

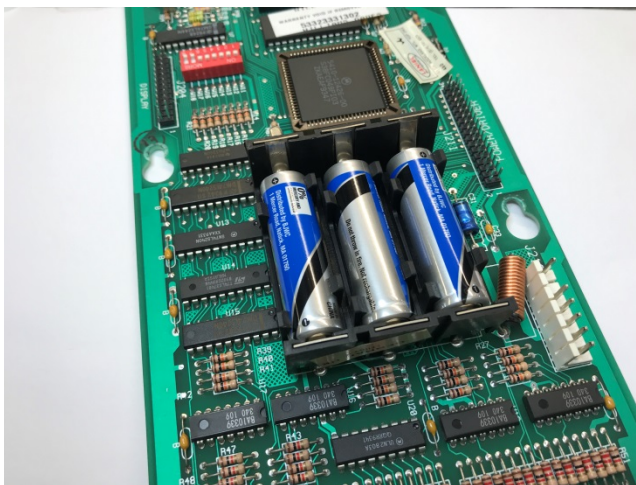
Battery Board Installation Instructions

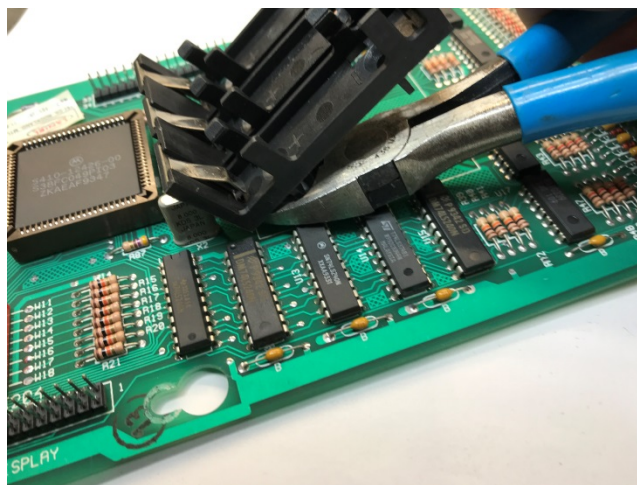
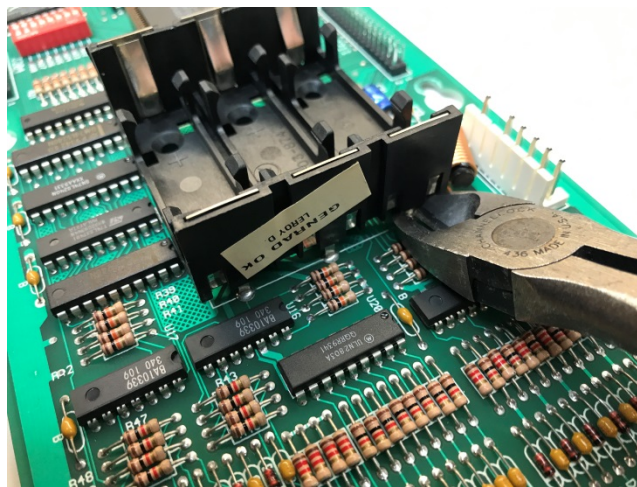
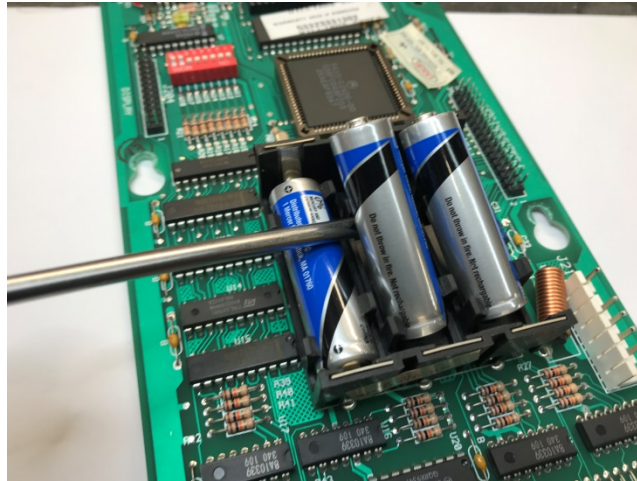
Thank you for your purchase! Your new battery board will forever protect your game from acid damage and provide decades of trouble free service.

Installing your new battery board is relatively a straight forward process. The exact procedures differ slightly between the different game manufactures but the general idea is the same. With the power off remove your logic board and place it on your work bench, or kitchen table if you don't have a bench and the wife isn't looking. If you go the kitchen table route and get caught you're on your own so do so at your own risk.

