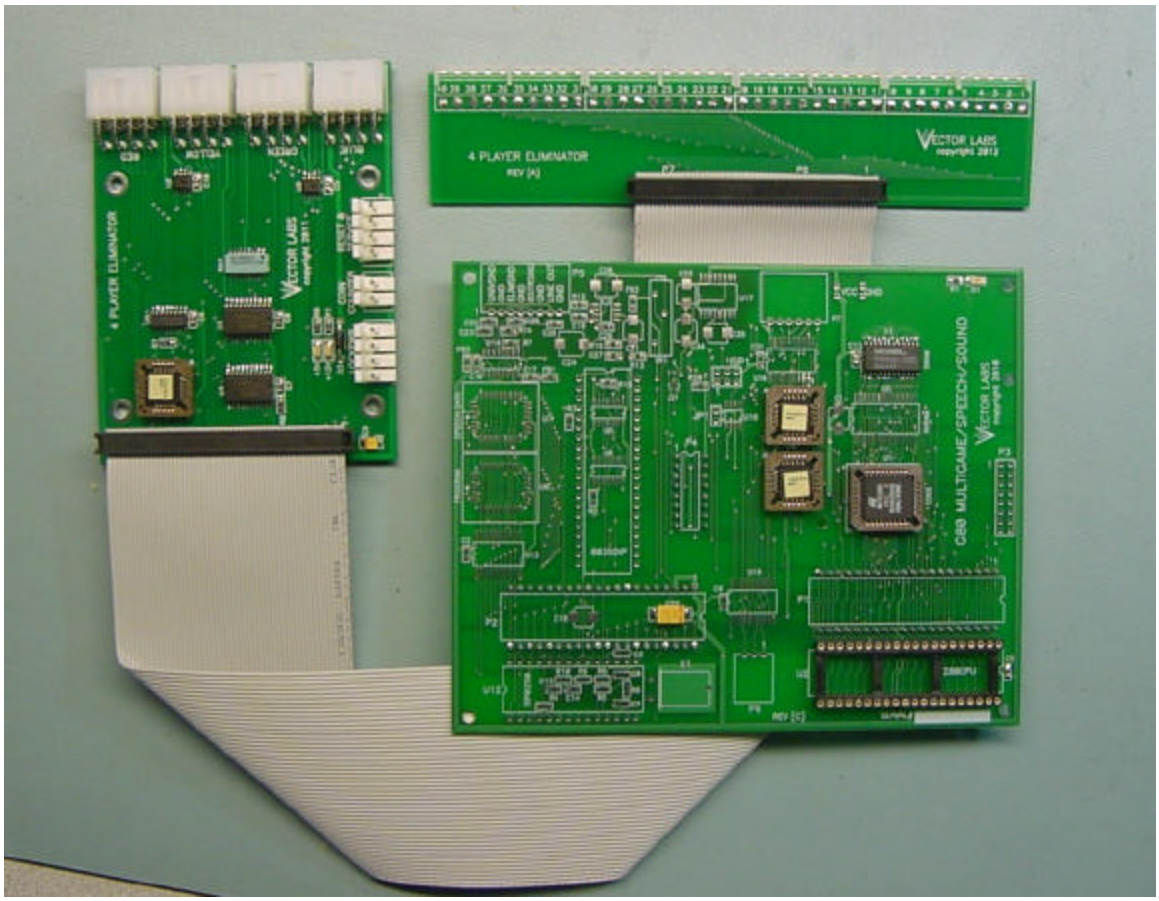
4 Player Eliminator
INSTALL GUIDE



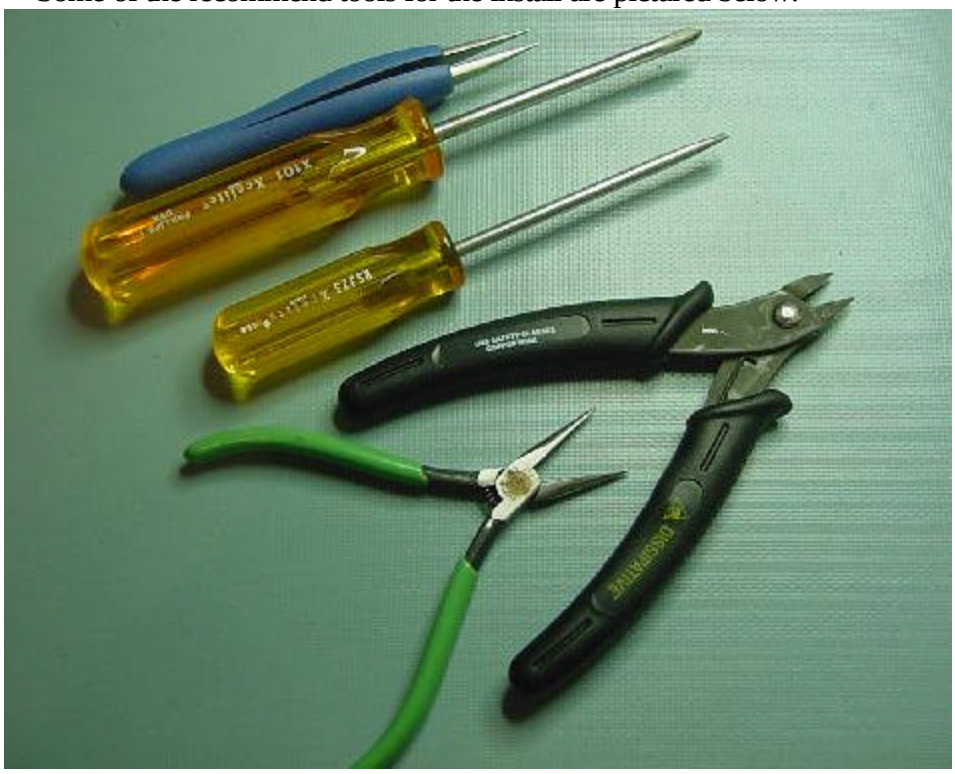
The 4 Player Eliminator kit includes 3 PWB's

1. A daughter PWB for the Sega G80 CPU board which eliminates the security chip & prom on the G80 CPU board, as well as the G80 EPROM board.

2. A wiring adapter PWB which plugs into the 4 10pin headers on the G80 CPU board and converts it into a 50 pin ribbon cable for ease of cabinet wiring.

3. An I/O PWB which connects to the 50pin ribbon cable and has connectors for 4 control panels & coin mech's. A header for a coin counte, header for the reset & service switches & +12V power for the coin lockout coils.

Some of the recommend tools for the install are pictured below.

