Apple
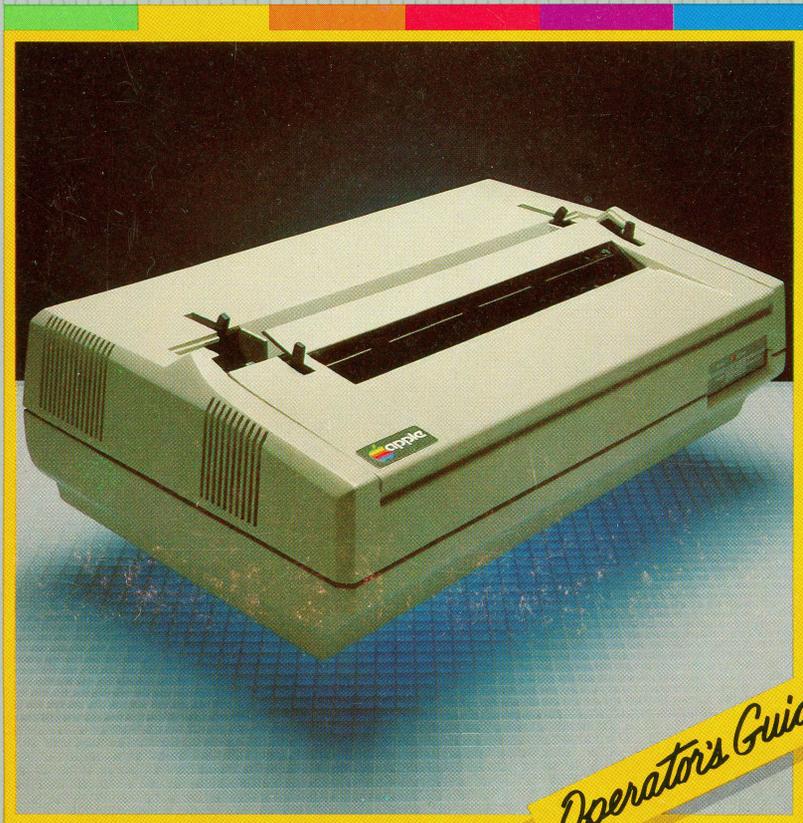
Daisy Wheel Printer

Operator's Guide

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Radio and Television Interference

The equipment described in this manual generates and uses radio frequency energy. If it is not installed and used properly, that is, in strict accordance with our instructions, it may cause interference to radio and television reception.

This equipment has been tested and complies with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules. These rules are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that the interference will not occur in a particular installation.

You can determine whether your computer equipment is causing interference by turning it off. If the interference stops, it was probably caused by the equipment. If your equipment does cause interference to radio or television reception, you can try to correct the interference by using one or more of the following measures:

- Turn the TV or radio antenna until interference stops.
- Move the equipment to one side or the other of the TV or radio.
- Move the equipment farther away from the TV or radio.
- Plug the equipment into an outlet that is on a different circuit from the TV or radio. (That is, make certain the equipment and the TV or radio are on circuits controlled by different circuit breakers or fuses.)

If necessary, you should consult your dealer or an experienced radio/television technician for additional suggestions. You may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems"

This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock number 004-000-00345-4.

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apple

Daisy Wheel Printer

Operator's Guide

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In conjunction with

apple computer

Contents

Part 1. Getting Ready

Now that you are the proud owner of an Apple Daisy Wheel Printer (DWP), you are probably eager to hook it to your Apple computer and begin using it. This booklet will help you do just that; and, with the help of the enclosed demonstration diskette and reference card, you'll soon be taking advantage of the DWP's many outstanding features.

BUT. . . before you can do anything with your printer, you'll need to have some accessories. What kind? That depends upon the model of Apple computer you're planning to use with the printer. Use the chart below to determine which items you will need to connect the DWP to either an Apple II Series or Apple III Series Computer.

Items needed to connect the DWP to your Apple computer

APPLE II Series	Apple II *Super Serial Card*
	Connector Cable with a "male" DB-25 connector at each end, included with your printer.
APPLE III Series	Connector Cable with a male DB-25 connector at each end, included with your printer.
	Modem Eliminator Cable with a male DB-25 connector on one end and a "female" DB-25 connector on the other end, also included with your printer.

You may also want to have on hand a screwdriver or a quarter to remove some packing materials.

Finally, you will need a supply of single sheet or continuous fanfold printer paper.

Take a few minutes to examine this **Operator's Guide** carefully. In the front cover pocket you will find a demonstration diskette entitled "Apple Presents Daisy Wheel Printer." In the rear cover pocket you will find the Daisy Wheel Printer Reference Card. You will use both of these items as you learn more about your printer.
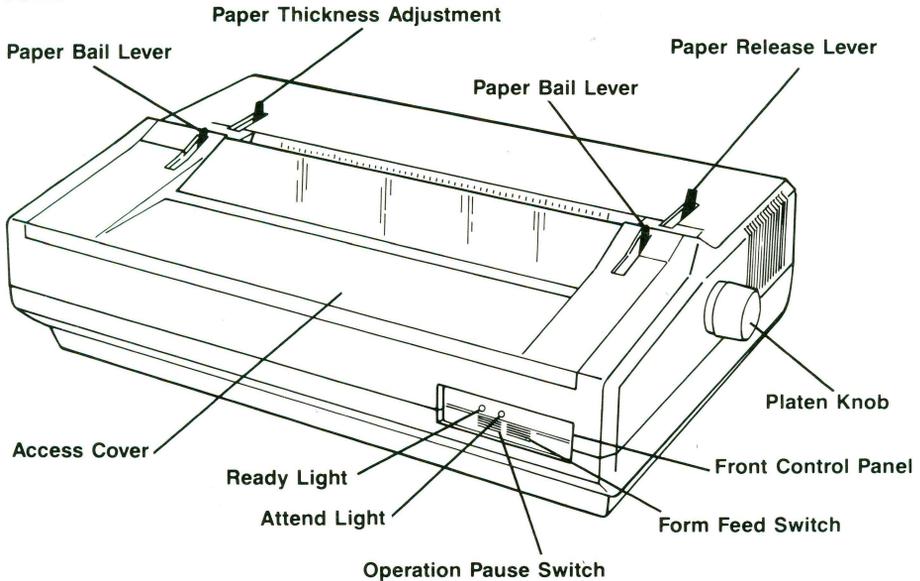
When you have checked your Operator's Guide and collected the necessary parts and tools, you will have completed the first steps. You are now ready to set up your new printer.
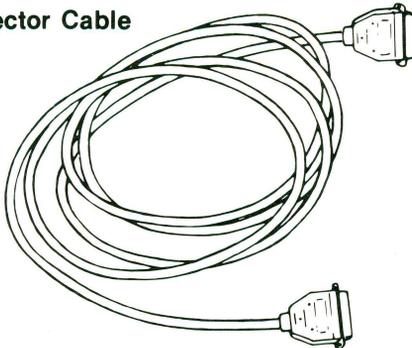
Part 2. Readying The Printer

The DWP is almost ready to run when you unpack it. A few things which were used to protect the printer during shipping need to be removed, and a few things need to be put into place. This assembly will take about 40 minutes or so. The only tools you will need are scissors (or knife) and a screwdriver (or quarter).

