IBM   Installation Instructions

Field Feature Bill of Material

PN 89H4319

Install a backup Network Node Control Point (NNP-B)
on IBM 3746-9X0.
(FC 5022)

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Before Installation (Steps 1-8)

Very Important

Netview Performance Monitoring minimum level required is:

Version 2 Release 2 with APAR OW18882.

1.0 Machines Affected

3746 Model 9X0
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)

- Network Node Control Point - A (FC 5022) BM P/N 29H4169.

- Microcode EC D46120 or Higher
  Checkpoint: Check that the CSS 1 EC level is D46120.000 or higher.

  Note: Refer to the *SPIM*, chapter 3, ′Displaying the EC Level of the code′.

2.2 Concurrent ECs

(Must be installed together)

None.

2.3 Companion ECs

(May be installed together)

None.

3.0 BMs to be Installed

FFBM	Title
89H4319	Network Node Processor B (NNP-B) (FC 5016)

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4.0 Preparation

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

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

- Obtain the Parameter worksheet ″**Definition of Service LAN IP Addresses**″ filled in by the customer

  Note: This parameter worksheet is part of *IBM 3746 Models 900 and 950 Migration and Planning Guide*, GA33-0349.   .

- The set up of the NNP-B has no impact on customer operations.

- Ask the customer:

  – For the maintenance password.

  – To logoff the Service Processor (SP), if not already done.

- Get the Network Node Installation diskette.

5.0 Programming

None.

6.0 Purpose and Description

To increase reliability of 3746-9X0 by adding backup Network Node Processor.

The installation of the NNP-B is divided into two main procedures:

1. Installing the system unit
2. Installing the code on the NNP-B processor.

7.0 Installation Time

FFBM	Machine Hrs.	System Hrs.	Nbr of CEs
89H4319	0.0	0.0	1

8.0 Tools/Material Required

None.

Two different type of NNP-B installation :

Display

3172 Service Processor   9577 Service Processor

Modem

FREE AREA FOR OPTIONS

FREE AREA FOR AC OUTLET DISTRIBUTION

Network Node Processor-A

Network Node Processor-B

LCBB
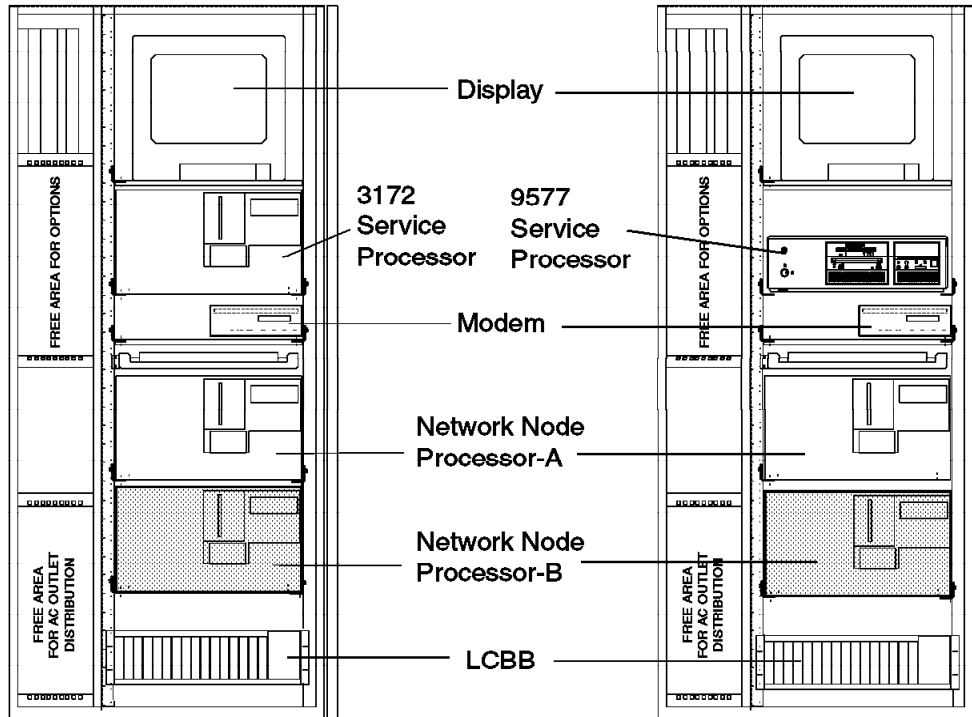
Figure 1. NNP-B installed with SP 3172 or PS/2 9577.

