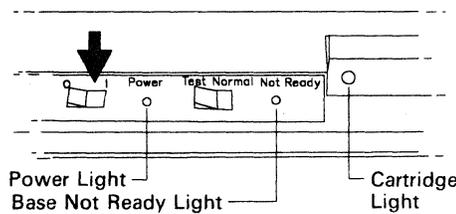
Note: Once the cartridge is inserted, do not remove it unless you are instructed to do so.



11. If, as you proceed with the instructions that follow, you experience problems with the 3708 and are unable to complete setup due to equipment failure, fill out an *IBM 3708 Network Conversion Problem Report*, GA27-3638. Report the problem(s) to your supervisor.

IBM 3708 NETWORK CONVERSION UNIT PROBLEM REPORT			
Complete this sheet and return it with the failed 3708 element			
Customer Name _____		Date _____	
Customer Address _____			
RID Number _____			
Contact the control terminal operator for the following information			
Alert ID _____		Port # _____	
Failure Code (1) _____		(2) _____ (3) _____	
Mark all indicators at time of extended test failure			
Base Power Light	Base Not Ready Light	Cartridge Not Ready Light	Port Test
--- On	--- On	--- On	
--- Blinking	--- Blinking	--- Blinking	
--- Off	--- Off	--- Off	

12. Observe the cartridge light closely, and press the Power switch to on (I). The Power light should come on and remain on, and the cartridge light should blink momentarily.



If the Power light comes on and remains on and the cartridge light blinks momentarily, proceed to step 13.

If the Power light does not come on and remain on, or the cartridge light does not blink momentarily, go to Chapter 2, "Identifying and Handling 3708 Setup Problems" on page 2-1.

13. After 10 seconds, if the base Not Ready light and the cartridge light are blinking **alternately**, setup is complete. Proceed to step 14.

If, after 40 seconds, the base Not Ready light and the cartridge light are blinking **together** (not alternately), the 3708 requires port testing. Go to "Testing the 3708 Ports" on page A-1.

If you have any other condition (the cartridge light and base Not Ready light not blinking alternately or together), go to Chapter 2, "Identifying and Handling 3708 Setup Problems" on page 2-1.

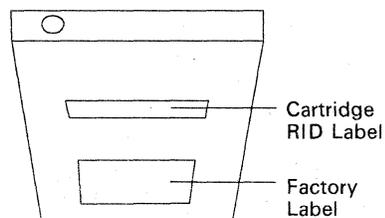
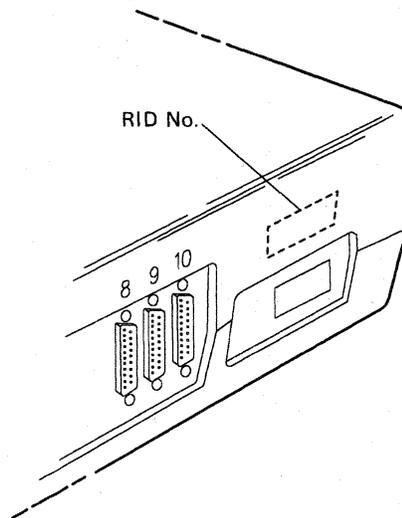
14. Press the Power switch to off (O).

15. The 3708 is setup and ready for cables to be installed. Store this manual where you can easily find it. If you relocate the 3708, you will need to use this manual again.

You will receive automatic notification of updates to 3708 microcode only if you register with IBM as a user of the 3708. To register, fill in and mail the *IBM 3708 Network Conversion Unit Address Registration Form* (included in the documentation package shipped with your 3708). No postage is necessary.

Note: For information on installing cables and configuring the 3708, refer to *IBM 3708 Network Conversion Unit Planning and Installation*, GA27-3766.

When you install a new 3708 base element or an exchange base element, use the 3708 control terminal to enter the RID number into the 3708's vital product area (EEPROM). The 3708 RID number is located just above the power cord on the back of the base and also on the cartridge



Maintaining the same RID number on the base, the cartridge, and within the 3708's vital product area ensures smoother and faster service if you ever require remote microcode service or 3708 element exchange.

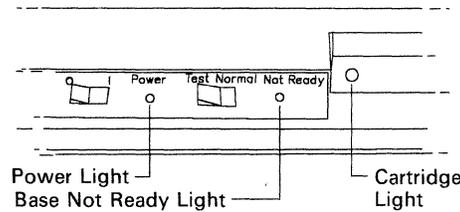
Chapter 2. Identifying and Handling 3708 Setup Problems

This chapter contains procedures for identifying and handling problems that occur with the 3708. Use the table below to select the appropriate procedure.

Notes:

1. If you are setting up a 3708 and the base Not Ready light and the cartridge light blink alternately, setup is complete. Go to step 14 on page 1-5.
2. If you are setting up a 3708 and the base Not Ready light and the cartridge light blink together, setup is not complete. Go to Appendix A, "Running the 3708 Initial Wrap Test."