Before you begin to set up your new printer, take a few moments to familiarize yourself with its main exterior parts.

Front:
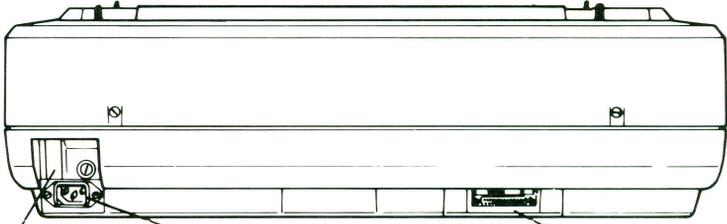

Paper Thickness Adjustment
Paper Bail Lever
Paper Release Lever
Paper Bail Lever
Platen Knob
Access Cover
Ready Light
Front Control Panel
Attend Light
Form Feed Switch
Operation Pause Switch

Connector Cable

Modem Eliminator Cable

Rear:

Power ON/OFF Switch   Power Cord Connector   DB-25 Connector

You can now proceed to attach the platen knob, remove the shipping restrainer, attach the daisy wheel print element and the printer ribbon cartridge.

☐ Attach Platen Knob

Your first step is to attach the **Platen Knob** to the printer. The platen knob is packed separately in the styrofoam shipping cradle. Remove the knob from the cradle. The knob fits into the hole on the right side of the printer cabinet as you face the front of the DWP.

Notice that the platen knob has two "teeth" extending from it. These must align with the teeth on the retainer mechanism inside the printer.
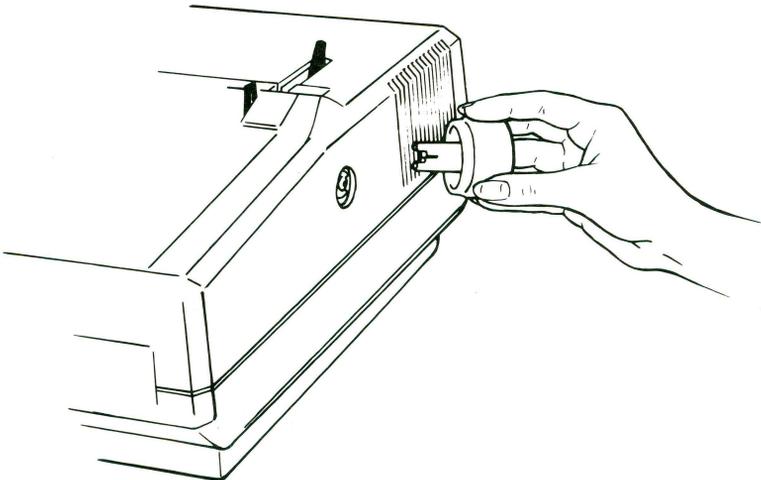
When you have attached the platen knob, turn it several times. The knob will turn with a slight drag because it is also turning the printer paper advance motor. Press inward on the platen knob while you turn it again several times. The platen knob will now turn very freely. When you press inward and turn the platen knob, you are only moving the platen. This feature will be discussed more thoroughly when you learn to load and adjust the printer paper.

☐ Remove Access Cover

Grasp the front lip of the **Access Cover** and gently slide the cover toward the front of the machine. Lower the front edge of the cover and lift it off the printer.
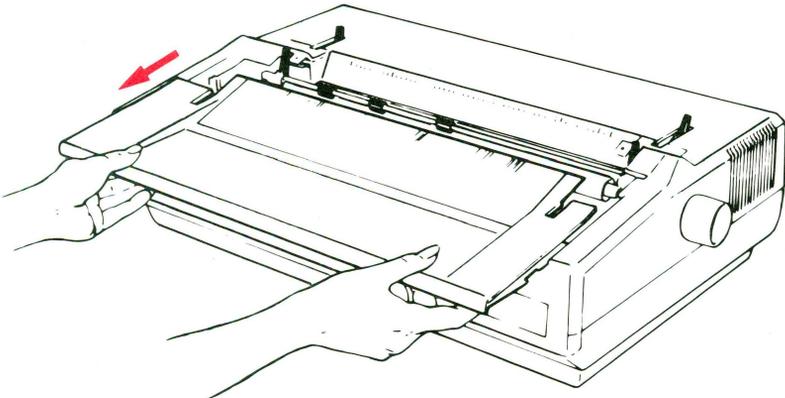

☐ Remove Tie-Downs

Tie-Downs are used to hold the **Paper Bail** stationary and prevent any damage during shipment. The tie-downs must be removed. This will require you to be somewhat of a detective. The tie-downs for the paper bail are usually attached to each end of the paper bail.

☐ Remove Plastic Restraint

The **Print Mechanism** is held stationary during shipment by a plastic restraint that has been slipped over the print mechanism rear guide rail. To free the print mechanism, pull the plastic restraint off the guide rail. Grasp both ends of the fiber strap and pull up until the plastic restraint comes off the guide rail.

Paper Bail Tie-Down

Paper Bail Tie-Down

Print Mechanism Restraint
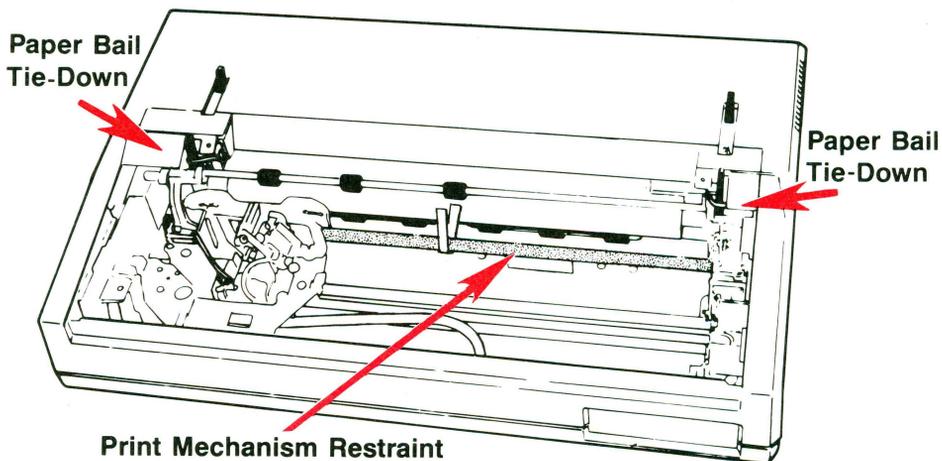
☐ Remove the Metal Shipping Strip

Underneath the printer is a metal shipping strip with two rubber feet. This must be removed for the printer to work properly.

☐ Tilt the printer back on its rear edge while holding it with one hand.

CAUTION: **Continue to hold the printer upright or it may topple and be damaged.**

☐ Remove the two sets of screws and washers holding the metal strip. Then remove the metal shipping strip.