Display

Network Node Processor-B

Modem

FREE AREA FOR OPTIONS

Network Node Processor-A

Service Processor

FREE AREA FOR AC OUTLET DISTRIBUTION
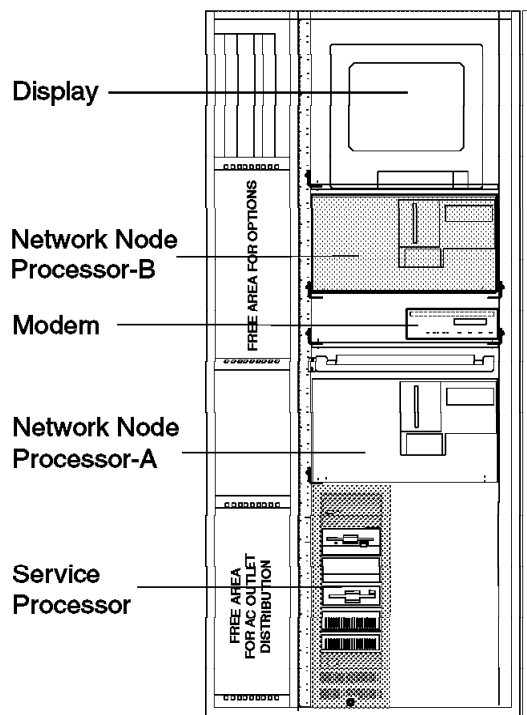
Figure 2. NNP-B installed with SP PS/2 9585.

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Display

Service
Processor

Modem

Network Node
Processor - A

Network Node
Processor - B

LCB

Display

Service
Processor

Modem

Drawer

NNP-A

NNP-B

View B

View A

Front View

View A

View B
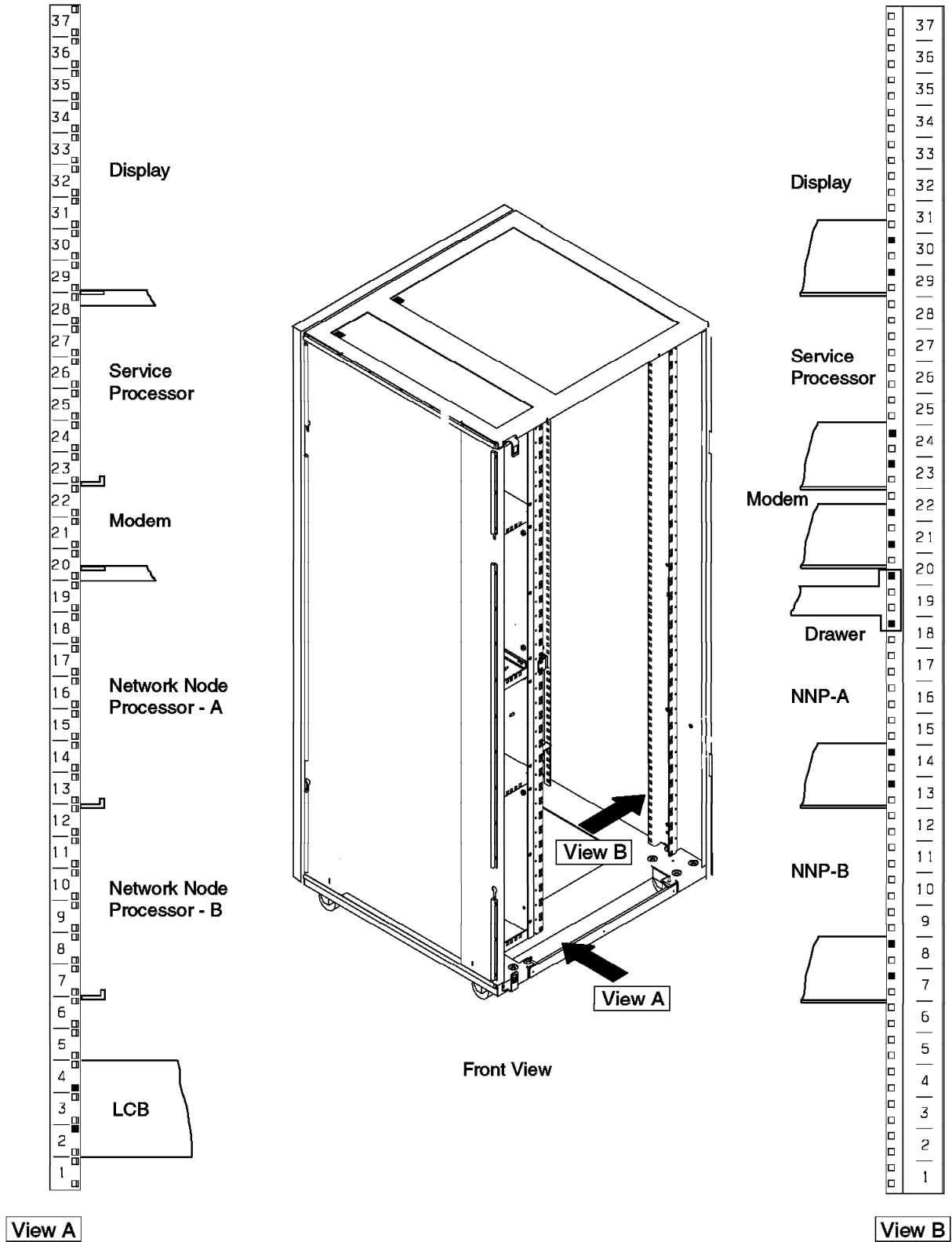
Figure 3. NNP-B with SP3172 or PS/2 9577. Details of installation.

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Installation (Steps 9-11)

9.0 Safety

Review the **Safety Notices** and the **Service Inspection Procedures** located at the beginning of the:

- *3746 Model 900 Service Guide* manual, SY33-2116, or
- *3746 Model 950 Service Guide* manual, SY33-2106.

