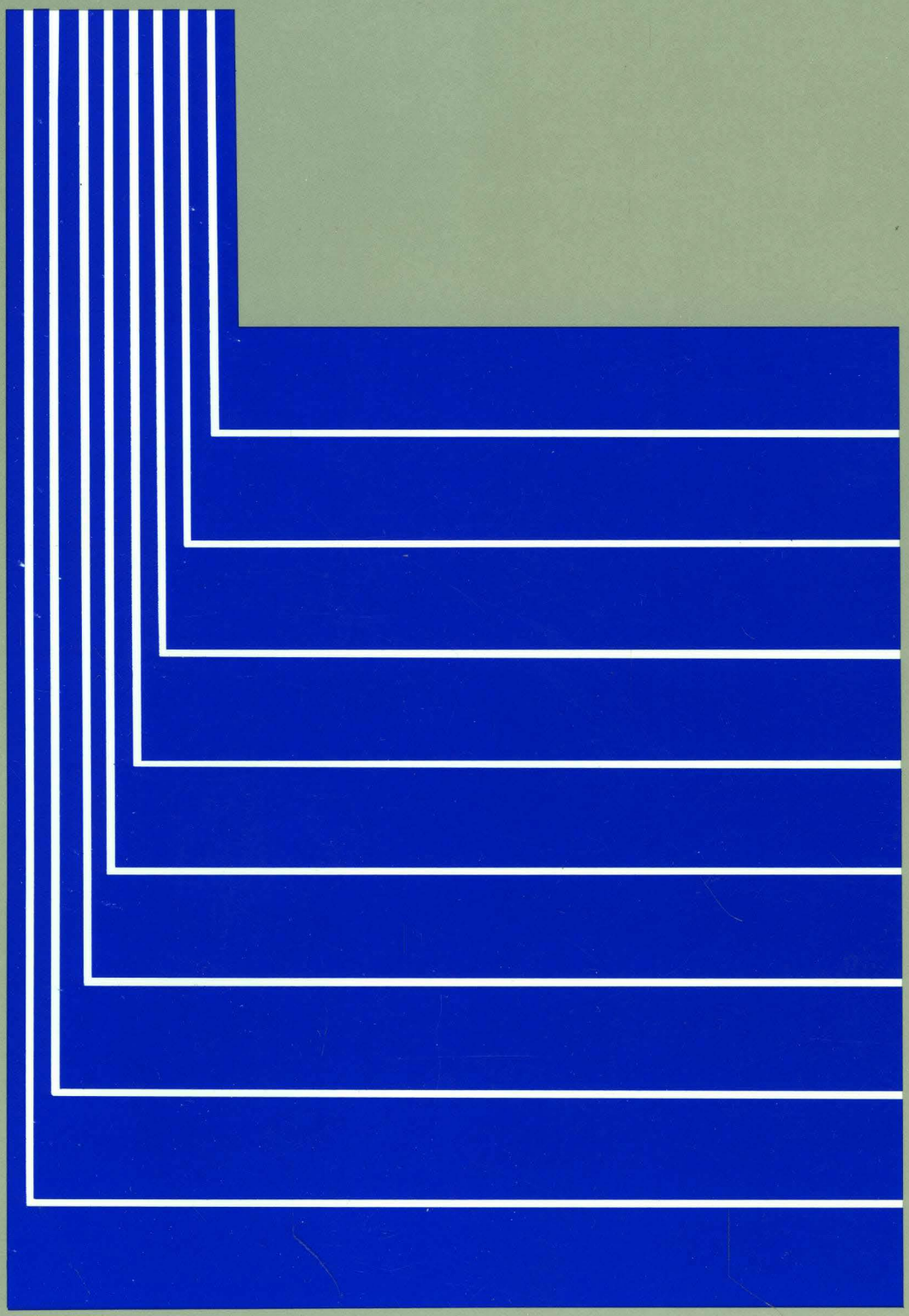
# Setup

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.


