Field Feature Bill of Material

PN 08J5496

Install Network Node Control Point (NNP-A)
Feature Code 5122

on IBM 3746-900.

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3746	PN 08J5496	EC E46545A				
FFBM	1 of 18	07 MAY 97				

3746	PN 08J5496	EC E46545A				
FFBM	2 of 18	07 MAY 97				

2

Before Installation (Steps 1-8)

1.0 Machines Affected

3746 Model 900

This feature should only be applied on the machine serial for which it is specified.

2.0 Related BMs and ECs

2.1 Prerequisites

(Must be installed prior to this installation)

Feature or EC	Title
5023	Controller Expansion (FB/M 29H4173)
9018	Controller Bus and Service Processor Type 2 - (FB/M 59G0456), or
5019	Controller Bus and Service Processor Type 2 - (FFB/M 58G5516).
D46130	Microcode (Minimum Level)
	Checkpoint: Check that the CSS 1 EC Level is D46130.000 or higher.
	Note: Refer to *SPIM*, Chapter 3. *Displaying the EC Level of the Code.*
5026	Hard Disk Drive Exchange (FFB/M 29H4179) (If Service Processor type 9577 only).

2.2 Concurrent ECs

(Must be installed together)

None.

2.3 Companion ECs

(May be installed together)

None.

| 3746 FFBM	PN 08J5496 3 of 18	EC E46545A 07 MAY 97				

3.0 BMs to be Installed

FFB/M   **Title**

08J5496   Network Node Processor A (NNP-A) Feature Code 5122

4.0 Preparation

1. Familiarize yourself with the purpose and details of the installation instruction before negotiating machine time with the customer.

2. Check all items listed on the BM(s) to determine that all parts have been received.

☐   Brackets (X2)   ☐   NNP-B and Power Cord   ☐   Publications and diskette
and Screws (X4)
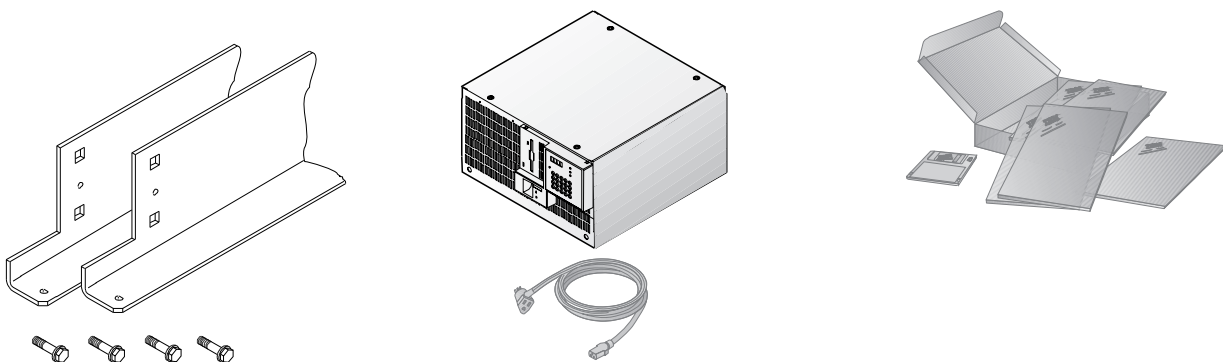
3. The set up of the NNP-A has no impact on customer operations.

4. Obtain from the customer the **Parameter worksheet**.

5.0 Programming

None.

6.0 Purpose and Description

3746	PN 08J5496	EC E46545A				
FFBM	4 of 18	07 MAY 97				

4

6.1 Purpose

To support the APPN, X25, IP or ISDN operation on 3746-900.

6.2 Description

The installation of the NNP-A is divided into three main procedures:

1. Loading the Network Node Processor Code on the Service Processor

2. Installing the system unit

3. Loading the code on the network node processor

7.0 Installation Time

FFBM	Machine Hrs.	System Hrs.	Nbr of CEs
08J5496	0.0	0.0	1

Note: To reduce the MES installation time it is recommended that you load the Network Node Processor Code on the Service Processor and install the system unit at the same time.

