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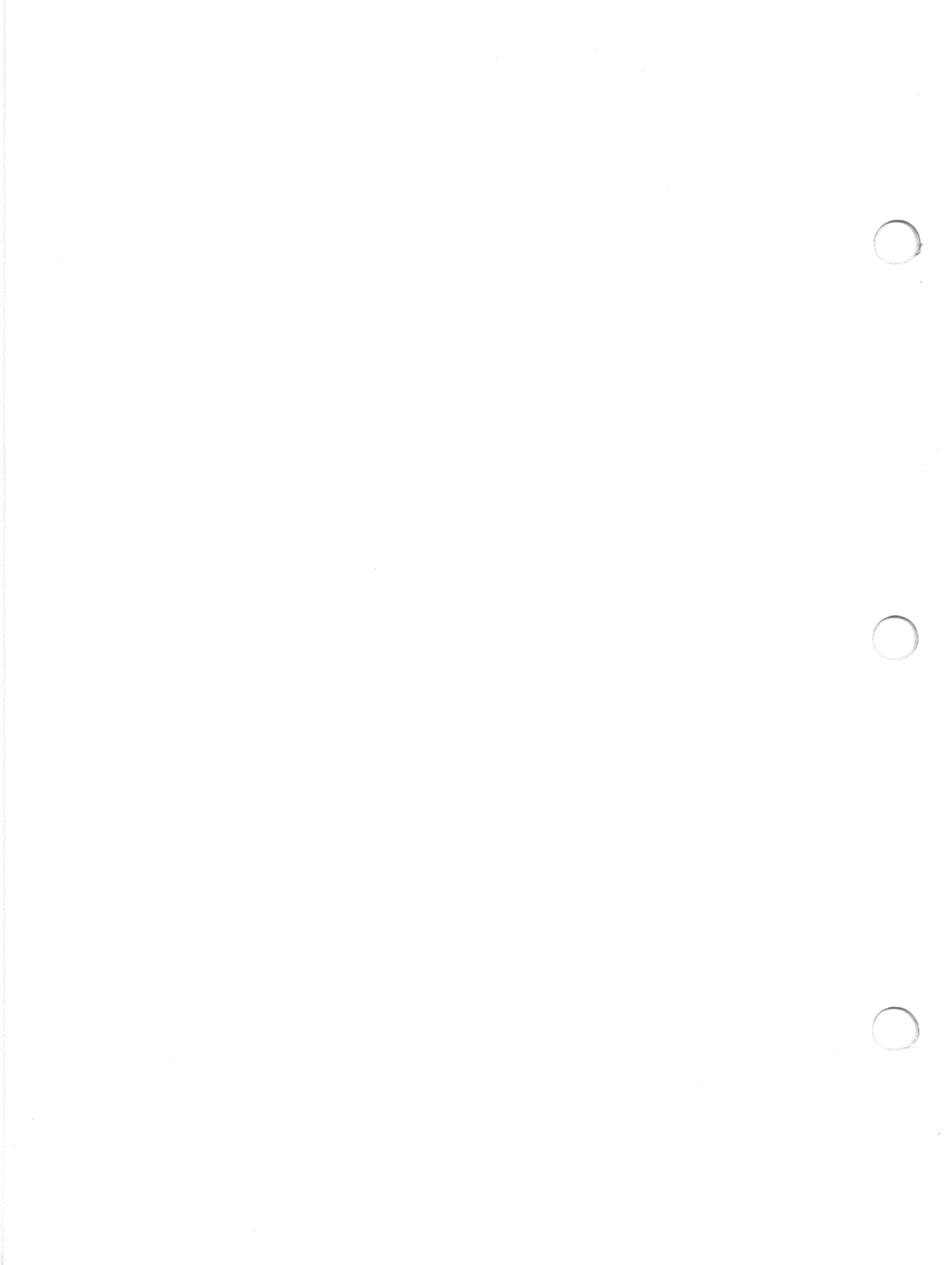
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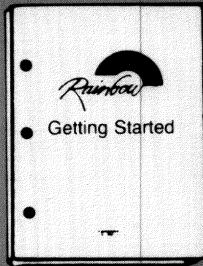
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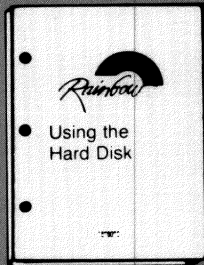


