

NOTE: If the message does not indicate "96 TPI drive", then reset the computer and go back to the beginning of Backup Procedure One and start over.

C6. Immediately remove Distribution Disk I and replace it with the Backup Disk. Then close the disk drive, and press **RETURN**.

C7. The light on the disk drive will glow for several seconds. Then FORMAT will display:

Do you have more disks to format? (y/n):

C8. Type N and FORMAT will display:

Place a bootable disk in drive A and press any character:

C9. Remove the Backup Disk and insert Distribution Disk I. Then type any character. CP/M will display:

A>

With Distribution Disk I in the drive, proceed to SYSGEN.

SYSGEN

The SYSGEN utility copies the CP/M Operating System to a disk. Use SYSGEN to copy the CP/M Operating System from Distribution Disk I to the Backup Disk (or Backup Disk I).

1. At the A> prompt, type **SYSGEN** and press **RETURN**. This entry invokes SYSGEN, which displays a message in the following form:

SYSGEN VER 2.0.04
SOURCE DRIVE NAME (OR RETURN TO SKIP):

2. Type **A**. SYSGEN will display:

SOURCE ON A, THEN TYPE RETURN

3. Press **RETURN**. SYSGEN will display:

FUNCTION COMPLETE.
COPY BIOS.SYS (Y/N):

4. Type **Y**. SYSGEN will display:

FUNCTION COMPLETE
DESTINATION DRIVE NAME (OR RETURN TO REBOOT):

5. Type **B**. SYSGEN will display:

DESTINATION ON B, THEN TYPE RETURN

6. Press **RETURN**. SYSGEN will display the following prompt:

PUT DISK B IN DRIVE A: AND PRESS RETURN

7. Remove Distribution Disk I and insert Backup Disk I (or the Backup Disk). Then press **RETURN**. SYSGEN will display the following:

FUNCTION COMPLETE.
DESTINATION DRIVE NAME (OR RETURN TO REBOOT):

8. Press **RETURN**. SYSGEN will display the following prompt:

PUT DISK A IN DRIVE A: AND PRESS RETURN

9. Remove Backup Disk I, and insert Distribution Disk I. Then press **RETURN**. CP/M will display:

A>

With Distribution Disk I in the drive, proceed to PIP.

PIP

The PIP utility copies files between disks.

The method you use to operate PIP depends on the type of disk media that will receive the copied distribution software. Use only one of the two PIP methods specified below:

If you have three, 5.25-inch, 48 TPI, backup disks (hard-sectored or soft-sectored), then use PIP Method A and follow the numbered steps preceded by the letter A.

If you have one, 5.25-inch, 96 TPI, backup disk, then use PIP Method B and follow the numbered steps preceded by the letter B.

Method A

A1. At the A> prompt, type the following command:

A>**PIP B: = A:*. * RETURN**

(*.* is an ambiguous or wildcard file name that stands for all of the files on Distribution Disk I.)

PIP will begin to copy the files one by one, and display the name of each file in the form:

COPYING -
FILENAME.EXT

Temporarily assign the following identities to your disks:

Distribution Disk I is "DISK A"; and
Backup Disk I is "DISK B".

PIP will prompt you to insert these disks alternately by displaying messages in the following form:

PUT DISK B IN DRIVE A: AND PRESS RETURN

A2. Whenever prompted by one of these messages, put the appropriate disk in the drive and press **RETURN**. PIP will require several disk switches before all of the Distribution Disk files are copied to the Backup Disk. When PIP finishes copying the files, CP/M will display a system prompt.

A3. Type **PIP B: = C:*. * RETURN** at the A> system prompt. (*. * is an ambiguous or wildcard file name that stands for all of the files on Distribution Disk II.)

A4. Temporarily assign the following identities to your disks:

Distribution Disk I is "DISK A";
Backup Disk II is "DISK B"; and
Distribution Disk II is "DISK C".

PIP will prompt you to insert these disks alternately. The prompts will appear in the following form:

PUT DISK B IN DRIVE A: AND PRESS RETURN

Whenever prompted by a message in this form, put the appropriate disk in the drive and press **RETURN**. PIP will require several disk switches before all of Distribution Disk II files are copied to Backup Disk II. When PIP has finished copying the files, you should end up with "DISK A" (Distribution Disk I) in the drive. Then CP/M should redisplay the A> system prompt.

- A5. Type **PIP B:=C:*. * RETURN** at the A> system prompt, and assign the following identities to your disks:

Distribution Disk I is "DISK A";
Backup Disk III is "DISK B"; and
Distribution Disk III is "DISK C".

- A6. Insert disks as prompted. PIP will display the names of the files it is copying. When PIP has finished copying the files, you should end up with "DISK A" (Distribution Disk I) in the drive and CP/M will redisplay the A> system prompt.

- A7. Store your Distribution Disks in a safe place, and use your Backup Disks for upcoming activities.