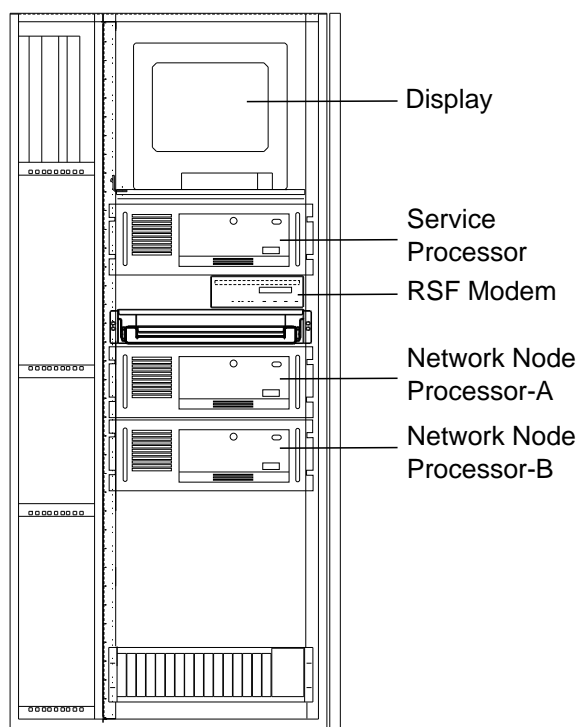No impact on 3745 customer operations.

8.0 Tools/Material Required

None.

3746	PN 08J5496	EC E46545A				
FFBM	5 of 18	07 MAY 97				

Figure 1. NNP-A installed with SP 7585.

- Display
- Service Processor
- RSF Modem
- Network Node Processor-A
- Network Node Processor-B
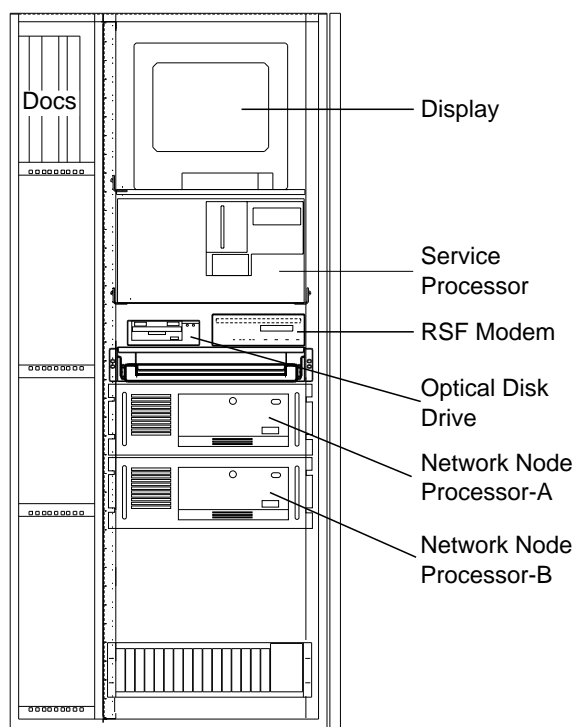
Figure 3. NNP-A installed with SP 3172.

- Docs
- Display
- Service Processor
- RSF Modem
- Optical Disk Drive
- Network Node Processor-A
- Network Node Processor-B
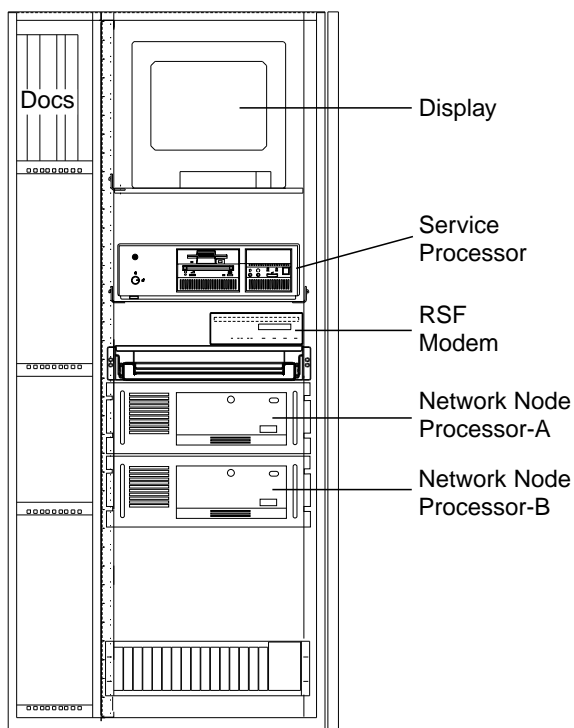
Figure 2. NNP-A installed with SP 9577.

- Docs
- Display
- Service Processor
- RSF Modem
- Network Node Processor-A
- Network Node Processor-B

Figure 4. NNP-A installed with SP 9585.