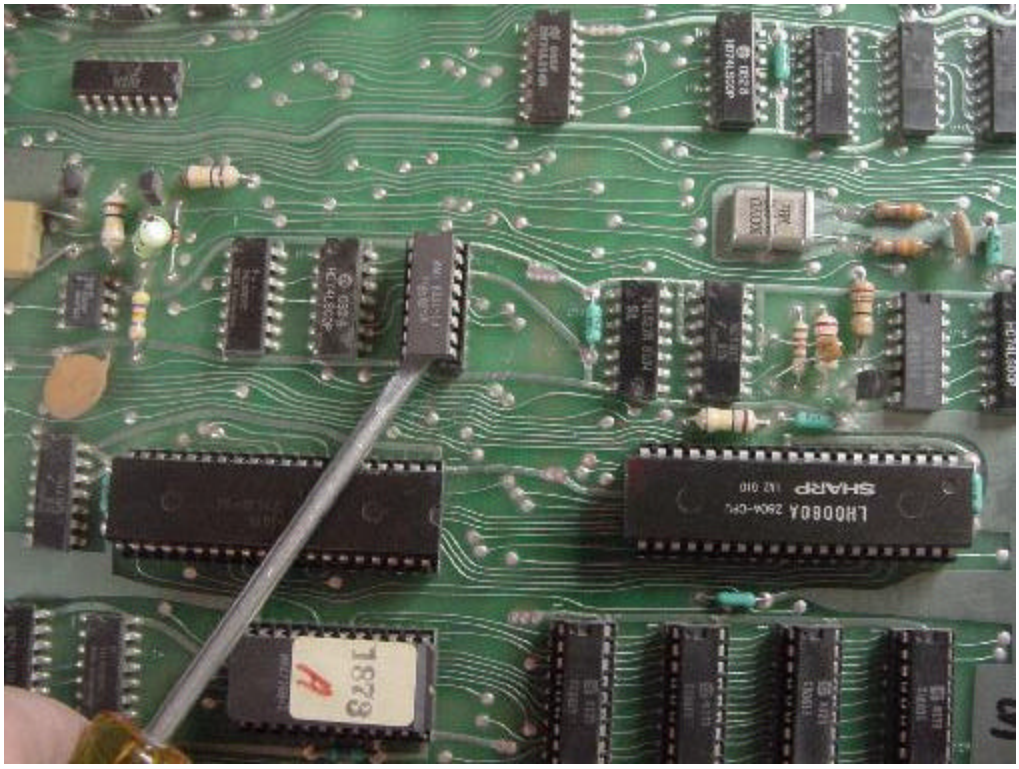


IMPORTANT INFORMATION PLEASE READ AND UNDERSTAND FULLY

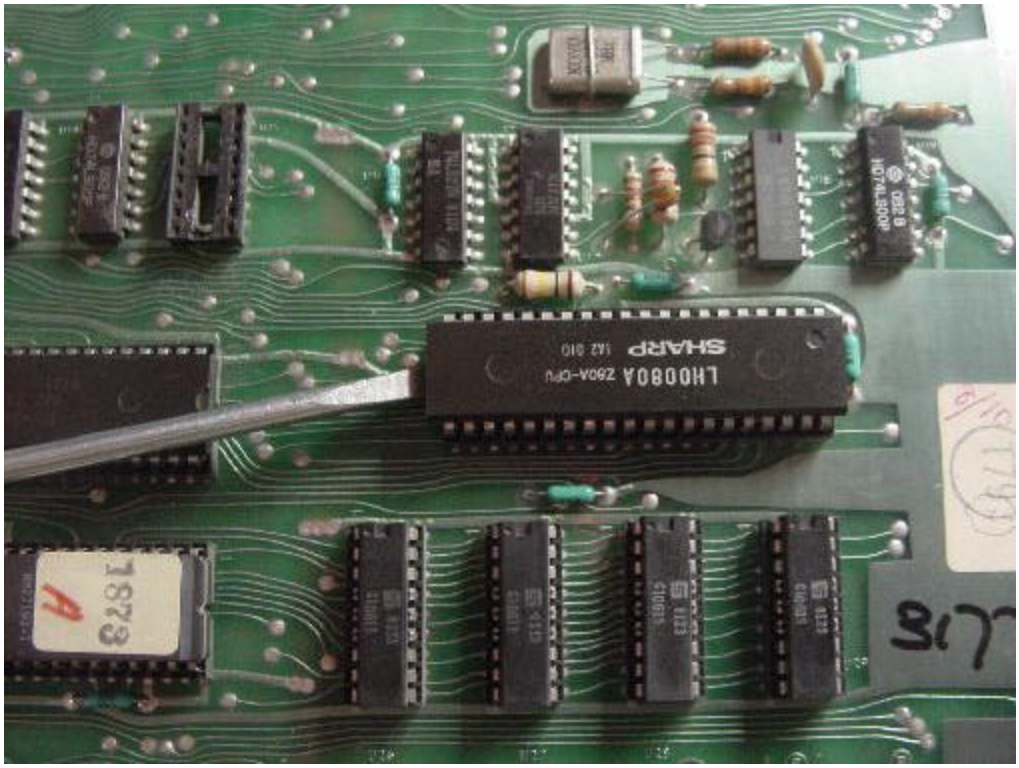
(1.) The card cage, X-Y & sound boards must be FULLY FUNCTIONAL before installing. The 4 Player Eliminator Kit will not "fix"a pre-existing problem with your game. Also make sure that your power supplyoutputs the proper voltages to the card cage. (+5v –5v +12v and –12v) +/- 5%.

(2.) You no longer need the EPROM board in your card cage so please remove it before starting the install.

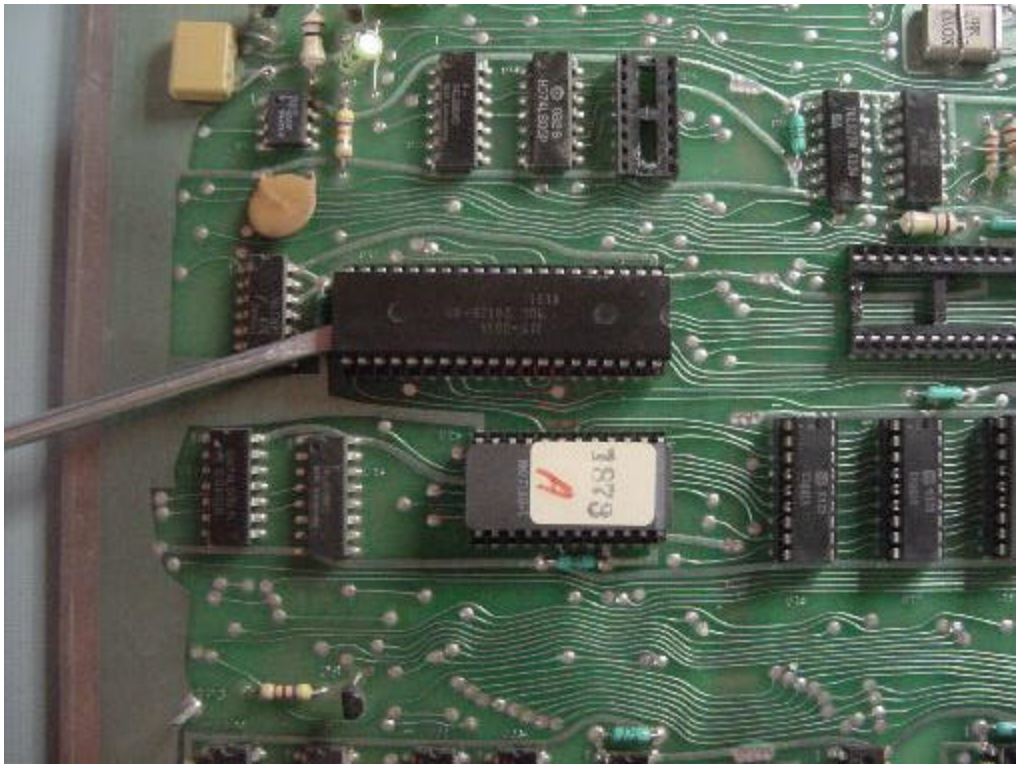
(3.) Until the Vector Labs MultiSound card is available you will need the Sega/Gremlin Eliminator or Meatball sound board to hear the game sounds.



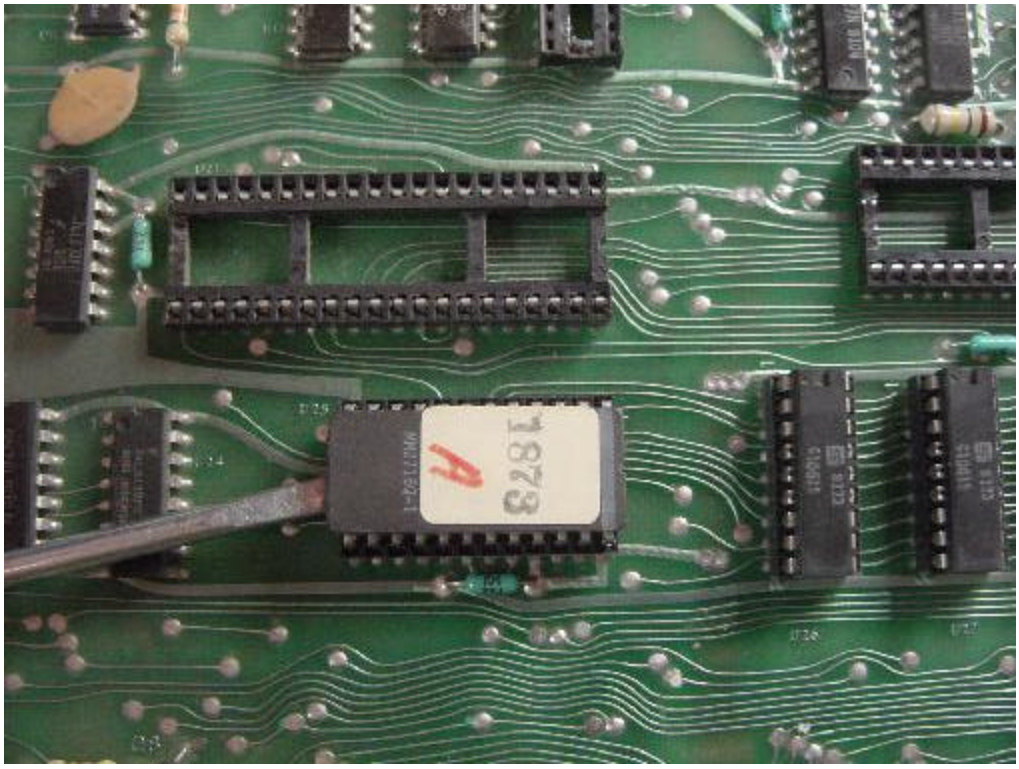
REMOVE PROM CHIP U15 AS SHOWN ABOVE.