© Copyright International Business Machines Corporation 1985, 1987

# 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 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.

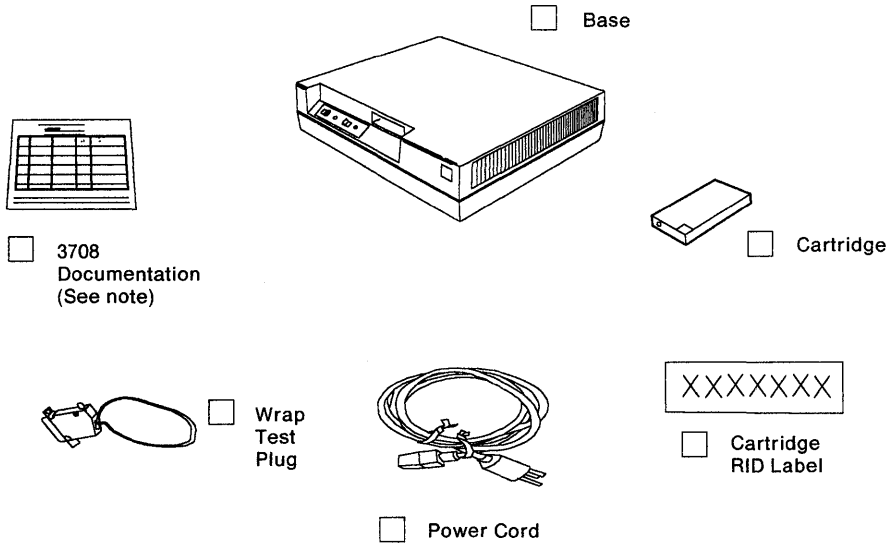
**Appendix A. Running the 3708 Initial Wrap Test** ..... **A-1**
--describes how to test 3708 ports during setup.

# 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.

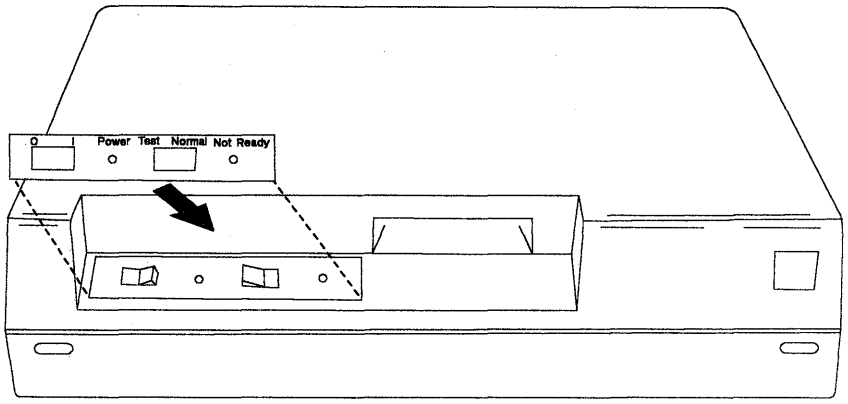
1. Inspect the 3708 for shipping damage. Report any damage to your supervisor.
2. Make sure you have all the parts shown.



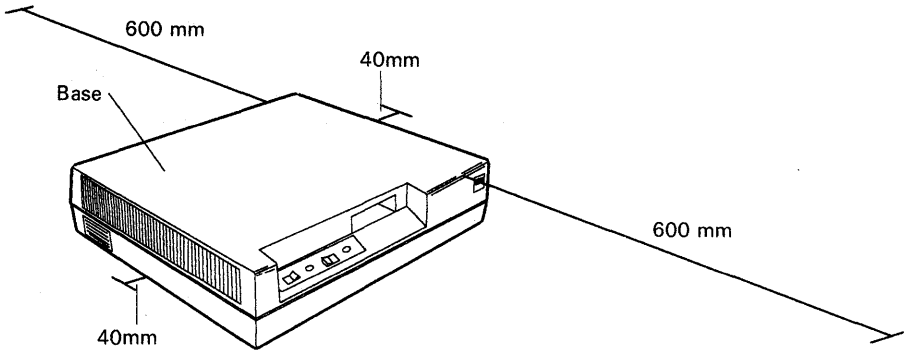

**Note:** If any of the items are missing, contact your marketing representative.

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.)



