

Gravitar Installation Guide



FREE PLAY HIGH SCORE SAVE KIT

***HIGHSCORE
SAVES***

Overview

Follow this short pre-install checklist to ensure a smooth, safe installation and reliable operation of your high score save kit.

Safety First

- **Power Off & Unplug:** Turn the game **off** and **unplug the cabinet** before touching the game board.
- **ESD Precautions (Recommended):** Work on an anti-static mat and ground yourself to avoid electrostatic discharge.

Preparation Checklist

- **Verify Board Health:** Confirm your **game board is 100% working** *before* installing the kit.
- **Remove Board Safely:** With power **off**, carefully remove the game board from the cabinet.
- **Label Connectors:** Tag **every connector and cable** you disconnect. Clear labels make re-installation fast and accurate.
- **Record Orientation:** Note the **orientation of each connector/cable**. *(Tip: take photos from multiple angles for reference.)*
- **Set Up Your Workspace:** Use a **well-lit workbench** with enough room to lay out the board, kit, and tools.

Next Step

Follow the instructions step-by-step using the photos below and the labels you created during the preparation checklist.

The Gravitar kit contains –

1 – 6502 Daughter card

6502 processor required. Purchase via the product page options or install with your current 6502.

How to tell what revision you have -

Take a look at the picture below. If the bottom number (that is circled in yellow) starts with a "1" it is version 1. If it starts with a "2" or "3", you are good to go!



If you do have a "1" on your vector roms, you can still use the kit, however, these will have to be changed accordingly.

Use a 2516 on Position L7 programmed with 136010-210 vector binaries --or--

Use a 2532 on Position MN7 programmed with 136010-207 vector binaries

AND

Use a 2532 on Position NP7 programmed with 136010-208 vector binaries

*Note - The 2532 on Position R7 is no longer needed.

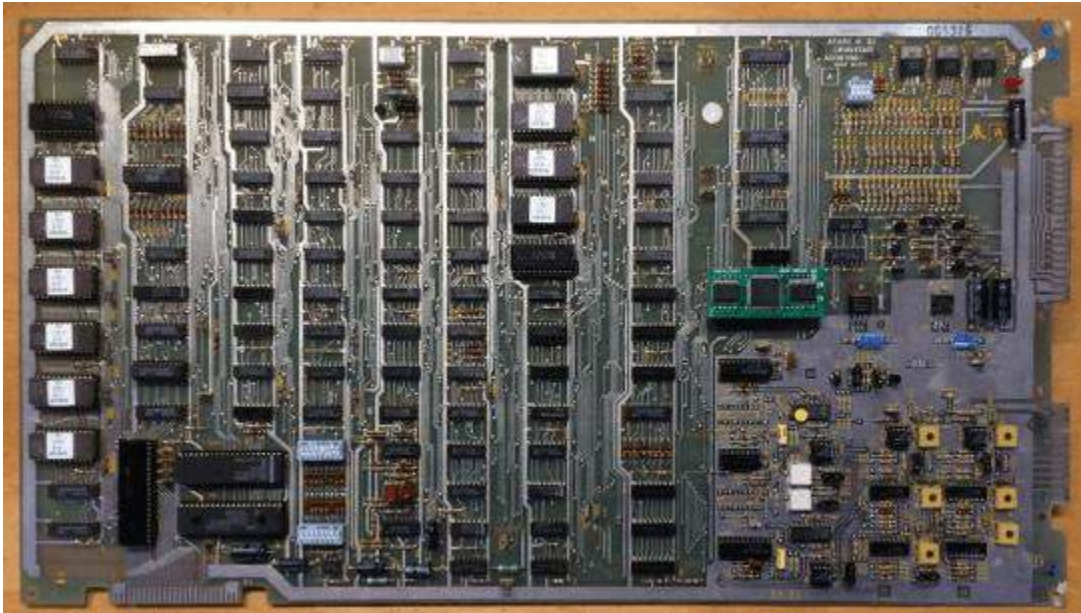
Please check your vector rom at R7 at VROM3 -

136010.209 is Version 2

136010.309 is Version 3 (Do not need any rom changes)

Overview –

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



This is the 6502 that you will want to remove, install the riser and the kit, then populate the 40-pin socket on the kit with the 6502 you just removed from your pcb. Described below.