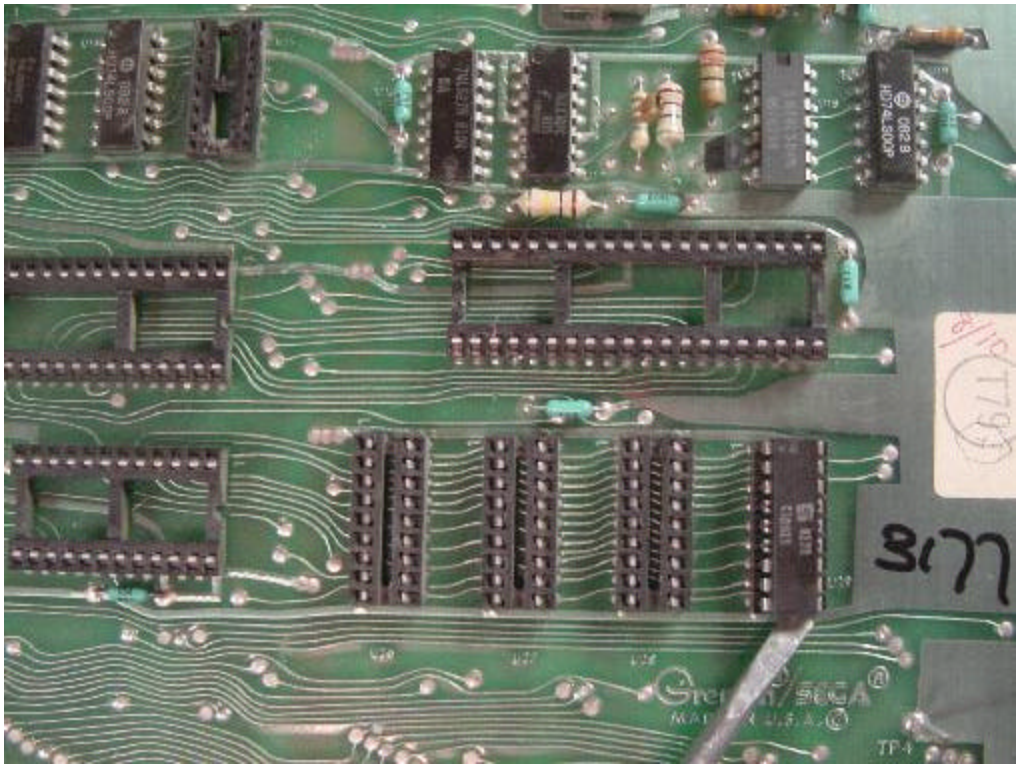
REMOVE Z-80 CHIP U2 AS SHOWN ABOVE.



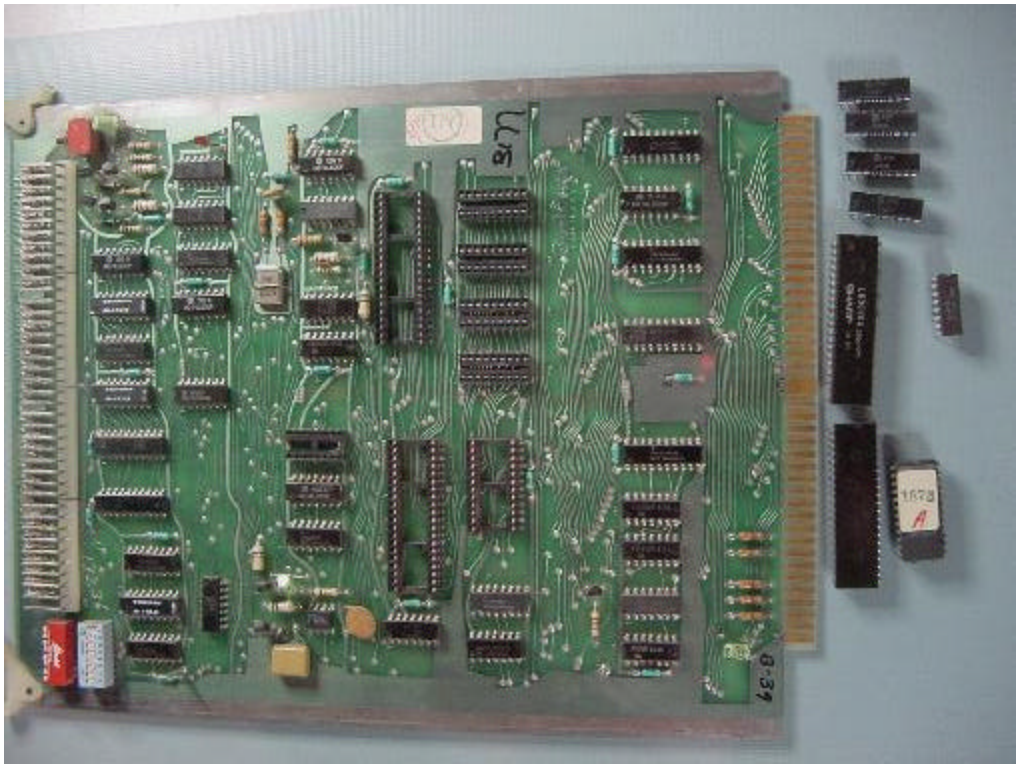
REMOVE SECURITY CHIP U21 AS SHOWN ABOVE.



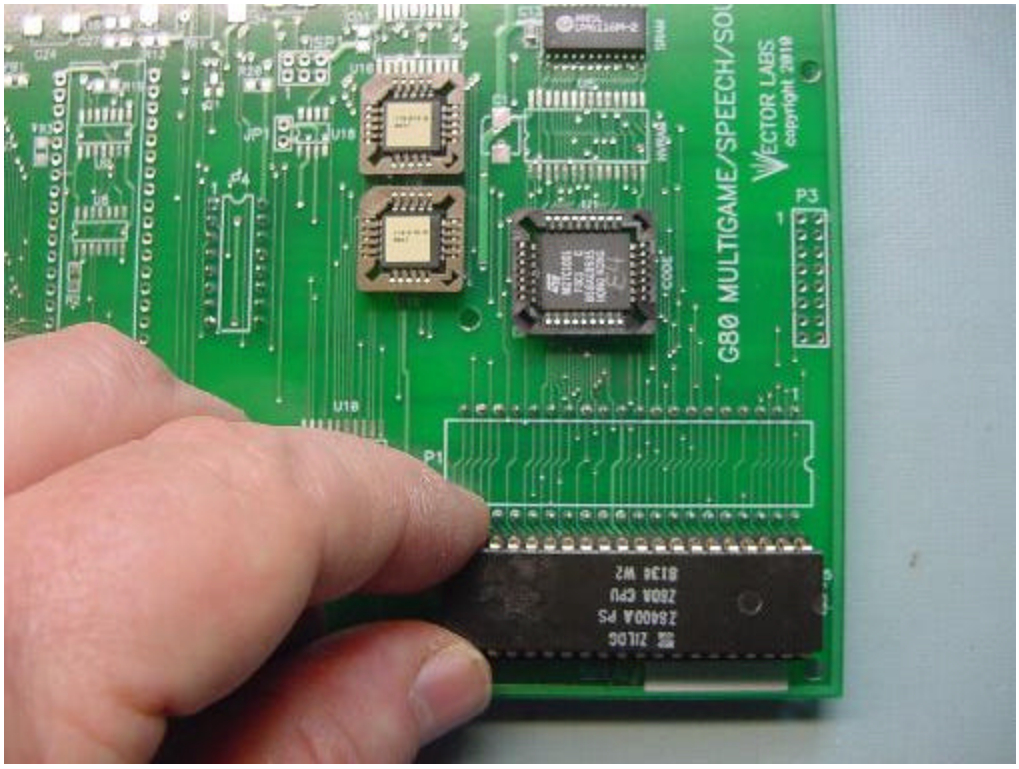
REMOVE EPROM CHIP U25 AS SHOWN ABOVE.