After completing Step A7 of the PIP activity proceed to the text titled "Customizing Procedures".

Method B

- B1. At the A> prompt, type the following command:

A>**PIP B:= A:*. *[V] RETURN**

(*.* is an ambiguous or wildcard file name that stands for all of the files on Distribution Disk I.)

PIP will begin to copy the files one by one, and display the name of each file in the form:

COPYING -
FILENAME.EXT

Temporarily assign the following identities to your disks:

Distribution Disk I is "DISK A"; and
The Backup Disk is "DISK B".

PIP will prompt you to insert these disks alternately by displaying messages in the following form:

PUT DISK B IN DRIVE A: AND PRESS RETURN

- B2. Whenever prompted by one of these messages, put the appropriate disk in the drive and press **RETURN**. PIP will require several disk switches before all of the Distribution Disk files are copied to the Backup Disk. When PIP has finished copying the files, CP/M will redisplay the A> system prompt.
- B3. Type **PIP B:=C:*. * RETURN** at the A> system prompt. (*. * is an ambiguous or wildcard file name that stands for all of the files on Distribution Disk II.)
- B4. Temporarily assign the following identities to your disks:

Distribution Disk I is "DISK A";
The Backup Disk is "DISK B"; and
Distribution Disk II is "DISK C".

PIP will prompt you to insert these disks alternately. The prompts will appear in the following form:

PUT DISK B IN DRIVE A: AND PRESS RETURN

Whenever prompted by a message in this form, put the appropriate disk in the drive and press **RETURN**. PIP will require several disk switches before all of Distribution Disk II files are copied to the Backup Disk. When PIP has finished copying the files, you should end up with "DISK A" (Distribution Disk I) in the drive. Then CP/M should redisplay the A> system prompt.

- B5. Type **PIP B:=C:*. * RETURN** at the A> system prompt, and assign the following identities to your disks:

Distribution Disk I is "DISK A";
The Backup Disk is "DISK B"; and
Distribution Disk III is "DISK C".

- B6. Insert disks as prompted. PIP will display the names of the files it is copying. When PIP has finished copying the files, you should end up with "DISK A" (Distribution Disk I) in the drive. Then CP/M should redisplay the A> system prompt.
- B7. Store your CP/M Distribution Disks in a safe place, and use your CP/M Backup Disk for upcoming activities.

After completing Step B7 of the PIP activity proceed to the text titled "Customizing Procedures".

Backup Procedure Two

Two or Three Primary 48 TPI Drives (5.25-inch or 8-inch)

This procedure is used to construct a Backup Disk by copying both the CP/M Operating System and the utility files from your Distribution Disk(s) to blank disk(s) of the same type.

If you have 5.25-inch disks, your CP/M software is stored on three Distribution Disks. You must copy the data from each Distribution Disk to a corresponding Backup Disk. Prepare for this procedure by labelling three blank disks "CP/M Backup Disk I", "CP/M Backup Disk II", and "CP/M Backup Disk III".

If you have 8-inch disks, you have only one CP/M Distribution Disk. Label one blank 8-inch disk "CP/M Backup Disk".

NOTE: The blank disks you will convert into Backup Disks must be write enabled during all of the activities in this procedure. Therefore, if you have 5.25-inch disks, do not cover the Backup Disk notches with tabs. If you have 8-inch disks, cover the Backup Disk notch with a tab and press down the write-protect switch for the H/Z47 drive containing the Backup Disk.

PROCEDURE SYNOPSIS

This procedure requires you to perform the following activities in sequence:

```
bootstrap
CONFIGUR
FORMAT
DUP
```

To begin Procedure Two, insert the Distribution Disk (or Distribution Disk I) in drive A and the Backup Disk (or Backup Disk I) in drive B. Perform bootstrap. When the CONFIGUR utility is automatically invoked, wait for the "STANDARD SYSTEM" prompt and type **Y**.

Then proceed to the FORMAT activity.

FORMAT

This FORMAT activity prepares your Backup Disk(s) for data storage. FORMAT works differently depending on the type of disk you are using. Therefore, use the FORMAT method specified below:

If your distribution software is recorded on hard-sectored 5.25-inch disks, use Method A to FORMAT and follow the numbered steps preceded by the letter A.

If your distribution software is recorded on 8-inch disks or soft-sectored 5.25-inch disks, use Method B to FORMAT and follow the numbered steps preceded by the letter B.

Method A:

- A1. At the A> System Prompt, type **FORMAT** and press **RETURN**. This entry invokes FORMAT, which displays a message in the form:

```
Format Version 2.04
This program is used to initialize a disk.
All information currently on the disk will be destroyed.
Is that what you want? (y/n):
```

- A2. Type **Y**. FORMAT will display:

```
Which drive do you wish to use for this operation?
```

A3. Type **B**. **FORMAT** will display:

Put the disk you wish to be formatted in drive B.
Press **RETURN** to begin, anything else to abort.

