

# Braze Mario Bros Installation Guide



<https://highscoresave.com/>

### **Steps for a successful install of your online or offline high score save kit -**

- Ensure your gameboard is working 100% before installing kit
- Ensure power to game is off before removing your gameboard from cabinet
- Label any connectors that you will be disconnecting. This will make reinstalling easier once kit is on gameboard
- **Note which way your connectors/cables are on.** (We suggest taking pictures to help you remember!)
- Work in a well-lit area on your workbench

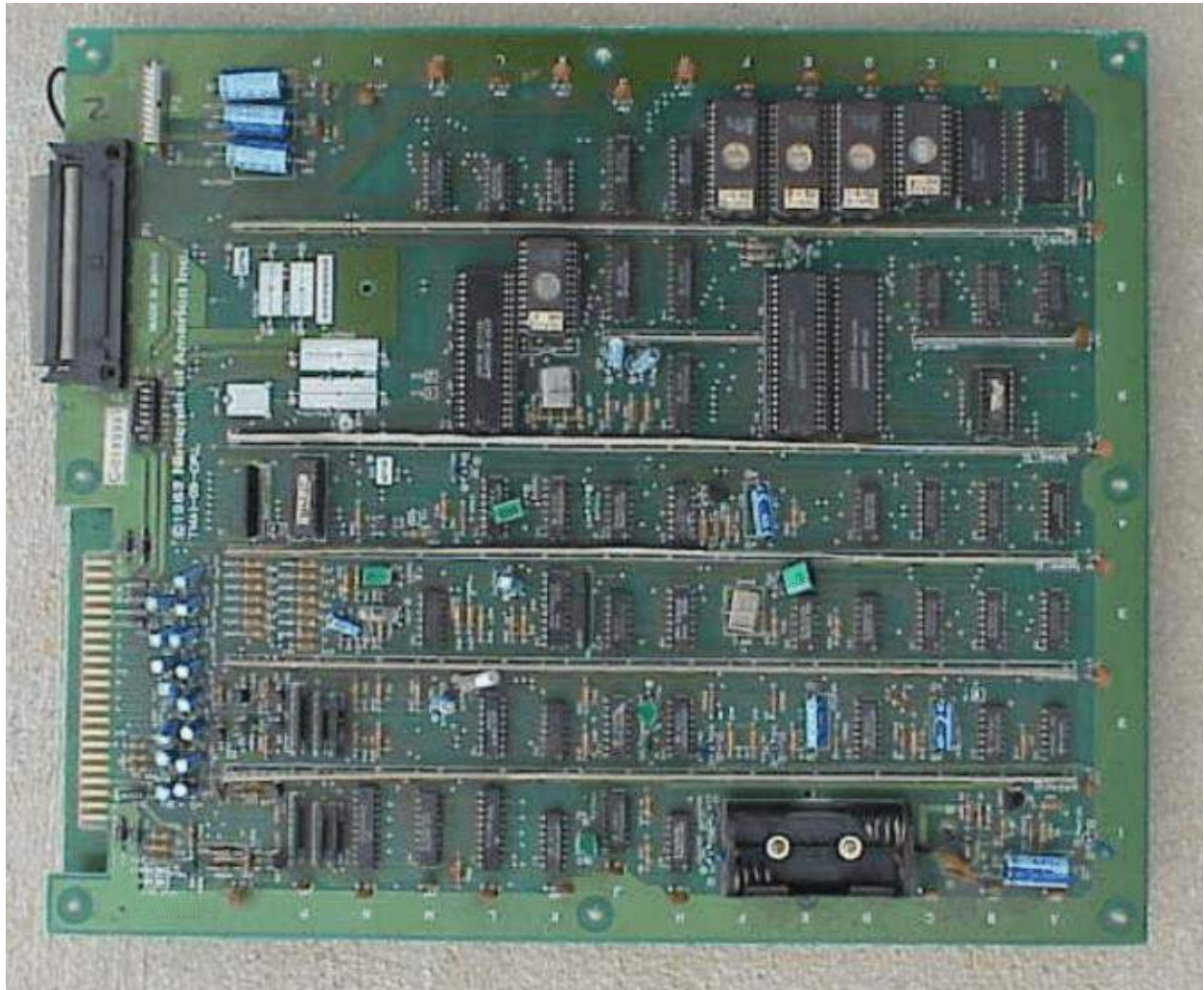
### **The Braze Mario Bros kit contains -**

- 1 – z80 Daughter card

**Please note** – you will need a z80 to install on this kit. There is an option to purchase in the drop downs of the product page when you order. Or you can use an existing one.