☐ Lower the machine so that it is standing on its feet, and put the metal strip and the sets of screws and washers in the styrofoam shipping cradle.
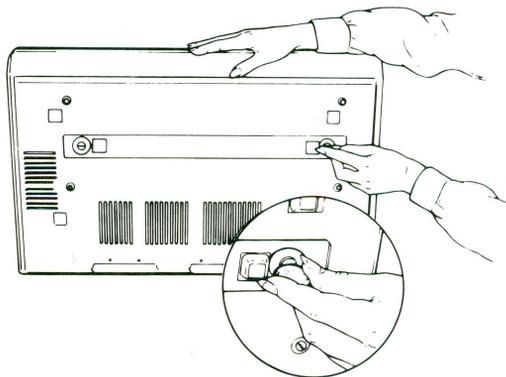
☐ Attach the Daisy Wheel Printing Element

Now that the print mechanism is free, it's time to put the daisy wheel in place. If you've used a typewriter with a daisy wheel element, you will be familiar with this procedure. Otherwise, it may seem a little awkward at first. In either case, it is harder to describe than do.

Note: The DWP uses a special, oversize, 130-character daisy wheel. Smaller daisy wheels will not work on the DWP.

☐ Locate the **Release Lever** on the **Print Mechanism** and move it toward the **Print Hammer.** The easiest way to do this is to grasp **both** the release lever and the print hammer between your thumb and forefinger, and then squeeze your fingers together.

Release Lever
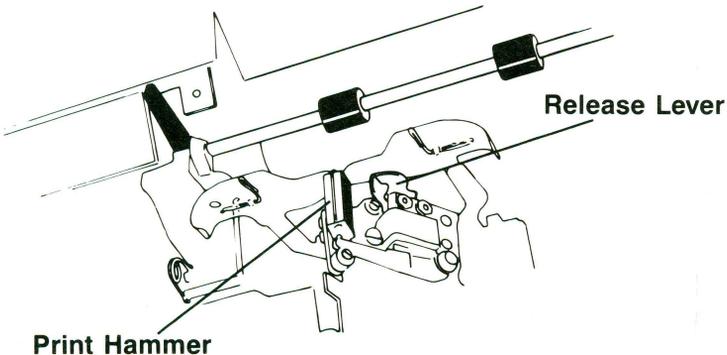
Print Hammer

☐ As you squeeze the release lever toward the print hammer, pull back on the print mechanism. It will tilt toward you.

☐ You will now see a triangular-shaped **Daisy Wheel Mount** that rotates on the print mechanism. You should also take note of the **Daisy Wheel Holder** and the **Guide Pin.**

Daisy Wheel Mount

Daisy Wheel Holder
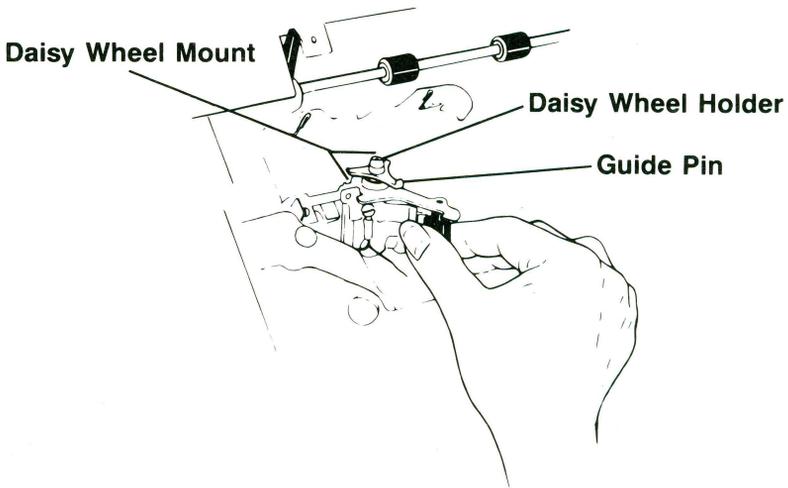
Guide Pin

☐ Grip the small knob on the daisy wheel printing element and take it out of its plastic case. Notice that there is a small, square **Guide Pin Hole** on the face of the daisy wheel.

☐ Place the printing element on the daisy wheel mount and align the guide pin hole on the daisy wheel guide pin. This can best be accomplished if the guide pin is positioned at the top of its rotation, as shown in the illustration.

☐ When you have properly aligned the guide pin and guide pin hole on the daisy wheel, gently but firmly press the knob down onto the holder. Insure that the guide pin is fully seated in the daisy wheel guide pin hole.

Guide Pin Hole

Knob

Daisy Wheel Printing Element
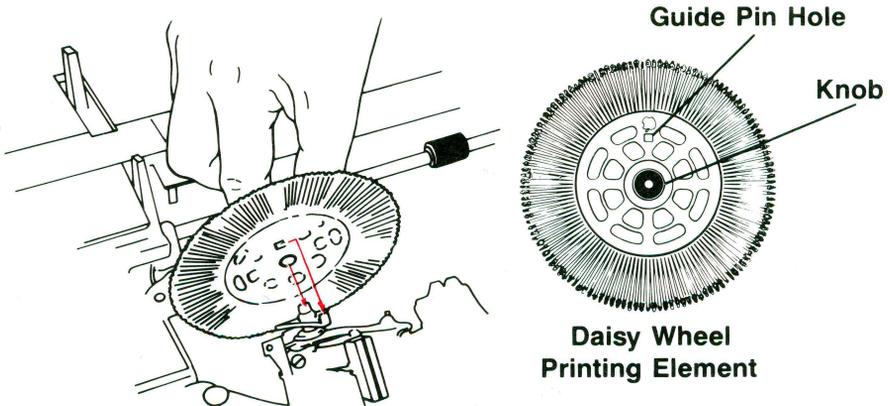
☐ Reposition the print mechanism by pushing it toward the platen until it clicks into place.

CAUTION: **The daisy wheel can be easily damaged. Do not use it to move the print mechanism.**

☐ Attach the Ribbon Cartridge

☐ Pick up the **Ribbon Cartridge** so that the small adjusting knob is facing upward.

☐ Remove the protective cardboard insert.

☐ If the ribbon is loose, turn the adjusting knob counterclockwise until all slack is removed from the ribbon.
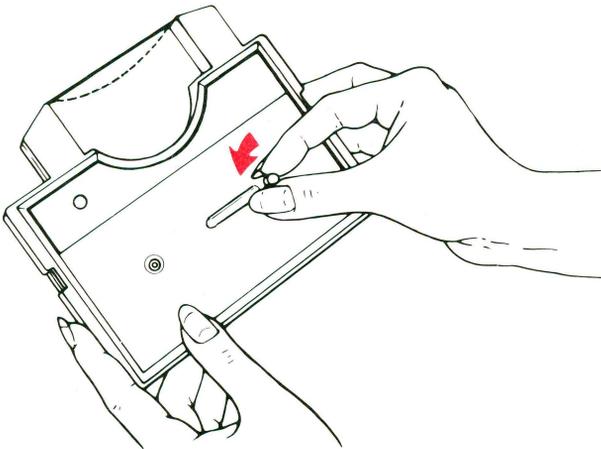
☐ Hold the ribbon cartridge level with the ribbon cartridge deck. Fit the ribbon through the two metal **Pin Guides** on the print mechanism.