10.0 Details of Installation.

10.1 Installing the System Unit

10.1.1 Preparing your installation

___ 1. **Unpack** Your NNP-B.

You need the following items to complete this installation:

• Brackets (X2) and Screws (X4)	• NNP-B and Power Cord	• Publications and diskette
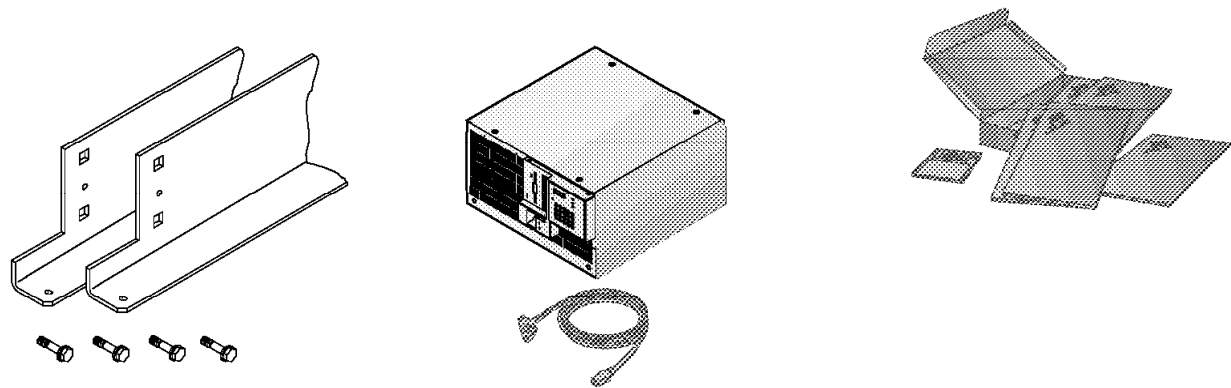
___ 2. On the NNP-B processor, remove the four foot pads and screws.

___ 3. Open the front and rear doors of the controller expansion.

Type of Service Processor used ?

Two different possibilities of NNP-B installation dependent of the Service Processor used in the machine.

- **3172 or 9577** : go to 10.1.2, "Installing the NNP-B (With SP type : 3172 or PS/2 9577)" on page 8.
- **9585** : go to 10.1.3, "Installing the NNP-B (With SP type : PS/2 9585)" on page 9.

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10.1.2 Installing the NNP-B (With SP type : 3172 or PS/2 9577)

__ 1. Locate NNP-B position in the Controller Expansion (See Figure 3 on page 6).

__ 2. Install right and left brackets p/n 58G5793 **1** on the rack.

__ 3. Tighten using the four screws p/n 2665527 **2** *(see Figure 4)*
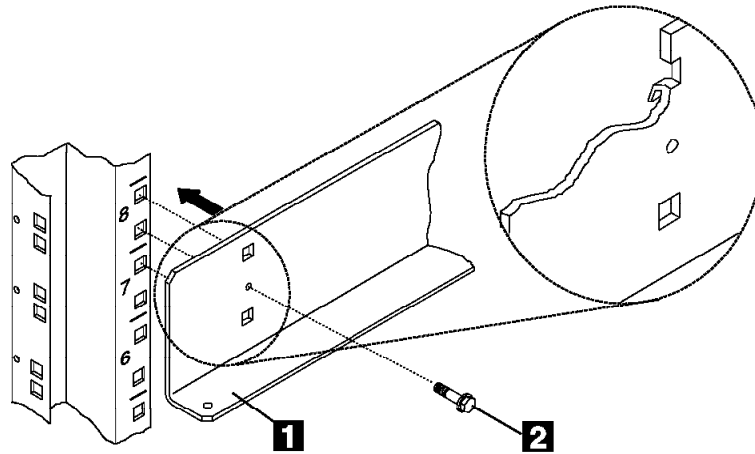
Figure 4. Bracket installation.

__ 4. slide the NNP-B unit in the rack from the rear side. *(see Figure 5)*
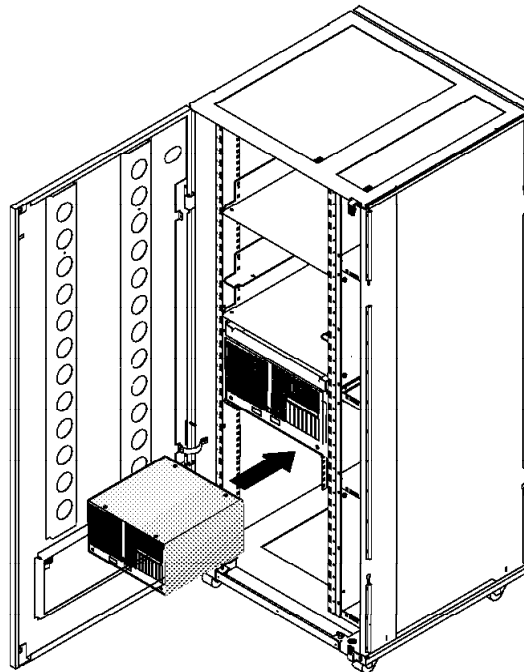
Figure 5. NNP-B installation

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10.1.3 Installing the NNP-B (With SP type : PS/2 9585)

Note: You do not have to install brackets. The NNP-B has just to be installed on an existing plate.