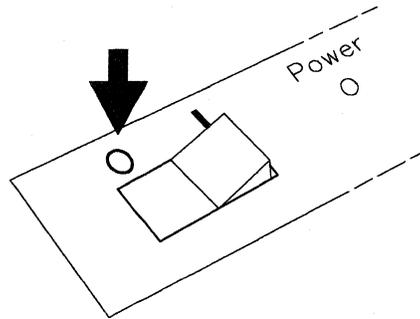
Refer any questions or problems encountered in these procedures to the control terminal operator or the network operator.



If the problem is:	Do this:
Power light off	Go to page 2-2.
Power light blinking	Go to page 2-2.
Base Not Ready light off (never comes on)	Go to page 2-3.
Base Not Ready light on (does not blink)	Go to page 2-3.
Cartridge light off (never comes on)	Go to page 2-4.
Cartridge light on (does not blink)	Go to page 2-5.
Base Not Ready light and cartridge light off (never come on)	Go to page 2-6.
Base Not Ready light and cartridge light on (do not blink)	Go to page 2-7.

Power Light Off

1. Press the Power switch to off (O).

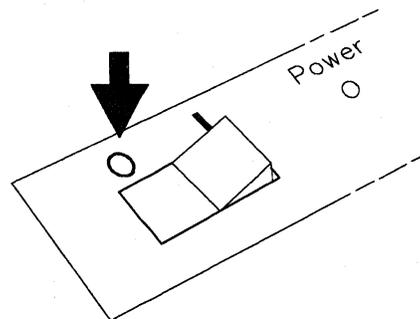


2. Make sure that the outlet has electrical power (plug a lamp into the outlet to test it).
3. Make sure the power cord is securely attached to the outlet and to the 3708.
4. Press the Power switch to on (I). If the Power light comes on and remains on, go to step 13 on page 1-5.

If the Power light does not come on, tell your supervisor that the base is not operational.

Power Light Blinking

1. Press the Power switch to off (O).

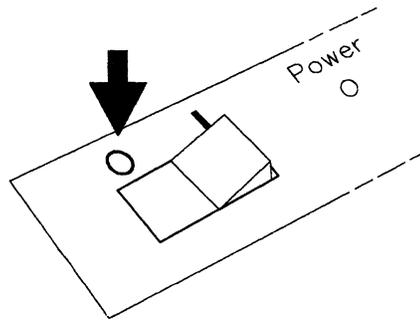


2. Wait about 10 seconds, then press the Power switch to on (I). If the Power light comes on and remains on, go to step 13 on page 1-5.

If the Power light is blinking, tell your supervisor that the base is not operational.

Base Not Ready Light Off (never comes on)

1. Press the Power switch to off (O).

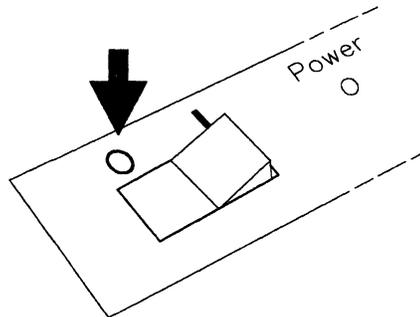


2. Wait about 10 seconds, then press the Power switch to on (I). If the base Not Ready light comes on, go to step 13 on page 1-5.

If the base Not Ready light does not come on, tell your supervisor that the base element is not operational.

Base Not Ready Light On (does not blink)

1. Press the Power switch to off (O).

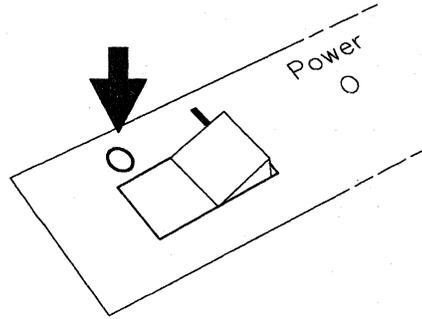


2. Wait about 10 seconds, then press the Power switch to on (I). If the base Not Ready light comes on and is blinking, go to step 13 on page 1-5.

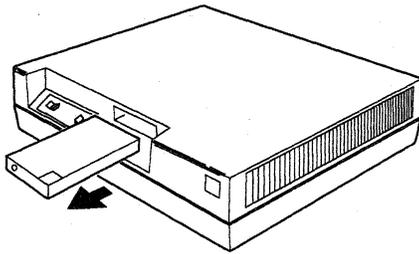
If the base Not Ready light comes on and remains on (does not blink), tell your supervisor that the base is not operational.