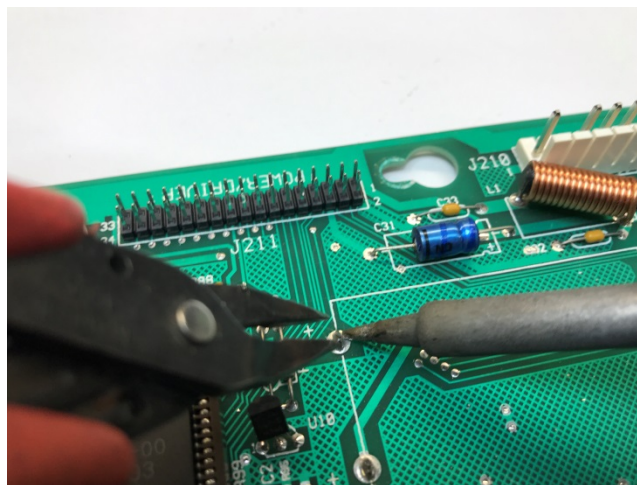
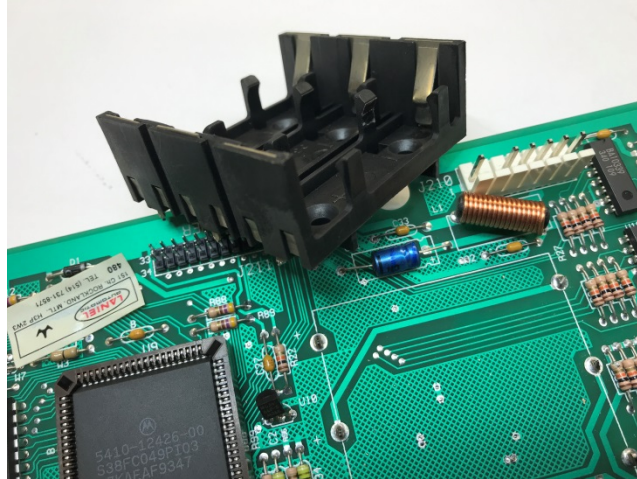
A few points I need to make before you get started. First, if your logic board is acid damaged or has other issues I suggest you address those first, especially since your new CR2032 battery board will be in an acid damaged area and will need to be removed again if you don't deal with it now. Second if you have mega high scores saved or don't want to deal with changing the defaults back to your preferred settings you will need to add a "piggy-back" battery to your board to keep those settings while installing your new battery board since they will be lost the second you remove your existing batteries.

This mainly applies to games that use three AA batteries, but for games that use a rechargeable NiCad battery, the procedure is similar. First step is to remove any existing batteries. At this point, I suggest that you cut the old battery holder off. If you feel comfortable with your soldering skills, you can de-solder each point but I have to warn you that you may damage the eyelets and may require adding jumper wires to complete any electrical connections.

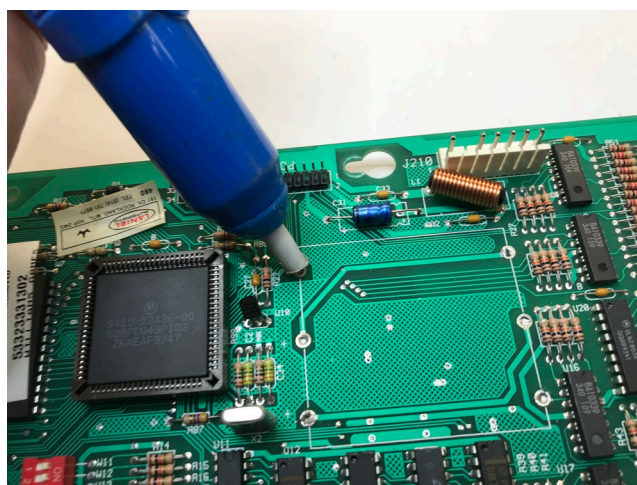




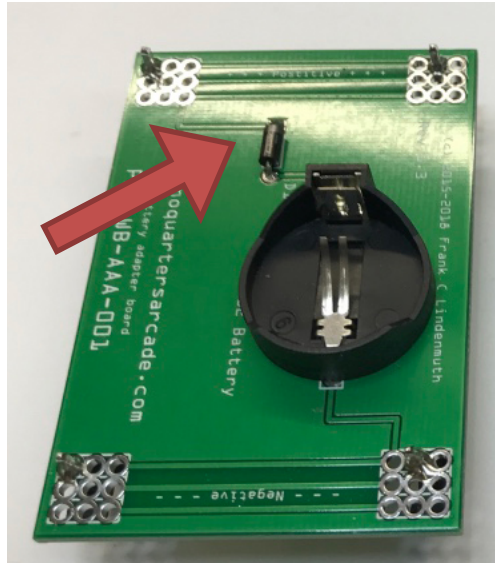
After cutting the old battery holder off the next step is carefully remove each of the remaining pins. Apply heat with your soldering iron and remove each one with needle nose pliers.