# Overview –

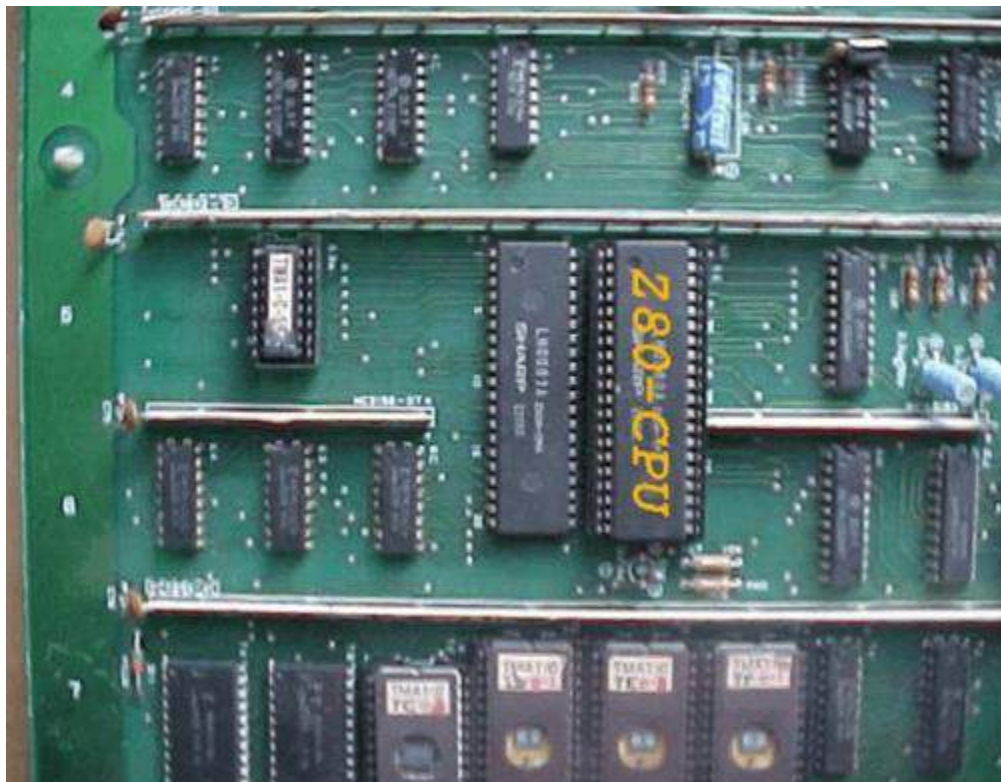
This is what your pcb should look like. This kit will only work on a Mario Bros PCB.



1. Locate your z80. Remove.

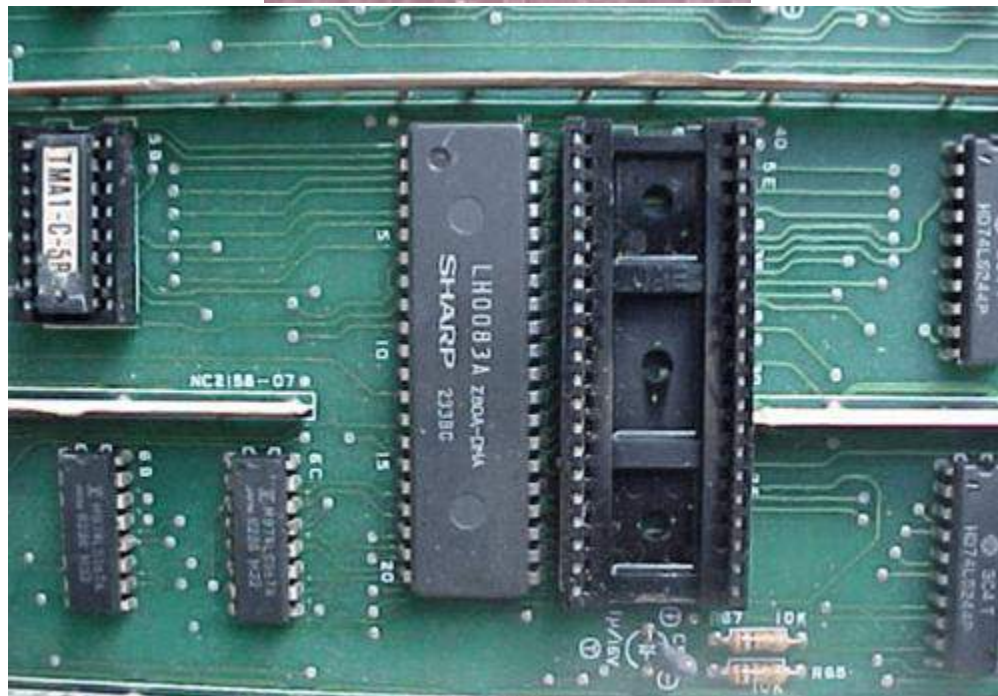
Locate and remove the Z80 chip on the CPU board. Use the photos to assist in locating it. See Z80 Chip Identification for additional information.