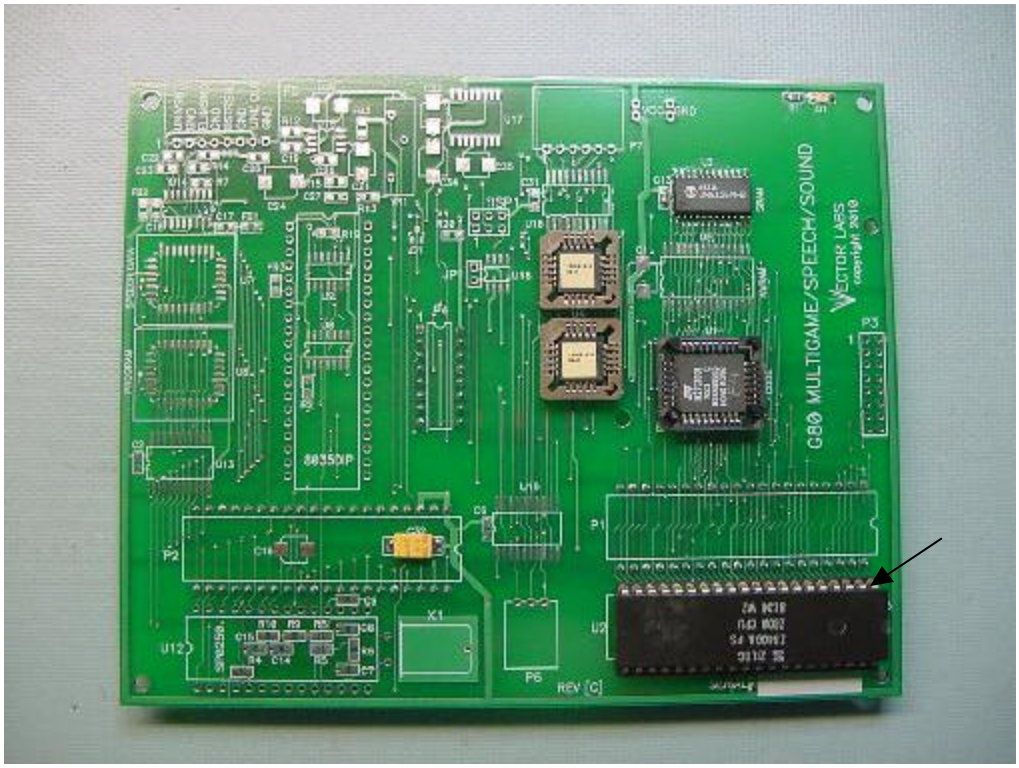
REMOVE SRAM CHIPS U26, U27, U28, U29 AS SHOWN ABOVE.



YOUR CPU BOARD SHOULD HAVE THE CHIPS REMOVED AS SHOWN ABOVE.

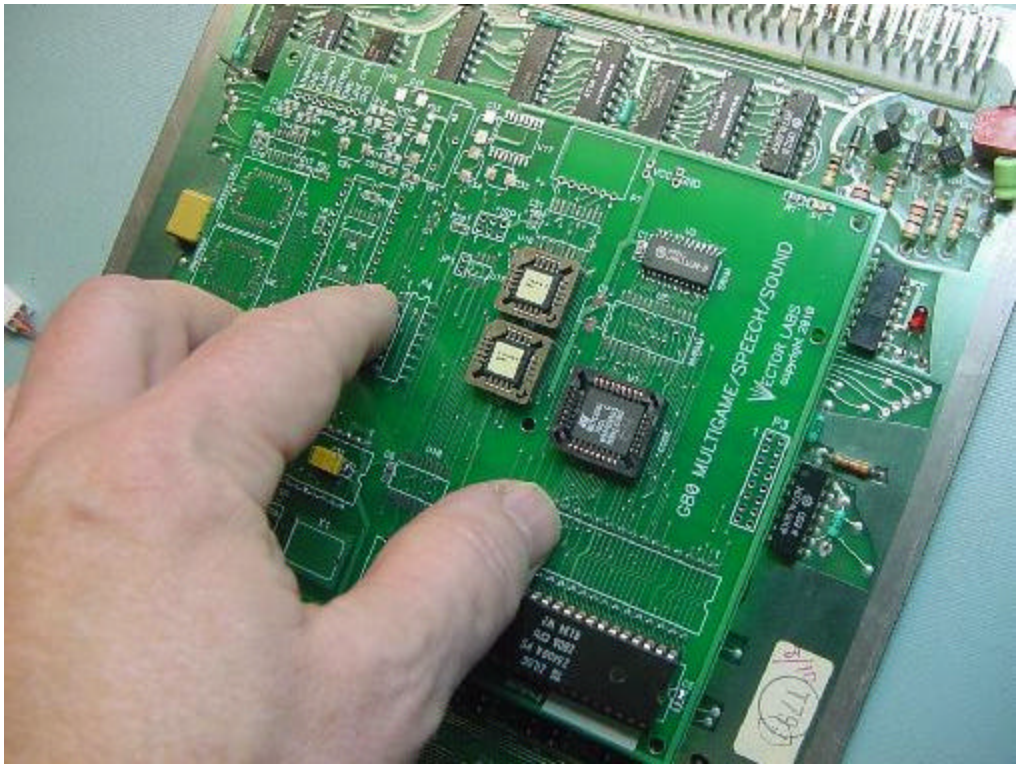


RE-INSTALL Z-80 CPU INTO MULTIGAME BOARD AS SHOWN ABOVE.

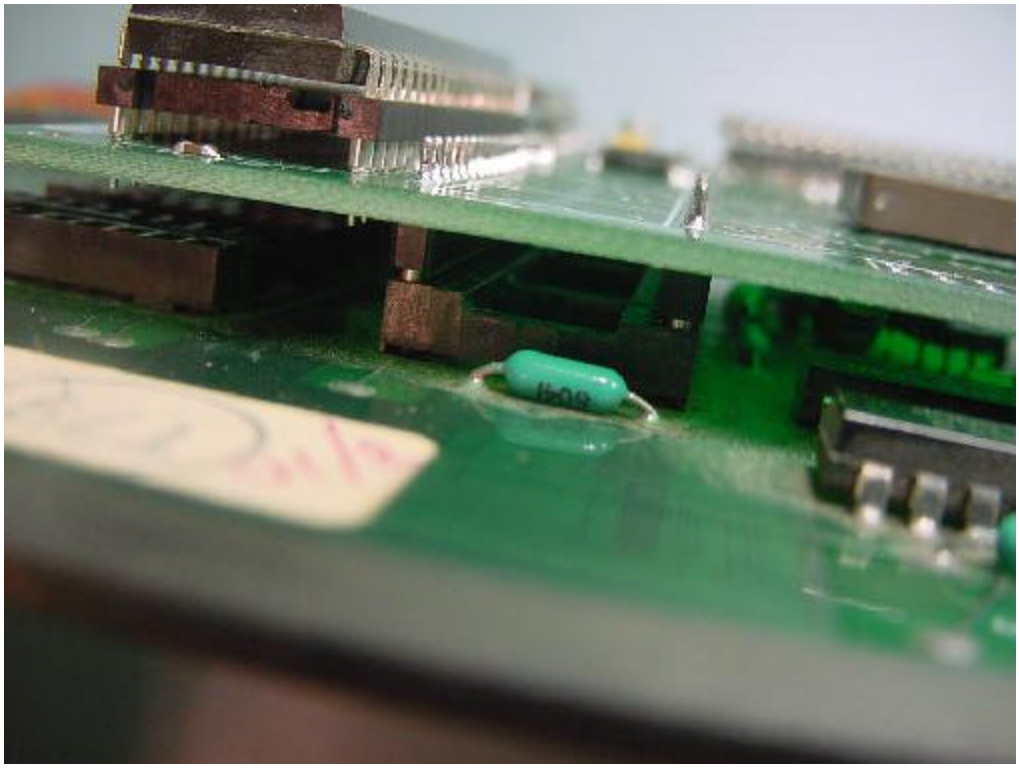


YOU MULTIGAME BOARD SHOULD NOW LOOK LIKE THE ONE ABOVE.
THE ARROW SHOW THE PIN(1) ORIENTATION FOR THE Z-80 CHIP.

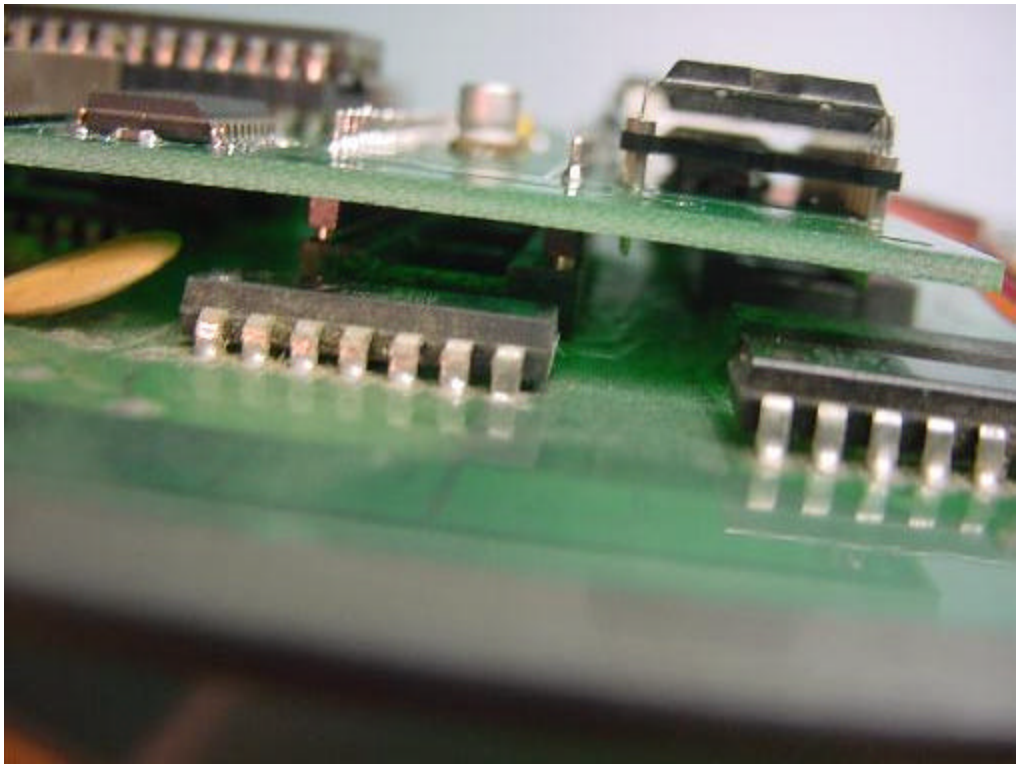
ALIGN THE PINS INTO THE CPU SOCKET ON THE RIGHT SIDE BY THE BOARD AND ON THE LEFT SIDE BY THE SECURITY CHIP SOCKET.



