



# Tech Info Library

## ImageWriter II General Troubleshooting

This article last reviewed: 20 February 1989

### DESCRIPTION:

Follow this procedure to determine whether the ImageWriter II is functional.

### YOU WILL NEED:

1. Apple IIe computer
2. Super Serial Card
3. Printer cable
4. Level I Tech Procedures for ImageWriter II
5. ImageWriter II User's Manual
6. Pencil and paper
7. Color ribbon for the ImageWriter II

### A NOTE ABOUT THE RED ERROR LIGHT:

If the ERROR LIGHT stays lit: Check and make sure that the printer is not out of paper. The paper-out switch or main CPU PCB might be defective if the printer has paper inserted properly.

The ERROR LIGHT blinks at regular intervals: Check to make sure that the cover is securely fastened and that the magnet is still in place (located under the front right of the cover). Sometimes the magnet becomes loosened and falls out. Also, check to make sure that a paper jam has not occurred.

The ERROR light blinks irregularly: Check DIP switch 4 on Switch 2. DIP switch 4 should be set to the "closed" position if the AppleTalk Card or Memory Card is installed. Otherwise DIP switch 4 should be set to "open".

### BEFORE YOU START:

1. If replacement or adjustment procedures are needed, refer to the Tech Procedures.
2. If location for IW II controls is needed, refer to the User's Manual.
3. Install the color ribbon on the printer.

### CHECK 1: PRE-PRINT

- 1.1 Disconnect the printer cable at the back of the IW II.
- 1.2 Remove the AppleTalk Option card

- 1.3 Check that the top panel is installed correctly.
- 1.4 Check that paper is installed.
- 1.5 Turn the platen knob.

PROB: The platen binds or doesn't turn consistently.

FIX: Take off the top cover, pull off the platen knob and check for obstructions in the gears

- 1.6 Move the carriage back and forth along its full length of travel.

PROB: The carriage binds or doesn't move consistently.

FIX: Check if carrier belt is properly installed.  
Check for obstructions. "Very" lightly lubricate the carrier shaft with tellus lubrication oil.

CHECK 2: POWER ON INITIALIZATION

As you turn on the printer, check for NORMAL PRINTER ACTIONS below.

NORMAL PRINTER ACTION	IF NOT THEN
The power lamp lights.	Search on HTS and ImageWriter II and Power/Carrier problems
The carrier should move slowly to its leftmost position then rapidly to its center position	Search on HTS and ImageWriter II and Power/Carrier Problems
The platen should rotate one line backward and one forward	Search on HTS and ImageWriter II and Line Feed Problems
The ribbon frame assembly should tilt down about two lines and then up to become level again.	Search on HTS and ImageWriter II and Color Select Problems
The SEL lamp lights.	Search on HTS and ImageWriter II and Communication Problems

CHECK 3: SELF TEST

To initiate Self Test: turn the printer off and press Form Feed while you turn it back on. The printer should print:

SELF TEST

ROMREV

DIP switch settings

RAM XX AT On or OFF

and then begin printing lines of CHARACTER SETS in alternating colors.

If the Self Test occurs as described above and the print quality is good, go to CHECK 4.

If the printer doesn't print character sets or the print quality is poor, search on "HTS and Imagewriter II and Self Test". The document you will obtain contains fixes for IW II Self Test problems.

#### CHECK 4: HOST PRINT

4.1 Turn off the printer, write down the customer's Super Serial Card and printer DIP switch configurations. Set the DIP switches as shown below:

(Note: Op = open, Cl = closed, up = On, dn = Off)

_____IW II-SW1_____								_____IW II-SW2_____						
Op	Op	Op	Op	Op	Cl	Op	Op	Op	Op	Cl	Cl	N/A	N/A	
1	2	3	4	5	6	7	8	1	2	3	4	5	6	
_____SSC-SW1_____							_____SSC-SW2_____							
Off	Off	Off	On	Off	On	On	On	Off	Off	On	On	Off	Off	MODEM/TERM jumper
1	2	3	4	5	6	7	1	2	3	4	5	6	7	block to TERM

NOTE: Dip switches 2-5 and 2-6 on the printer are preset at the factory. They control the timing of the firing of the hammer. Do not move these switches unless a hammer firing adjustment is being done. Refer to ImageWriter II Technical Procedures for more information.

4.2 Remove all peripheral cards from the IIE. Install the Super Serial card in slot 1. Connect the IW II to the S/S card via printer cable. Turn on the IW II (make sure cover is installed). Turn on the IIE and press the RESET key while you press the CONTROL key (DO NOT BOOT A DISK). The cursor should blink.

Type the program exactly as shown below.

```
10 PR#1
20 FOR A = 1 TO 100
30 FOR I = 32 TO 126
40 PRINT CHR$(I);:NEXT I:PRINT
50 NEXT A
60 PR#0
70 END
```

4.3 After you type RUN and press the <RETURN> key. The printer should print out about 100 character sets like the one shown below. If it does, the IW II is OK.

```
!#$%&'()*+,-./0123456789:;<>?@ABCDEFGHIJKLMN OPQRSTUVWXYZ[\]^_`abcdefghijklmno
pqrstuvwxyz{|}
```

If it doesn't, look below for problems.

\* If you get a SYNTAX ERROR on the computer, you may have mis-typed a line.

To correct the syntax error perform the following:

- (1) Type LIST and press <RETURN>. The program should appear on the screen.
- (2) Examine the program for accuracy. Spaces, colons, etc. are important.
- (3) To correct a line, simply retype the line and press <RETURN>. LIST again to make sure the correction is OK.

\* If nothing happens on the printer or the computer, press the RESET key while you press the CONTROL key. Then LIST your program as described above in the SYNTAX ERROR explanation to look for typing errors.

\* If no syntax errors occurred; the cursor is blinking again; then the program has probably run OK so there must be a problem with the printer. Search on "HTS and Imagewriter II and Communications". The document you will obtain contains fixes for IW II hardware communications problems. Copyright 1988 Apple Computer, Inc.

Keywords: hts

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19960215 11:05:19.00

Tech Info Library Article Number: 1404