___ 1. Slide the NNP-B in the rack as shown after. *(see Figure 6)*
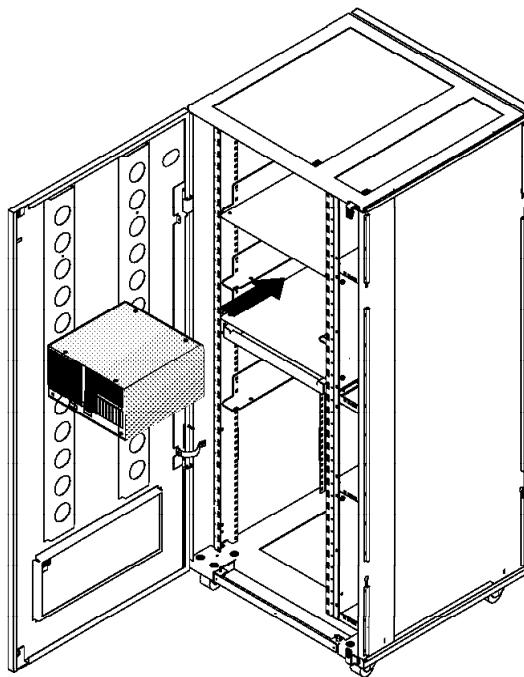
Figure 6. Installing the NNP-B Unit in the rack (Rear Side)

Note: Brackets packed with the NNP can be left near the machine for futur equipment installation.

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10.1.4 Connecting the NNP-B.

__ 1. Set the **ON/OFF Switch** to off **(O)** on the NNP-B front panel.

__ 2. **Connect the keyboard** to the connector (K) and (M) of the NNP-B, then place the keyboard in the nearest free area.

__ 3. Plug connector **1** of cable **A** (PN 6339098) *(see Figure 7)* to cable **B** (PN 60G1066).

__ 4. Using a sticker, identify the cable **A** as the ″NNP-B cable″ and plug connector **2** to **any plug** of the SPAU IBM 8228 from **1 to 8**

__ 5. Plug cable **B** to **slot 7** of the NNP-B.

__ 6. Connect the power cord **3** .(PN 58G5783) to the NNP-B ac inlet and to J5 of the ac outlet distribution box.

__ 7. Turn the **ON/OFF Switch** to ON **(I)** on the NNP-B front panel.

Note: For any unexpected message or error concerning the NNP-B, go to **Chapter 3. Network Node Processor Problem Determination** of the *Network Node Processor Installation and Maintenance (Based on 3172)* Manual. SY33-2111.
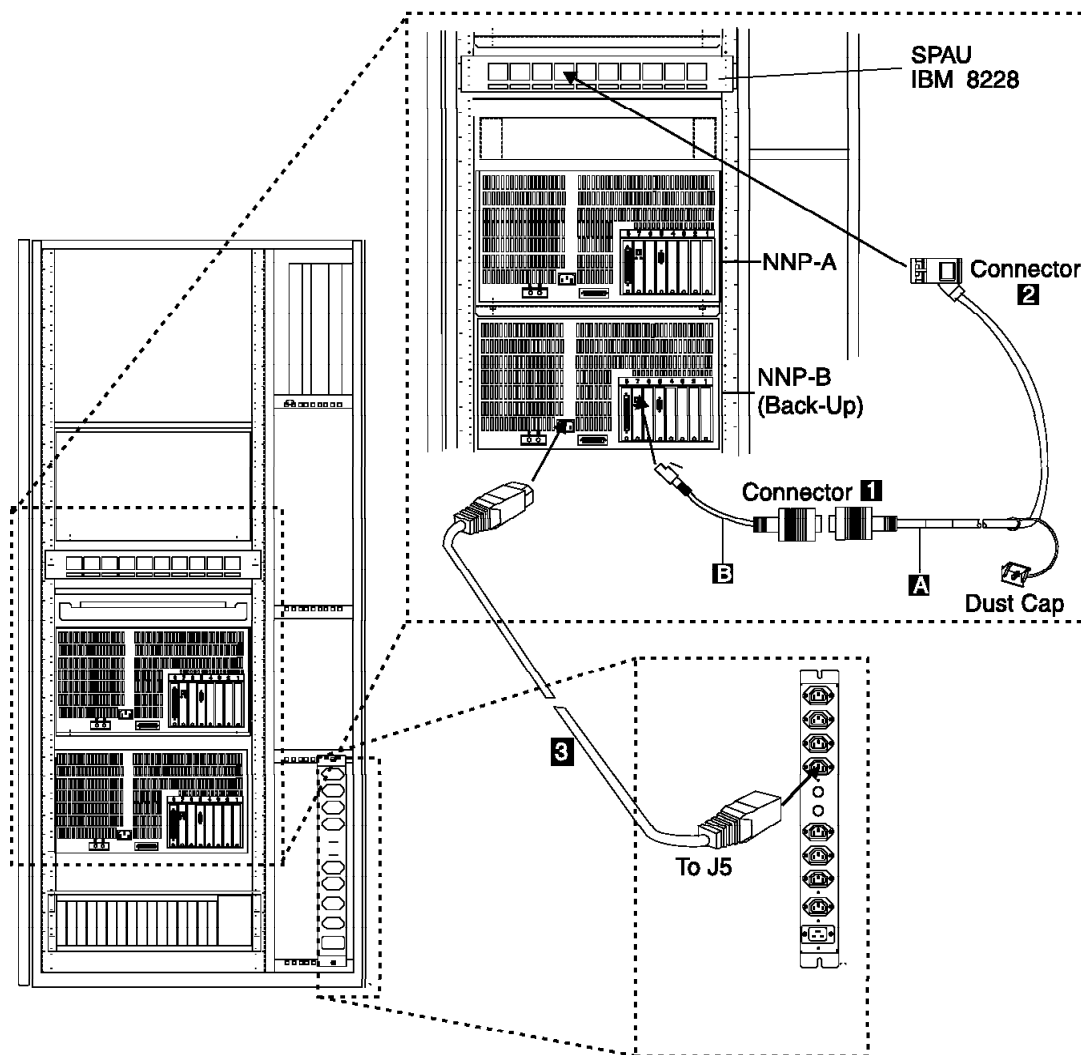
Figure 7. Connecting the NNP-B.