- Docs
- Display
- Network Node Processor-B
- Network Node Processor-A
- Service Processor

36					
35	5				
34	4				
33					
32	Display				

Display

Service
Processor

Modem

Network Node
Processor - A

Network Node
Processor - B

LCB

View A
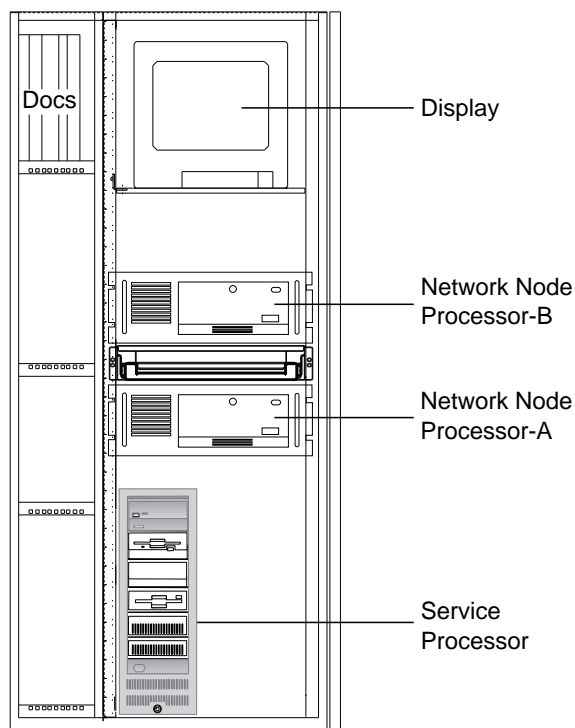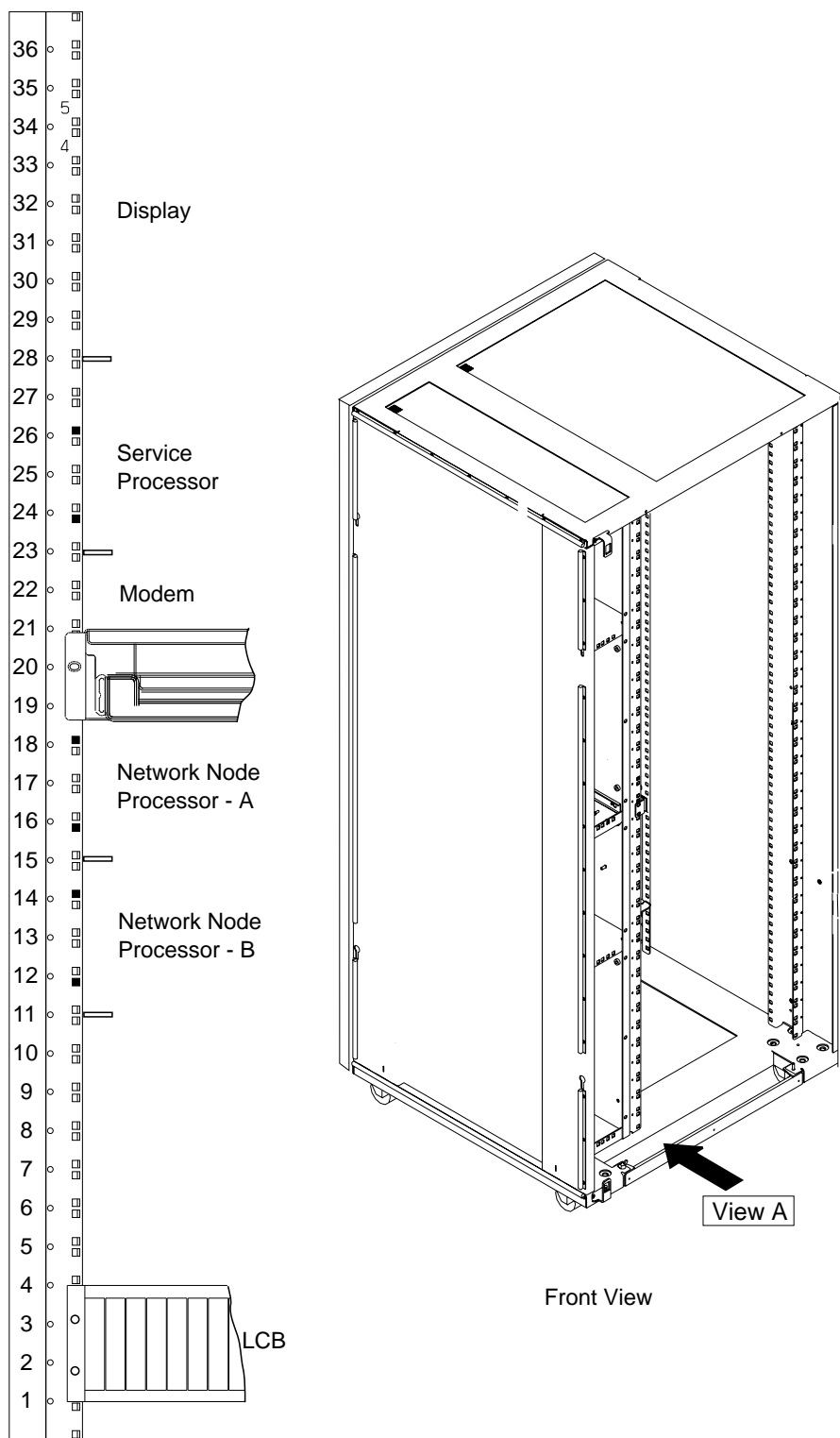
Front View