Make sure that the ribbon fits **between** the daisy wheel and the platen, as shown in the illustration on the next page.

☐ Align the indentations in the cartridge directly over the locking tabs on the ribbon cartridge deck. Press down on the cartridge until it snaps in place.

Pin Guides

Ribbon Cartridge Locking Tabs
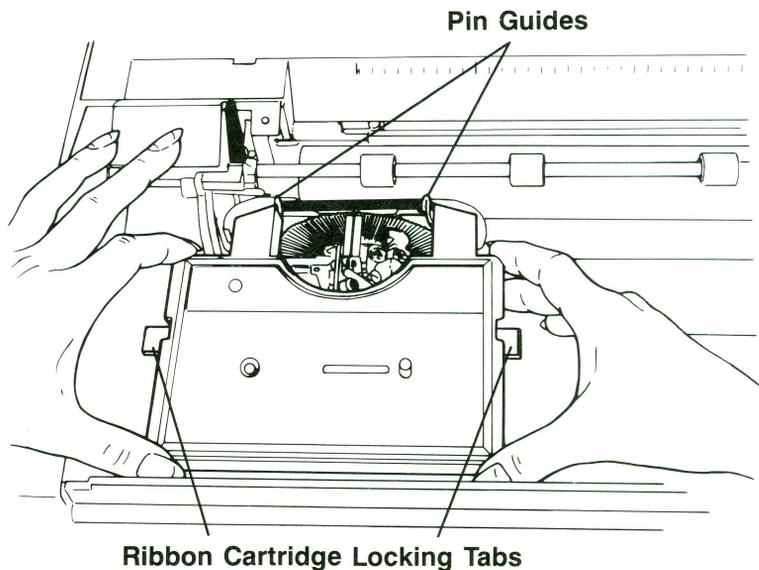
☐ Replace the Access Cover

Hang the printer access cover on the front of the printer cabinet.
Grasp the front lip and lift up until the cover is level with the
printer.

Gently slide the cover toward the back of the printer until it is
completely closed.

Note: The DWP will not operate if the access cover is not
completely closed.

☐ Connect the Printer to Your Computer

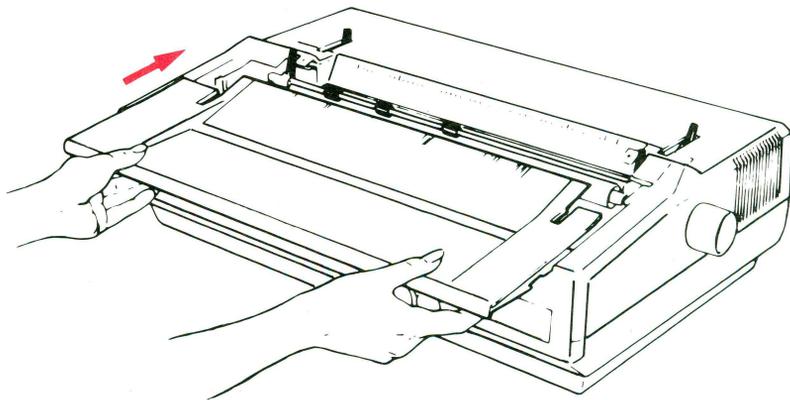The DWP has been specifically designed to connect to all Apple computers in both the Apple II Series and the Apple III Series. In the rear cover pocket of this Operator's Guide, you will find a DWP Reference Card. You will need to occasionally refer to this reference card as you connect and use your new printer. The card has been specifically designed as a quick reference to your print-er's configuration and command codes. Take a few moments to familiarize yourself with this card and the types of information it presents.

Once your printer has been properly connected, you can load and use the demonstration diskette in the front cover pocket to learn more about the many features of your new printer.

• If you own an Apple II Series Computer, continue on this page.

Connecting the DWP to an Apple II Series Computer

YOU NEED: The Apple *Super Serial Card Kit*

Super Serial Card   **Internal Cable**   **DB-25 Connector**   **Connector Cable**   **DB-25 Connector**

Adapter Clamp Assembly
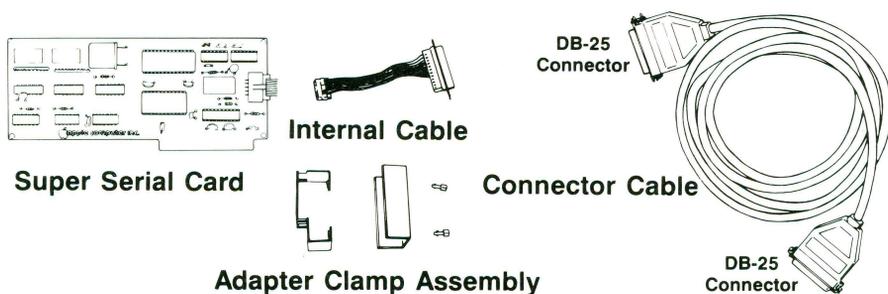
The long Connector Cable with a DB-25 connector at each end comes with your printer.

When connecting your printer to an Apple II Series Computer, you will not need the short Modem Eliminator Cable included with your printer.

If you haven't yet installed your *Super Serial Card,* follow the instructions in the "Super Serial Card Installation and Operating Manual" included with the card, and install the card now. . .

The small triangle figure (▽) on the jumper block should be pointing toward **"Terminal,"** as shown on the illustration of the Super Serial Card.

The two DIP Switches on the Super Serial Card (SSC) should be set as shown in the charts below:

SSC Switch 1 (sw1) Configuration

1	2	3	4	5	6	7
OFF	ON	ON	ON	OFF	ON	ON

SSC Switch 2 (sw2) Configuration

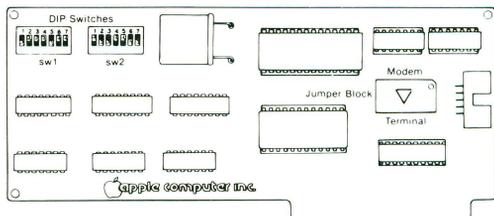| 1	2	3	4	5	6	7
ON	OFF	*OFF	*OFF	ON	OFF	OFF

* These two switches control the Line Width/Video:
40/Video on: 3=ON, 4=ON;
80/Video off: 3=OFF, 4=ON;
72/Video off: 3=ON; 4=OFF;
132/Video off: 3=OFF; 4=OFF.

Refer to the Super Serial Card Installation and Operating Manual for a complete description of the function of each DIP switch.

Note: It is suggested that the Super Serial Card be installed in SLOT #1. The demonstration diskette included with this guide expects the card to be in Slot #1. See your Computer Owner's Guide to determine Slot #1 for your computer.

CAUTION: The computer should be turned off when connecting it to the DWP.