A4. Make sure that the Backup Disk is properly situated in drive B, and press **RETURN**. The light on the disk drive will glow for several seconds. Then **FORMAT** will display:

Do you have more disks to format? (y/n):

A5. If you have three Distribution Disks, format Backup Disks for each volume by typing **Y** at this step, and resuming the **FORMAT** activity at Step A3.

If you have formatted all of your Distribution Disks, then type **N**. **CP/M** will display:

A>

Now proceed to the **DUP** activity.

Method B:

B1. After the **CP/M** prompt A>, type **FORMAT** and press **RETURN**. This entry invokes **FORMAT**, which displays a message in the form:

Format Version 2.04
This program is used to initialize a disk.
All information currently on the disk will be destroyed.
Is that what you want? (y/n):

B2. Type **Y**. **FORMAT** will display:

Which drive do you wish to use for this operation?

B3. Type **B**. **FORMAT** will display one of the following two messages:

Which density? (S=single, D=double):

or

Which density? (S=single, D=double, E=extended density):

B4. Type S.

If the Backup Disk is an 8-inch disk, proceed to Step B6.

If the Backup Disk is a 5.25 inch soft-sectored disk, **FORMAT** will display:

Number of sides? (1=single, 2=double):

B5. If your Backup Disk is a 5.25-inch soft-sectored disk, type 1. **FORMAT will display:**

48 TPI drive -- 40 tracks will be formatted

B6. **FORMAT will now display the message:**

Put the disk you wish to be formatted in drive B.
Press **RETURN** to begin, anything else to abort.

B7. Make sure that the Backup Disk is properly situated in drive B, and press **RETURN. The light on the disk drive will glow for several seconds. Then **FORMAT** will display:**

Do you have more disks to format? (y/n):

B8. If you have not yet formatted each of your Backup Disks, type **Y at this step, and resume the **FORMAT** activity at Step B3.**

If you have formatted all of your backup software, type **N**. **CP/M** will display:

A>

Now proceed to the **DUP** activity.

DUP

The **DUP** utility copies all of the data from one disk to another disk of the exact same type.

To use **DUP** for duplicating the data from the Distribution Disk, your Backup Disk must be the same size, and formatted to the same density, and number of sides.

The Distribution Disk (or Distribution Disk I) should be in drive A:
and the Backup Disk (or Backup Disk I) in drive B:.

1. At the A> prompt, type **DUP** and press **RETURN**. DUP will display the following:

```
Disk Utility Program
Version 2.04
```

```
Do you want to:
```

```
A copy and verify
B copy only
C verify only
```

```
Z exit to operating system
```

```
Selection:
```

2. Type **A**. DUP will display:

```
Source unit:
```

3. Type **A**. DUP will display:

```
Destination unit:
```

4. Type **B**. DUP will display:

```
Put source disk in drive A.
Put destination disk in drive B.
```

```
Press RETURN to begin:
```

5. Making certain that your disks are in the proper drives, press **RETURN**. DUP will copy the entire contents of your Distribution Disk onto your Backup Disk, as the lights on drives A and B glow alternately. Then DUP will display:

```
Copy finished.
```

After copying, DUP will automatically start to test the accuracy of the copy operation, as the glowing drive lights alternate more rapidly. When finished, DUP will display:

```
Verification finished.
```

Then DUP will redisplay the selection menu.

6. If you have duplicated all of your distribution software, proceed to Step 7.

If you have not yet duplicated all of your Distribution Disks, then insert a different Distribution Disk in drive A, and insert a different Backup Disk in drive B. Then resume the DUP activity at Step 2.

7. Type **Z** at the DUP selection menu. If you have more than one backup disk, DUP will display the following prompt:

Place a bootable disk in drive A and type any character:

8. Insert the Backup Disk (or Backup Disk I) in drive A, and type any keyboard character. Use your backup software for upcoming activities. CP/M will display the system prompt, as shown:

A>

9. Store your distribution software away in a safe place.

After completing the DUP activity, proceed to the text titled "Customizing Procedures".

Backup Procedure Three

Two or Three, Primary, 96 TPI, 5.25-inch, Floppy, Disk Drives

This procedure is used to construct a CP/M Backup Disk by copying both the CP/M Operating System and the utility files from your three CP/M Distribution Disks to a single blank disk.

Although your CP/M distribution software is recorded on 48 TPI (40 track) disks, you should use a 96 TPI (80 track) disk for the CP/M Backup Disk. Prepare for this procedure by labelling the 5.25-inch, 96 TPI, soft-sectored, blank disk as "CP/M Backup Disk".

NOTE: The blank disk that you will convert into a Backup Disk must be write enabled during all of the activities in this procedure. Therefore, do **not** cover the notch on the Backup Disk with a write-protect tab.