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10.2 Log the Service Processor ON

___ 1. On **MOSS-E View** window, click on **Program**.

___ 2. Click on **LOG ON MOSS-E**.

___ 3. Enter the maintenance password, press **Enter**.

10.3 Installing the Code on the NNP-B.

___ 1. Double click on the 3746-900 or 3746-950 icon where you are going to install the NNP-B (NNP-A already installed).

___ 2. From the 3746-9x0 menu, click on **Network Node Processor (NNP) Management**.
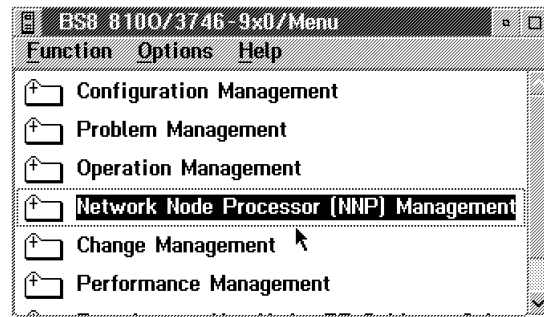
___ 3. Double click on **(M) Install/Remove/Change/Restore LIC/NNP**.
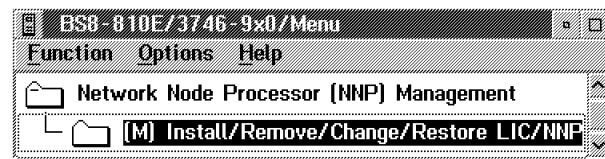
___ 4. Click on **NNP-B**, then click on **Install NNP** button.