☐ When you have completed your installation of the Super Serial Card, take the connector cable and attach one of the DB-25 connectors to the connector on the installed Super Serial Card.

Note: The DB-25 connector can be installed in only one way. Once it has been connected, secure the connector to the computer with the two attached mounting screws.
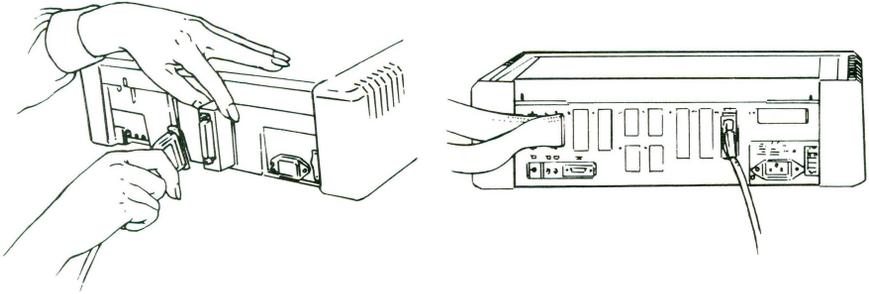
☐ Take the other end of the connector cable and attach it to the DB-25 connector in the back of the printer. The connector can be installed in only one way. Remember to secure the cable to the printer with the two small mounting screws on the cable connector.
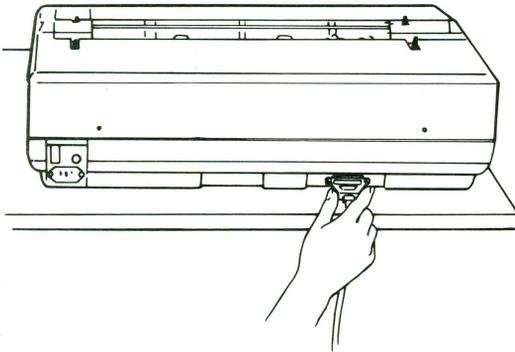
☐ Install the DWP's power cord in the receptacle in the back of the printer next to the ON/OFF switch.

CAUTION: Make sure the switch is in the OFF position before you plug in the printer!

☐ Go to page 14, and continue reading the section entitled "Load the Paper."

Connecting the DWP to an APPLE III

YOU NEED: A Connector Cable with a male DB-25 connector at each end.

A Modem Eliminator Cable with a male DB-25 connector on one end and a female DB-25 connector on the other end.

Connecting your printer to an Apple III computer requires that you consider two different types of connections. The first connection involves the "hardware," including the equipment and the connecting cables. The second connection involves the Apple III "software" or more specifically the Apple III Sophisticated Operating System (SOS) device drivers. In this section you will be concerned with the hardware connection. You will deal with the software connection when you are ready for a test run on your new printer.

CAUTION: **Before connecting the hardware, make sure that both the Apple III and the DWP are turned OFF.**

The Apple III has a built-in female DB-25 connector which is labeled "Port C" on the back of the computer.

☐ Connect the male end of the Modem Eliminator Cable to Port C.

☐ Take the connector cable and attach one of its DB-25 connectors to the female end of the Modem Eliminator Cable.

Note: The DB-25 connectors can be assembled in only one way.

☐ Attach the connector at the other end of the cable to the built-in connector in the DWP.

☐ Secure the connecting cables to your equipment with the built-in mounting screws where it is appropriate.

☐ Install the DWP's power cord in the receptacle in the back of the printer next to the ON/OFF switch.

CAUTION: **Make sure the switch is in the OFF position before you plug in the printer!**
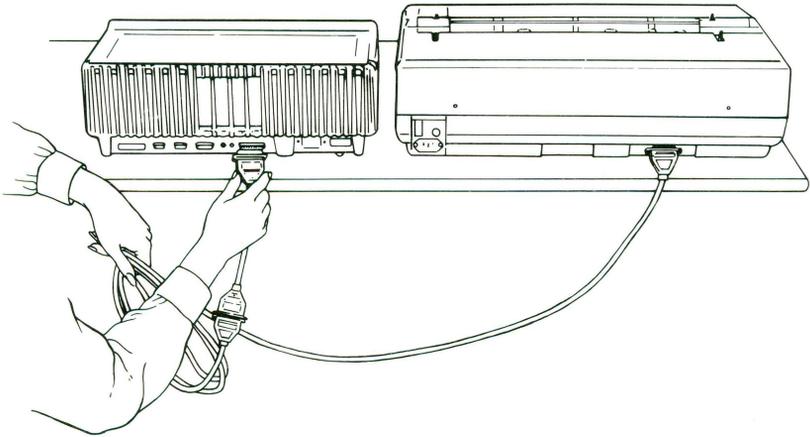
☐ You are now ready to load your printer with paper. Continue reading the next section.

☐ Load the Paper

The DWP can print on single sheets of paper and on continuous fanfold paper. Both are loaded in the same way you would put paper in a typewriter

☐ Pull either paper bail lever forward toward the front of the DWP.

☐ Adjust the paper thickness lever to match the thickness of the paper being used.

For Single Sheets & Thin Forms	The lever should point toward the **front** of the DWP.
For Multiple Sheets & Thick Forms	The lever should point toward the **back** of the DWP.

☐ Insert the paper into the back of the paper platen, and turn the platen knob **clockwise** (away from you as you face the front of the printer).

☐ Press inward and turn the platen knob until about six inches of paper extend above the printing mechanism.

☐ Position and align the paper by moving the release lever toward the front of the DWP, and then moving the paper to where you want it located in the printer.

For continuous fanfold paper, align the top of the paper that comes out of the paper platen with the perforated edge of a sheet going into the paper platen.
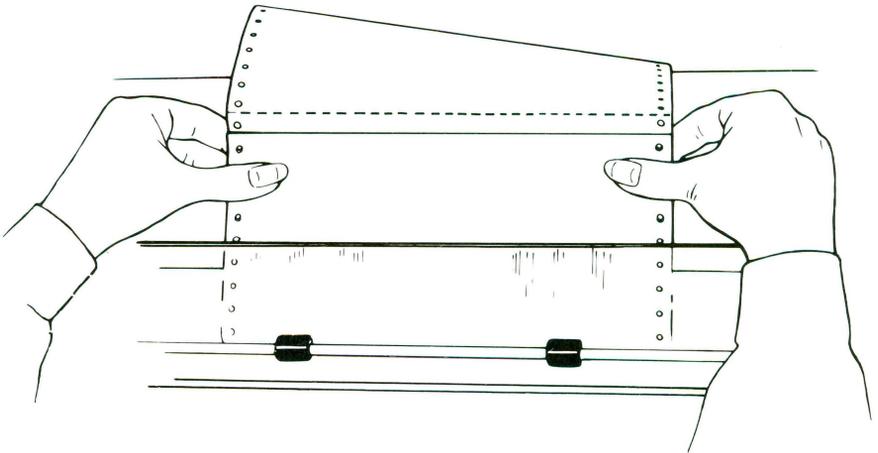
☐ Push the paper bail lever toward the back of the DWP.