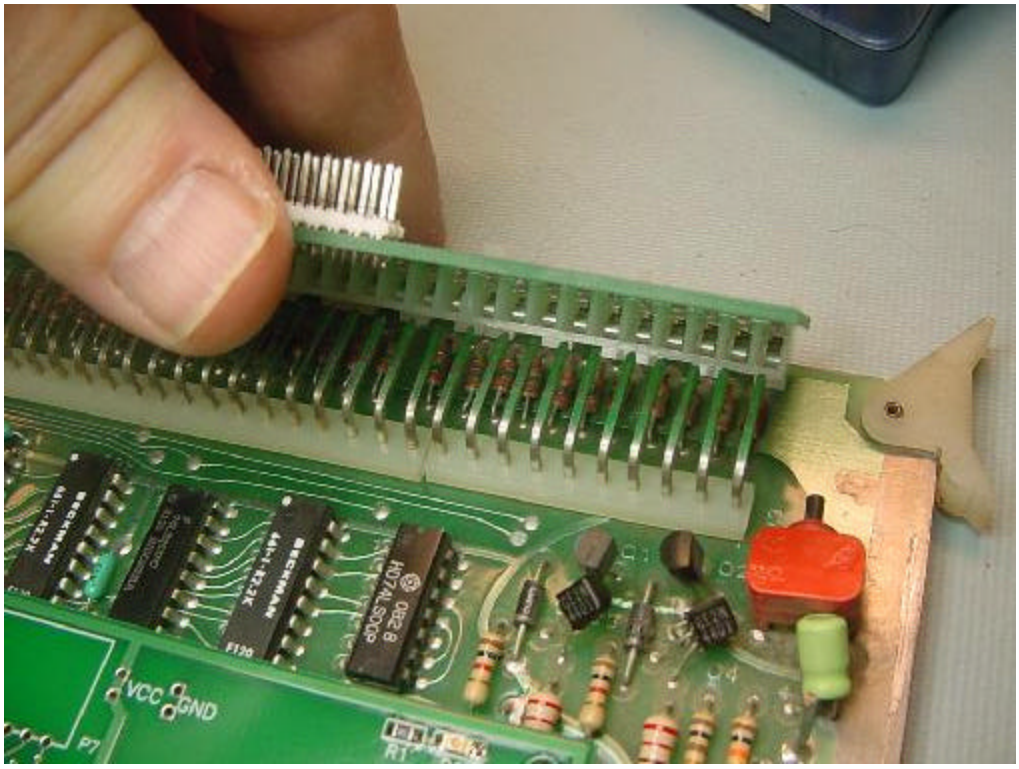
PRESS DOWN WITH EQUAL PRESSURE ON ALL THREE SETS OF PINS.



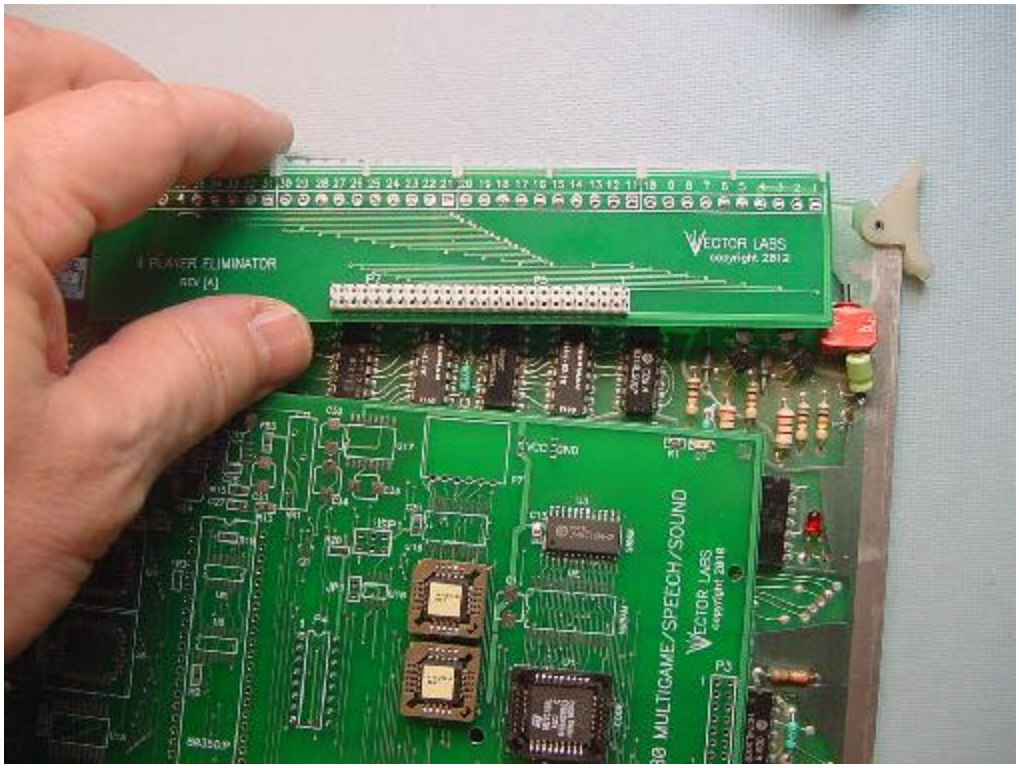
RE-CHECK THE RIGHT SIDE TO MAKE SURE THE PINS ARE ALIGNED PROPERLY.



RE-CHECK THE LEFT SIDE TO MAKE SURE THE PINS ARE ALIGNED PROPERLY.

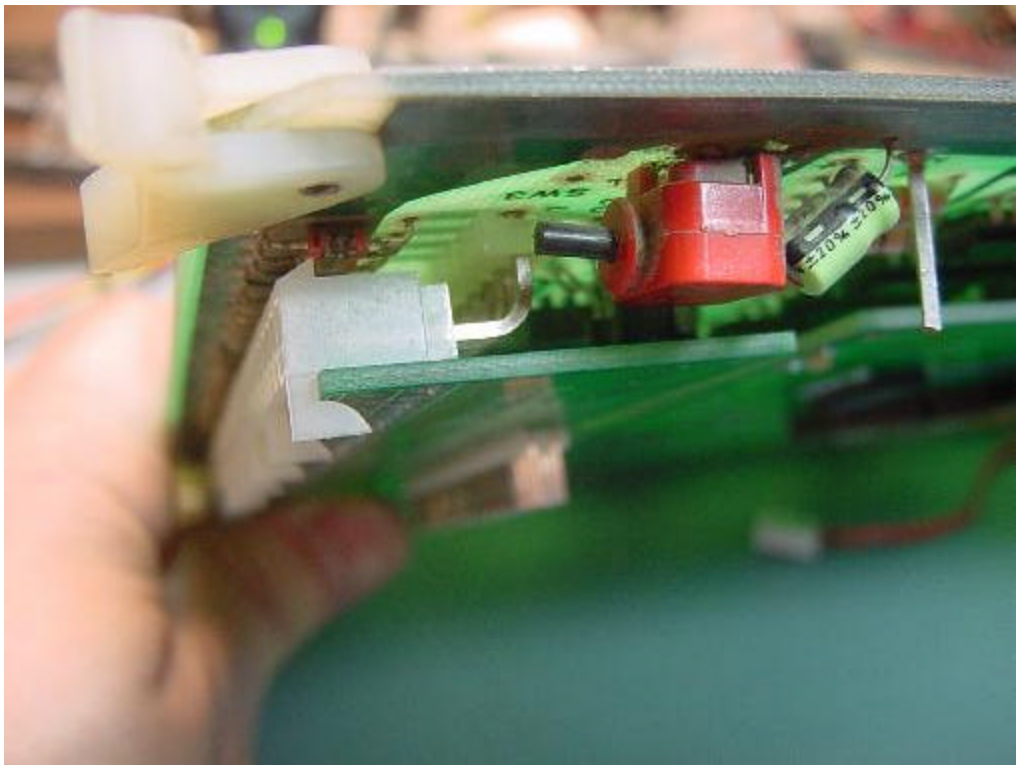


INSERT THE BOARD OVER THE PINS ON THE CPU BOARD AS SHOWN ABOVE.