View A

Figure 5. Installing Brackets for Processor Type 7585

3746 FFBM	PN 08J5496 7 of 18	EC E46545A 07 MAY 97				

Installation (Steps 9-12)

9.0 Safety

Review the **Safety Notices** and the **Safety Inspection Procedures** located at the beginning of the *IBM 3745 Communication Controller All Models*, *IBM 3746 Expansion Unit Model 900*, *IBM 3746 Nways Multinetwork Controller Model 950 Safety Information*, GA33-0400.

10.0 Details of Installation.

10.1 Loading the Network Node Processor Code on the Service Processor

```
┌─── Notes ──────────────────────────────────────────────────┐

For any unexpected message or error concerning the service processor, go to
**Chapter 4. Problem Determination** of the:

• *Service Processor Installation and Maintenance (Based on 7585, 3172,
  9585, and 9577)*, SY33-2115, or
• *Service Processor Installation and Maintenance Based on 3172*,
  SY33-2111, or
• *Service Processor Installation and Maintenance Based on PS/2 9585*,
  SY33-2109, or
• *Service Processor Installation and Maintenance Based on PS/2 9577*,
  SY33-2095.

└────────────────────────────────────────────────────────────┘
```
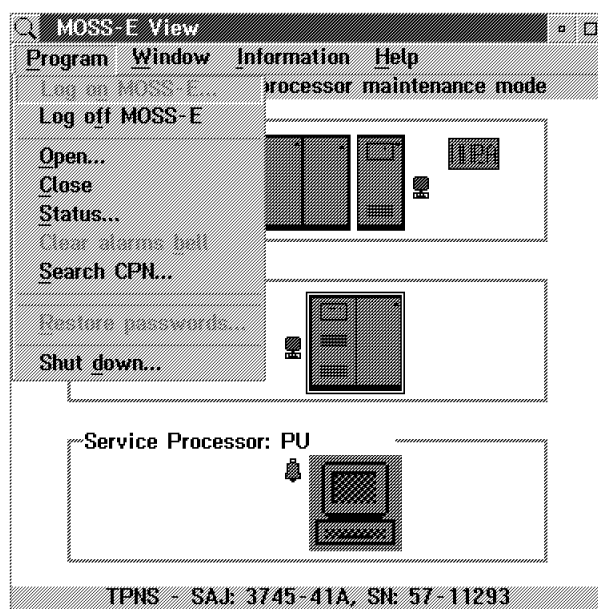
__ 1. **Shut Down and Power OFF the Service Processor** (If not already done):

   Note: Before powering OFF the Service Processor, use this procedure to properly close all the active functions.

   __ a. On the "MOSS-E view" window click on **"Program"**.

   __ b. Click on **"Shut down"**.

```
┌─────────────────────────────────────────────────────────┐
│ Q  MOSS-E View                                    ▫ □    │
│ Program  Window  Information  Help                       │
│ Log on MOSS-E...        rocessor maintenance mode        │
│ Log off MOSS-E                                           │
│                                                          │
│ Open...                                                  │
│ Close                                                    │
│ Status...                                                │
│ Clear alarms bell                                        │
│ Search CPN...                                            │
│                                                          │
│ Restore passwords...                                     │
│ Shut down...                                             │
│                                                          │
│         ┌─Service Processor: PU──────────────────┐       │
│         │                                         │       │
│         └─────────────────────────────────────────┘       │
│          TPNS - SAJ: 3745-41A, SN: 57-11293             │
└─────────────────────────────────────────────────────────┘
```

___   c. Enter the Service Processor maintenance password (default is IBM3745). Then, click on **"OK"**.

___   d. Power **OFF** the service processor.

___ 2. Install the **Service Processor installation diskette 1** in the Service Processor diskette drive.

___ 3. Power **ON** the service processor.

___ 4. Install the **Licensed Internal Code** optical disk, at EC D46130 or higher, in the Service Processor optical disk drive.

___ 5. On the first screen displayed, press **"Enter"**

___ 6. From the primary window select option **5** **(Update Licensed Internal Code when installing a Network Node Processor)**.