Cartridge Light Off (never comes on)

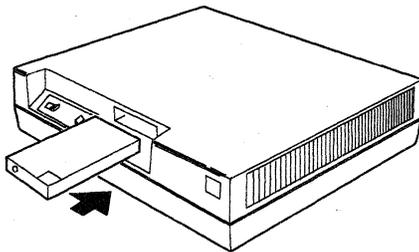
1. Press the Power switch to off (O).



2. Remove the cartridge by pulling it out of the base.



3. Reinsert the same cartridge and push firmly.

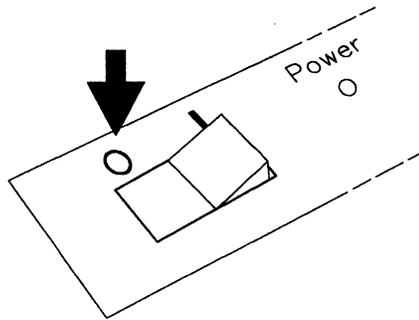


4. Observe the cartridge light closely, and press the Power switch to on (I). If the cartridge light blinks momentarily, go to step 13 on page 1-5.

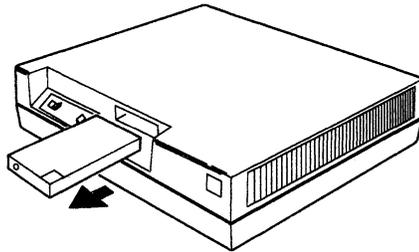
After 40 seconds, if the cartridge light does not come on, tell your supervisor that the cartridge is not operational.

Cartridge Light On (not blinking)

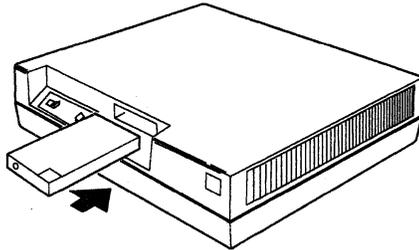
1. Press the Power switch to off (O).



2. Remove the cartridge by pulling it out of the base.



3. Reinsert the same cartridge and push firmly.

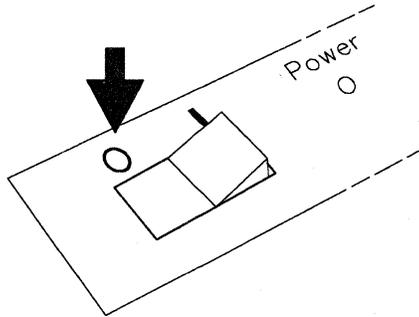


4. Press the Power switch to on (I). If the cartridge light comes on and is blinking, go to step 13 on page 1-5.

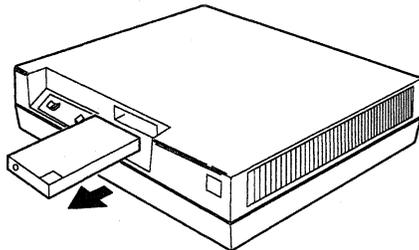
After 40 seconds, if the cartridge light remains on (does not blink), tell your supervisor that the cartridge is not operational.

Base Not Ready Light and Cartridge Light Off (never come on)

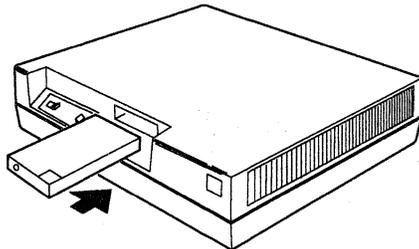
1. Press the Power switch to off (O).



2. Remove the cartridge by pulling it out of the base.



3. Reinsert the same cartridge and push firmly.

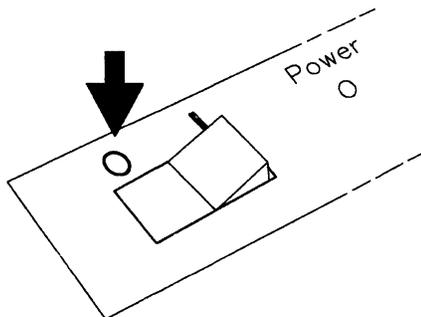


4. Wait about 10 seconds, then press the Power switch to on (I). If the base Not Ready light and the cartridge light come on and begin blinking, go to step 13 on page 1-5.

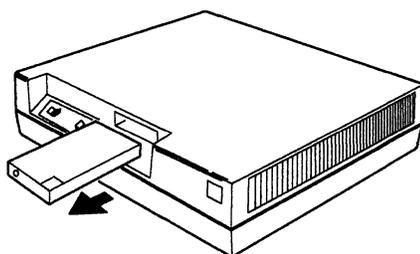
After 40 seconds, if the base Not Ready light and cartridge light do not come on, tell your supervisor that the base is not operational.