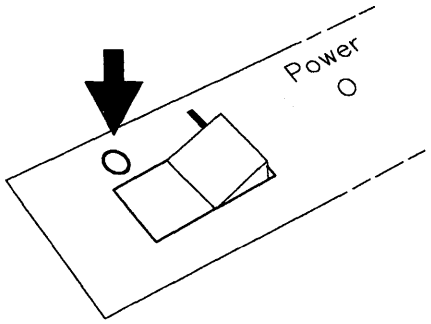

4. Position the 3708 base on the table, rack, or stand that has been selected for its location. Allow 600 mm (24 in.) of front and back clearance for service access.




**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.

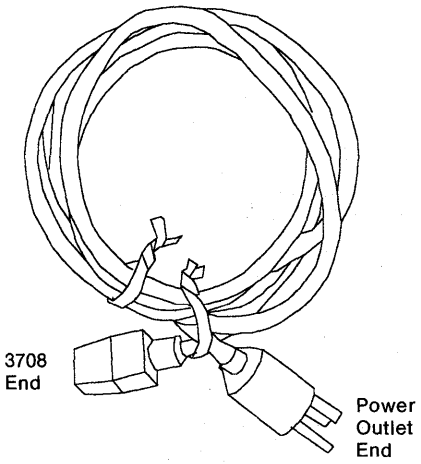
**Warning:** The cooling vents on the sides must not be blocked.

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

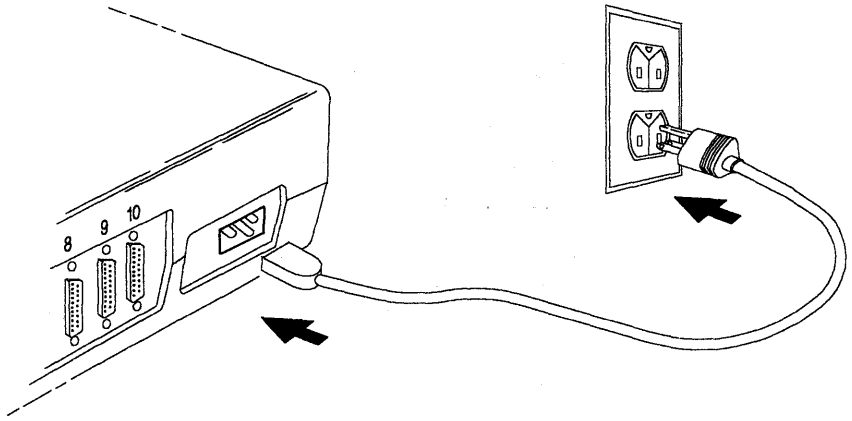



6. Remove the straps from the power cord.

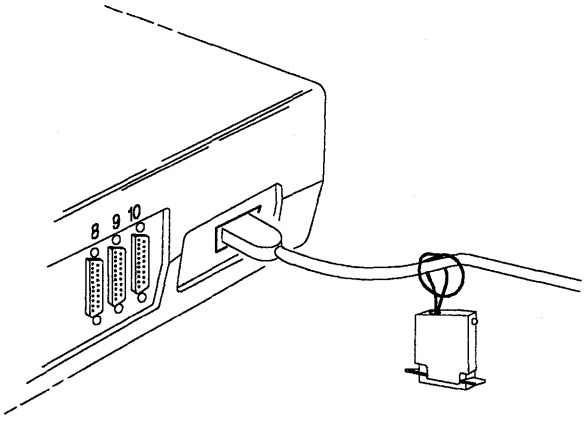
   **Warning:** The 3708 power cord is equipped with a UL and CSA required and approved plug for the user's safety. It is to be used in conjunction with a properly grounded receptacle.