Remove your 6502 and insert on you new save kit [Note orientation of the 6502]

Install the 6502 on save kit as shown -



Install save kit on your PCB with the 6502 in same orientation before you placed on the save kit [Ensure PIN 1 of the 6502 is installed in the proper orientation]

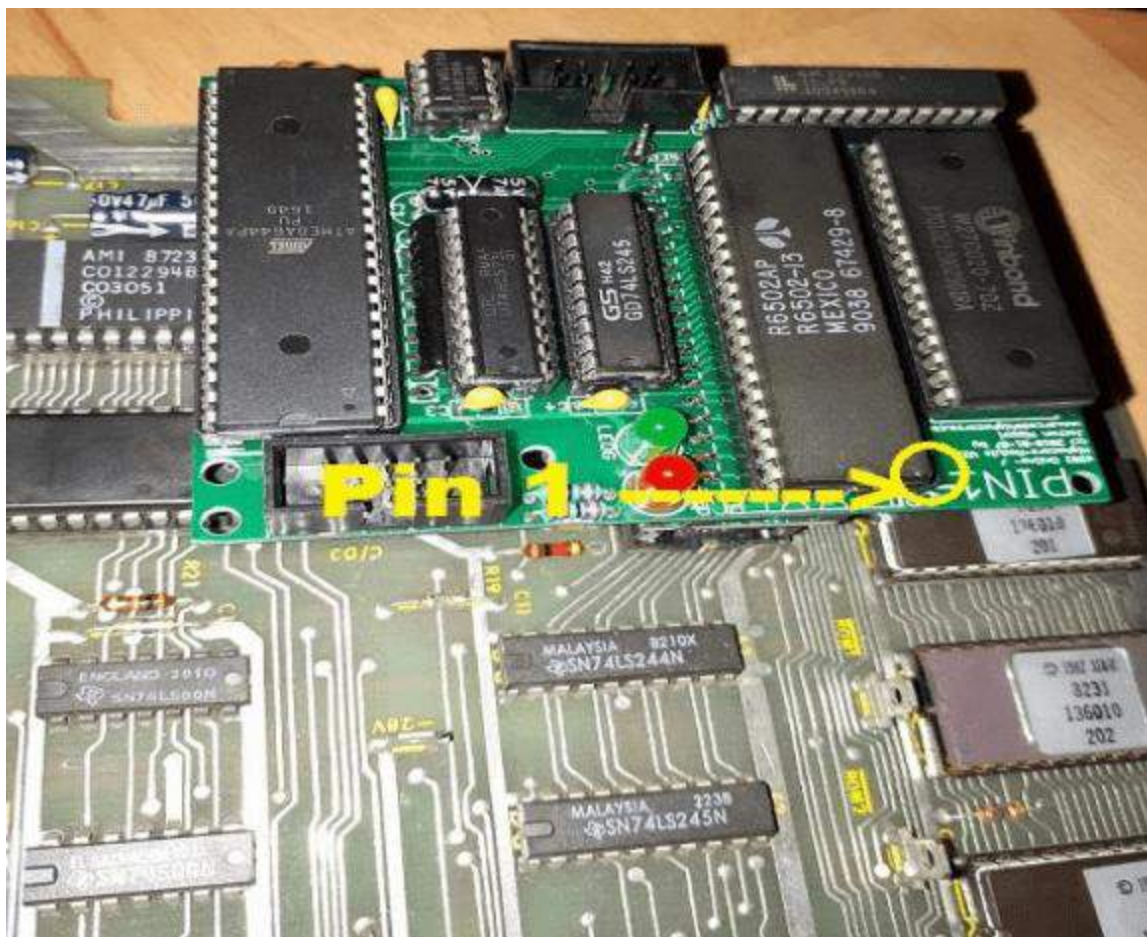
Here are the test points that you DO NOT want the bottom of the kit to touch! This is why we are using a riser. I have bent these slightly on my pcb, which will avoid the need for the riser, however, the riser is provided if you do not want to bend the test points. This riser is



Insert the riser pcb at C2 (where the 6502 was removed from). Note the Pin1 and install like pic below (the riser may be a 40-pin machine socket instead of the small pcb pictured, they work the same to raise the height properly)



Now, install your main save kit. Please note the Pin 1 like pic below.
(your kit may look different, this is an online version)



You're done!

- 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.

How do I get to the menu settings?

With the power off on your game. Press and hold P1 while you turn the game on. Release P1 button when the screen tells you to. You are now in the main menu settings. This is a feature built into your kits, so the menu settings are not accessible to your guests or family.

Now, having said that, you need to enable this feature in the menu settings, or disable if you want your kit to give you approximately 5 seconds every time you turn on your game.

Helpful links –

Homepage - <https://www.highscoresaves.com/>

Product Page - <https://www.highscoresaves.com/Gravitar-Free-Play-and-High-Score-Save-Kit/HSSGRAV>

What's a Wi-Fi kit? - <https://www.highscoresaves.com/What-s-a-WiFi-Enabled-Kit-or-Standard-Kit/>

Tips and Tricks-

https://www.highscoresaves.com/media/a6/28/5e/1756433395/Highscoresaves%20Tips%20and%20Tricks_compressed.pdf?ts=1756433395