PROCEDURE SYNOPSIS

This procedure requires you to perform the following activities in sequence:

bootup
CONFIGUR
FORMAT
SYSGEN
PIP

To begin Procedure Three, insert CP/M Distribution Disk I in drive A and the Backup Disk in drive B. Then boot up to drive A. The CONFIGUR utility will be invoked automatically. Proceed to the CONFIGUR activity.

CONFIGUR

This CONFIGUR activity customizes the operating system that you placed in memory when you booted up so that you can copy data to your Backup Disk.

1. When the CONFIGUR activity is automatically invoked, it will display several messages. Wait for CONFIGUR to display the following message:

STANDARD SYSTEM (Y OR N)? <Y>:

2. Type the sequence of keyboard entries listed in Table 1-4. To the right of each entry is an excerpt or description of the part of the display that should appear immediately **after** you type the entry.

Keyboard Entries	Excerpt or Description of Desired Display
N B B 6 RETURN 96 RETURN Y X	CP/M CONFIGURATION (Main Menu) 5.25 INCH SOFT-SECTORED UNIT 0 STEP RATE: 30MS TRACK DENSITY: 48TPI 5.25 INCH SOFT-SECTORED UNIT 1 STEP RATE: 30MS TRACK DENSITY: 48TPI SOFT SECTOR UNIT 1 STEP RATE ? SOFT SECTOR UNIT 1 STEP RATE ? 6 SOFT SECTOR UNIT 1 TRACK DENSITY ? SOFT SECTOR UNIT 1 TRACK DENSITY ? 96 5.25 INCH SOFT-SECTORED UNIT 0 STEP RATE: 30MS TRACK DENSITY: 48TPI 5.25 INCH SOFT-SECTORED UNIT 1 STEP RATE: 6MS TRACK DENSITY: 96TPI CP/M CONFIGURATION (Main Menu) A> (CP/M system prompt)

Table 1-4
CONFIGUR Entries for 96 TPI Drives

NOTE: If the display excerpted or described in Table 1-4 does not appear, read the CONFIGUR text in Volume II: "The CP/M Reference Guide".

After you type this entry sequence, CP/M should display the A> system prompt. When the A> system prompt appears, proceed to the **FORMAT** activity.

FORMAT

This **FORMAT** activity prepares your Backup Disk for data storage.

1. After the CP/M prompt A>, type **FORMAT** and press **RETURN**. This entry invokes **FORMAT**, which displays a message in the form:

```
Format Version 2.04
This program is used to initialize a disk.
All information currently on the disk will be destroyed.
Is that what you want? (y/n):
```

2. Type **Y**. **FORMAT** will display:

```
Which drive do you wish to use for this operation?
```

3. Type **B**. **FORMAT** will display the prompt:

```
Which density? (S=single, D=double):
```

4. Type **D**. **FORMAT** will display the prompt:

```
Number of sides? (1=single, 2=double):
```

5. Type **2**. **FORMAT** will display the message:

```
96 TPI drive -- 80 tracks will be formatted
```

```
Put the disk you wish to be formatted in drive B.
Press RETURN to begin, anything else to abort.
```

NOTE: If the message does not indicate “96 TPI drive” and “80 tracks”, then reset the computer and start over at the beginning of Backup Procedure Three.

6. Make sure that the Backup Disk is properly situated in drive B, and press **RETURN**. The light on the disk drive will glow for several seconds. Then **FORMAT** will display:

```
Do you have more disks to format? (y/n):
```

7. Type **N** and CP/M will display the **A>** system prompt.

Proceed to the SYSGEN activity.

SYSGEN

This SYSGEN activity will help you to copy the CP/M Operating System to the Backup Disk. Perform this activity with Distribution Disk I in drive A, and the Backup Disk in drive B.

1. At the **A>** prompt, type **SYSGEN** and press **RETURN**. This entry invokes SYSGEN, which displays a message in the following form:

```
SYSGEN VER 2.0.04
SOURCE DRIVE NAME (OR RETURN TO SKIP):
```

2. Type **A**. SYSGEN will display:

```
SOURCE ON A, THEN TYPE RETURN
```

3. Press **RETURN**. SYSGEN will display:

```
FUNCTION COMPLETE.
COPY BIOS.SYS (Y/N):
```

4. Type **Y**. SYSGEN will display:

```
FUNCTION COMPLETE
DESTINATION DRIVE NAME (OR RETURN TO REBOOT):
```

5. Type **B**. SYSGEN will display:

```
DESTINATION ON B, THEN TYPE RETURN
```

6. Press **RETURN**. SYSGEN will display:

```
FUNCTION COMPLETE.
DESTINATION DRIVE NAME (OR RETURN TO REBOOT):
```

7. Press **RETURN**. CP/M will display:

```
A>
```

Leave CP/M Distribution Disk I in drive A and the CP/M Backup Disk in drive B, and proceed to the PIP activity.