The paper is now firmly in place, hopefully, where you want it. However, if you decide you want to reposition the paper, just repeat the process. Soon you will learn how to establish the "top-of-form" position so that the DWP will begin to print in a similar place on each sheet of continuous fanfold paper.

Paper Release Lever

Paper Bail Lever
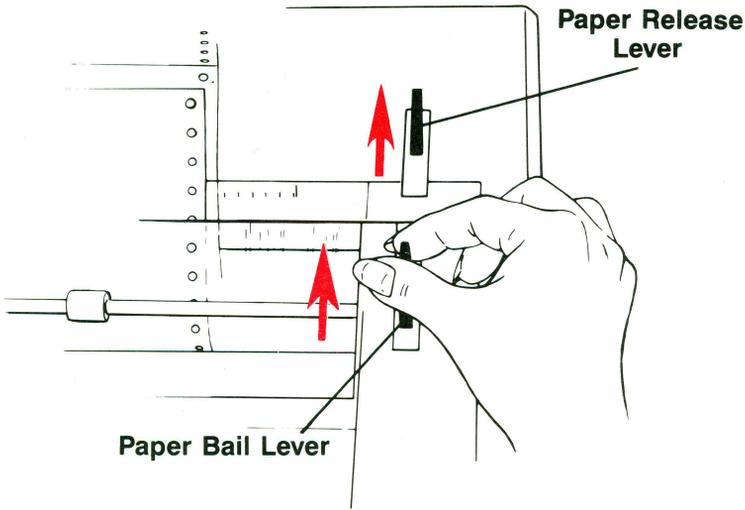
☐ Check the DWP's Operation

We're about to turn on the DWP for the first time. However, each time you turn on the DWP you will want to follow these instructions:

CAUTION: **Make sure the printer's switch is in the OFF position before plugging in the power cord.**

☐ Plug the power cord into a three-prong outlet.

☐ Turn the ON/OFF switch in the back of the printer to the **ON** position.

☐ Check the Status Lights on the Front Control Panel.

You should see one of these conditions:

• A steady *"Ready Light"*

• A flashing *"Ready Light"*

• A flashing *"Ready Light"* **and** a steady *"Attend Light"*

• A steady *"Attend Light"*

CONDITION	RESPONSE
• A steady *"Ready Light"* READY ● ○ ATTEND PAUSE FORM FEED	The printer is ready to operate. Proceed to use it.
• A flashing *"Ready Light"* READY ● ○ ATTEND PAUSE FORM FEED	The printer is in a PAUSE condition. Touch the Operation Pause Switch on the Front Control Panel. The DWP should become operational, and you should now see a steady *"Ready Light."*
• A flashing *"Ready Light"* **and** A steady *"Attend Light"* READY ● ● ATTEND PAUSE FORM FEED	The printer needs attention! Check the following: 1. Is the **Access Cover** open? 2. Is the DWP **out of paper,** or has the paper been **incorrectly loaded?** 3. Is the **Ribbon Cartridge** out of ribbon? Correct any "yes" situation and then press the operation pause switch on the front control panel. The *"Attend Light"* should go out and you should see a steady *"Ready Light."* **If this doesn't happen, or if you are unable to find the reason why the "Attend Light" is on, turn OFF the printer and call your dealer.**
• A steady *"Attend Light"* READY ○ ● ATTEND PAUSE FORM FEED	**If you see only a steady** *"Attend Light"* **and no** *"Ready Light,"* **it means the machine has an internal malfunction. Immediately turn the machine OFF and contact the dealer.**
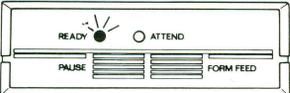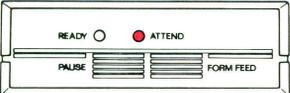
It's a good idea to get in the habit of checking the *"Ready Light"* before you start printing. It should be steady—not flashing. A steady *"Ready Light"* ensures that none of your text or format will be lost in transmission from your computer to the printer. If you see a flashing *"Ready Light,"* just press the pause switch on the front control panel. You should get a steady light, and you'll be ready to print.

☐ Set the "Top-of-Form" Feature

The **Form Feed Switch** on the front control panel is a touch-sensitive switch with two functions. When pressed, it advances the paper in the machine for easy removal. It also can be used to tell the DWP where the top of a form (or piece of paper) begins.
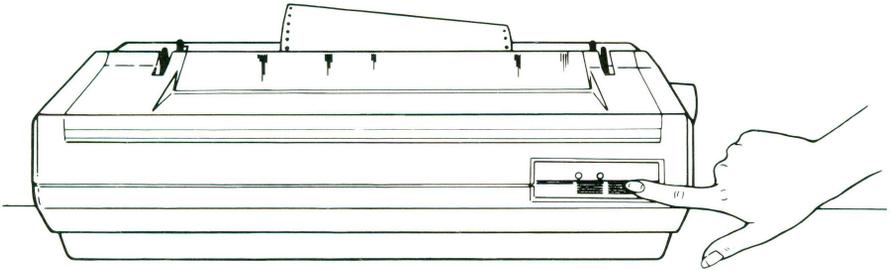
The top-of-form feature is especially useful when you use continuous fanfold paper. It ensures that the printer will begin to print at the same distance from the top of each sheet.

You will usually want to set the top-of-form whenever you initially turn on the printer. This is how to do it:

☐ Check the DWP to make sure it is loaded with an adequate supply of continuous fanfold paper, and add paper if necessary.

☐ Turn on the printer and check its status lights.

☐ Press the form feed switch if you have a steady *"Ready Light."*

Paper will advance through the printer. It will run awhile, so don't worry.

When the DWP stops, the top-of-form position is set.

If you're satisfied with this setting of the top-of-form, you can carry on with your set-up activities.

But if you want the top-of-form to be at a different place on your paper, you will need to adjust the printer platen.

☐ Press inward on the platen knob and turn it until you obtain your desired top-of-form position. Release the platen knob and you have set the top-of-form position.
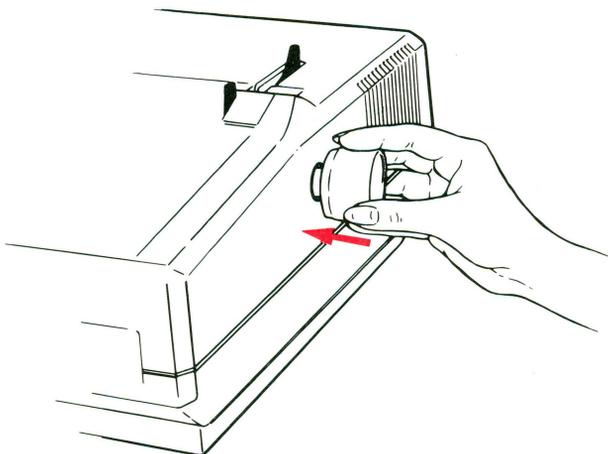
CAUTION: **When the printer power switch is ON, always move the platen by pressing inward and turning. Otherwise, you might damage the platen drive motor.**

The top-of-form has now been set. The printer will begin printing on each sheet just where you desire. Push the form feed switch to check this out. The paper should advance (it will run for awhile). When it stops, the printer will be ready to print at the appropriate distance from the top of the paper. Of course, if you decide you don't like this new top-of-form, you can repeat the process until you get one that is suited to your requirements.