___ 5. Click on **OK**.

```
┌──────────────────────────────────────────────────────────┐
│ ▼  821V03.0/3746-9x0/NNP Licensed Internal Code [LIC] Management │
├──────────────────────────────────────────────────────────┤
│                                                          │
│   ⚠   You have selected "Install NNP".                   │
│                                                          │
│        The NNP hard disk will be partitioned and formatted, │
│        then loaded and configured.                       │
│                                                          │
│        All present data on the NNP hard disk will be lost. │
│                                                          │
│      ┌────────┐   ┌────────┐                             │
│      │  OK    │   │ Cancel │                             │
│      └────────┘   └────────┘                             │
└──────────────────────────────────────────────────────────┘
```
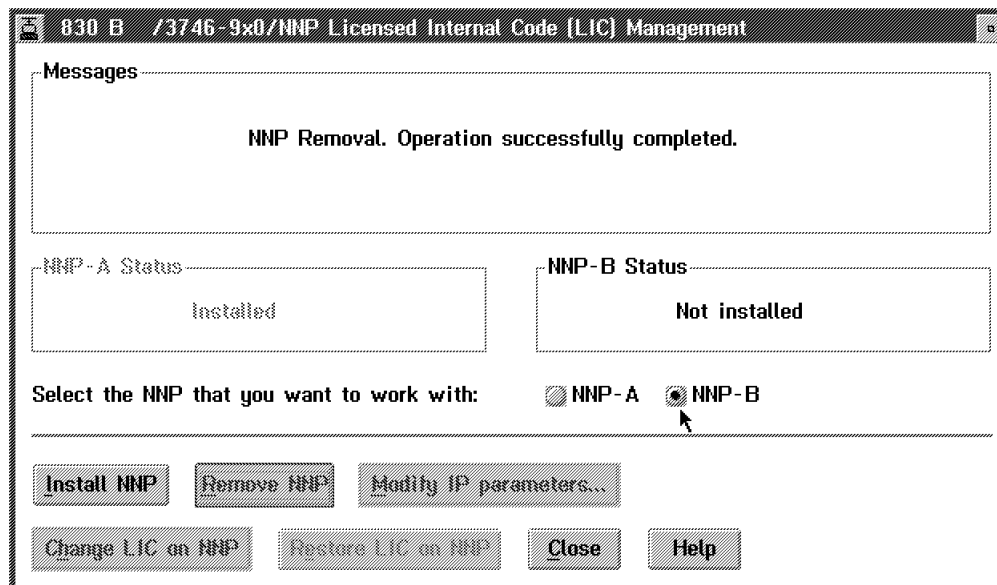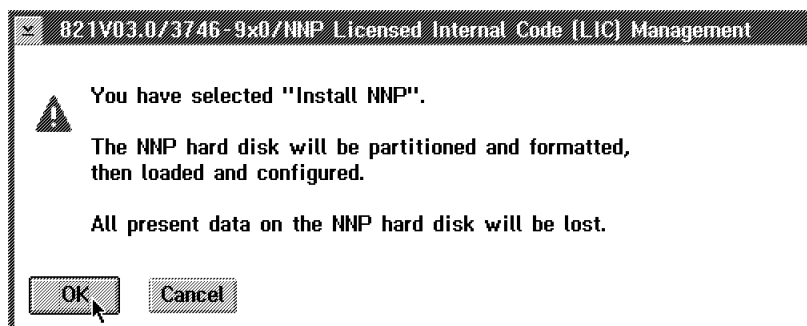
___ 6. Modify the **IP address**, the **Subnet mask** for the NNP-B and the **IP address** of the **3746NN** according to the values recorded by the customer on the parameter worksheet. Otherwise keep the default values and record the hostnames for later use. Then click on **OK**.

```
┌──────────────────────────────────────────────────────────────────┐
│ ▼  821V03.0/3746-9x0/Service Processor/Network Node Processors [NNP] - IF │
├──────────────────────────────────────────────────────────────────┤
│                    IP address       Subnet mask      Hostname    │
│                                                                  │
│  Service Processor: [9.100.32.18]  [255.255.192.0]  [SP11111]    │
│                                                                  │
│  NNP-A:             [9.100.32.19]  [255.255.192.0]  [CA112345]   │
│                                                                  │
│  NNP-B:             [9.100.32.20]  [255.255.192.0]  [CB112345]   │
│                                                                  │
│  3746 NN:           [9.100.32.21]  [255.255.192.0]               │
│                                                                  │
│  ┌────────┐   ┌────────┐   ┌────────┐                           │
│  │  OK    │   │ Cancel │   │  Help  │                           │
│  └────────┘   └────────┘   └────────┘                           │
└──────────────────────────────────────────────────────────────────┘
```
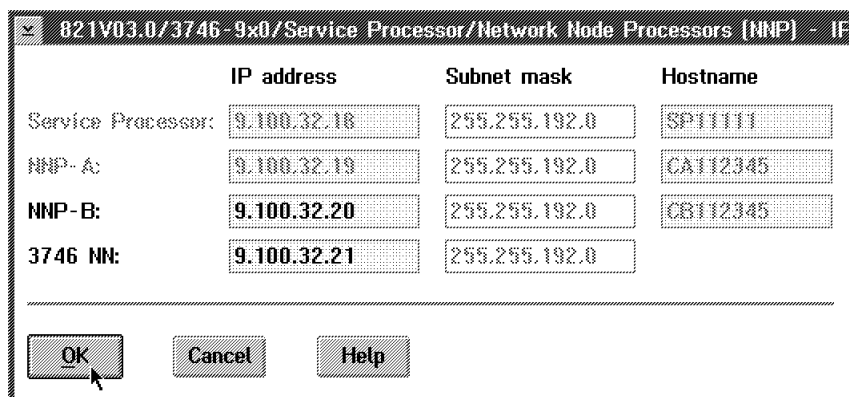
___ 7. Insert the **Network Node Processor installation diskette** in the diskette drive of the **service processor**,then click **OK**.

```
┌──────────────────────────────────────────────────────────┐
│ ▼  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    │                                          │
│      └────────┘                                          │
└──────────────────────────────────────────────────────────┘
```
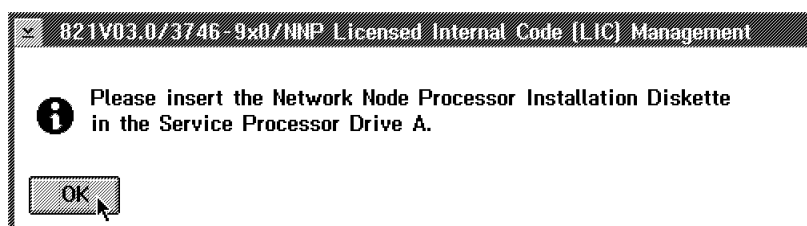
___ 8. When the process is completed, perform the following steps, then click
     on **OK**.