Base Not Ready Light and Cartridge Light On (not blinking)

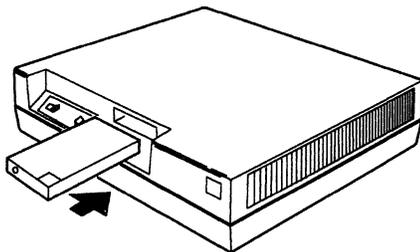
1. Press the Power switch to off (O).



2. Remove the cartridge by pulling it out of the base.



3. Reinsert the same cartridge and push firmly.



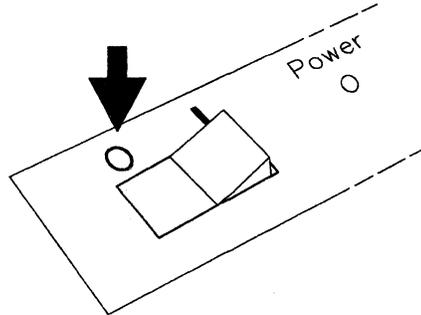
4. Wait about 10 seconds, then press the Power switch to on (I). If the base Not Ready light and the cartridge light come on and begin blinking, go to step 13 on page 1-5.

If the base Not Ready light and cartridge light come on and remain on (do not blink), tell your supervisor that the base is not operational.

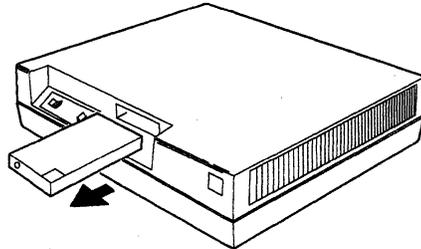
Chapter 3. Preparing the 3708 for Relocation

This chapter contains sequential procedures to prepare the 3708 for relocation.

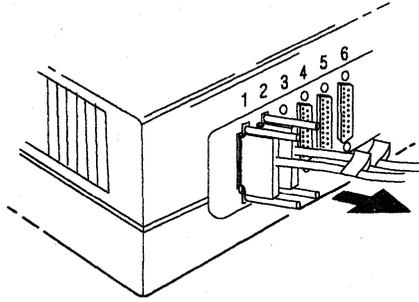
1. Locate the original shipping carton or order one from your marketing representative.
2. Press the Power switch to off (O).



3. Unplug the power cord from the outlet and then from the 3708. (Assure that the test plug is attached to the power cord.)
4. Remove the cartridge by pulling it out of the base.



5. Disconnect the cables from the 3708 by loosening the screws and removing the cables.



6. Pack the items according to the instructions on the shipping carton.
7. The 3708 is now ready for shipment.

Notes:

1. For information on how to install and configure a 3708, refer to *IBM 3708 Network Conversion Unit Planning and Installation*, GA27-3766.
2. If port failures occur when you install a relocated 3708, refer to “Running the 3708 Extended Diagnostic Test” in *IBM 3708 Network Conversion Unit Problem Determination*, GA27-3767.

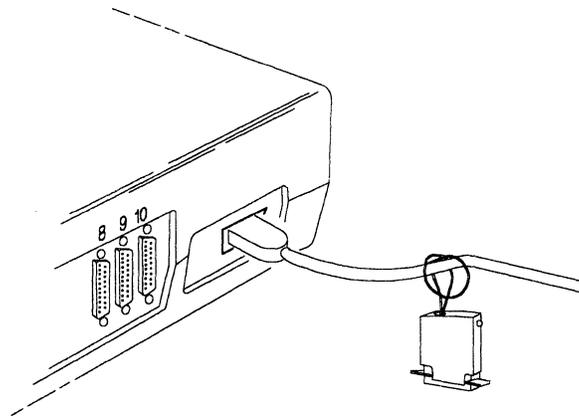
Appendix A. Running the 3708 Initial Wrap Test

This appendix describes the procedure for testing 3708 ports. Port testing is required only when you are setting up a 3708 and the base Not Ready light and cartridge light blink together. Port testing is not required if the base Not Ready light and the cartridge light blink alternately. If the lights are blinking alternately, return to step 14 on page 1-5.

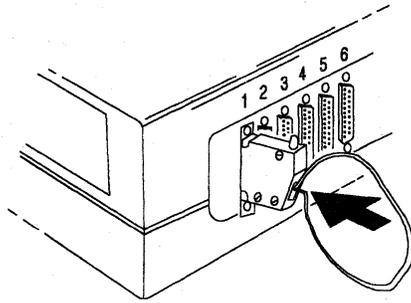
If you have problems during the test, refer to the troubleshooting chart in Chapter 2, "Identifying and Handling 3708 Setup Problems" on page 2-1.

Testing the 3708 Ports

1. Unwrap the wrap test plug from the power cord, and verify that power is on. (The Power switch should be in the on (I) position, and the Power light should be on.)