Now, let's check your set-up of your new printer.

☐ Performing Printer Self Tests

You can check the set-up and operation of your printer with two self tests. Each test requires that you have a sheet of paper at least 14 inches wide loaded in the platen. Using this wide sheet of paper will protect your daisy wheel printing element from possible damage. Before you perform either test, turn the printer **OFF.**

☐ **Self Test 1:**   This test will confirm that all the printer mechanisms except those involved in communication with the computer are working correctly. Run this test by pressing and holding the form feed switch as you turn the printer power switch **ON.**

The print mechanism will move from left to right and print the same line of 96 characters repeatedly, each time starting with the next character in the line. Turn the printer **OFF** to stop this test.

☐ **Self Test 2:**   This second test checks the circuitry in the printer that allows it to receive information from the computer. Start this test by pressing and holding the pause switch as you turn the printer **ON.**

The printer should repeatedly print several lines of information followed by a line of 130 characters. Each printed line should look exactly like the one before. Turn the printer **OFF** for about eight seconds to end the test.

Part 3.   Performing a Test Run

Now that your DWP is hooked to your Apple computer and is loaded with paper, it is time for a test run.

Procedures for the test run will be different for owners of Apple II Series Computers and Apple III owners.

• Apple III owners should turn to page 23.

• Apple II owners should continue on this page.

Test Running the DWP with Apple II Series Computers

The test that follows is designed to operate on Apple II Computers with **Applesoft Basic.**

You can test your new DWP with or without an external disk drive. However, to run the demonstration diskette that is a part of this Operator's Guide, you will need to use an external disk drive.

☐ Turn the Apple computer and printer **ON.** Hit Control-Reset if your computer has the automatic boot feature.

☐ Check the status lights on the DWP and proceed only after seeing a steady *"Ready Light."*

☐ Type this program into the computer exactly as shown below.

```
 10 PR#1
 20 FOR I = 32 TO 79
 30 PRINT CHR$(I);
 40 NEXT I
 50 PRINT
 60 FOR I = 80 TO 127
 70 PRINT CHR$(I);
 80 NEXT I
 90 PRINT
100 PR#0: IN#0
110 END
```

☐ Type: RUN

☐ You should get a printout that looks like this:

```
 !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNO
PQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~
```

If all went well, go to page 27.

BUT. . .if your printout looks different, or if nothing happened, don't get discouraged! Let's see if we can find what went wrong. If we can't, help is only a phone call away!

• Use the LIST command, and list the program you typed. Does it match exactly the one we gave you?

  Correct any errors.

• Check the connectors. Are they securely attached?

• Is the *Super Serial Card* properly installed?

• Is the DWP's *"Ready Light"* steady?

Having checked all of these things, try again. Hopefully your printer will spring to life and produce a printout for you that matches the model. If so, good!

If not, call your dealer and ask for a little assistance.

Test Running the DWP with an APPLE III.

Before you can complete a test of your hook-up of the DWP and
Apple III Computer, you may have to modify some of your software.
The next sections will describe how to perform these modifications.

☐ Installing the Printer Device Driver

The Apple III Computer's Sophisticated Operating System (SOS)
uses special programs called **device drivers** to communicate with
all peripheral devices. Whether a given device is built in or added
to your system later, SOS uses a device driver to exchange
information with it. Many software application programs do not
have the appropriate device driver installed to permit communica-
tions between your Apple III Computer and your new Daisy Wheel
Printer. Before applications programs, such as **Apple Writer III** or
Mail List Manager, can be used in conjunction with your Daisy
Wheel Printer, you may need to add the appropriate software
driver to the applications program diskette.

The device driver for your Daisy Wheel Printer is included on the
System Utilities software diskette under the name of ".PRINTER,"
in the Sophisticated Operating Systems driver file. This special
device driver must be installed on any software application
program you wish to use in conjunction with your new printer.

The procedures you must follow to install a device driver for your
Daisy Wheel Printer are described in the Apple III **Standard
Device Drivers Manual** in the chapter "The Printer Driver." You
should also have on hand your System Utilities diskette which
may be needed to reconfigure your system. Be sure to use the
device driver entitled ".PRINTER" on the System Utilities diskette
during the installation procedures. You must also edit the device
driver parameters to reflect the following:

Apple III Serial Driver Configuration Block

0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
08	22	00	00	00											

Note: Some software applications programs may already have a ".PRINTER" device driver installed. It may be labeled ".PRINTER" or ".QUME." This driver is most likely for a serial type printer such as the DWP. Before you assume that this installed device driver is correctly configured for your DWP, check it against the Apple III Serial Driver Configuration Block presented at the bottom of the preceding page.

When you have modified the driver configuration, make sure that you install the new configuration in the SOS Driver file of your application diskette. When this procedure is complete, the DWP driver will automatically be loaded into your Apple III each time the applications diskette is booted. Remember, this new printer device driver must be on each applications diskette you wish to use in conjunction with your new printer.

☐ Performing a Test Run With an Apple III Series Computer

This section presents two different routines that can be used to perform a test run of your printer with an Apple III Series Computer. The first test procedure requires an **Apple Business Basic** diskette. The second test procedure uses the Apple III System Utilities diskette. If you do not have a Business Basic diskette, skip to **Test 2** on page 26. If you have Business Basic, follow the procedures listed below under **Test 1.**

☐ **Test 1:** Once you have installed a DWP device driver on your Apple Business Basic diskette, you can use it to perform this test run procedure:

Insert the Business Basic diskette into the internal disk drive.

Turn **ON** your printer and check to see that the *"Ready Light"* is steady.

Turn **ON** the monitor and your computer.

Enter the following program into your Apple III. The program must be entered **exactly** as it is shown below to work properly.

```
 10 OUT$ = ".PRINTER"
 20 OPEN #1, OUT$
 30 FOR I = 32 TO 79
 40 PRINT#1;CHR$(I);
 50 NEXT I
 60 PRINT #1
 70 FOR I = 80 TO 127
 80 PRINT #1; CHR$(I);
 90 NEXT I
100 PRINT #1
110 CLOSE #1
120 END
```

When you type the command RUN, you should get a test pattern that looks like this:

```
 !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNO
PQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{|}~
```

If all went well, go to page 27 and read the section entitled **Getting the Most From Your New Printer.**

BUT. . . if you didn't get a printout, don't throw in the towel just yet! Take a few minutes to check the following points:

List the program you entered to check its completeness and correctness. Compare the listed program with the program above. Do they match exactly? If they don't match, make any corrections that are necessary, and run the program again. If your program is correct but you still don't get a printout, go through the following check list.

CHECK LIST:

☐ Check the electrical and interface connections.

☐ See that your printer *"Ready Light"* is steady.