BS5/3746-900/BS5/3746-900/NNP Licensed Internal Code [LIC] Managemen

ⓘ   Please perform the following steps:

    1. Power OFF the Network Node Processor to be installed.

    2. Remove the NNP Installation Diskette
       from the Service Processor Drive A.

    3. Insert it in the Netwotk Node Processor Drive A.

    4. Power ON the Network Node Processor.

    [OK]
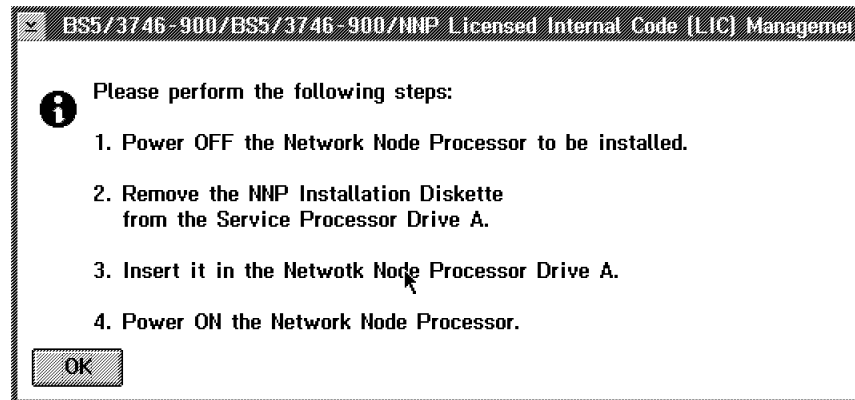
___ 9. To follow the progress of the installation, read the messages prompted
     in '**Messages**' box.

    Note: It takes about 40 minutes to complete the installation

---

830 B   /3746-9x0/NNP Licensed Internal Code [LIC] Management

Messages

    Operation will be continued when the NNP is booted
    with the NNP Installation Diskette that has been updated.

    Please wait. . .

NNP-A Status
    Installed

NNP-B Status
    Installation in progress. . .

Select the NNP that you want to work with: ◌NNP-A   ◉NNP-B

[Install NNP] [Remove NNP] [Modify IP parameters...]

[Change LIC on NNP] [Restore LIC on NNP] [Close] [**Help**]

___ 10. As indicated in the following information message, remove the NNP-B
     installation diskette, then click on **OK**.

BS5/3746-900/BS5/3746-900/NNP Licensed Internal Code [LIC] Managemen

ⓘ   Please remove the NNP Installation Diskette
    from the NNP drive A.

[OK]

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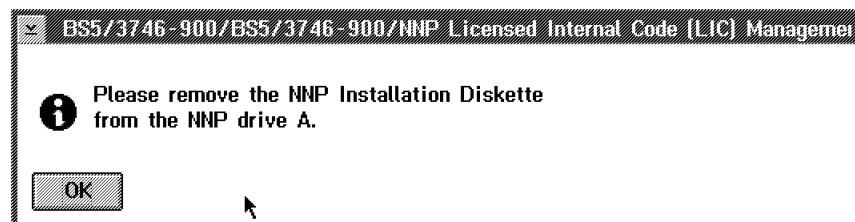
___ 11. The installation is completed, click on **OK**.

```
☒  830 B   /3746-9x0/NNP Licensed Internal Code [LIC] Management

   ℹ  NNP Installation. Operation successfully completed.

   ┌──────┐
   │  OK  │
   └──────┘
```

___ 12. Click on **Close**

```
▣  830 B   /3746-9x0/NNP Licensed Internal Code [LIC] Management          □

 ┌─Messages────────────────────────────────────────────────────────────┐
 │                                                                      │
 │          NNP Installation. Operation successfully completed.         │
 │                                                                      │
 └──────────────────────────────────────────────────────────────────────┘

 ┌─NNP-A Status──────────────┐     ┌─NNP-B Status──────────────┐
 │                           │     │                           │
 │        Installed          │     │        Installed          │
 │                           │     │                           │
 └───────────────────────────┘     └───────────────────────────┘

 Select the NNP that you want to work with:      ○ NNP-A   ● NNP-B
 ────────────────────────────────────────────────────────────────────

 ┌───────────┐  ┌───────────┐  ┌──────────────────────┐
 │Install NNP│  │Remove NNP │  │Modify IP parameters...│
 └───────────┘  └───────────┘  └──────────────────────┘

 ┌───────────────┐  ┌────────────────┐  ┌───────┐  ┌───────┐
 │Change LIC on NNP│ │Restore LIC on NNP│ │ Close │  │ Help  │
 └───────────────┘  └────────────────┘  └───────┘  └───────┘
```

10.4 Enabling the NNP Back-up Function

┌─ **Important** ──┐
│   │
│ It's a customer task. But ask the customer if you should perform this task. │
│   │
└──┘

___ 1. On the **3746-9X0 main** menu, Click on
   Network Node Processor Management.

```
▤  BS8 810O/3746-9x0/Menu                    □ □
 Function  Options  Help
 ┌─────────────────────────────────────────────┐
 │ 📁 Configuration Management                  │
 │ 📁 Problem Management                        │
 │ 📁 Operation Management                      │
 │ 📁 Network Node Processor (NNP) Management   │
 │ 📁 Change Management                         │
 │ 📁 Performance Management                    │
 └─────────────────────────────────────────────┘
```

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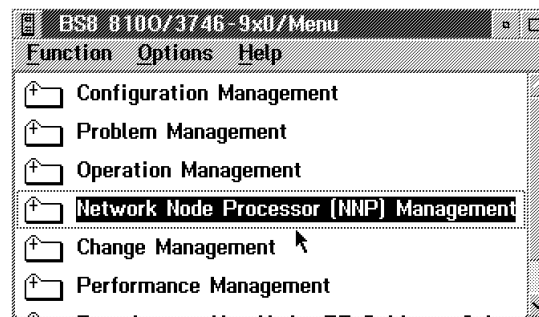
2. Double click on **Manage Control Point on NNPs**.