2. Insert the wrap test plug into port 1, and watch the light on the wrap test plug.



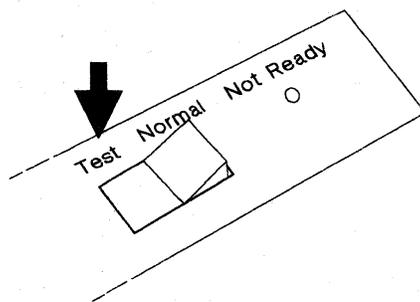
If the light on the wrap test plug blinks, port 1 is operative. Move the wrap test plug from port to port in ascending order (1 to 2, 2 to 3 8 to 9, 9 to 10), and check for a blinking light on the wrap test plug at each port. If all 10 ports operate properly, proceed to step 3.

If the light on the wrap test plug does not blink for any port, the port is inoperative. Fill out the *IBM 3708 Network Conversion Unit Problem Report*, GA27-3638, and tell your supervisor that the 3708 base is not operational due to port failure.

3. Remove the test plug from port 10 and look at the base Not Ready light and the cartridge light.

The base Not Ready light should be on and remain on, and the cartridge light should be off.

4. Press and **hold** the Test/Normal switch in the Test position, and look at the base Not Ready light and the cartridge light. The base Not Ready light should remain on, and the cartridge light should remain off.



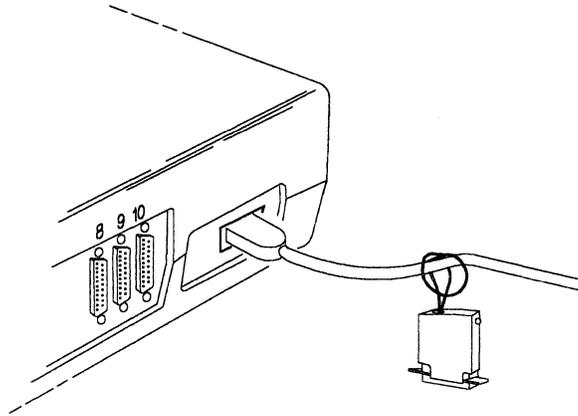
5. Release the Test/Normal switch. The base Not Ready light should go off and remain off, and the cartridge light should remain off. If both lights are off, proceed to step 6 on page A-3.

If one or both of the lights are on, go to the troubleshooting chart in Chapter 2, "Identifying and Handling 3708 Setup Problems" on page 2-1.

6. Press the Power switch to off (O), wait 10 seconds, then press the Power switch to on (I). The base Not Ready light and the cartridge light should come on and blink alternately. Proceed to step 7.

If the cartridge light and the base Not Ready light are not blinking alternately, go to the troubleshooting chart in Chapter 2, "Identifying and Handling 3708 Setup Problems" on page 2-1.

7. Wrap the test plug around the 3708 power cord, and go to step 14 on page 1-5.



Statement of Limited Warranty

DEFINITIONS

The term "Machine" as used herein refers to machines and/or their features, model conversions, machine elements and accessories unless the context requires individual reference.

The terms "Machines" and "machines" are used in substitution for the terms "Products" and "products," respectively. Such latter terms appear in selected IBM agreements.

The term "failing machine" refers to a machine or machine element requiring warranty service. The term "exchange machine" refers to a machine or machine element provided by IBM to the Customer under Exchange Type of Service.

The term "programming" shall mean such programming as IBM may make generally available, without separate charge, for machines of the type ordered by the Customer.

WARRANTIES

Machines purchased from IBM under an agreement for purchase of Machines or from an IBM approved Remarketer, or an IBM Authorized Dealer, Distributor or Wholesaler will be 1) newly manufactured by or for IBM from new and serviceable used parts which are equivalent to new in performance in these Machines, 2) assembled by or for IBM from serviceable used parts, or 3) Machines which have been previously installed.

IBM warrants that on the Date of Installation each Machine will be in good working order and will conform to IBM's official published specifications which are available upon request.

The Warranty Period for each Machine commences on its Date of Installation.

Warranty service as described herein may be provided by IBM, an applicable IBM Authorized Dealer, or an IBM selected independent contractor, as indicated in the applicable Exhibit.

IBM will not provide warranty service hereunder for Machines or programming located outside the United States and Puerto Rico.

Service and Parts Warranty

Commencing on the Date of Installation of each machine, model grade and feature addition, and continuing for the duration of the warranty period, IBM agrees to provide the availability of warranty service, at no additional charge except as set forth in this subsection or the subsection entitled "Travel Expense," to keep the machines, deliver upgrades and feature additions in, or restore them to, good working order. Warranty service will be provided by repairing the machines, model upgrades or feature additions or exchanging the machines under one of the Types of Service described in the subsection entitled "Types of Service." The specific Type of Service for each machine, model upgrade or feature addition will be indicated in the applicable Exhibit. Warranty options that provide alternate Types of Service are available for certain Machines under an IBM maintenance agreement.