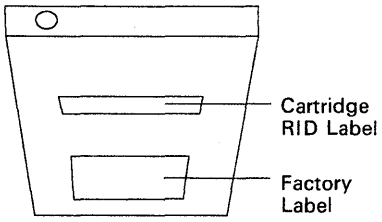

7. Refer to the power cord shown in step 6. Plug the 3708 end of the cord into the back of the 3708, and plug the other end of the cord into an appropriate power outlet.



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.

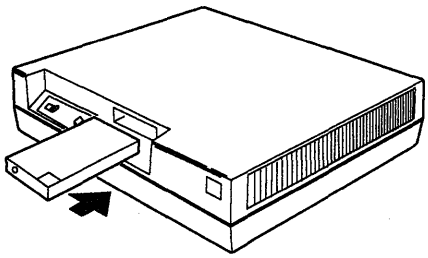



9. Locate the cartridge Repair ID (RID) label. Place the RID label above the factory label on the bottom of the cartridge.

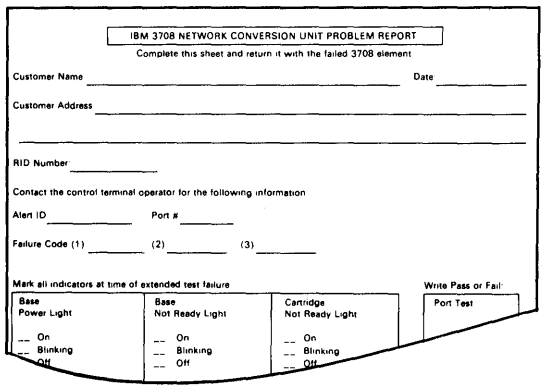



10. Insert the cartridge (with the light on the cartridge to the left and the IBM logo on the cartridge facing up and to the right) into the base and push firmly.

    **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

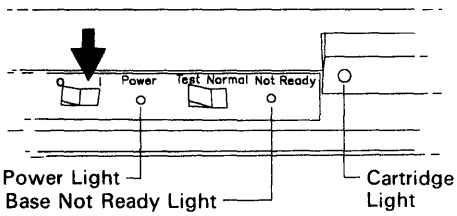
Alert ID _____ Port # _____

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 | Write Pass or Fail: Port Test |
|---|---|---|---|
| -- On<br>-- Blinking<br>-- Off | -- On<br>-- Blinking<br>-- Off | -- On<br>-- Blinking<br>-- 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.

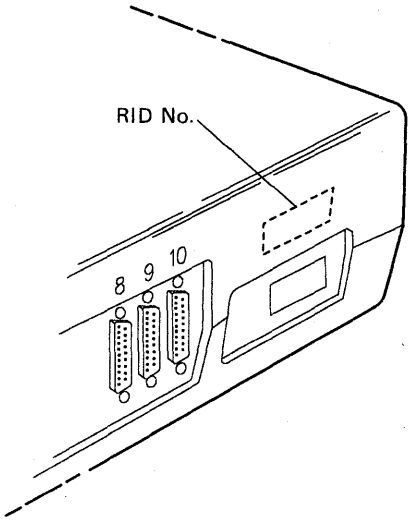
14. Press the Power switch to off (O).

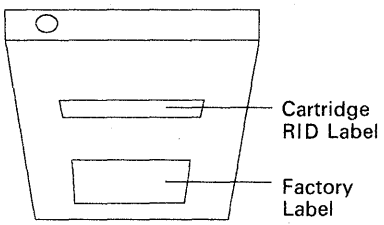
15. The 3708 is setup and ready for cables to be installed. Store this manual where you can easily find it. If you relocate the 3708, you will need to use this manual again.

