

## B.I.-80 Replacement Character ROM Installation

### The introduction:

This replacement character ROM for your Batteries Included B.I.-80 80 column display will greatly enhance C-64/128 *Kermit* v2.1 operation. This ROM adds the standard ASCII characters not found in the Commodore character set as well as the entire DEC VT-100 line graphics character set.

With this ROM, commercial programs such as the word processor *Paperclip* will still work fine. You *will* lose the use of many of the graphics characters in the Commodore uppercase/graphics characters set, though.

### The materials & tools:

- 1) The replacement ROM from Dr. Evil Labs
- 2) A small Phillips screwdriver
- 3) A miniature regular screwdriver OR an IC puller

### The procedure:

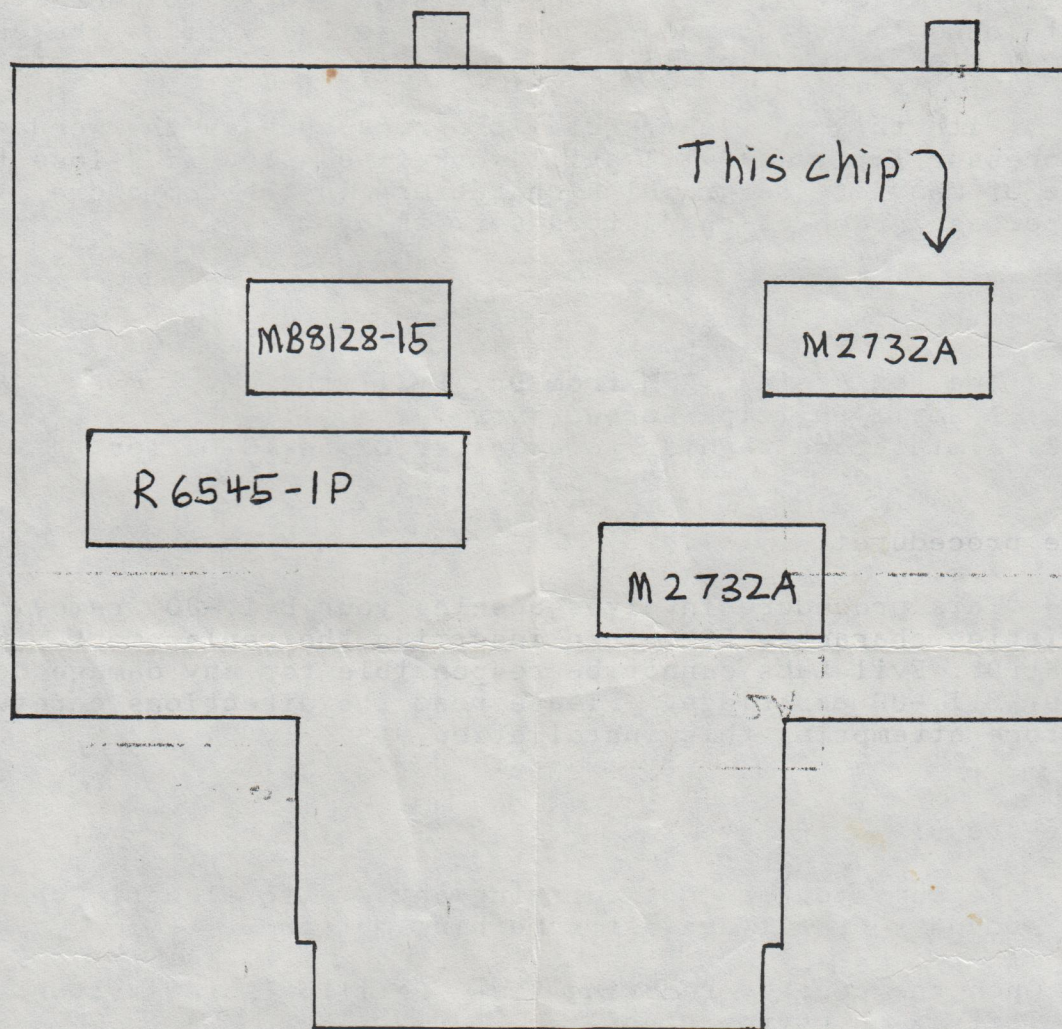
This procedure involves opening your B.I.-80, removing the existing character ROM, then inserting the replacement. Note that Dr. Evil Labs cannot be responsible for any damage done to your B.I.-80 cartridge. Please read the directions carefully before attempting this installation.

### The steps:

- 1) Make sure you are not carrying any static electric charge--ground yourself against something metal.
- 2) Open the case by removing the 4 Phillips screws (2 on top left, 2 on bottom right).
- 3) Orient the card so that the cartridge port connector is pointing at you and the video jacks away from you. You should also see the word "TOP" etched on the card's circuit board.
- 4) Locate the character ROM using the sketch on the back of this sheet as a guide. The chip should have the number 2732 or 2732A on it.
- 5) Carefully remove the ROM chip. If you are using a miniature regular screwdriver, carefully pry up under one end of the chip then the other to gradually pop the chip out of the socket.



- 6) Place the replacement ROM in the socket, making sure the notch on one end of the ROM is on the left (the way the notches on all the others chips are pointing). Gently press the ROM down into the socket until it is firmly seated.
- 7) Reassemble the case using the 4 Phillips screws.



The operation:

To use the custom ROM with C-64/128 *Kermit* v2.1, plug the B.I.-80 card in and turn on your computer. Load *Kermit* as usual, making sure you are in 40-column mode (i.e., don't do a SYS 33000 first). Then, select the CUSTOM-BI-80 screen driver. That's all there is to it! You may want to re-save your default settings (see the SAVE command) so that *Kermit* will automatically switch on the B.I.-80 when booted.

If you do select the CUSTOM-BI-80 driver as the default but you won't always have the B.I.-80 plugged in when you boot *Kermit*, that's ok. *Kermit* can tell when the card isn't plugged in and will use the C-64 80-column screen driver instead.