It is the Customer's responsibility to determine when a machine or machine element requires warranty service. Before requesting warranty service, the Customer will perform any problem determination procedures provided by IBM, and if service is required, the Customer will follow the service request procedures provided by IBM.

When the Customer presents a failing machine to IBM under a Repair Type of Service, IBM will provide warranty service to restore the machine to good working order. Repair Types of Service include remedial maintenance and may include preventive maintenance based on the specific needs of individual machines as determined by IBM. Repair Types of Service may also include lubrication, adjustments or replacement of parts, all as deemed necessary by IBM. Parts, which may be used parts, will be furnished on an exchange basis, and replaced parts become the property of IBM. When a failing machine is to be repaired under a Repair Type of Service, the Customer is responsible to remove or implement other safeguards to protect all programming, programs, data and removable storage media before such repair.

When the Customer presents a failing machine to IBM under an Exchange Type of Service, it becomes the property of IBM at the time of exchange. An exchange machine may not be new, but will be in good working order, and becomes the Customer's property at the time of exchange. IBM reserves the right to verify that warranty service for a failing machine is required prior to providing an exchange machine. When a failing machine is exchanged, the Customer will remove all

programming, programs, data and removable storage media, and all non-IBM parts, options, alterations and attachments before such exchange. The Customer agrees that all such items not removed will be deemed to have been discarded by the Customer. The Customer will not present to IBM a failing machine for exchange which is defaced, altered or damaged beyond repair. (Repair is as described in the preceding paragraph.) However, if upon inspection IBM determines it has received in exchange a failing machine in such condition, the exchange will be nullified and each party will return to the other the machine or machine element in its possession.

The Period of Warranty Service Availability for IBM On-Site Repair and IBM On-Site Exchange Types of Service are specified in the applicable Exhibit. Outside such Period, warranty service, if requested by the Customer and provided by IBM, will be subject to charge for travel expense plus travel, waiting and service time at IBM's then applicable hourly service rates and minimum charges; however, there will be no additional charges for parts.

The Period of Warranty Service Availability for Customer On-Site Exchange, Customer Carry-In Exchange and Customer Carry-In Repair Types of Service are specified in the applicable Exhibit.

Warranty service described herein does not assure uninterrupted operation of the Machines. IBM may, at its option, store on the Customer's premises maintenance equipment and/or parts that IBM deems necessary to fulfill this warranty.

During the Warranty Period, engineering changes, determined applicable by IBM, will be controlled by IBM and installed as specified by IBM on the Machines. The Customer may, by providing notice subject to written confirmation by IBM, elect to have only mandatory changes, as determined by IBM, installed on Machines so designated.

IBM shall have full, free and safe access to the Machines to provide IBM On-Site Types of Service thereon. The Customer shall promptly inform IBM of any change in a Machine's location during the Warranty Period.

In respect to warranty service provided by IBM, the Customer is responsible for all risk of loss of, or damage to, Machines owned by other than IBM during the period such Machines are in transit to and from IBM, except for loss or damage caused by IBM's negligence. However, IBM is responsible for risk of loss of, or damage to, Machines owned by other than IBM while in possession of IBM or in transit from IBM by an IBM selected carrier whose expenses were prepaid by IBM.

The Customer represents and warrants that, at the time a failing machine becomes IBM's property, it will be free of any outstanding liens, security interests or other encumbrances held by any third party.

If the Warranty Period expires on a Friday or Saturday, it will be extended so that the last day of such Warranty Period will be on the following Sunday.

Types of Service**IBM On-Site Repair (IOR)**

IBM will provide warranty service for the failing machine at the Customer's location.

IBM On-Site Exchange (IOE)

IBM will 1) deliver the exchange machine to the Customer's location, 2) disconnect the failing machine, 3) connect the exchange machine, 4) verify its operation, and 5) remove the failing machine from the Customer's location.

Customer On-Site Exchange (COE)

IBM will have an exchange machine delivered to the Customer's location. The Customer will 1) disconnect the failing machine and prepare it for shipment to IBM, 2) connect the exchange machine, and 3) verify its operation. The Customer will follow IBM's instructions regarding the shipment of the failing machine to IBM. Such shipment will be at IBM's expense.

Customer Carry-In Exchange (CCE)

The Customer will 1) deliver the failing machine to an IBM Service/Exchange Center or other IBM designated location, 2) pick up the exchange machine and take it to the Customer's location, 3) connect it, and 4) verify its operation.

The Customer, in lieu of such delivery and pick up, may ship the failing machine prepaid, in the original shipping container or equivalent, to one of the designated IBM Service/Exchange

Centers designated for this delivery method. IBM will then ship the exchange machine to the Customer's location, prepaid, within the United States and Puerto Rico.