## To get you started . . .



### Getting Started

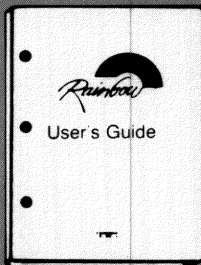
Tells you how to start your operating system and copy the operating system diskette.



### Using the Hard Disk

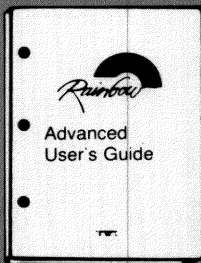
Tells you how to set up your hard disk to use with the operating system.

## For more information . . .



### User's Guide

Contains detailed information about your operating system and how to use its commands.



### Advanced User's Guide

Contains detailed information about the operating system's more advanced commands; for example, those commands that a programmer would use.

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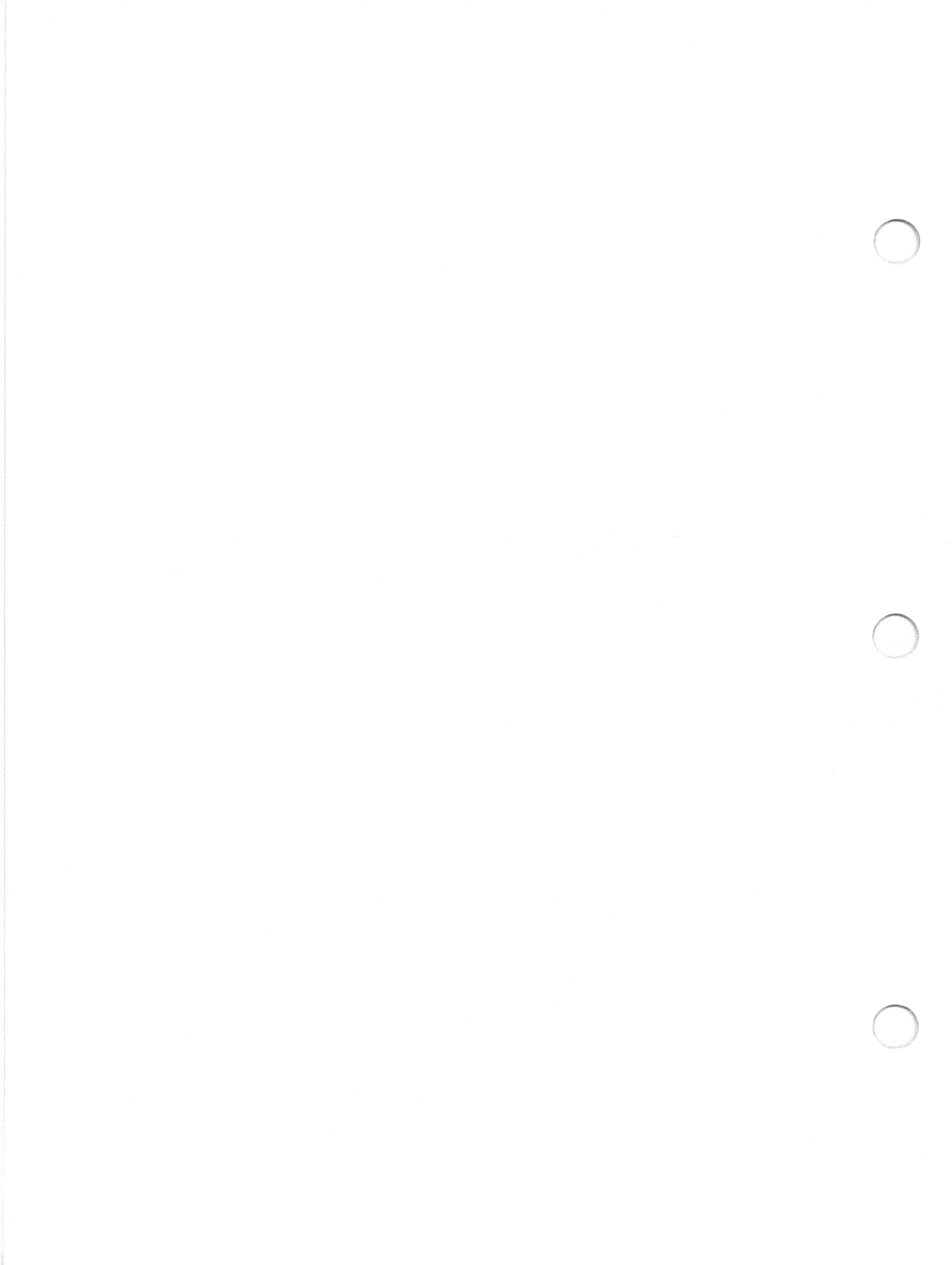
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## **MS™-DOS Version 2.11 Update Instructions**