If you've checked both of these areas, run the program again. If it still doesn't run properly, give your Apple dealer a call and ask for a little assistance.

Once you have gotten a good test run printout, it's time to learn just how well your new printer can perform.

If all went well, go to page 27 and read the section entitled **Getting the Most From Your New Printer.**

☐ **Test 2:**   If you do not have an **Apple Business Basic** diskette, you can use the System Utilities diskette that comes as a part of your Apple III Computer System Software to run a printer test.

Check you Systems Utilities diskette for a DWP ".PRINTER" device driver file. Make sure that it has been configured as shown on page 23.

Load the reconfigured System Utilities diskette into your computer.

When the diskette menu appears on the screen, select the option: **F-**File Handling Commands.

When the File Handling Commands menu appears on the screen, select the option: **L-**List Files.

Type in the request **.D1** to list the files on the utilities diskette in drive one and press **RETURN.**

Request **ALL** and press **RETURN.**

Request **.PRINTER** and press **RETURN.**

At this point, a catalog listing similar to the one below will be printed out on your printer:

```
/UTILITIES                Size     Modified   Time   File type    Eof  Phys
 *SOS.KERNEL               43     4-Sep-81   0:00   Sosfile     512    44
 *SOS.DRIVER               27    11-Sep-81   0:00   Sosfile     512    28
 *SOS.INTERP               27    11-Sep-81   0:00   Sosfile     512    28
 *SYSTEM.PASCAL            45    11-Sep-81   0:00   Codefile    512    46
  SYSTEM.MISCINFO           1    11-Sep-81   0:00   Datafile    512     1
 *SYSTEM.STARTUP          123    11-Sep-81   0:00   Codefile    512   124
6 files listed, 2 blocks available
```

If you do not get this printout, don't panic. Take a few moments and go through the **Check List** on page 25.

If all went well, go to page 27 and read the section entitled **Getting the Most From Your New Printer.**

Part 4. Getting the Most From Your New Printer

Your Apple Daisy Wheel Printer is now ready to show you how well it can perform. To introduce you to the many features of this new printer, a special demonstration diskette has been prepared to put the printer through its paces. The diskette can be used on both Apple II and Apple III Series Computers. Since the programs are written in Applesoft Basic, you will need to use an Apple II Emulation Diskette if you are going to use the diskette on an Apple III Series Computer.

Apple II Systems

Insert the demonstration diskette in Disk Drive 1 of your Apple II and "boot" the system by either turning **ON** power to the computer or typing the standard **PR#6.** After a few seconds, a high resolution picture will appear. The program will then continue and you will have several choices from a main menu.

Apple III Systems

Insert the Apple II Emulation Diskette into the internal drive of the Apple III and "boot" the system by either turning on the computer or, if the computer is already on, by pressing the **RESET** button while holding down the **CONTROL** key at the same time. After a few seconds, you will be presented with a menu. Remove the Emulation Diskette and insert the demonstration diskette into the internal drive. Press the **RETURN** key and the diskette will begin to run. After a few seconds, a high resolution picture will appear. The program will then continue, and you will have several choices from a main menu.

If you are running the program for the first time, you should go through the entire demonstration diskette to get an overview of the capabilities of your printer. You will learn how well your new Daisy Wheel Printer can rapidly produce clearly typed text, boldface type, underlined text, and quality graphs, tables and charts.

Note: The instructional portion of the demonstration can be printed on your Daisy Wheel Printer by simply pressing the **P** key whenever the screen indicates this capability. In this way, you can create your own paper copy of the demonstration for later reference.

Special Notice

The demonstration disk that comes with your printer usually displays light characters on a black background on the monitor screen, but occasionally it inverts the colors—that is, black characters on a light background. This "inverse video" display is fine on screen, but not on paper. In fact, if you try to print an inverse video display on paper, you'll get only meaningless characters. No harm results, but to continue you'll have to turn the printer **OFF,** then **ON** again.

If you should encounter a copy of one of these older demonstration diskettes, you can correct the problem by modifying the demonstration program. If you want to keep the modification permanently, you'll need to format a blank disk and use it to make a copy of the demonstration disk. (See the Owner's Guide for your computer for instructions on formatting and copying.) Once you've made the duplication, we suggest that you store the original disk in a safe place. You cannot permanently modify the original disk because it is protected from changes, so work with the newly copied disk.

If you're working with an Apple II computer, just insert the new demonstration disk. If you're using an Apple III computer, use the Apple II Emulation Disk first. As soon as the demonstration diskette signals you to "press any key," press `CONTROL`—`C`. You may have to hold the keys down for a few moments until the current program stops. Now you're ready to modify the program. Type the following lines just as you see them; press `RETURN` after each **numbered line.**

```
6092  CODE = PEEK (NBASE)
6094  IF CODE = > 0 AND CODE < 64
      THEN CODE = CODE + 64:FLAG = 1
6096  IF CODE > 95 AND CODE < 128 THEN CODE = CODE −
      64:FLAG = 1
6098  IF FLAG THEN ST$ = ST$ + CHR$ (CODE) + CHR$ (8)
      + CHR$ (95);FLAG = 0: GOTO 6110
6100  ST$ = ST$ + CHR$ (CODE)
```

You can check to make sure you typed this information correctly by typing:

```
LIST 6092, 6100
```

Press `RETURN`. Compare the display on your screen with the lines above. If you find a mistake, retype just the incorrect lines at the bottom of the screen. Then type again:
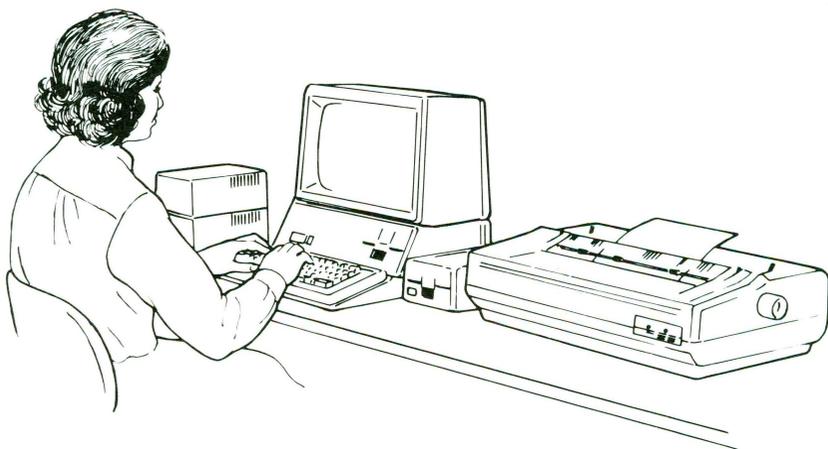
LIST 6092, 6100

Press `RETURN`. When your display matches the lines above, type

SAVE LQP DEMO

Then press `RETURN`. You have now permanently saved the entire program, including the modification, on the new disk.

You're all set! Just restart the demonstration program using the new disk, and see what your Apple Daisy Wheel Printer can do for you.

NOTES

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