    **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.

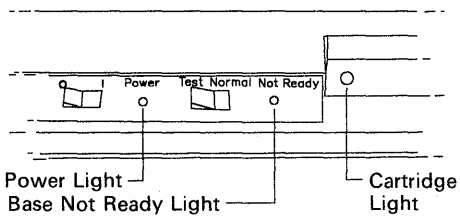
# Chapter 2. Identifying and Handling 3708 Setup Problems

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."**

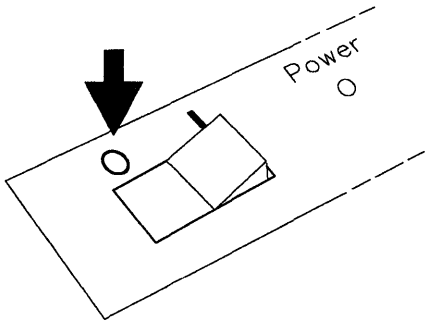
Refer any questions or problems encountered in these procedures to the control terminal operator or the network operator.




| 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).

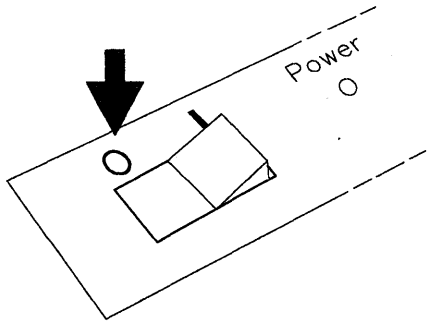



2. Make sure that the outlet has electrical power (plug a lamp into the outlet to test it).
3. Make sure the power cord is securely attached to the outlet and to the 3708.
4. Press the Power switch to on (I). If the Power light comes on and remains on, go to step 13 on page 1-5.

   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).

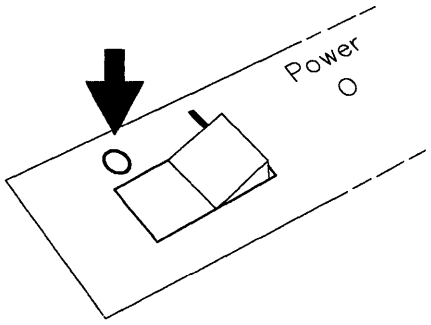



2. Wait about 10 seconds, then press the Power switch to on (I). If the Power light comes on and remains on, go to step 13 on page 1-5.

   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).

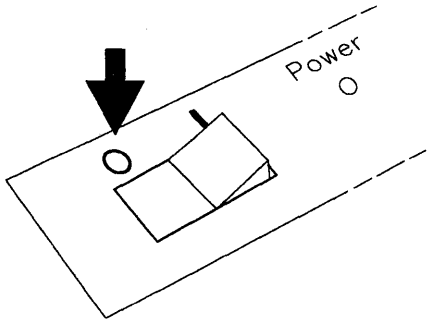



2. Wait about 10 seconds, then press the Power switch to on (I). If the base Not Ready light comes on, go to step 13 on page 1-5.

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

## Base Not Ready Light On (does not blink)

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

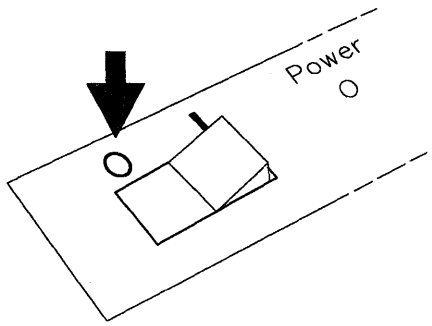



2. Wait about 10 seconds, then press the Power switch to on (I). If the base Not Ready light comes on and is blinking, go to step 13 on page 1-5.