**AV-EA04A-XV**

**October 1984**

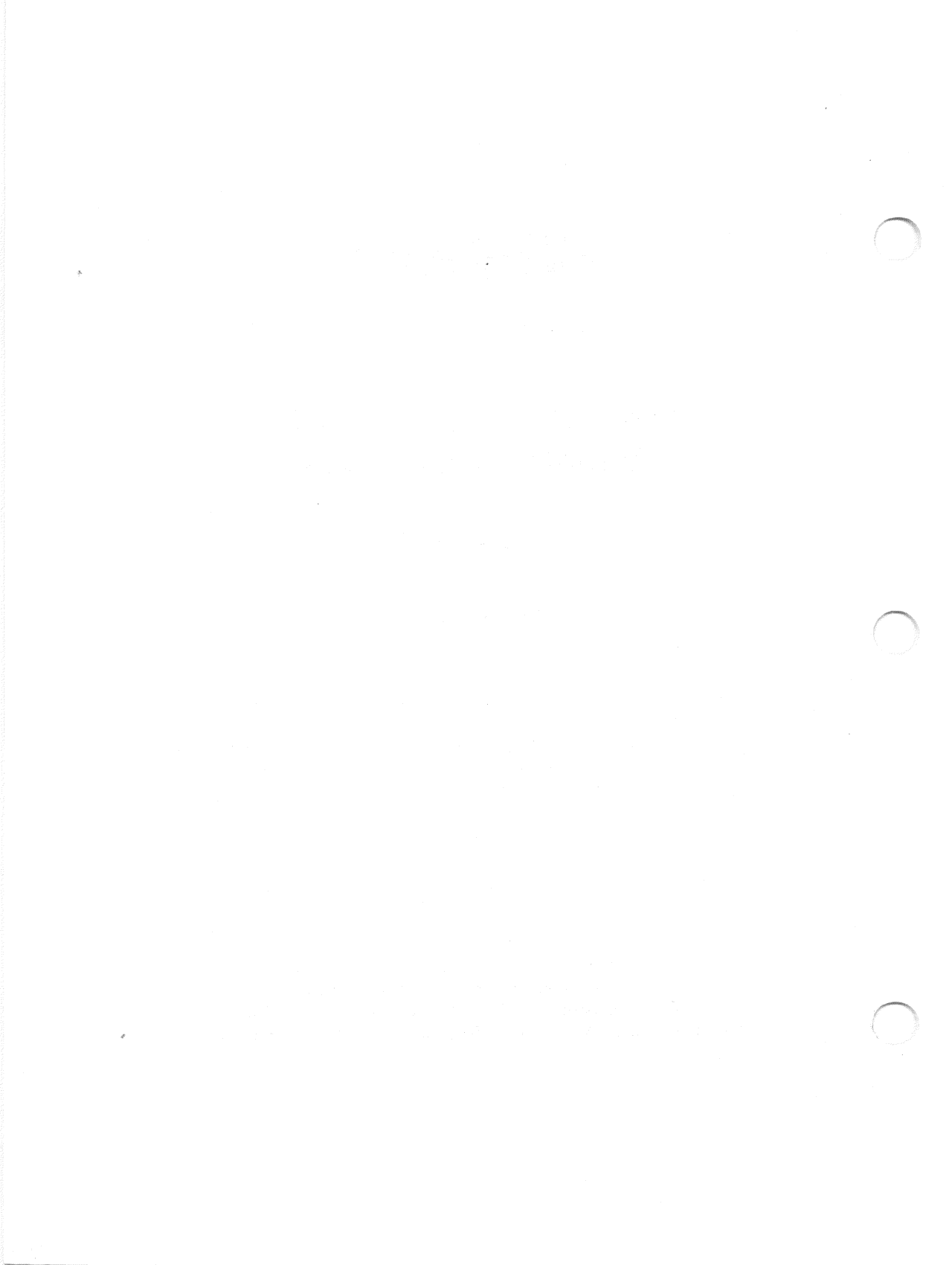
Use these instructions if you have been using the MS™-DOS Version 2.05 or Version 2.01 operating system. If you are a first-time user of the MS™-DOS operating system, you can ignore these instructions and go to the *Rainbow MS™-DOS Version 2.11 Getting Started* in this kit.

