

PINSHAKERS

Pinshakers Universal Shaker Motor Kit Installation

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For product support email us directly at pinshakers@gmail.com

Standard Driver Board Vers 3.xx Gottlieb Installation – Updated 02/16/2021

Tools Required:	Parts Required (included):
<ul style="list-style-type: none">-Small Phillips Head Screwdriver-Pen – (For adjusting the dip switches)-1/4” Nut Driver	<ul style="list-style-type: none"><input type="checkbox"/> Motor Harness<input type="checkbox"/> Wire Harness “A” and “B” Cable & Connector Adapters<input type="checkbox"/> Motor Driver Board V3.xx<input type="checkbox"/> Metal Board Mounting Backplate<input type="checkbox"/> 4 x 1/2” Hex Head Wood Screws<input type="checkbox"/> 4 x 1/2” Phillips Head Machine Screws (Installed on Backplate)<input type="checkbox"/> Installation Manual<input type="checkbox"/> Dip Switch Settings (download from www.pinshakers.com) <p>Unpack and inventory all the included components. Please let us know as soon as possible if you have any missing items.</p>

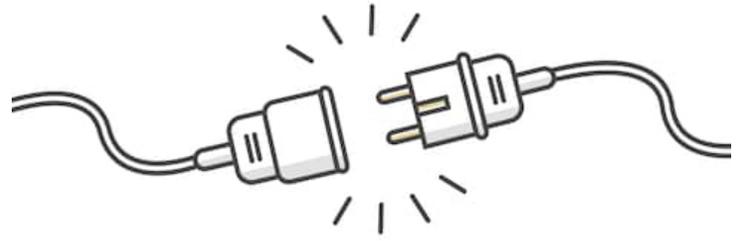
Note: Please hold onto this installation manual! In order to keep the price down on our kits we are only shipping one manual per household. You can still download our manuals from the website or watch the in-depth YouTube installation videos.

EXPECTATIONS OF USE

You agree to use our products in the manner described in the documentation provided. Any deviation from the provided documentation, or any custom modifications to our products, will likely cause damage to persons or property. You agree to only install our products in fully working and operating pinball machines. Any prior issues with grounding, loose connections, game resets, cold solder joints, hacked up circuit boards and other components, or any other pre-existing problems with your pinball machine will likely result in the damage of our product and/or your pinball machine. Other risks of installing our product in a machine that is not fully working is that of fire or bodily harm. Pinshakers will in no way be held responsible or liable for any damage that results in the use of this kit; either to any person, your pinball machine, or structure in which the pinball machine is operated.



Remove All Power!



On/Off Switch Is NOT Enough!

**Step 1: Motor Driver
Metal Backplate
Installation**



In this step you will be handling the metal backplate. Be careful as there might be some sharp edges on the sides or on the back of the plate.

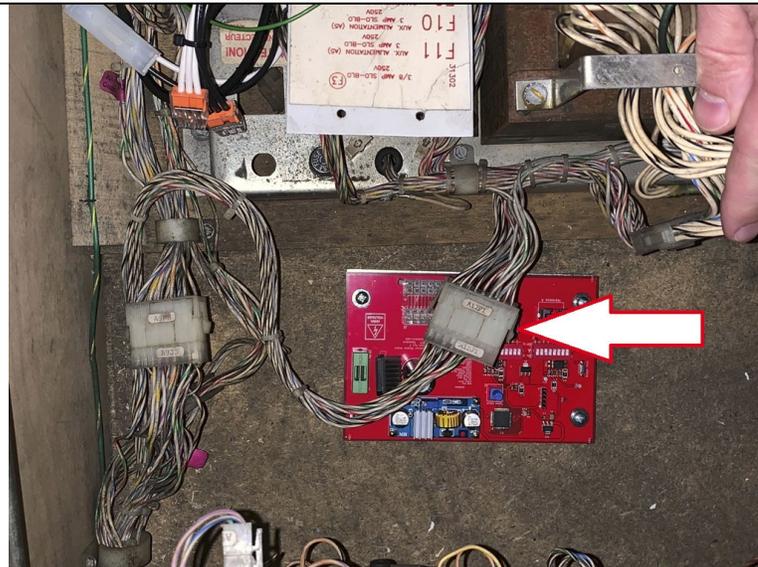


You received a metal Backplate with your kit that is used to mount the motor driver board. The picture to the right shows the spot in the cabinet where you will secure it with the 4 hex head wood screws in the hardware bag.