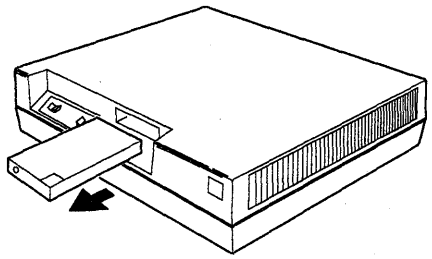
   If the base Not Ready light comes on and remains on (does not blink), tell your supervisor that the base is not operational.

## Cartridge Light Off (never comes on)

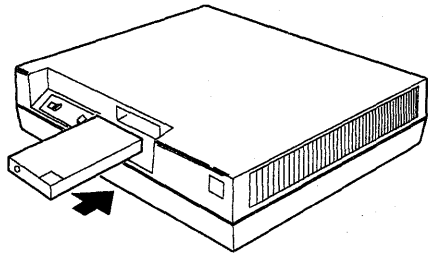
1. Press the Power switch to off (O).




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



3. Reinsert the same cartridge and push firmly.

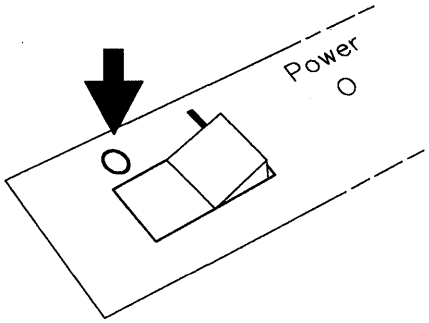


4. Observe the cartridge light closely, and press the Power switch to on (I). If the cartridge light blinks momentarily, go to step 13 on page 1-5.

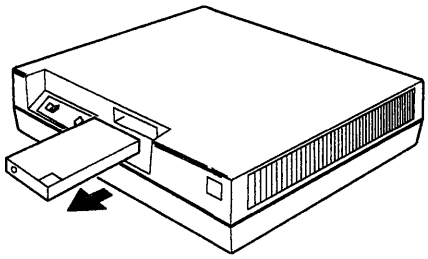
   After 40 seconds, if the cartridge light does not come on, tell your supervisor that the cartridge is not operational.

## Cartridge Light On (not blinking)

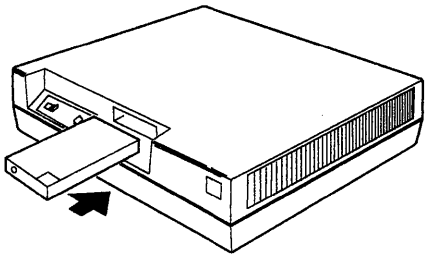
1. Press the Power switch to off (O).




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



3. Reinsert the same cartridge and push firmly.

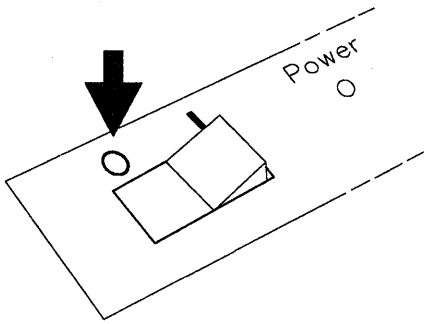


4. Press the Power switch to on (I). If the cartridge light comes on and is blinking, go to step 13 on page 1-5.

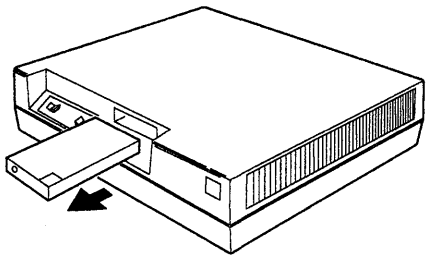
   After 40 seconds, if the cartridge light remains on (does not blink), tell your supervisor that the cartridge is not operational.