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# Updating the MS-DOS Operating System

These update instructions are for users of the MS-DOS operating system that have been using the MS-DOS Version 2.05 or Version 2.01 operating system. If you are a first-time user of the MS-DOS operating system, you can ignore these instructions and go to the *Rainbow MS-DOS Version 2.11 Getting Started* in this kit.

You have to update the MS-DOS operating system if you have one of the following combinations:

**Table 1. Update Instructions**

| <b>If you...</b>   | <b>Go to...</b>  |
|--|--|
| Are a new user of the MS-DOS operating system with the Rainbow Computer                    | <i>Rainbow MS-DOS Version 2.11 Getting Started</i> in this kit |
| Use the MS-DOS Version 2.01 operating system with diskettes that contain application files | Page 2   |
| Use the MS-DOS Version 2.05 operating system with diskettes that contain application files | Page 4   |
| Use the MS-DOS Version 2.01 or Version 2.05 operating system with copy-protected diskettes | Page 6   |
| Use the MS-DOS Version 2.05 or Version 2.01 operating system with a hard disk              | Page 9   |

## **IMPORTANT**

You should make a copy of the master MS-DOS Version 2.11 operating system diskette before you use it. Store the original, master diskette in a safe place.

### Updating Diskettes that Contain The MS-DOS Version 2.01 Operating System

To update a diskette that contains the MS-DOS Version 2.01 operating system AND application files or other programs for the MS-DOS Version 2.11 operating system, you will:

- Copy MS-DOS system files from the MS-DOS Version 2.11 operating system diskette to a blank diskette.
- Copy application files or other programs from the MS-DOS Version 2.01 diskette to the diskette that contains the MS-DOS Version 2.11 operating system files.

Follow the instructions below:

1. Turn on the Rainbow computer and insert the MS-DOS Version 2.11 operating system diskette into drive A.
2. Insert a blank diskette into drive B.
3. Press the A key to start the MS-DOS operating system.
4. Type the date and the time.

The computer displays the operating system prompt, A>.

5. Use the FORMAT program to prepare the blank diskette in drive B.  
Type:

```
A>FORMAT B: /I/S Return
```

#### NOTE

To properly update the operating system, you must use the FORMAT program to copy the system files. DO NOT use the SYS program.

When the **FORMAT** program is finished, MS-DOS displays the operating system prompt. The diskette in drive B now contains two hidden MS-DOS Version 2.11 system files and the file named "COMMAND.COM".

6. Use the **COPY** command to copy any MS-DOS Version 2.11 programs, (**DISKCOPY**, **FORMAT**, and **PRINT**, for example) to the diskette in drive B. Most of these programs are new versions and should be used with the new version of the operating system files.