PIP

The PIP utility will help you to copy files from your CP/M Distribution Disks to your Backup Disk. The method you use to operate PIP depends on the number of 5.25-inch disk drives you have in your primary drive group. Use only one of the two PIP methods specified below:

If you have two primary 5.25-inch, disk drives, then use PIP Method A and follow the numbered steps preceded by the letter A.

If you have three primary 5.25-inch, disk drives, then use PIP Method B and follow the numbered steps preceded by the letter B.

Method A

A1. At the A> prompt, type the following command:

```
A>PIP B:=A:*. *[V] RETURN
```

(*.* is an ambiguous or wildcard file name that stands for all of the files on Distribution Disk I.) PIP will begin to copy the files from Distribution Disk I one by one, and display the name of each file in the form:

```
COPYING -  
FILENAME.EXT
```

When PIP has finished copying the files, CP/M will redisplay the A> system prompt.

A2. Type the following command at the A> system prompt.

```
A>PIP B:=C:*. *[V] RETURN
```

(*.* is an ambiguous or wildcard file name that stands for all of the files on Distribution Disk II.) PIP will display the following prompt:

```
PUT DISK C IN DRIVE A: AND PRESS RETURN
```


- A3. Insert Distribution Disk II (temporarily called "DISK C") into drive A and press **RETURN**. The lights on the two 5.25-inch drives will glow alternately as PIP displays the names of the files it is copying in the following form:

```
COPYING -  
FILENAME.EXT
```

When PIP is finished copying all of the files from Distribution Disk II, the following prompt will be displayed:

```
PUT DISK A IN DRIVE A: AND PRESS RETURN
```

- A4. Insert Distribution Disk I (temporarily called "DISK A") into drive A and press **RETURN**. CP/M will display the A> system prompt.
- A5. Type the following command at the A> system prompt.

```
A>PIP B:=C:*. *[V] RETURN
```

(*.* is an ambiguous or wildcard file name that stands for all of the files on Distribution Disk III.) PIP will display the following prompt:

```
PUT DISK C IN DRIVE A: AND PRESS RETURN
```

- A6. Insert Distribution Disk III (temporarily called "DISK C") into drive A and press **RETURN**. The lights on the two 5.25-inch drives will glow alternately as PIP displays the names of the files it is copying in the following form:

```
COPYING -  
FILENAME.EXT
```

When PIP is finished copying all of the files from Distribution Disk III, the following prompt will be displayed:

```
PUT DISK A IN DRIVE A: AND PRESS RETURN
```

A7. Insert Distribution Disk I (temporarily called "DISK A") into drive A and press **RETURN**. CP/M will display the A> system prompt.

A8. Store your CP/M Distribution Disks in a safe place, and use your CP/M Backup Disk for upcoming activities.

After completing the PIP activity, proceed to the text titled "Customizing Procedures".

Method B

B1. At the A> prompt, type the following command:

```
A>PIP B: = A:*. *[V] RETURN
```

(*.* is an ambiguous or wildcard file name that stands for all of the files on Distribution Disk I.) PIP will begin to copy the files from Distribution Disk I one by one, and display the name of each file in the form:

```
COPYING -  
FILENAME.EXT
```

When PIP has finished copying the files, CP/M will redisplay the A> system prompt.

B2. Insert Distribution Disk II in drive C.

B3. Type the following command at the A> system prompt:

```
A>PIP B: = C:*. *[v]
```

(*.* is an ambiguous or wildcard file name that stands for all of the files on Distribution Disk II.) PIP will begin to copy the files from Distribution Disk II one by one, and display the name of each file in the form:

```
COPYING -  
FILENAME.EXT
```

When PIP has finished copying the files, CP/M will redisplay the A> system prompt.

B4. Remove Distribution Disk II from drive C and insert Distribution Disk III in drive C.

B5. Type the following command at the A> system prompt:

```
A>PIP B: = C:*. *[v]
```

(*.* is an ambiguous or wildcard file name that stands for all of the files on Distribution Disk III.) PIP will begin to copy the files from Distribution Disk III one by one, and display the name of each file in the form:

```
COPYING -  
FILENAME.EXT
```

When PIP has finished copying the files, CP/M will redisplay the A> system prompt.

After completing the PIP activity, proceed to the text titled “Customizing Procedures”.

Backup Procedure Four

One Primary, 96 TPI, 5.25-inch, Floppy, Disk Drive and One or Two 48 TPI, 5.25-inch, Floppy, Disk Drive(s)

This procedure is used to construct a CP/M Backup Disk by copying both the CP/M Operating System and the utility files from your three CP/M Distribution Disks to a single blank disk.

Although your CP/M distribution software is recorded on 48 TPI (40 track) disks, you should use a single 96 TPI (80 track) disk for the CP/M Backup Disk. Prepare for this procedure by labelling the 5.25-inch, 96 TPI, soft-sectored, blank disk as “CP/M Backup Disk”.