Customer Carry-In Repair (CCR)

The Customer will 1) deliver the failing machine to an IBM Service/ Exchange Center or other IBM designated location, 2) when the failing machine is repaired, pick it up and return it to the Customer's location, 3) connect it, and 4) verify its operation.

The Customer, in lieu of such delivery and pick up, may ship the failing machine prepaid, in the original shipping container or equivalent, to one of the IBM Service/Exchange Centers designated for this delivery method. IBM will ship the repaired machine to the Customer's location, prepaid, within the United States and Puerto Rico.

Programming

IBM warrants that, when shipped to the Customer, programming designated by IBM for use with a Machine and for which programming services are available will conform to IBM's official published specifications which are available upon request.

IBM does not warrant that functions contained in programming will operate in the combinations which may be selected for use by the Customer or will meet the Customer's requirements.

ALL OTHER PROGRAMMING IS DISTRIBUTED ON AN "AS IS" BASIS.

Additional Provisions for Features and Model Conversions

IBM's warranty for each feature addition or model upgrade requires that the machine on which it is installed is at the then current engineering-change level, is the specific serial-numbered machine for which it was ordered and has been modified only with changes obtained from IBM specifically for that serial-numbered machine. If these conditions are not met, IBM will attempt to install non-Customer set-up feature additions and model upgrades on the machine, and, if such attempt results in an incorrectly functioning machine, upon Customer request and at IBM's then applicable hourly service rates and minimum charges, parts and material prices and travel expense, IBM will remove the features and/or model upgrades and restore the machine to its prior condition. If such features or model upgrades did not involve the removal of parts which became the property of IBM, such features and model upgrades remain the property of the Customer. If such features or model upgrades did involve the removal of parts which became the property of IBM, such features and model upgrades become the property of IBM and the restored parts become the property of the Customer.

For a feature removal, model downgrade or reinstallation of a previously purchased feature or model conversion, a three-month parts warranty will apply to additional parts, if any, supplied by IBM.

Additional Provisions for Accessories

Accessories have a three-month Warranty Period unless otherwise specified by IBM. During the Warranty Period, the Customer will remove any defective or failing accessory and ship it prepaid to the designated IBM location. IBM will replace such accessory and ship the replacement to the Customer without charge.

Additional Provisions for Machines Containing Funds

The Customer is responsible for removing, controlling and replacing or reloading funds contained in the Machines. IBM will service Machines containing funds only when the cash container cannot be opened prior to repair by IBM, in which case the Customer will remove the funds as soon as the container has been opened.

Services for Additional Charge During the Warranty Period

The services for additional charge described in this subsection are not warranty services. However, unless such services are provided under another written agreement between the Customer and IBM, during the Warranty Period, the following services, if available, will be provided by IBM to the Customer at IBM's i) then generally available hourly service rates and minimum charges for IBM service time,

including travel and waiting time, ii) parts and material prices then generally in effect, and iii) charges for travel and shipping expense, all as applicable:

- 1) Repair of Machine damage, replacement of parts or increase in service time caused by —
 - a) failure to continually provide a suitable environment prescribed by IBM including adequate space, electrical power, air conditioning and humidity control;
 - b) neglect; misuse, including use of the Machines for purposes other than for which designed;
 - c) accident; disaster, including water, wind and lightning; transportation; vandalism or burglary;
 - d) alterations, including any deviation from IBM's Machine design;
 - e) attachments, including any interconnection to the Machine of non-IBM equipment or devices not under an IBM maintenance agreement;
 - f) IBM Machines, other Machines or accessories, except those IBM Machines, other Machines or accessories that are owned by IBM, under warranty from IBM or under an IBM maintenance agreement;
 - g) conversions from one IBM model to another or installation or removal of an IBM feature whenever any of these activities was performed by other than IBM, except that this item (g) will apply only during the first three-month period subsequent to such Machine modification; and
 - h) maintenance or repair of the Machine not performed by IBM;
- 2) Repair of Machine damage, replacement of maintenance parts (due to other than normal wear) or repetitive service calls caused by the use of, inadequate use of, or failure to use, supplies;
- 3) Service for accessories other than as provided in the subsection entitled "Additional Provisions for Accessories" of this Section;
- 4) Inspection of altered Machines;
- 5) Replacement or addition of parts and increase in service time, associated with the installation by IBM of an engineering change required due to the conversion of one IBM model to another or installation or removal of an IBM feature whenever any of these activities was performed by other than IBM;
- 6) Rearrangement or relocation of Machines and provision of necessary materials; and
- 7) Replacement of a part not furnished for the Machine by IBM with a directly interchangeable IBM maintenance part, and any increase in service time associated with such activity, except that IBM will not replace any part which is included in an alteration.