┌───┐
│ ▣ 821V03.0/3746-9x0/Menu   □ ▫ □│
│ **Function Options Help**   │
│ ⊞▱ Operation Management   ▲   │
│ ▱ Network Node Processor (NNP) Manag │   │
│ ├─▭ (M) Install/Remove/Change/Rest   │
│ ├─▭ Manage Control Points on NNPs   │
│ ├─▭ Controller Configuration and Man₂   │
│ ├─▭ (M) Connect To an NNP   ▼   │
└───┘
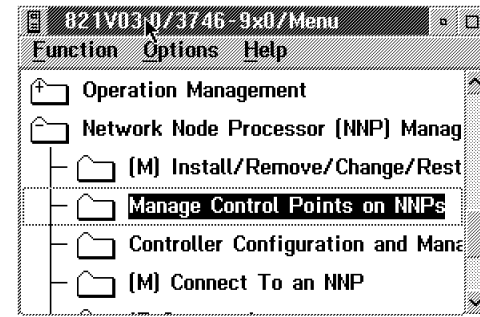
3. Click on **Enable the CP/NNP back-up**.

┌───┐
│ ▣ LA GAUDE /3746-9x0/Manage Control Points (CP) on NNP   ▫ │
│ ┌─CP/NNP Messages───┐│
│ │   ││
│ │   ││
│ │   ││
│ │   ││
│ └───┘│
│ ┌─CP/NNP-A Status──────────────┐ ┌─CP/NNP-B Status──────────────┐   │
│ │ Link operational   │ │ Standby   │   │
│ └──────────────────────────────┘ └──────────────────────────────┘   │
│ ┌─Options──┐│
│ │ Select the CP/NNP that you want to manage: ◉ CP/NNP-A   ○ CP/NNP-B ││
│ │ ▣ Automatic configuration activation   ☑ Enable CP/NNP backup ││
│ └──┘│
│   [Start CP] [Stop CP] [Stop and restart CP] [Activate configuration] [Dump CP] │
│   [Help] [Close] [Shutdown and restart NNP] [Manage NPM]   │
└───┘
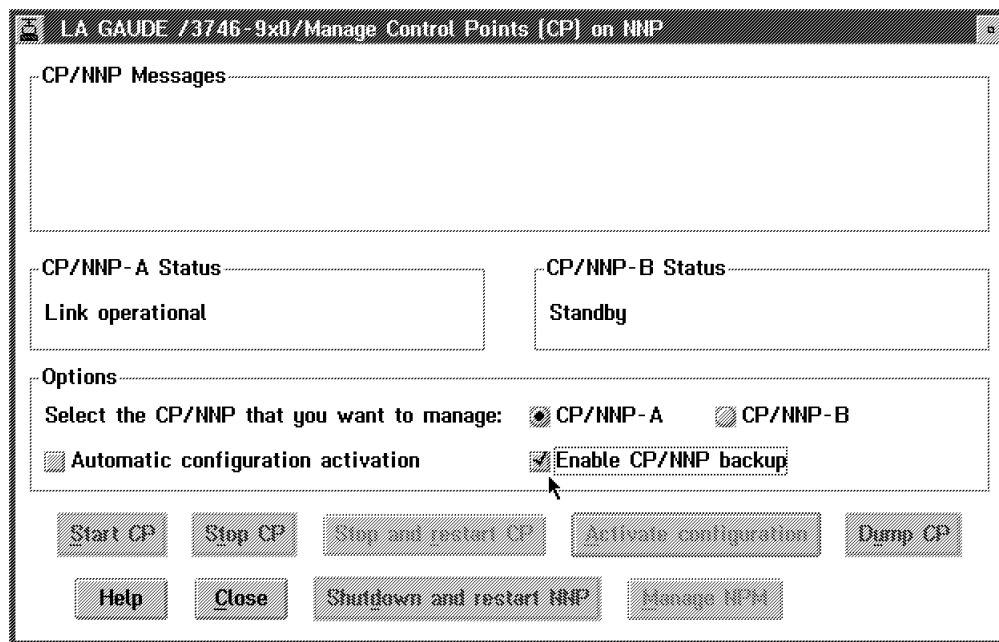
Note: For details refer to chapter **Working with the NNP Functions** on one of the following manuals:

- *3746-950 User's Guide*, SA33-0356, or
- *3745-17A to 61A and 3746-900 Basic Operation Guide*, SA33-0177.

10.5 Returning the 3746-9x0 to the Customer.

1. On the **3746-9x0 Menu** window, click on **Function**, then, click on **Exit**.

2. On the **MOSS-E View** window, click on **Program**.

3. Click on **LOG OFF MOSS-E**.

4. Close the front and rear doors of the controller expansion.

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11.0 Test Procedures

No test required.

After Installation (steps 12-15)

12.0 Field Updating

None.

13.0 Publications Update

None.

14.0 Parts Disposition

14.1 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.

15.0 Machine Records

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

End of instructions.

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