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

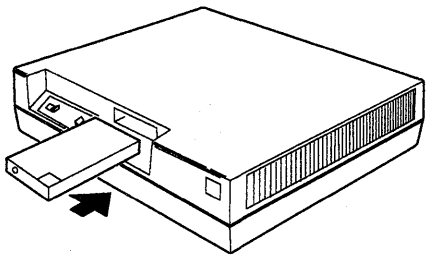
1. Press the Power switch to off (O).




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



3. Reinsert the same cartridge and push firmly.

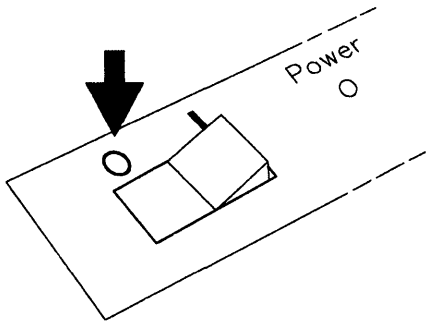


4. Wait about 10 seconds, then press the Power switch to on (I). If the base Not Ready light and the cartridge light come on and begin blinking, go to step 13 on page 1-5.

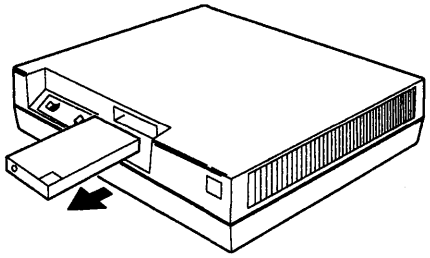
   After 40 seconds, if the base Not Ready light and cartridge light do not come on, tell your supervisor that the base is not operational.

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

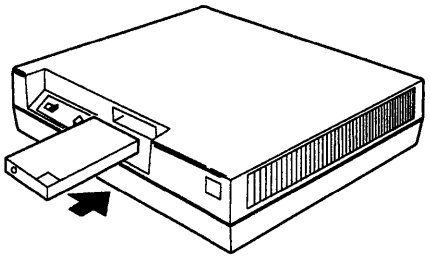
1. Press the Power switch to off (O).




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



3. Reinsert the same cartridge and push firmly.



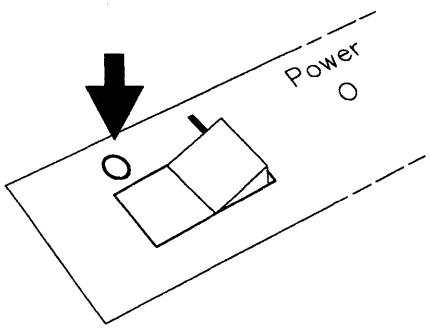
4. Wait about 10 seconds, then press the Power switch to on (I). If the base Not Ready light and the cartridge light come on and begin blinking, go to step 13 on page 1-5.

   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.

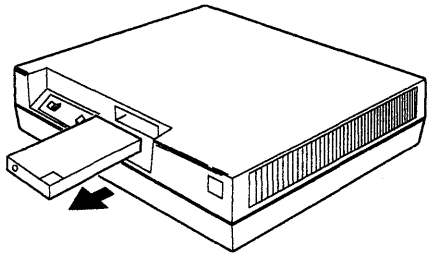
# Chapter 3. Preparing the 3708 for Relocation

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

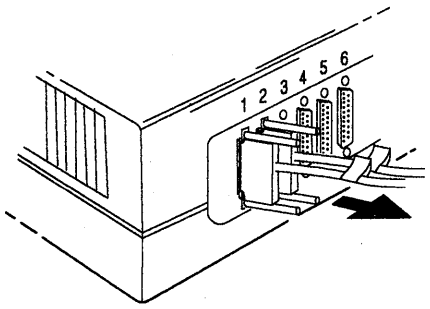
1. Locate the original shipping carton or order one from your marketing representative.
2. Press the Power switch to off (O).




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.