For example, to copy the **PRINT** program to the diskette in drive B, type:

```
A>COPY PRINT.COM B: 
```

7. Use the **COPY** command to copy application files or other programs to the diskette in drive B.
  - Remove the MS-DOS Version 2.11 operating system diskette from drive A.
  - Insert the diskette that contains the MS-DOS Version 2.01 operating system diskette and the application files or other programs into drive A.
  - Type:

```
A>COPY filename.typ B: 
```

Where `filename.typ` is the name of the file you want to copy from the MS-DOS Version 2.01 diskette in drive A to the updated diskette in drive B.

### **IMPORTANT**

Be sure that you **DO NOT** copy an old version of "COMMAND.COM" or an old version of any other MS-DOS operating system file to the diskette in drive B.

## Updating The MS-DOS Operating System

---

Your diskette in drive B is now ready to use with the MS-DOS Version 2.11 operating system. With this diskette, you can:

- Start and use the MS-DOS Version 2.11 operating system
- Run programs or applications

### **NOTE**

When you format diskettes, the default drive must be the drive that contains the MS-DOS Version 2.11 operating system diskette. This insures that your diskettes are properly updated to the MS-DOS Version 2.11 operating system.

## Updating Diskettes that Contain The MS-DOS Version 2.05 Operating System

To update the operating system on a diskette that contains the MS-DOS Version 2.05 operating system AND other programs or files, you will:

- Use the LDCOPY program to place the MS-DOS Version 2.11 operating system loader on the MS-DOS Version 2.05 diskette.
- Use the SYS program to copy the MS-DOS Version 2.11 system files to the MS-DOS Version 2.05 diskette.
- Use the COPY command to copy the file COMMAND.COM to the MS-DOS Version 2.05 diskette.
- Use the COPY command to copy the MS-DOS Version 2.11 programs, (BACKUP, FORMAT, and DISKCOPY, for example) to the MS-DOS Version 2.05 diskette.



Follow the instructions below:

1. Turn on the Rainbow computer and insert the MS-DOS Version 2.11 operating system diskette into drive A.
2. Insert the diskette that contains the MS-DOS Version 2.05 operating system into drive B.
3. Press the A key to start the MS-DOS operating system.
4. Type the date and the time.

The computer displays the operating system prompt, A>.

5. Use the LDCOPY program to place the MS-DOS Version 2.11 loader on the diskette that contains the MS-DOS Version 2.05 operating system in drive B. Type:

```
A>LDCOPY B: 
```

When the LDCOPY program is finished, the computer displays the A> prompt.

6. Use the SYS program to copy the MS-DOS Version 2.11 system files from your new diskette to the MS-DOS Version 2.05 operating system diskette in drive B. Type:

```
A>SYS B: 
```

When the SYS program is finished, the computer displays the A> prompt.

7. Use the COPY command to copy the file named "COMMAND.COM" from your new diskette to the diskette that contains the MS-DOS Version 2.05 operating system in drive B. Type:

```
A>COPY COMMAND.COM B: 
```

When the COPY command is complete, the computer displays the A> prompt.

## Updating The MS-DOS Operating System

---

8. Use the COPY command to copy any MS-DOS Version 2.11 programs, (DISKCOPY, FORMAT, and BACKUP, for example) to the diskette in drive B. Most of these programs are new versions and should be used with the new version of the operating system.

For example, to copy the BACKUP program to the diskette in drive B, type:

```
A>COPY BACKUP.EXE B: 
```

Your diskette in drive B is now ready to use with the MS-DOS Version 2.11 operating system. With this diskette, you can:

- Start and use the MS-DOS Version 2.11 operating system
- Run programs or applications

### Updating Diskettes that Contain MS-DOS Version 2.05 or Version 2.01 Operating System and Are Copy-Protected

To update the operating system on a copy-protected diskette that contains the MS-DOS Version 2.05 or MS-DOS Version 2.01 operating system, you will:

- Copy the files on the copy-protected diskette to a blank, MS-DOS formatted diskette
- Reformat the copy-protected diskette
- Copy the files back to the copy-protected diskette

### NOTE

If you want to put MS-DOS Version 2.11 on a copy-protected diskette that does not contain MS-DOS Version 2.05 or Version 2.01, you can follow the instructions below. However, the copy-protected diskette **MUST** have 50,000 bytes of free space.