The Z80 chip is a 40 pin (large) chip, located at 7C (for the 2-boardset games or 5C for the DK 4-boardset game). Remove the chip gently by using a flat head screwdriver to pry it out of its socket from each end. Be careful not to bend any of the pins. If any pins do get inadvertently bent, or you will need to straighten them out before the next step. Needle nose pliers work the best for this.

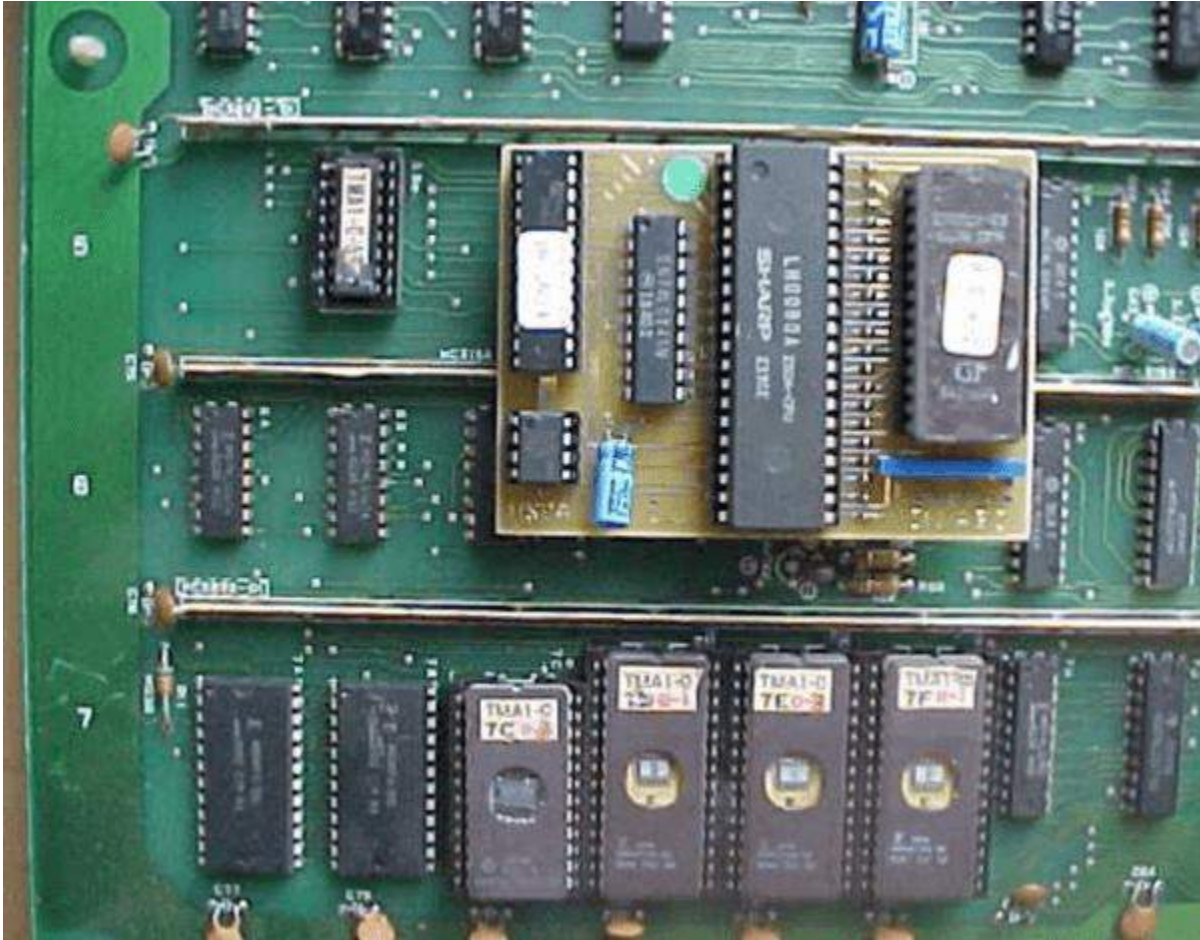


Insert the just removed Z80 chip into the empty 40 pin socket on the High Score Save Kit. Make sure pin-1 is correctly oriented. Pin-1 is marked on the Z80 chip usually by some type of indentation or circle molded into the plastic. The end of the chip with the marking, needs to match up with the

socket on the daughter card that also has a marking on the plastic. Pin-1 is also labelled on the kit pcb with a "1".