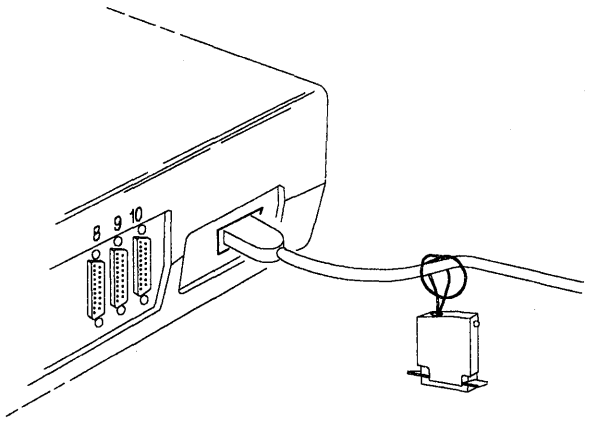
# Appendix A. Running the 3708 Initial Wrap Test

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.

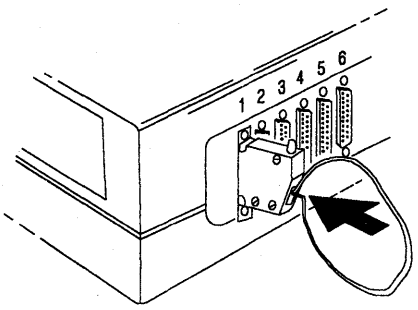
If you have problems during the test, refer to the troubleshooting chart in Chapter 2, "Identifying and Handling 3708 Setup Problems" on page 2-1.

## 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.



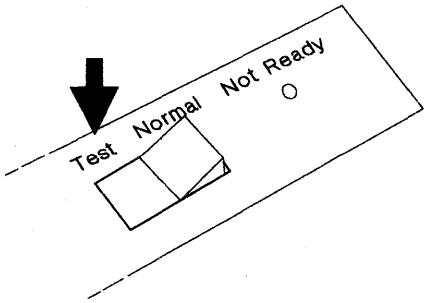

If the light on the wrap test plug blinks, port 1 is operative. Move the wrap test plug from port to port in ascending order (1 to 2, 2 to 3 .... 8 to 9, 9 to 10), and check for a blinking light on the wrap test plug at each port. If all 10 ports operate properly, proceed to step 3.

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.



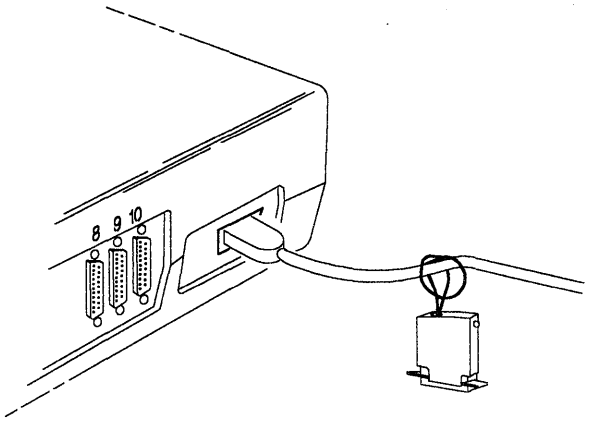

5. Release the Test/Normal switch. The base Not Ready light should go off and remain off, and the cartridge light should remain off. If both lights are off, proceed to step 6 on page A-3.

   If one or both of the lights are on, go to 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.



**IBM 3708 Network Conversion Unit Setup**

**Publication No. GA27-3611-1**

**READER'S COMMENT FORM**

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.

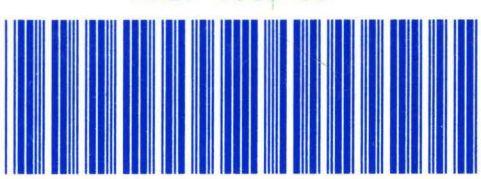
POSTAGE WILL BE PAID BY ADDRESSEE

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

IBM®

GA27-3611-01
6405469

Printed in the U.S.A.

GA27-3611-01