INSERT THE LEFT SIDE FIRST AND THEN THE RIGHT AS SHOWN.

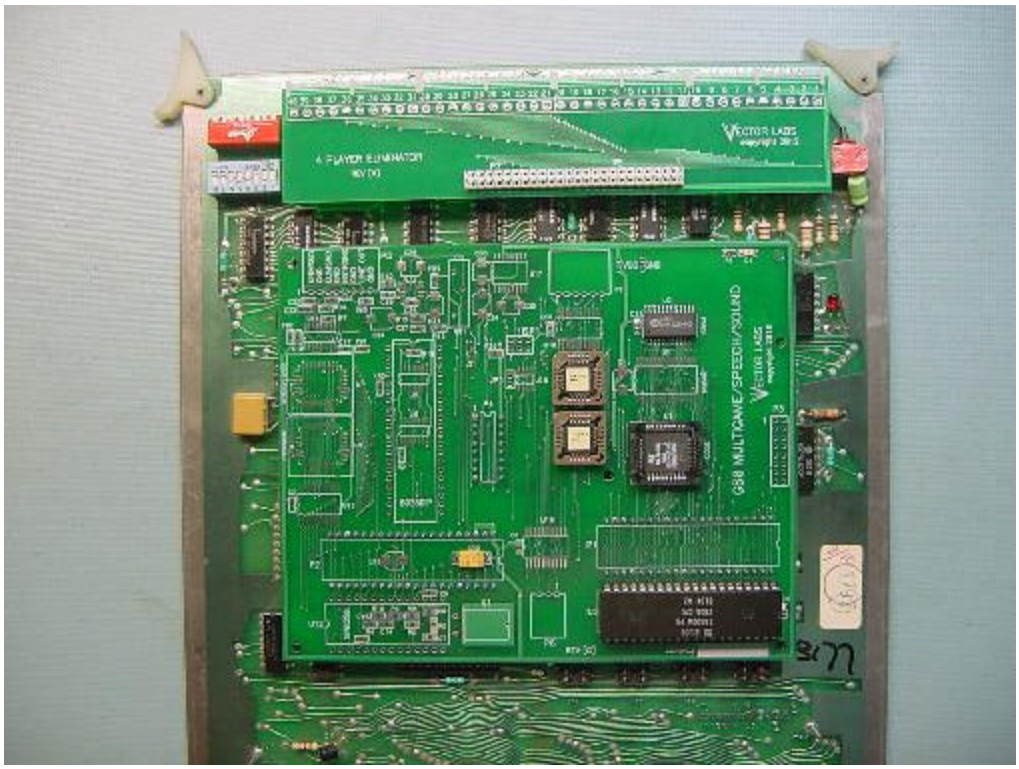
IT REQUIRES BOTH HANDS AND SIGNIFICANT FORCE TO ENSURE THAT THE BOARD IS INSERTED PROPERLY.



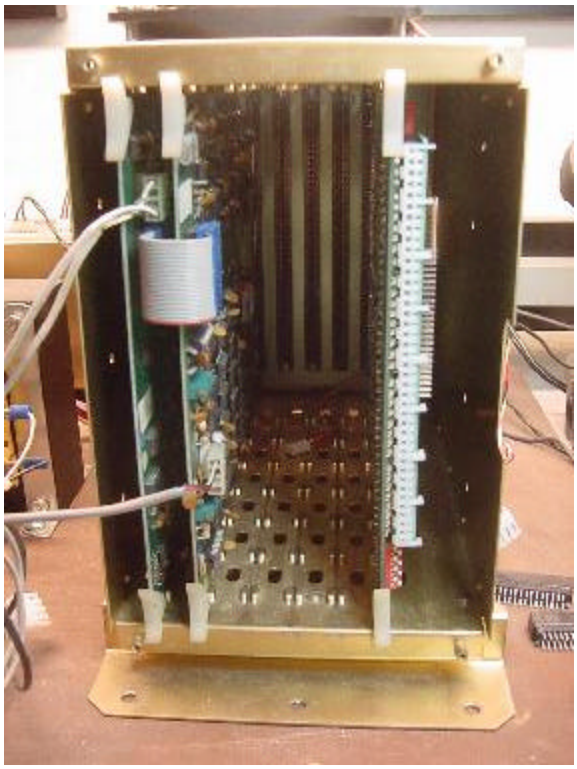
INSPECT BOTH SIDES UNDERNEATH THE INTERFACE BOARD.

THE PINS SHOULD BE INSERTED APPROX. 90% INTO THE WHITE NYLON CONNECTOR AS SHOWN ABOVE.

YOU HAVE COMPLETED THE CPU PORTION OF THE INSTALL.
YOU BOARD SHOULD LOOK SIMILAR TO THE ONE PICTURED BELOW.



THE NEXT STEP IS TO PLUG THE CPU BOARD INTO THE CARD CAGE WITH THE TWO XY BOARDS AS SHOWN BELOW.



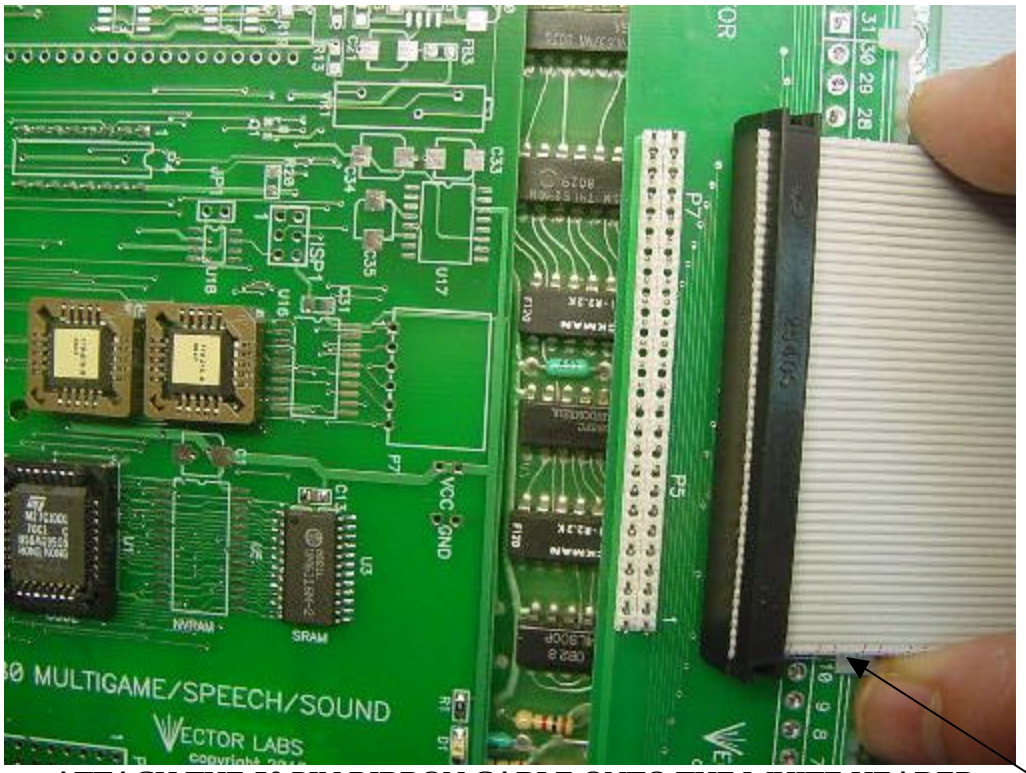
DO A QUICK POWER UP TEST TO MAKE SURE THE CPU BOARD

AND ELIMINATOR DAUGHTER BOARD ARE PROPERLY INSTALLED.

YOU SHOULD SEE THE 4 PLAYER ELIMINATOR STARTUP SCREEN.

