PRODUCT UPDATE

ATARI HOME COMPUTER SYSTEM

ATARI® Assembler Editor User's Manual Update

This product update contains a number of corrections and additions to the *ATARI Assembler Editor User's Manual* (C014189-03 REV. 1).

Inside Front Cover. The codes listed are **BASIC Error Codes,** and should be replaced with **Assembler Error Codes** as shown (which are also listed in Appendix 1):

Error No.	
1	Insufficient memory
2	No start address for DEL command
3	Mini-assembler address error
4	LOAD file error
5	Undefined label reference
6	Error in syntax of statement
7	Label defined more than once
8	Buffer overflow
9	Missing label
10	Value greater than 255
11	Invalid null string
12	Incorrect address or address type
13	Phase error
14	Undefined forward reference
15	Line too large
16	Unrecognizable source statement
17	Line number too large
18	Misuse of LOMEM command
19	No starting address
20	Overflow in NUM or RENUM
128	BREAK key pressed during I/O operation
130	Nonexistent device
132	Invalid command
136	End of file
137	Record longer than 256 characters
138	Device does not respond
139	Device does not return Acknowledge signal
140	Serial bus input framing error
142	Serial bus data frame overrun
143	Serial data checksum error
144	Device done error
145	Read-after-write compare error
146	Function not implemented
162	Disk full
165	Filename error

Page vii. These are the correct page numbers for:

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Page viii. In the Appendices, the title for **Appendix 9** should read:

9 **Using the Assembler Editor Cartridge to Best Advantage: Sample Programs** 63

Page 1 and **Page 2.**

Delete reference to ATARI 815 Dual Disk Drive.

Page 5. The caption for **Figure 2** should read:

Figure 2. Memory map without use of LOMEM.

Page 9.

The example shown in Figure 4 is not an executable program. It is used only to demonstrate the format of a sample program.

Page 11. The third paragraph should read:

Please refer to the description of the LABEL= directive . . .

Page 12. This information pertains to **Indirect Indexed Operands:**

Using indirect indexed operands will sometimes produce an error 12, although the source code appears to assemble correctly anyway. Use with caution; examine the object code to be certain.

Page 17. Under the **REP Command**, the first listing in the left column should read:

REP/OLD/NEW/

Page 18. On the sample **Programming Form**, the following line numbers are missing:

20
30
40
50
60
70
80
90

In **Figure 7** on line 50, IMY should be:

INY

Page 19. This information pertains to the **LIST Command:**

The LIST command does not set the display flag, so a LIST containing control characters will execute those functions instead of printing the characters.

The LIST Command format should read:

$$\text{LIST}\left[\left\{\begin{array}{l} xx[,yy] \\ \#\left\{\begin{array}{l}\text{device:}\\ \text{filespec}\end{array}\right\}[,xx[,yy]] \end{array}\right\}\right]$$

Page 20. The program should read as follows—note in particular the indentation and spacing:

```
EDIT
LIST RETURN
10   *= $3000
20   LDY #00
30 REP LDX ABSX, Y
40   BNE XEQ SAME PAGE
50   INY TALLY
60   JMP REP
70 ABSX = $3744
80 XEQ = *+$60
90   .END

EDIT
LIST30 RETURN

30 REP LDX ABSX, Y

EDIT
LIST 60,80 RETURN

60   JMP REP
70 ABSX = $3744
80 XEQ = *+$60

EDIT
```

Page 22. The **SAVE Command Example** should look like this:

Examples: SAVE#C:<1235,1736
SAVE#D2:MYFILE<1235,1736
SAVE#C9:<1235,1736

To save an object program residing in hex address1 to address2 on cassette or diskette, the commands are:

SAVE#C: < address1,address2
CAUTION: Use the CSAVE procedure illustrated in your 410 Program Recorder Operator's Manual.

SAVE#D:FILENAME < address1,address2
where FILENAME is an arbitrary name you give to the block of memory that you are saving (where your object program is stored).

SAVE#C9: <address1,address2
Saves an object file without the DOS header bytes. This command procedure is used to generate tapes that can be booted on the cassette. You will have to supply your own cassette boot control information in your program. (See section 10 of Technical Reference Notes CA016555)

Page 22. The **LOAD Command Format** should look like this:

Format: LOAD# { device: / filespec }

Page 25. In the general form diagram the upper left line should read:

ASM [#D[n]:PROGNAME[.SRC]]

Add to Figure 8.

In Figure 8, an additional line will appear at the end of the assembly, prior to the next EDIT prompt. The added line shows the number of errors in the assembly.

Page 26. This information pertains to where object program is to be stored:

When generating tapes that can be booted on the cassette, do not assemble directly to the cassette using ASM,,#C9:. Store the object code in RAM and then use SAVE#C9:< address 1, address 2.

Page 28.

One more space should be added between the line numbers and pseudo ops on the top half of the page.

In addition, one O should be deleted from the sixth line down so that it reads:

100 .OPT NOOBJ

Under **Title and Page Directives,** add the following note:

The number of lines per page is set at 56 lines. To change the number of lines per page, change the content of location 480H. To cause an assembly listing to feed to top of page, change the location 481H to a non-zero value.

For example:
BUG RETURN
DEBUG
C480<3C
(this changes the number of lines in the printout to 60)

Page 29. Under the **Tab Directive,** the following clause and table should be inserted after the form of the directive (third paragraph):

—where each number corresponds to the number of columns to the right of the line number field to start printing.

Number	Field
1	op code
2	operator
3	comment

The last two drawings at the bottom of the page, should be replaced by: