

SECTION VIII
BOOT-UP SOFTWARE

8.1 Power-Up Procedure

```
begin (*run from 0*)
    set up stack_pointer
    (*power up*)
        if cartridge type = test
            execute the code at starting address
            found in location 800AH
        else
            disable sound chip
            init random number generator
            init controller buffer areas
            defer writes = false
            mux sprites = false
            (*display_logo*)
                fill VRAM with 0's
                set up VDP to mode 1
                load ASCII generators
```

```
1          load logo generators
2          load logo names
3          load logo colors
4          enable display
5          if cartridge = game
6              display logo and game name
7              wait 12 seconds
8              disable display
9              execute the code at starting
10             address found in location 800AH
11             else (*cartridge not present*)
12                 display log and "insert cartridge"
13                 message
14                 wait 60 seconds
15                 disable display
16                 soft halt
17             endif (*cartridge = game*)
18         endif (*cartridge type = test*)
19     end (*run from 0*)
```

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2 8.2 Title Screen

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4 During the power-up process, the boot-up software will
5 look for an ASCII string of characters at Cartridge ROM
6 location GAME_NAME for display on the logo screen.

7
8 The following information should be in the string:

- 9 1. Cartridge title with trademark (T=1EH, M=1FH).
10 2. Original licensor of the game.
11 3. The year the cartridge is released.

12 Example:

13 DEFB "DONKEY KONG JUNIOR",1EH,1FH
14 DEFB /PRESENTS NINTENDO'S/1983"
15

16 Each string is delimited by a slash (/). The first two
17 strings are limited to 28 characters and the last string
18 is four characters.
19

20 8.3 Cartridge Present Identifier:
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22 All cartridges must store OAAH at location 8000H for the
23 OS to recognize them as cartridges that require logo
24 display.
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The OS will initialize portions of the hardware, select data areas, display the logo screen and then pass control to the cartridge program.

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