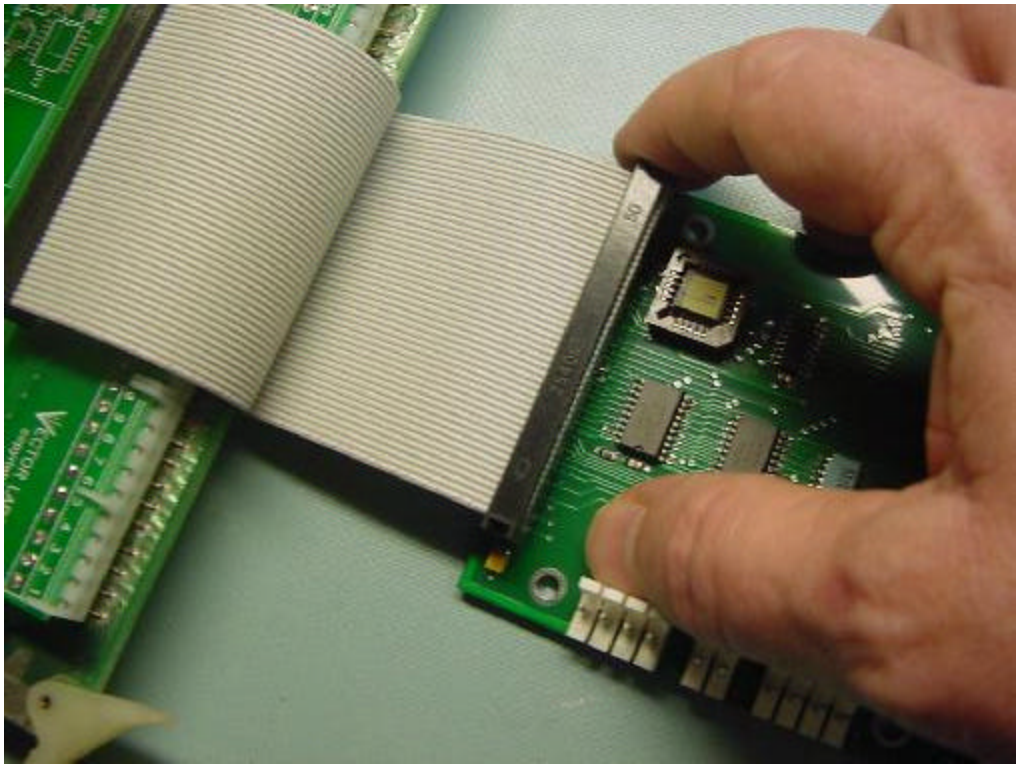
POWER DOWN THE GAME AND AFTER 10-15 SECONDS & REMOVE THE CPU BOARD FROM THE CARD CAGE.

NEXT IS INSTALLING THE RIBBON CABLE & IO BOARD TO THE CPU BOARD.

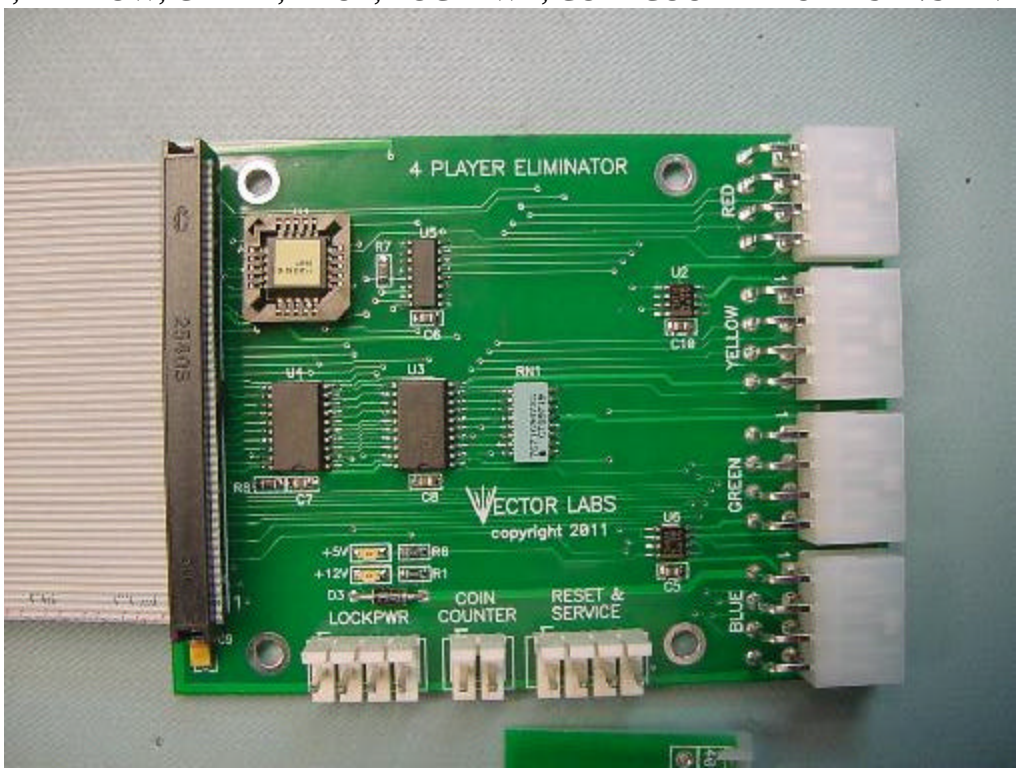


ATTACH THE 50 PIN RIBBON CABLE ONTO THE WHITE HEADER
**NOTE THE ARROW POINTS TO PIN 1 RED STRIPE AS SHOWN ABOVE.

ATTCH OTHER SIDE OF 50 PIN RIBBON CABLE TO THE IO BOARD AS SHOWN BELOW.



TAKE NOTE OF THE 7 CONNECTORS ON THE IO BOARD
RED, YELLOW, GREEN, BLUE, LOCKPWR, COIN COUNTER & RESET/SERVICE.

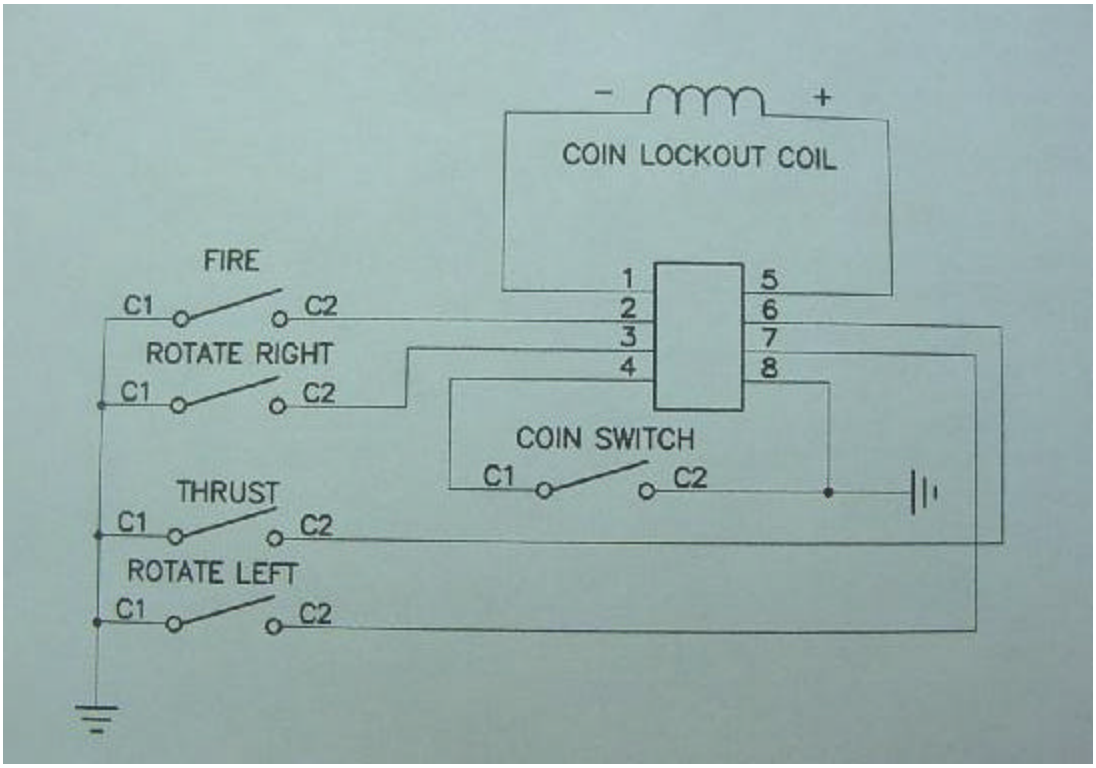


THE FOUR 8PIN CONNECTORS ARE THE CONTROL PANEL/COIN CONNECTIONS FOR EACH OF THE 4 PLAYERS.