Then, press **"Enter"** to start the process then follow the prompts.

```
┌──────────────────────────────────────────────────────────────────┐
│              Service Processor Installation Main Menu             │
│ ──────────────────────────────────────────────────────────────   │
│                                                                  │
│ Select one of the following options using ↑ and ↓ or tab keys,   │
│ then press Enter:                                                 │
│ 1.  Update Licensed Internal Code (LIC) when installing a 3746-9XX│
│ 2.  Update Licensed Internal Code                                 │
│ 3.  Restore hard disk                                             │
│ 4.  Save hard disk                                                │
│ 5.  Update Licensed Internal Code when installing a Network Node Processor│
│ 6.  Exit                                                          │
│                                                                  │
│ Enter                                                            │
└──────────────────────────────────────────────────────────────────┘
```

3746	PN 08J5496	EC E46545A				
FFBM	9 of 18	07 MAY 97				

9

   7. Wait (Up to 45 minutes) for the message: **Operation successfully completed**.

> **Note:** If you have two 3746-9x0s connected to the same Service Processor, using the arrow keys, select the target 3746-9x0 code to be updated, and pressing the space bar, specify if you want to update the code for the selected 3746-9x0 (by default the two 3746-9x0 are selected).

   8. At the end, select **"Exit"** from the primary window and follow the prompts.

```
            Service Processor Installation Main Menu
    _____

    Select one of the following options using ↑ and ↓ or tab keys,
    then press Enter:
    1.  Update Licensed Internal Code (LIC) when installing a 3746-9XX
    2.  Update Licensed Internal Code
    3.  Restore hard disk
    4.  Save hard disk
    5.  Update Licensed Internal Code when installing a Network Node Processor
    6 .   Exit

    Enter
```

10.2 Installing the System Unit

   1. Open the front and rear doors of the Controller Expansion.

   2. Locate the location to install the NNP-A in the Controller Expansion (Refer to Figure 1 on page 6 to Figure 4 on page 6).

   3. Install the right and left brackets **1** (PN 58G5752), provided with the FFB/M, in the controller expansion. Then. tighten using the four screws (p/n 2665527 **2** (See Figure 6 on page 11).

> **Note:** If some brackets are already install in the position where the NNP-A must be install, remove those left and right brackets.

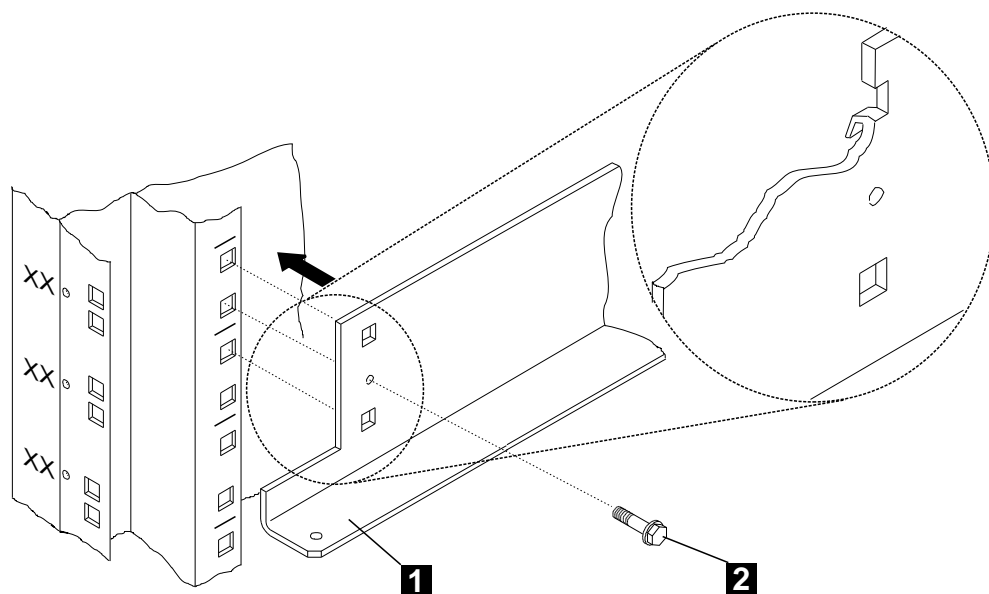| 3746	PN 08J5496	EC E46545A				
FFBM	10 of 18	07 MAY 97				

10

Figure 6. Installing the NNP-A Brackets

__ 4. Install four captive nuts (PN 58G5766) on the left and right side of the controller expansion (Refer to Figure 5 on page 7).
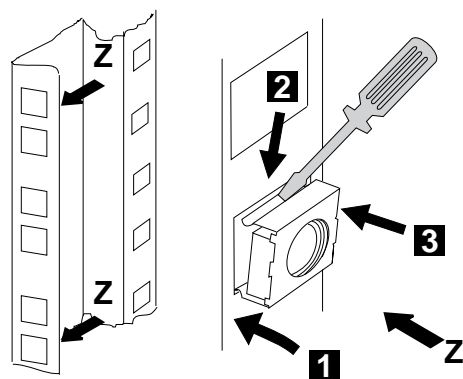

Figure 7. Installing the Captive Nuts.