Step 2: Motor Driver Board Installation

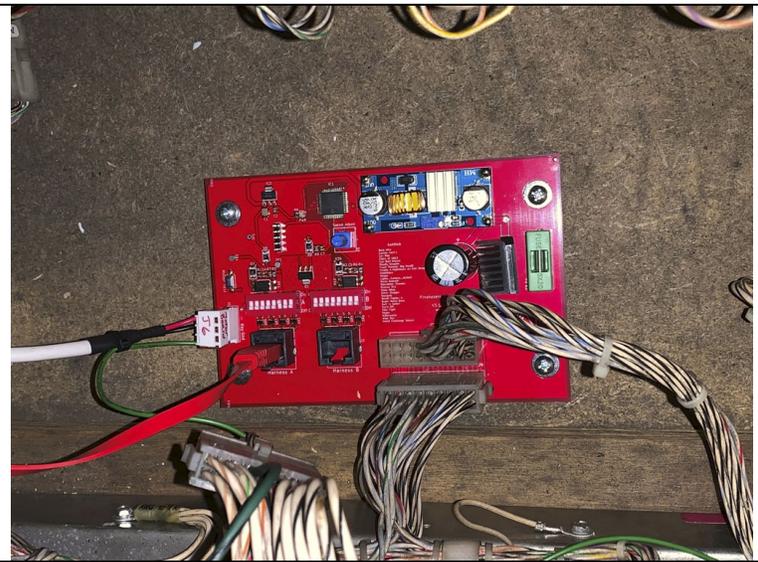
Mount the motor board on the metal backplate. Be careful not to tighten the screws too tightly otherwise you will damage the threads.

Find the connector coming from the transformer deck labeled “A12P1” or “A12J1” and pull that connector apart. The photo to the left should show where that connector is located. Connect both ends of that connector to J3 and J4 on the motor driver board. They will only go in one way, but make sure BOTH sides are connected to the board.



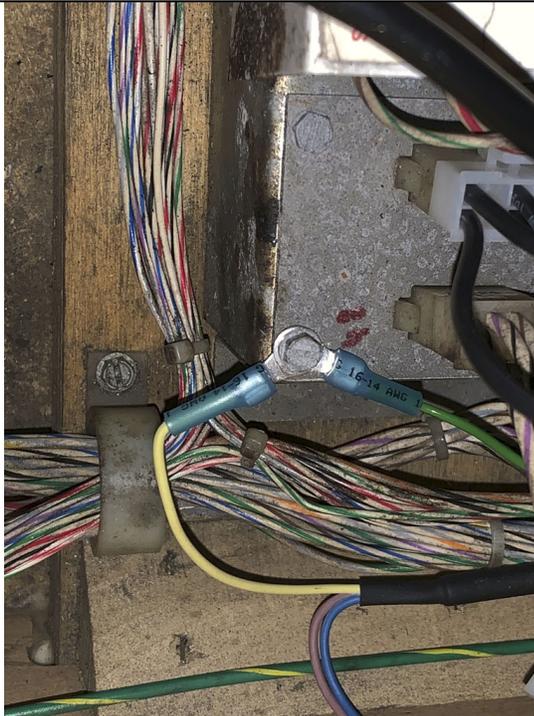
Step 2a: Motor Driver Board Installation

Connect the motor harness and Cat 5 cables to the motor board.



Step 2b: Motor Driver Board Installation

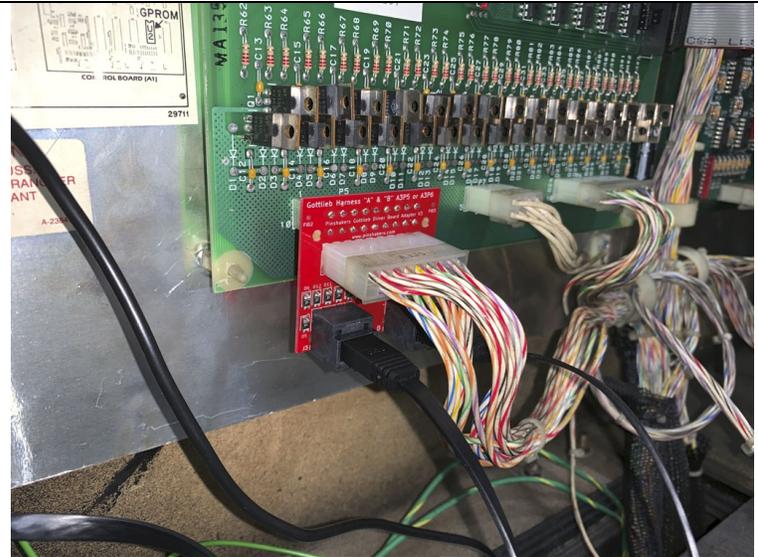
Connect the grounding cable from the motor harness to a good grounding spot like the one in the photo to the left.