Travel Expense

There will be no charge for travel expense associated with warranty service or programming service during the applicable Period of Warranty Service Availability except that actual travel expense will be charged when the site at which the Machine is located is normally inaccessible by both private automobile and scheduled public transportation.

Exclusions

The warranties stated herein do not include 1) furnishing supplies, painting or refinishing the Machine or furnishing material therefor, 2) electrical work external to the Machines, 3) installation, maintenance or removal of alterations or attachments to the Machines, and 4) any service which is impractical for IBM to render because of alterations in, or attachments to, the Machines. IBM does not warrant that the operation of Machines or programming will be uninterrupted or error free or that all programming errors will be corrected.

THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

**International Business Machines Corporation
Armonk, New York 10504**

Exhibit to IBM Statement of Limited Warranty (Z125-3744)

IBM 3708 Network Conversion Unit

IF YOU PURCHASED THE IBM 3708 NETWORK CONVERSION UNIT (MACHINE) DIRECTLY FROM INTERNATIONAL BUSINESS MACHINES CORPORATION (IBM), OR ANOTHER ORGANIZATION, UNDER AN AGREEMENT FOR PURCHASE OF IBM MACHINES, THE WARRANTY PROVISIONS THEREIN SHALL PREVAIL AND THIS EXHIBIT AND THE ENCLOSED STATEMENT OF LIMITED WARRANTY SHALL NOT APPLY.

WARRANTY SERVICE DESCRIBED IN THE ENCLOSED STATEMENT OF LIMITED WARRANTY IS AVAILABLE ONLY FOR MACHINES PURCHASED AND LOCATED IN THE UNITED STATES OR PUERTO RICO.

IF YOU PURCHASED THIS MACHINE FROM A SUPPLIER AUTHORIZED BY AN IBM ORGANIZATION TO MARKET THIS MACHINE IN OTHER THAN THE UNITED STATES OR PUERTO RICO, WARRANTY INFORMATION IS AVAILABLE FROM SUCH SUPPLIER.

I. Date of Installation (Warranty Start Date):

The Date of Installation, which is the warranty start date, will be the day (Monday through Friday) following the date of delivery of the Machine to you from an IBM Authorized Distributor or a Reseller who purchased the Machine from such Distributor. Delivery is deemed to be complete when the Machine is placed in your possession; however, when the Machine is shipped to you, delivery will be deemed to be complete three days after the date of shipment from an IBM Authorized Distributor or a Reseller who purchased the Machine from such Distributor. You are responsible to set up this Machine in accordance with the instructions furnished by IBM.

II. Warranty Duration:

One Year

III. Type of Service:

Customer On-Site Exchange (COE)

IV. Period of Warranty Service Availability:

Warranty service is available during the normal business hours of the applicable IBM Service/Exchange Center.

V. Provider of Warranty Service:

IBM

There is enclosed the IBM Statement of Limited Warranty.

You may be required to provide a dated proof of purchase of this Machine from the IBM Authorized Distributor or the Reseller who purchased this Machine from such Distributor and evidence of the date of delivery to you in order to obtain warranty service. If you have any questions regarding warranty service, contact your point of purchase, or call IBM at 1-800-2569.

The following warranty service option is available, for a charge, under the IBM Maintenance Agreement:

IBM On-Site Exchange (IOE)

This manual is part of a library that serves as a reference source for systems analysts, programmers, and operators of IBM systems. You may use this form to communicate your comments about this publication, its organization, or subject matter, with the understanding that IBM may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you.

Note: Copies of IBM publications are not stocked at the location to which this form is addressed. Please direct any requests for copies of publications, or for assistance in using your IBM system, to your IBM representative or to the IBM branch office serving your locality.

Possible topics for comment are:

Clarity Accuracy Completeness Organization Coding Retrieval Legibility

If you wish a reply, give your name, company, mailing address, and date:

What is your occupation? _____

Number of latest Newsletter associated with this publication: _____

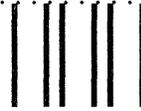
Thank you for your cooperation. No postage stamp necessary if mailed in the U.S.A.
(Elsewhere, an IBM office or representative will be happy to forward your comments or you may mail directly to the address in the Edition Notice on the back of the title page.)

Reader's Comment Form

Fold and tape

Please Do Not Staple

Fold and tape



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 40 ARMONK, N.Y.

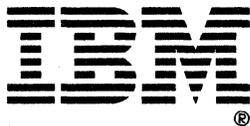
POSTAGE WILL BE PAID BY ADDRESSEE

International Business Machines Corporation
Dept. E02
P.O. Box 12195
Research Triangle Park, N.C. 27709-9990

Fold and tape

Please Do Not Staple

Fold and tape





GA27-3611-01
6405469

Printed in the U.S.A.

GA27-3611-01