3746	PN 08J5496	EC E46545A				
FFBM	11 of 18	07 MAY 97				

11

__ 5. Slide the network node processor unit in the controller expansion from the front side as shown in Figure 8, then fasten the unit using four screws (PN 1621230).
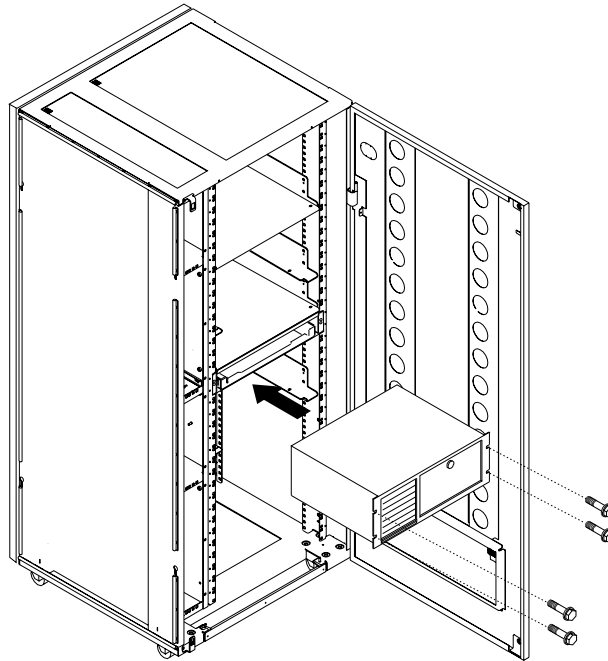
Figure 8. Installing the 7585 NNP-A Unit in the Controller Expansion (Front Side)

__ 6. Using label (PN 0792966), **identify** your Network Node Processor-A by sticking the appropriate label **A** on the front and rear side of the unit.
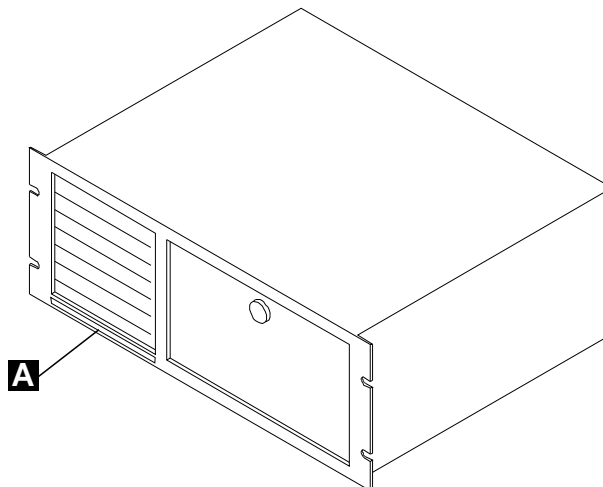
Figure 9. Installing Label on the Front Side of the Network Node Processor.

10.3 Connecting the NNP-A.

____ 1. Plug connector **1** of cable **A** (PN 6339098) to the token-ring card connector.

____ 2. Using a sticker, identify the cable **A** as the "network node processor cable" and plug connector **2** to **any plug** of the 8228 from **1 to 8**