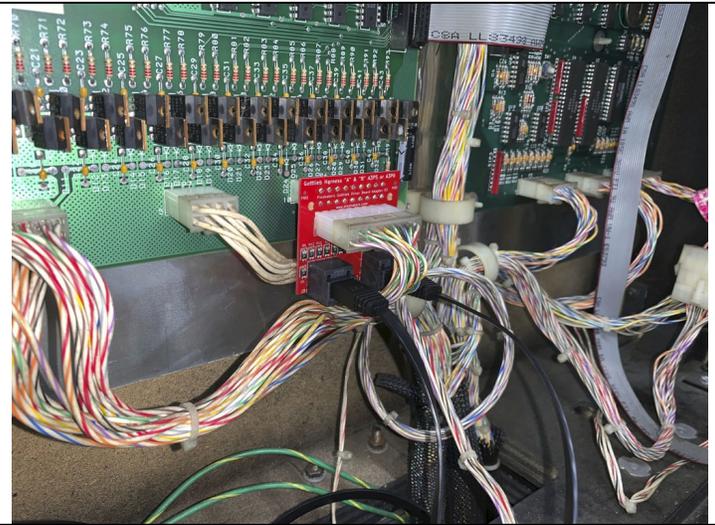
Step 3: Harness Adapter Installation

Locate the power driver board connector you want to connect the Cat5 adapter to. The two main choices for a standard kit are going to be A3P5 and A3P6. Unplug it and connect it to the connection on the front of the Cat5 adapter. Then connect the adapter back into the power driver board. Last, connect the Cat5 cables to the adapter. A photo to the right is an example of the harness adapter connected to A3P5.

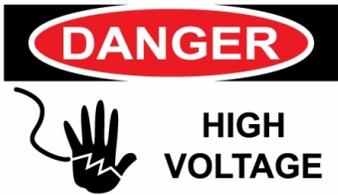
The Cat5 adapter will have the connection printed on it for which harness you are installing as well as what connector to use on the power driver board.



Here is another example of the harness adapter installed to the A3P6 connection.

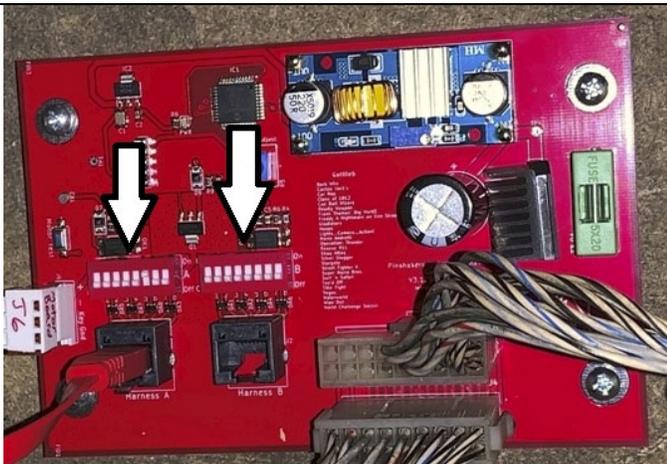
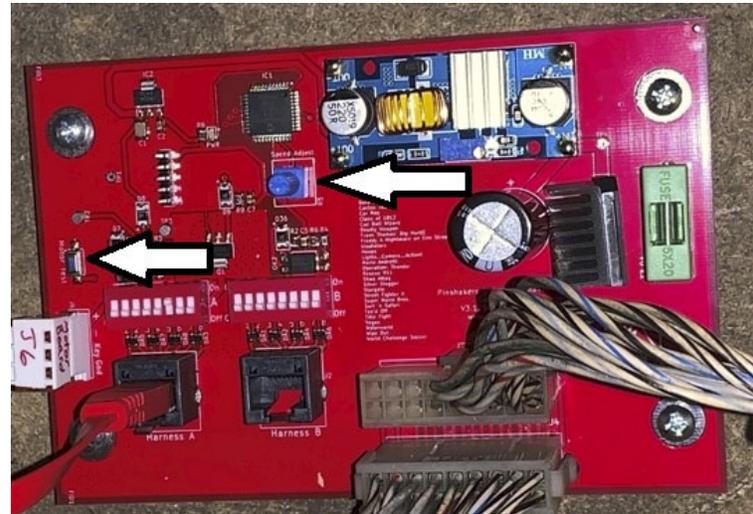


Step 5: Power On & Test



In this step you will be working with the motor board while it is powered on. Make sure you do not touch any of the components in the high voltage section or the 20vac/50vac output connector by accident as it may result in a serious injury or shock.

Power the machine on and look for the led on the motor driver board. It should flash 5 times during it's power-on routine. Once it is steady green, it is ready for action. Press the test button and the motor should shake. If it doesn't, then go back through the above steps to make sure you didn't miss a connection somewhere. You can also use this test button to fine tune the intensity of the shaker using the speed adjust knob as shown to the right to provide the perfect amount of shake you desire.



Step 6: Trigger Selections Feel free to change the dip switch settings with a pen or other like device on the motor driver board for the desired inputs that you want to drive the shaker motor. Do this while the machine is powered down. You may turn on any dip switch on the motor driver board that does not have the "Not Used" or "Do Not Use" label on the dip switch chart. You can choose to have more than one switch turned on at a time. Have fun with it and try to make it so that it feels as if this kit was always meant to be installed from the factory.

Congratulations, you have successfully installed the motor driver board, shaker motor, wiring harness, and power supply! If you have any questions or problems please do not hesitate to reach out to us for help.