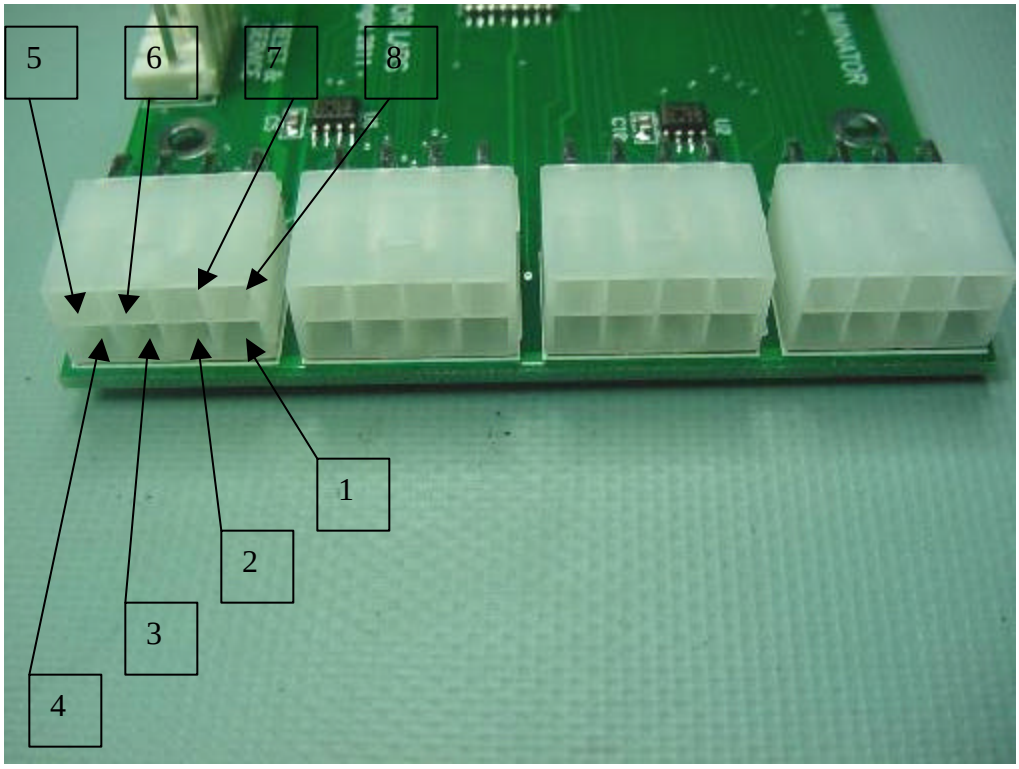
CONTROL PANEL/ COIN

1. COIN LOCKOUT COIL (-)
2. FIRE BUTTON
3. ROTATE RIGHT BUTTON
4. COIN SWITCH
5. COIN LOCKOUT COIL (+)
6. THRUST BUTTON
7. ROTATE LEFT BUTTON
8. GROUND

THE DIAGRAM PICTURED BELOW SHOWS THE CONNECTIONS FOR EACH OF THE 4 CONTROL PANELS.

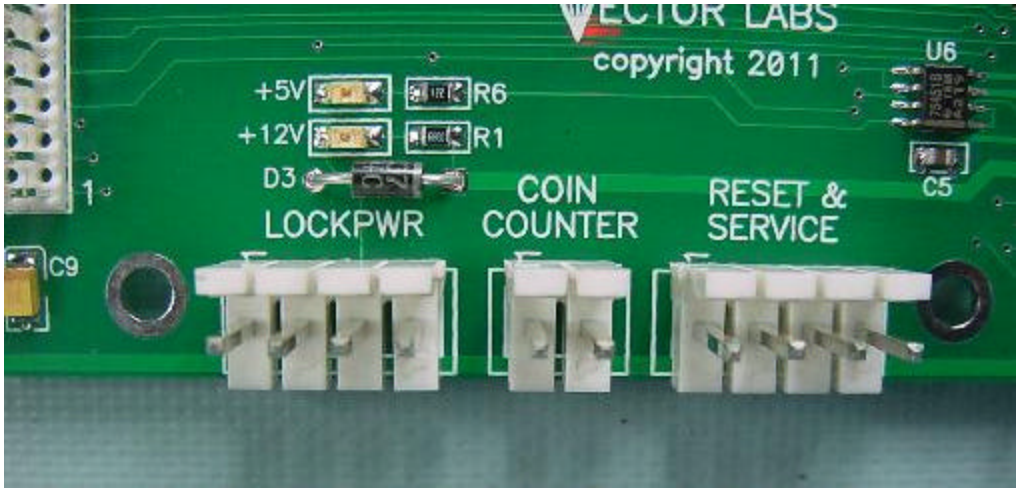


THE PICTURE BELOW SHOWS THE PIN ORIENTATION FOR THE 8 PIN CONNECTORS.



THE 3 OTHER CONNECTORS ARE LOCK POWER, COIN COUNTER & RESET/SERVICE.

PLEASE NOTE THE [PIN1] ORIENTATION FOR EACH CONNECTOR.



THE PINOUTS FOR THE 3 CONNECTORS ARE AS FOLLOWS:

LOCKPWR

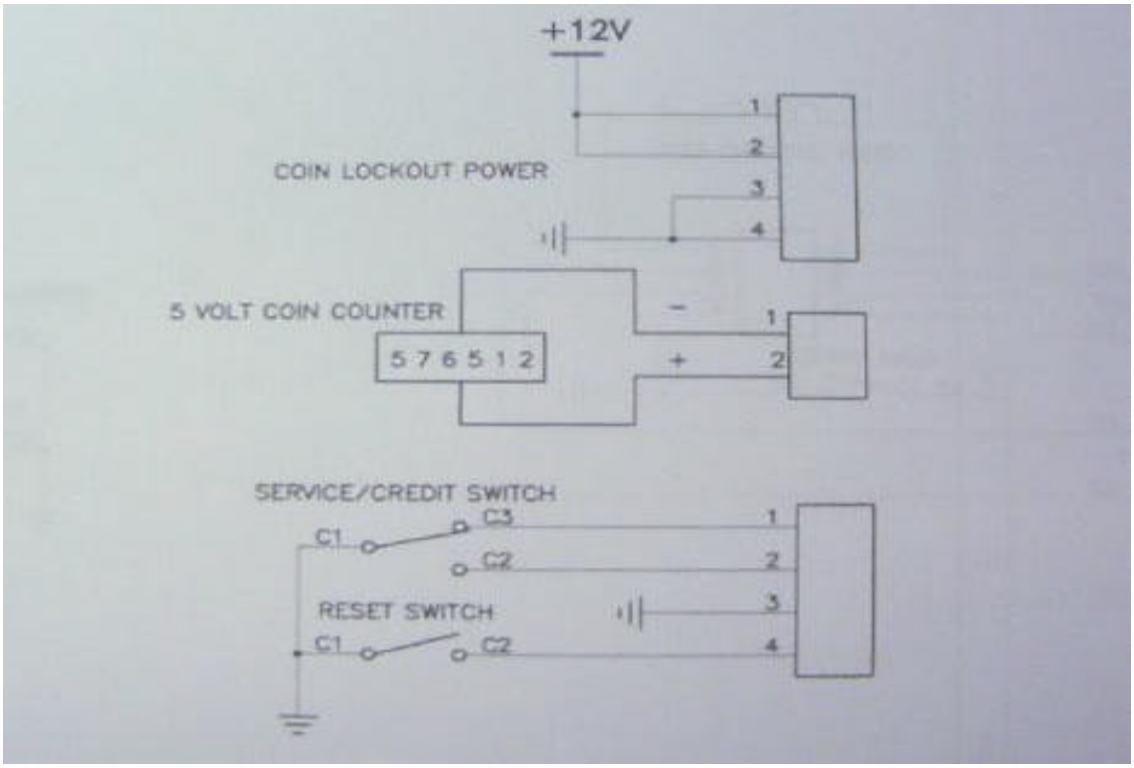
1. +12V SUPPLY
2. +12V SUPPLY
3. GND SUPPLY
4. GND SUPPLY

COIN COUNTER

1. (-) TO COIN COUNTER
2. (+) TO COIN COUNTER

RESET/SERVICE SWITCHES

1. SERVICE SWITCH NORMALLY CLOSED
2. SERVICE SWITCH NORMALLY OPEN
3. SERVICE/RESET SWITCHES COMMON (GND)
4. RESET SWITCH NORMALLY OPEN



THE PICTURE BELOW SHOWS THE PINS/CONNECTORS THAT ARE INCLUDED. IT IS UP TO THE END USER TO DETERMINT WIRE LENGTHS, ETC.

THE INSTALL GUIDE IS NOW COMPLETE!!!

ADDITIONAL NOTES

MOST SEGA/GREMLIN SERIES OF GAMES HAS A SOFTWARE DRIVEN COIN DETECTION ALGORITHM THAT EXPECTS A PULSE OF A SPECIFIC DURATION TO VALIDATE THAT A COIN HAS INDEED BEEN INSERTED INTO THE COIN MECHS THERFORE IT IS HIGHLY RECOMMENDED THAT YOU USE ACTUAL COIN MECHS FOR ALL 4 PLAYERS RATHER THAN A SIMPLE PUSH BUTTON.

ALSO THE 4 PLAYER ELIMINATOR HAS NO PLAYER “START” SWITCH. THE FIRST PLAYER WHO INSERTS A COIN STARTS A 10 SEC TIMER WHICH ALLOWS ADDITIONAL PLAYERS TO INSERT THEIR COINS. AFTER THE 10 SEC TIMEOUT THE COIN LOCKOUT COILS FOR ALL 4 PLAYERS ARE ENERGIZED RESTRICTING ANY NEW PLAYERS UNTIL THE GAME HAS COMPLETED.

IF YOU HAVE AND PROBLEMS OR SUGGESTIONS ON HOW TO IMPROVE THIS INSTALL GUIDE PLEASE CONTACT VECTOR-LABS@TX.RR.COM