The blank disk that you will convert into a Backup Disk must be write enabled during all of the activities in this procedure. Therefore, do **not** cover the notch on the Backup Disk with a write-protect tab.

NOTE: Backup Procedure Four does not specify all of the drive letters that you must include in the command lines you enter. Therefore, before you enter these command lines, you must determine the drive letters that will correspond to the physical drive units in your primary drive group.

PROCEDURE SYNOPSIS

This procedure requires you to perform the following activities in sequence:

bootup
CONFIGUR
FORMAT
SYSGEN
PIP

To begin Backup Procedure Four, insert CP/M Distribution Disk I in a 48 TPI drive, and the Backup Disk in the 96 TPI drive. Then boot up to the 48 TPI drive containing CP/M Distribution Disk I. The CONFIGUR utility will be invoked automatically. Proceed to the CONFIGUR activity.

CONFIGUR

This CONFIGUR activity customizes the operating system that you placed in memory when you booted up so that you can copy data to your Backup Disk.

1. When the CONFIGUR activity is automatically invoked, it will display several messages. Wait for CONFIGUR to display the following message:

STANDARD SYSTEM (Y OR N)? <Y>:

2. Type **N** at the "STANDARD SYSTEM" prompt. CONFIGUR will display the "CP/M CONFIGURATION" menu.
3. Type **B** at the "SELECTION" prompt beneath the "CP/M CONFIGURATION" menu. CONFIGUR will display the disk parameters menu (submenu B), showing the status of your 5.25-inch drive units.
4. Select the "SOFT-SECTORED UNIT" that corresponds to your 96 TPI primary drive. CONFIGUR will prompt you to enter a "STEP RATE".
5. Type **6** for the step rate of your 96 TPI primary drive. (This entry is necessary to change the 30 ms default step rate.) CONFIGUR will prompt you to enter a "TRACK DENSITY".

6. Type **96** for the track density of your 96 TPI primary drive. (This entry is necessary to change the 48 TPI default track density.) CONFIGUR will display the changed status of your 96 TPI drive.
7. Type **Y** at the "SELECTION" prompt beneath the drive disk parameters menu (submenu B). CONFIGUR will redisplay the "CP/M CONFIGURATION" menu.
8. Type **X** at the "SELECTION" prompt beneath the "CP/M CONFIGURATION" menu. CP/M will display the system prompt.

Proceed to the FORMAT activity.

FORMAT

This FORMAT activity prepares your Backup Disk for data storage.

1. After the CP/M prompt **A>**, type **FORMAT** and press **RETURN**. This entry invokes FORMAT, which displays a message in the form:

```
Format Version 2.04
This program is used to initialize a disk.
All information currently on the disk will be destroyed.
Is that what you want? (y/n):
```

2. Type **Y**. FORMAT will display:

Which drive do you wish to use for this operation?
3. Type the drive letter that corresponds to your 96 TPI drive. FORMAT will display the prompt:

Which density? (S=single, D=double):
4. Type **D**. FORMAT will display the prompt:

```
Number of sides? (1=single, 2=double):
```

5. Type **2**. **FORMAT** will display the message:

96 TPI drive -- 80 tracks will be formatted

Put the disk you wish to be formatted in drive x.
Press **RETURN** to begin, anything else to abort.

NOTE: If the message does not indicate "96 TPI drive" and "80 tracks", then reset the computer and go back to the beginning of Backup Procedure Four and start over.

6. Make sure that the Backup Disk is properly situated in the 96 TPI drive, and press **RETURN**. The light on the disk drive will glow for several seconds. Then **FORMAT** will display:

Do you have more disks to format? (y/n):

7. Type **N** and **CP/M** will display the **A>** system prompt.

Proceed to the **SYSGEN** activity.

SYSGEN

This **SYSGEN** activity will help you to copy the **CP/M** Operating System to the Backup Disk. Perform this activity with Distribution Disk I in the 48 TPI drive you used to boot up (drive A), and the Backup Disk in the 96 TPI drive.

1. At the **A>** prompt, type **SYSGEN** and press **RETURN**. This entry invokes **SYSGEN**, which displays a message in the following form:

SYSGEN VER 2.0.04
SOURCE DRIVE NAME (OR RETURN TO SKIP):

2. Type **A**. **SYSGEN** will display:

SOURCE ON A, THEN TYPE RETURN

3. Press **RETURN**. **SYSGEN** will display:

FUNCTION COMPLETE.
COPY BIOS.SYS (Y/N):

4. Type **Y**. SYSGEN will display:

```
FUNCTION COMPLETE
DESTINATION DRIVE NAME (OR RETURN TO REBOOT):
```

5. Type the drive letter that corresponds to your 96 TPI drive. SYSGEN will display:

```
DESTINATION ON B, THEN TYPE RETURN
```

6. Press **RETURN**. SYSGEN will display:

```
FUNCTION COMPLETE.
DESTINATION DRIVE NAME (OR RETURN TO REBOOT):
```

7. Press **RETURN**. CP/M will display:

```
A>
```

Leave CP/M Distribution Disk I in the 48 TPI drive you used to boot up (drive A), leave the Backup Disk in the 96 TPI drive, and proceed to the PIP activity.