Follow the instructions below:

1. Turn on the Rainbow computer and insert the MS-DOS Version 2.11 operating system diskette into drive A.
2. Insert a blank diskette into drive B. This diskette is referred to as the "temporary holding diskette."
3. Press the A key to start the MS-DOS operating system.
4. Type the date and the time.

The computer displays the operating system prompt, A>.

5. Use the FORMAT program to prepare the blank diskette in drive B. Type:

```
A>FORMAT B: /I 
```

When the FORMAT program is finished, MS-DOS displays the operating system prompt.

6. Remove the MS-DOS Version 2.11 operating system diskette from drive A and insert the copy-protected diskette into drive A.
7. Use the COPY command to copy the files on the copy-protected diskette in drive A to the blank, formatted diskette in drive B. Type:

```
A>COPY *.* B: 
```

MS-DOS copies the files from the copy-protected diskette in drive A to the temporary holding diskette in drive B.

## Updating The MS-DOS Operating System

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8. Use the DEL command to remove the file named "COMMAND.COM" from the temporary holding diskette. Type:

```
A>DEL B:COMMAND.COM 
```

9. Change the current default drive to drive B by typing:

```
A>B: 
```

10. Remove the temporary holding diskette from drive B and insert the MS-DOS Version 2.11 operating system diskette into the same drive.
11. Use the FORMAT program to copy the MS-DOS Version 2.11 system files on the diskette in drive B to the diskette in drive A. Type:

```
B>FORMAT A:/S 
```

### IMPORTANT

DO NOT use the /I switch with the above FORMAT program.

When the FORMAT program is finished, the MS-DOS operating system displays the operating system prompt. The diskette in drive A now contains two hidden MS-DOS Version 2.11 operating system files and the file named "COMMAND.COM".

12. Remove the MS-DOS Version 2.11 operating system diskette from drive B and insert the temporary holding diskette in the same drive.
13. Use the COPY command to copy the files from the temporary holding diskette in drive B to the copy-protected diskette in drive A. Type:

```
B>COPY *.* A: 
```

### **NOTE**

If you have any MS-DOS Version 2.05 or Version 2.01 programs (DISKCOPY and FORMAT, for example) on the copy-protected diskette, you should copy the new version of the program from the MS-DOS Version 2.11 operating system diskette to the copy-protected diskette.

You can now use your original copy-protected diskette to start the MS-DOS Version 2.11 operating system.

### **Updating to MS-DOS Version 2.11 on a Hard Disk**

The update instructions for a hard disk depend on whether you have a 10-megabyte partition on your hard disk. To determine whether you have a 10-megabyte partition, follow the steps below:

1. Turn on the Rainbow computer and insert the MS-DOS Version 2.11 operating system diskette into drive A.
2. Press the A key to start the MS-DOS operating system.

If your screen looks like Screen 1, follow the instructions in the section "Updating to MS-DOS Version 2.11 on a Hard Disk without a 10-Megabyte Partition".

If your screen looks like Screen 2, then follow the instructions in the section "Updating to MS-DOS Version 2.11 on a Hard Disk with a 10-Megabyte Partition".

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**Microsoft MS-DOS version 2.11  
Copyright 1981,82,83 Microsoft Corp.**

**Command v. 2.11  
Current date is Sat 9-01-1984  
Enter new date:**

**Screen 1. MS-DOS Version 2.11 Start-Up Screen  
without a 10-Megabyte Partition**

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Microsoft MS-DOS version 2.11

Copyright 1981,82,83 Microsoft Corp.