Kit will look like this installed -



**NOTE – Your kit may be an updated version, but the layout is the same.**

## TROUBLE SHOOTING

A common mistake is not having the daughter card inserted correctly, either hanging over the socket by one pin, or in backwards. In this case you will usually just see the powerup garbage on the screen. This garbage is just the random bits that are in the character RAM at powerup, and it indicates the CPU was not able to run.

Another common mistake is for the Z80 CPU to have been inserted incorrectly, either backwards, or possibly with a pin bent that did not insert into the socket properly.

The Mario Bros high score save kit will perform a very simple powerup selftest of the HS daughter cards on powerup. Should this mini selftest fail, the text "HS

FAILURE" will appear on the bottom line during the very first attract mode screen. After that, it is cleared by the subsequent attract mode screens, so you need to check for this immediately after powering up the game. A sample screen showing the failure is shown to the right. If you see this failure, most likely that means that one of the socketed chips on the daughter card is probably loose. Check to make sure the 8 pin dip (the smallest chip) on the HS daughter card is fully inserted into its socket.

## **TEST MODE**

Pressing and holding the SERVICE switch will cause the Test Mode menu to be displayed. A flashing shellcreeper points to the current test. Momentarily depressing the SERVICE switch will step to the next test. When the shellcreeper is pointing to the desired test, the details of that test can be displayed by pressing and holding the SERVICE switch. You can return to the test mode menu from within a test by pressing and holding the SERVICE switch until the menu appears. Return to game mode by selecting the last test "RETURN TO GAME MODE" and pressing and holding the SERVICE switch until it returns to game play mode.

### **Enter Test Mode**

Following the general test mode operation instructions, put the game into test mode. (Press and hold the SERVICE switch until the menu appears). Select the menu item "1-DISTRIBUTIONS" (normally already selected). Press and hold the SERVICE switch until the distribution screen appears.

### **Clear Distributions**

Press P1-START or P2-START to clear the distributions. For the Mario Bros. High Score save kit, this also resets the high scores back to the factory defaults. At this point, the game should have returned to the test mode menu with the next item selected.

### **Return to Game Play**

At this point, the game should have returned to the test mode menu with the next item selected. Advance the menu to "4-RETURN TO GAME" by Momentarily depressing the SERVICE switch will step to the next test. Once the last item is selected, press and hold the SERVICE switch until it returns to game play mode. At

this point the high score table should have the following factor default scores and initials.

### **SETTING MARIO BROS. FREE PLAY MODE**

Enter Test Mode, Select FREE PLAY Following the general test mode operation instructions, put the game into test mode. (Press and hold the SERVICE switch until the menu appears). Select the menu item "2-FREE PLAY" by momentarily pressing the SERVICE switch. Once selected, Press and hold the SERVICE switch until the free play screen appears.

### **TOGGLE FREE PLAY SETTINGS**

Press P1-START or P2-START to toggle the current free play setting. For the Mario Bros. High Score save kit, the free play option selected will be saved along with the high scores. Press (and hold) the SERVICE switch to return to the test mode menu.

### **MARIO BROS. MONITOR TESTS AND DIAGNOSTICS**

Following the general test mode operation instructions, put the game into test mode. (Press and hold the SERVICE switch until the menu appears). Select the menu item "3-MONITOR ADJUSTMENT & SELF-TEST" by momentarily pressing the SERVICE switch. Once selected, Press and hold the SERVICE switch until the first diagnostic test screen appears. Press either start button to proceed to the next test. The test screens are shown below for reference.



That's it!

- Double check your work
- Install back in cabinet using pictures you took and any marked connectors
- Power up the game and enjoy!

If the game does not start, turn power off immediately, double check your work.

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You will have 5 seconds to press P1 and enter setup mode, or the game will timeout and automatically transition to gameplay mode.

If the game does not come up, turn power off immediately, double check your work and read over the trouble shooting section.