PIP

This PIP activity will help you to copy files from your CP/M Distribution Disks to your Backup Disk. The method you use to operate PIP depends on the number of 5.25-inch disk drives you have in your primary drive group. Use only one of the two PIP methods specified below:

If you have two primary 5.25-inch, disk drives, (one 96 TPI and one 48 TPI) then use PIP Method A and follow the numbered steps preceded by the letter A.

If you have three primary 5.25-inch, disk drives, (one 96 TPI and two 48 TPI) then use PIP Method B and follow the numbered steps preceded by the letter B.

Method A

- A1. At the A> prompt, type the following command:

```
A>PIP x: = A:*. *[V] RETURN
```

Where **x** stands for the drive letter that references the Backup Disk within the 96 TPI drive;

where **A** is the drive letter that references Distribution Disk I within the 48 TPI drive;

where ***.*** is an ambiguous or wildcard file name that stands for all of the files on Distribution Disk I; and

where **[V]** is an option that verifies the accuracy of this PIP activity.

PIP will begin to copy the files from Distribution Disk I one by one, and display the name of each file in the form:

```
COPYING -  
FILENAME. EXT
```

When PIP has finished copying the files, CP/M will redisplay the A> system prompt.

A2. Type a command in the following form at the A> system prompt:

```
A>PIP x: = y: *.* [V] RETURN
```

Where **x** stands for the drive letter that references the Backup Disk within the 96 TPI drive;

where **y** stands for the drive letter that references Distribution Disk II within the 48 TPI drive;

where ***.*** is an ambiguous or wildcard file name that stands for all of the files on Distribution Disk II; and

where **[V]** is an option that verifies the accuracy of this PIP activity.

When you enter a command in this form, a prompt in the following form will be displayed:

```
PUT DISK y IN DRIVE A: AND PRESS RETURN
```

- A3. Insert Distribution Disk II (temporarily called "DISK y") into the 48 TPI drive (drive A) and press **RETURN**. PIP will display the names of the files it is copying in the following form:

```
COPYING -  
FILENAME.EXT
```

When PIP is finished copying all of the files from Distribution Disk II, the following prompt will be displayed:

```
PUT DISK A IN DRIVE A: AND PRESS RETURN
```

- A4. Insert Distribution Disk I (temporarily called "DISK A") into the 48 TPI drive (drive A) and press **RETURN**. CP/M will display the A> system prompt.
- A5. Type a command in the following form at the A> system prompt:

```
A>PIP x:=y:*.*[V] RETURN
```

Where **x** stands for the drive letter that references the Backup Disk within the 96 TPI drive;

where **y** stands for the drive letter that references Distribution Disk III within the 48 TPI drive;

where ****** is an ambiguous or wildcard file name that stands for all of the files on Distribution Disk III; and

where **[V]** is an option that verifies the accuracy of this PIP activity.

When you enter a command in this form, a prompt in the following form will be displayed:

```
PUT DISK y IN DRIVE A: AND PRESS RETURN
```

- A6. Insert Distribution Disk III (temporarily called "DISK C") into the 48 TPI drive (drive A) and press **RETURN**. PIP will display the names of the files it is copying in the following form:

```
COPYING -  
FILENAME.EXT
```

When PIP is finished copying all of the files from Distribution Disk III, the following prompt will be displayed:

```
PUT DISK A IN DRIVE A: AND PRESS RETURN
```

- A7. Insert Distribution Disk I (temporarily called "DISK A") into the 48 TPI drive (drive A) and press **RETURN**. CP/M will display the A> system prompt.
- A8. Store your CP/M Distribution Disks in a safe place, and use your CP/M Backup Disk for upcoming activities.

After completing the PIP activity, proceed to the text titled "Customizing Procedures".

Method B

- B1. At the A> prompt, type the following command:

```
A>PIP x: = A:*. *[V] RETURN
```

Where **x** stands for the drive letter that references the Backup Disk within the 96 TPI drive;

where **A** is the drive letter that references Distribution Disk I within the 48 TPI drive you used to boot up;

where ***.*** is an ambiguous or wildcard file name that stands for all of the files on Distribution Disk I; and

where **[V]** is an option that verifies the accuracy of this PIP activity.

PIP will begin to copy the files from Distribution Disk I one by one, and display the name of each file in the form:

```
COPYING -  
FILENAME.EXT
```

When PIP has finished copying the files, CP/M will redisplay the A> system prompt.