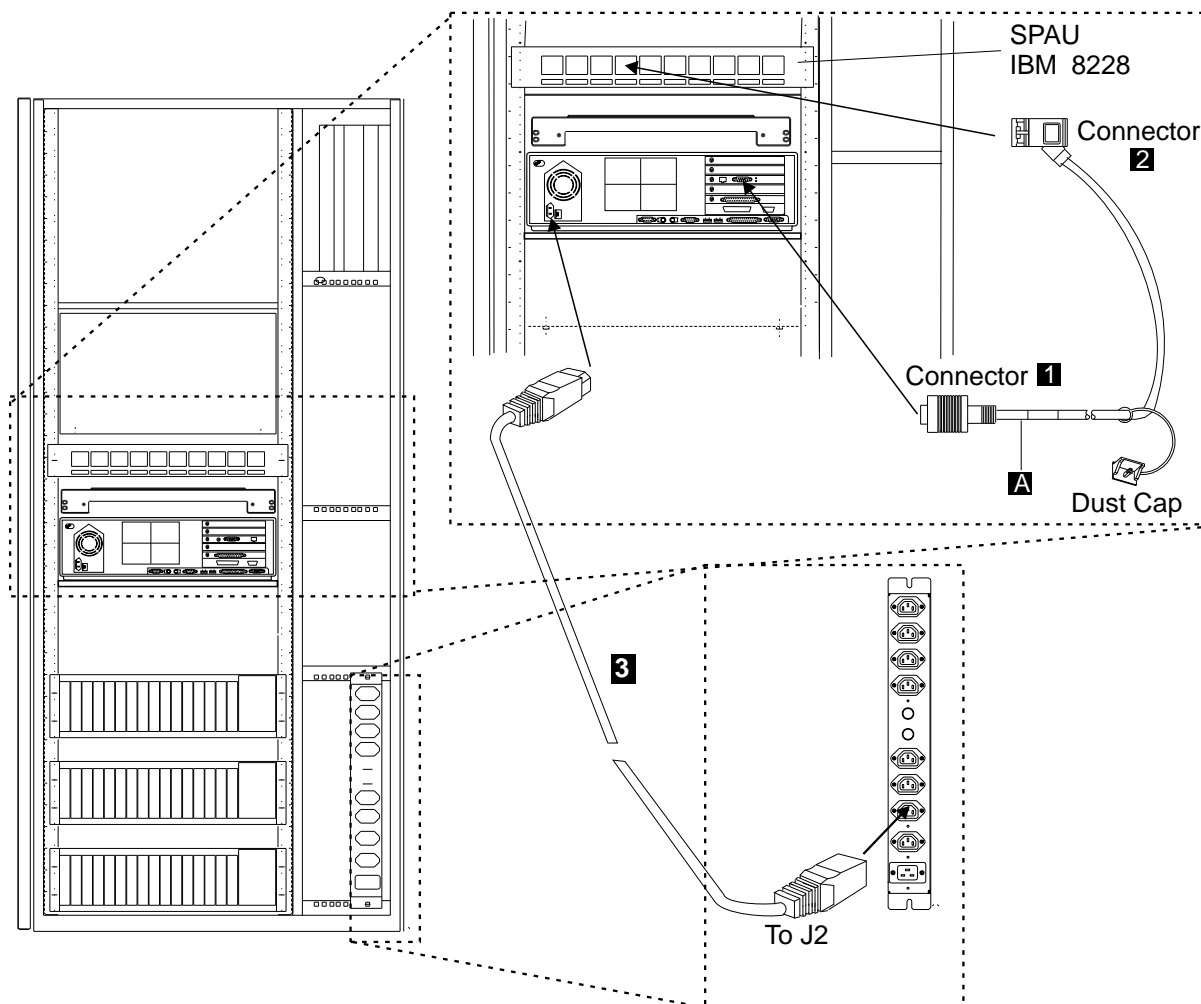____ 3. Connect power cord **3** from J2 to the ac outlet of the NNP-A.

Figure 10. Connecting the 7585 NNP-A

On the NNP-B Front Site:

____ 4. Open the access door, then press the Power button to **Switch ON** the processor.

> **Note:** For any unexpected message or error concerning the NNP-A, go to **Chapter 3. Network Node Processor Problem Determination** of the

3746 FFBM	PN 08J5496 13 of 18	EC E46545A 07 MAY 97				

13

Network Node Processor Installation and Maintenance Manual.
SY33-2111.

3746	PN 08J5496	EC E46545A				
FFBM	14 of 18	07 MAY 97				

14

10.4 Installing the Code on the Network Node Processor

__ 1. Double click on the 3746-900 icon where you are going to install the APPN feature.

__ 2. From the 3746-9x0 menu, click on **Network Node Processor (NNP) Management**.

__ 3. Double click on **(M) Install/Remove/Change/Restore LIC/NNP**.

__ 4. Select **NNP-A**, then click on **Install NNP**.

__ 5. Click on **OK**.

__ 6. If necessary, modify the **IP address** and the **Subnet mask** for the service processor and the network node processor according to the values recorded by the customer on the parameter worksheet. Otherwise keep the default values and record the hostnames for later use. Then, Click on **OK**.

```
BS8-810L/3746-9x0/Service Processor/Network Node Processors [NNP] - II

                     IP address        Subnet mask        Hostname

Service Processor:  192.9.200.1       255.255.255.240     SP34567

NNP-A:              192.9.200.2       255.255.255.240     CA034567

NNP-B:                                255.255.255.240     CB034567

3746 NN:            192.9.200.4       255.255.255.240


     OK          Cancel          Help
```
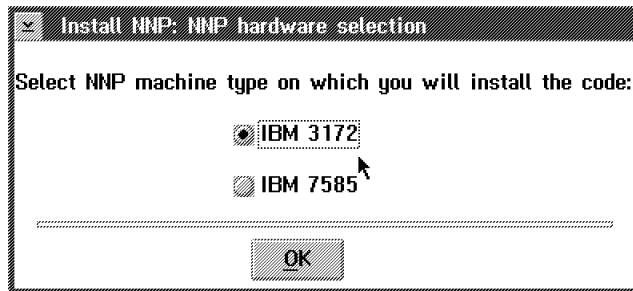
__ 7. Insert the **Network Node Processor installation diskette** in the diskette drive of the **service processor**. Then, click on **OK**.

```
821V03.0/3746-9x0/NNP Licensed Internal Code [LIC] Management

   i   Please insert the Network Node Processor Installation Diskette
       in the Service Processor Drive A.

   OK
```