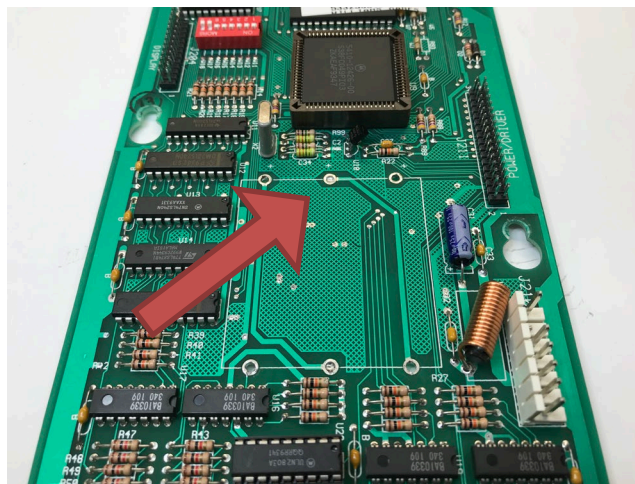
Once you have removed all of the pins use your tool of choice to clean the holes, here I am using a solder popper. Only the four corners need to be cleaned out since they are the only ones used by the new battery board.



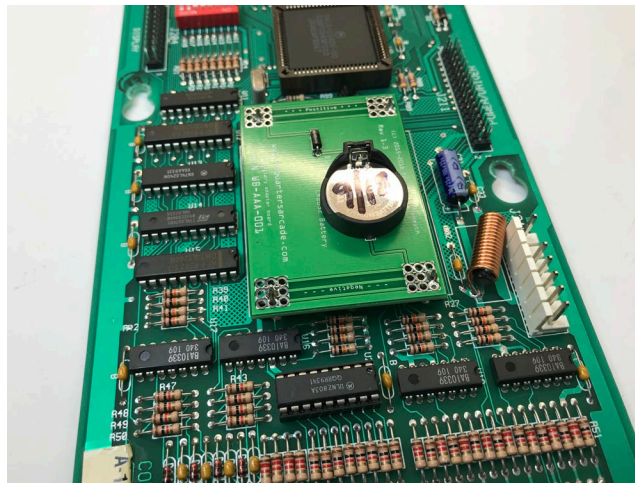
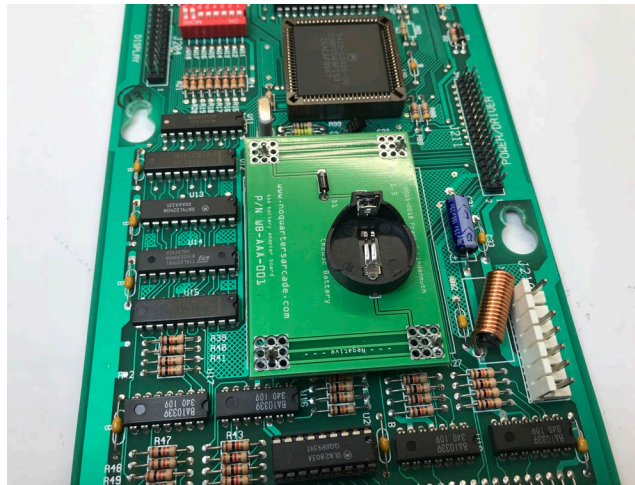
Remove the battery from the CR2032 battery holder before installing it on your logic board. Make sure you observe the polarity markings on both the battery board and your game's logic board. Match the positive-to-positive and negative-to-negative. As a side note, the diode on the battery board points towards the positive side so you can also point diode end to the positive side of the logic board. Arrow in pic below denotes diode and positive end of battery board.



The arrow in the pic of the WPC logic board points to positive end.



Now you can fit the CR2032 battery board into its place on the logic board. This part can get a little tricky. You will need to hold the battery board when you flip your logic board over to solder it into place. I hold it with one finger while using the tinned soldering iron tip and just tack it into place. Once you have it tacked in place you can let it lie on the bench and use both hands to hold the solder, iron, and fill the four holes in. The board only uses two holes for electrical connection; the other two are for additional support. Below are pictures of an installed battery board. The last step is to install the battery back into the holder. I find it helpful to note the month and year on the battery with a sharpie marker to remember how old it is. It should last at least 3-5 years.



Congratulations! Your battery board is ready to give you years of trouble free service. If you set a reminder to change the battery every four years or so you can do it with the power on and you won't lose your scores or settings.