

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 (Logo Bypass)  
        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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```

8.2 Title Screen

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

The following information should be in the string:

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

Example:

```
DEFB  "DONKEY KONG JUNIOR",1EH,1FH
DEFB  /PRESENTS NINTENDO'S/1983"
```

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

8.3 Cartridge Present Identifier:

All cartridges must store OAAH at location 8000H for the OS to recognize them as cartridges that require logo display.

1 The OS will initialize portions of the hardware, select
2 data areas, display the logo screen and then pass
3 control to the cartridge program.
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