**WARNING:** Only 8 MBytes of the hard disk is usable.  
Refer to the MS-DOS installation instructions.

Command v. 2.11

Current date is Sat 9-01-1984

Enter new date:

Screen 2. MS-DOS Version 2.11 Start-Up Screen  
with a 10-Megabyte Partition

**Updating to MS-DOS Version 2.11 on a Hard Disk without a 10-Megabyte Partition.** If your computer displays Screen 1 when you start the MS-DOS Version 2.11 operating system, you do not have a 10-megabyte partition on your hard disk. Follow the steps below to copy the MS-DOS Version 2.11 operating system on your hard disk.

You will:

- Use the LDCOPY program to place the MS-DOS Version 2.11 operating system loader on the hard disk partition(s).
- Use the SYS program to copy the MS-DOS Version 2.11 system files to the hard disk partition(s).
- Use the COPY command to copy the file COMMAND.COM to the hard disk partition(s).
- Use the COPY command to copy the MS-DOS Version 2.11 programs, (BACKUP, FORMAT, and DISKCOPY, for example) to the MS-DOS Version 2.05 hard disk partition(s).

Follow the instructions below:

### NOTE

You must follow these steps for **all** MS-DOS partitions to properly update the operating system on your hard disk.

1. Type the date and the time.

The computer displays the operating system prompt, A>.

2. Use the LDCOPY program to place the MS-DOS Version 2.11 loader on your hard disk partition that contains the MS-DOS Version 2.05 operating system. Type:

```
A>LDCOPY E: 
```

When the LDCOPY program is finished, the computer displays the A> prompt.



3. Use the SYS program to copy the MS-DOS Version 2.11 system files from your new diskette to the hard disk partition. Type:

A>SYS E:

When the SYS program is finished, the computer displays the A> prompt.

### IMPORTANT

If the SYS program displays the message, "No room for system on destination diskette," you do not start the operating system from the hard disk partition. You should ignore the message and continue with step 4.

4. Use the COPY command to copy the file named "COMMAND.COM" from your new diskette to the hard disk partition, (drive E:). Type:

A>COPY COMMAND.COM E:

When the COPY command is complete, the computer displays the the A> prompt.

5. Use the COPY command to copy any MS-DOS Version 2.11 programs, (DISKCOPY, FORMAT, and BACKUP, for example) to the hard disk partition. Most of these programs are new versions and should be used with the new version of the operating system.

For example, to copy the BACKUP program to the hard disk drive E, type:

A>COPY BACKUP.EXE E:

Your hard disk partition is now ready to use with the MS-DOS Version 2.11 operating system.

**Updating to MS-DOS Version 2.11 on a Hard Disk with a 10-Megabyte Partition.** If your computer displays Screen 2 when you start the MS-DOS Version 2.11 operating system, you have a 10-megabyte partition. Follow the instructions below to update the operating system on the hard disk. You will:

- Copy all the files from the hard disk to back-up diskettes.
- Re-initialize and re-partition the hard disk with the Winchester Utility Program Version 2.0 diskette that is contained in this kit.
- Format the MS-DOS hard disk partition(s) and copy the MS-DOS Version 2.11 operating system files to the hard disk partition(s).
- Copy the files from the back-up diskettes back to the hard disk. You will copy only those files that do not already exist on the hard disk partition(s).
- Copy any MS-DOS programs (DISKCOPY and FORMAT, for example) that you need from the MS-DOS Version 2.11 operating system diskette to the hard disk partition(s).

Follow the instructions below:

1. Type the date and the time.

The computer displays the operating system prompt, A>.

2. Insert a blank, formatted diskette into drive B.
3. Use the BACKUP program on the MS-DOS Version 2.11 operating system diskette to copy the contents of the MS-DOS hard disk partition to other diskettes. Type:

```
A>BACKUP E:\*.* /A TO B: 
```

Where:

- E: Is the MS-DOS hard disk partition that you want to copy files from
- B: Is the diskette drive that contains the diskette that you will copy the files to

Then follow the instructions at the bottom of the screen.