- B2. Insert Distribution Disk II in the 48 TPI drive that you did **not** use to boot up.
- B3. Type a command in the following form at the A> system prompt:

A>PIP x: = y:*.*[V] RETURN

Where **x** stands for the drive letter that references the Backup Disk within the 96 TPI drive;

where **y** stands for the drive letter that references Distribution Disk II within the 48 TPI drive you did **not** use to boot up;

where ***.*** is an ambiguous or wildcard file name that stands for all of the files on Distribution Disk II; and

where **[V]** is an option that verifies the accuracy of this PIP activity.

PIP will begin to copy the files from Distribution Disk II one by one, and display the name of each file in the form:

```
COPYING -
FILENAME.EXT
```

When PIP has finished copying the files, CP/M will redisplay the A> system prompt.

- B4. Remove Distribution Disk II from the 48 TPI drive that you did **not** use to boot up and insert Distribution Disk III in this drive.
- B5. Type a command in the following form at the A> system prompt:

A>PIP x: = y:*.*[V] RETURN

Where **x** stands for the drive letter that references the Backup Disk within the 96 TPI drive;

where **y** stands for the drive letter that references Distribution Disk III within the 48 TPI drive you did **not** use to boot up;

where ***.*** is an ambiguous or wildcard file name that stands for all of the files on Distribution Disk III; and

where **[V]** is an option that verifies the accuracy of this PIP activity.

PIP will begin to copy the files from Distribution Disk III one by one, and display the name of each file in the form:

```
COPYING -  
FILENAME.EXT
```

When PIP has finished copying the files, CP/M will redisplay the A> system prompt.

After completing the PIP activity, proceed to the text titled "Customizing Procedures".

Backup Procedure Five

An H/Z67 (Winchester Disk) Primary Drive

Use this procedure to back up an 8-inch Distribution Disk by copying both the CP/M Operating System and the utility files to a partition on the Winchester Disk. This partition will be known, for now, as the "Backup Partition".

Before beginning Backup Procedure Five, you should perform the Winchester Disk Partitioning Operation using the PART program. The PART program and its documentation are provided with your H/Z67 hardware.

NOTE: To enable you to copy data to a Winchester Disk partition, write-protect switch 0 (located on the front panel of the H/Z67 drive model) should be pressed down.

PROCEDURE SYNOPSIS

This procedure requires you to perform the following activities in sequence:

```
bootstrap
CONFIGUR
ASSIGN
FORMAT
SYSGEN
PIP
```

To begin Backup Procedure Five, insert your CP/M Distribution Disk into the floppy disk drive slot (right-hand slot) of the H/Z67 drive unit. Enter the bootup command necessary for booting-up to this floppy disk drive. This drive will be referred to as drive A: throughout this procedure. When the CONFIGUR utility is automatically invoked, wait for the "STANDARD SYSTEM" prompt and type Y.

Then proceed to the ASSIGN activity.

ASSIGN

The ASSIGN utility assigns H/Z-67 Winchester Disk partitions to drive names. Partitions should have already been created using the PART program (as described in the PART documentation). CP/M will allow one or two partitions to be assigned to drive names on the Winchester Disk. But during this procedure, you will assign only one partition to one drive name.

1. Type **ASSIGN ?** and press **RETURN**. ASSIGN will display a list of the partition names and occurrence numbers that were set up with the PART program. Such a display might look something like this:

PARTITION NAME	OCCUR	SIZE
-----	----	-----
CPM	; 0	3200k
CPM	; 1	2860k
CPM	; 2	2020k
HDOS	; 0	1600k

Your partitions will probably have different names and numbers, though they will be displayed in this form.

2. Select the partition that you want to become your Backup Partition.
3. Type **ASSIGN B:={partition name};{n}** and press **RETURN**.

Where **{partition name}** is a variable used to represent the name of the partition you select; and

where **{n}** is a variable used to represent the occurrence number of the partition you select.

A partition's name and occurrence number must be separated by a semicolon (;). Hence, a sample entry would be **ASSIGN B:CPM;2**.

4. If you wish to confirm the assignment, type **ASSIGN** and press **RETURN**. The **ASSIGN** utility will display the drive assignment you just entered. A sample display might appear as shown:

B: = CPM;2

Leave your Distribution Disk in drive A: and proceed to the **FORMAT** activity.

FORMAT

The **FORMAT** utility will prepare the Backup Partition on your Winchester Disk for data storage.

1. After the CP/M prompt **A>**, type **FORMAT** and press **RETURN**. This entry invokes **FORMAT**, which will display the following message:

```
Format Version 2.04
This program is used to initialize a disk.
All information currently on the disk will be destroyed.
Is that what you want? (y/n):
```

2. Type **Y**. **FORMAT** will display:

Which drive do you wish to use for this operation?

3. Type **B**. **FORMAT** will display:

Press **RETURN** to begin.