3746	PN 08J5496	EC E46545A				
FFBM	15 of 18	07 MAY 97				

___ 8. Select the type of NNP installed, then click on **OK**.

Install NNP: NNP hardware selection

Select NNP machine type on which you will install the code:

◉ IBM 3172

◎ IBM 7585

OK

___ 9. When the process is completed, perform the following steps:

    ___ 1) Power OFF the Network Node Processor B.

    ___ 2) Remove the NNP Installation Diskette from the Service Prcessor drive A

    ___ 3) Insert it in the Network Node Processor drive A.
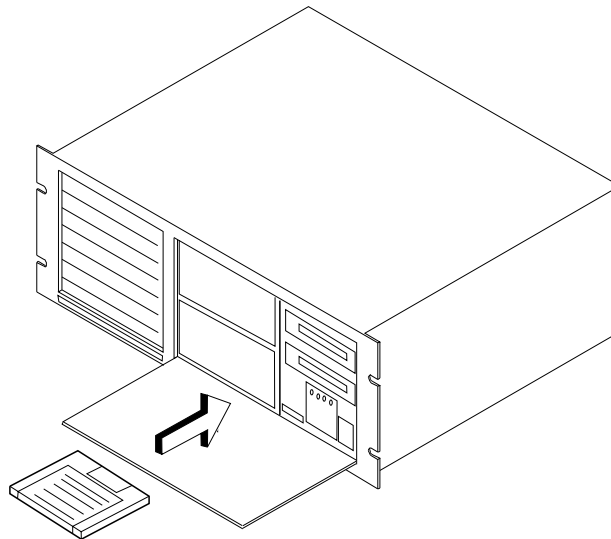
    ___ 4) Power ON the Network Node Processor B.

    ___ 5) Then click on **OK**.

___ 10. To follow the progress of the installation, read the messages prompted in '**Messages**' box.

    Note: It takes about 30 minutes to complete the installation

___ 11. As indicated in the following information message, remove the Network Node Processor installation diskette, then click on **OK**.
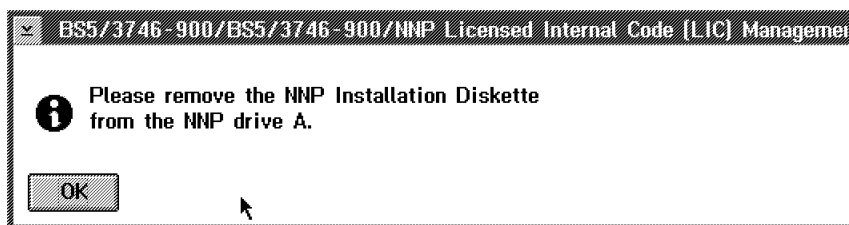
Figure 11. NNP-A Licensed Internal Code Management Information Message
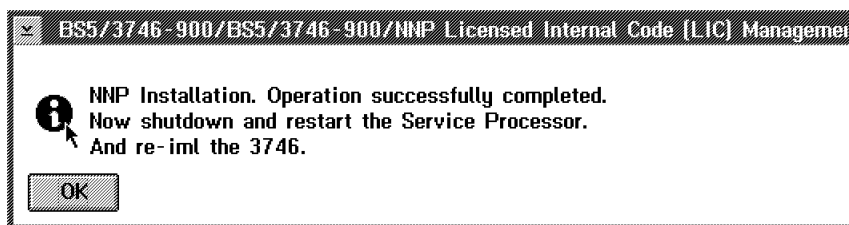
__ 12. The installation is completed, click on **OK**.

Figure 12. Network Node Processor LIC Management Information Message

__ 13. Click on **Close**.

__ 14. Shutdown and restart the service processor and re-iml the 3746-9x0

10.5 Returning the Machine to the Customer

__ 1. Inform the Customer that the machine is now ready to receive the APPN configuration.

11.0 Test Procedures

No test required.

12.0 Field Updating

None.

3746	PN 08J5496	EC E46545A				
FFBM	17 of 18	07 MAY 97				

17

After Installation (steps 13-15)

13.0 Field Updating

None.

14.0 Publications Update

None.

15.0 Parts Disposition

15.1 Purchased Machines

Refer to the parts ownership matrix to determine the correct owner of removed/unused parts.

- For EMEA/APG/AG Areas, refer to *Hardware and General Service Code Description*.
- For Domestic Areas, return parts to the customer.

16.0 Machine Records

- Install the new **MACHINE HISTORY** supplied.
- Report installation and quality problems using existing procedures.

End of instructions.

3746	PN 08J5496	EC E46545A				
FFBM	18 of 18	07 MAY 97				

18