4. After you copy the files from the hard disk, find the Winchester Utility Program Version 2.0 diskette contained in this kit. Use this diskette to re-initialize and re-partition your hard disk.

### NOTE

You should use this Winchester Utility Program Version 2.0 diskette, instead of the Winchester Utility Program Version 1.0 diskette whenever you use this program in the future.

- a. Remove the MS-DOS Version 2.11 diskette from drive A and insert the Winchester Utility Program Version 2.0 diskette in the drive A.
- b. Reset the Rainbow computer by pressing:

**Set-Up** **Ctrl/Set-Up**

- c. When the computer displays the Main System Menu, press the A key.

The computer displays the Winchester Disk Utility Program Main Screen.

- d. Press the down arrow key once so the arrow points to the "Test and initialize the hard disk" option. Then press:

**Do**

Follow the instructions on the screen to test and initialize the hard disk. When the testing is complete, the computer displays the Winchester Disk Utility Program Main Screen again.

- e. Press the down arrow key twice so the arrow points to the "Repartition the hard disk" option. Then press:

**Do**

The computer displays the operating system menu. Follow the instructions on the screen to choose your partition arrangement.

### **IMPORTANT**

We recommend that you divide the hard disk into the 8-megabyte and the 2-megabyte partitions. You can no longer choose a 10-megabyte partition. The contents of your 10-megabyte partition can be contained in the 8-megabyte partition of the new arrangement. Even though you can repartition with any of the available combinations, choosing the above combination insures that the files can be easily restored.

After you select the new partition arrangement, the computer returns to the Winchester Disk Utility Program Main Screen.

- f. Remove the Winchester Utility Program Version 2.0 diskette from drive A. Store it in a safe place in case you ever need to use it again.
- g. To leave the Winchester Utility Program, press:

**Set-Up** **Ctrl/Set-Up**

5. Insert the MS-DOS Version 2.11 operating system diskette into drive A.
6. Press the A key to start the MS-DOS operating system.
7. Type the date and the time.

The computer displays the operating system prompt, A>.

8. Use the **FORMAT** program on the MS-DOS Version 2.11 operating system diskette to reformat the MS-DOS hard disk partition(s). Type:

```
A>FORMAT E:/S Return
```

When the **FORMAT** program is complete, the computer displays the operating system prompt.

9. Use the **BACKUP** program on the MS-DOS Version 2.11 operating system diskette to restore the files that you copied to the other diskettes. Type:

```
A>BACKUP Return
```

The computer displays the Winchester Utility Program Main Screen.

- a. Press the down arrow key twice so the arrow points to the "Restore hard disk files from the backup diskettes." Then, press:

```
Do
```

The computer displays the restore options.

- b. Press the Next Screen key to select the advanced restore options. The computer displays the Advanced User Restore Options.

- c. Choose:

- Source diskette drive
- Destination hard disk drive

- d. Press the down arrow key to move to the "Restore file specifier" option.
- e. Press the delete character key until the default entry is no longer displayed.
- f. Type:

```
\*.* /A
```

## Updating The MS-DOS Operating System

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- g. Press the down arrow key to move the arrow to the "Restore over existing files" option.
- h. Press the left arrow key to select "No".

This tells the computer to copy (restore) all the files from your back-up diskettes to the hard disk except files with the same name as files that already exist on the hard disk drive. The files that already exist on your hard disk are the MS-DOS system files that the /S switch of the FORMAT program copied there. You DO NOT want to copy over these files.

- i. Press:

**Do**

Then follow the instructions at the bottom of the screen to copy (restore) the files to the specified hard disk partition.

- 10. To update the remaining MS-DOS programs that are on the MS-DOS Version 2.11 operating system diskette, use the COPY command to copy the new versions of the programs from the MS-DOS Version 2.11 operating system diskette to the hard disk partition(s). Most of these programs are new versions and should be used with the new version of the operating system files.

For example, to copy the BACKUP program to the hard disk drive E, type:

A>COPY BACKUP.EXE E: **Return**

Your hard disk partition is now ready to use with the MS-DOS Version 2.11 operating system.