

2708 eproms were used in early computer equipment and arcade machines, but unlike more modern eproms they require a triple voltage for programming. Because of this odd voltage requirement many current eprom programmers don't support them. 2716 eproms are later model eproms which have a very close pin configuration to the 2708's, but are supported by many current eprom programmers. A simple three pin modification can be made to the 2716's to make them usable as 2708's. 2716's have a 2k capacity, as opposed to 2708's which are 1k, so you only use half of the capacity, but as they are readily available and fairly cheap, this is not a big issue. 2816 electronically erasable eeproms can also be used instead of 2716's. The 2816's are pin compatible with 2716's but are electronically erasable rather than UV erasable, so they are even easier to work with.

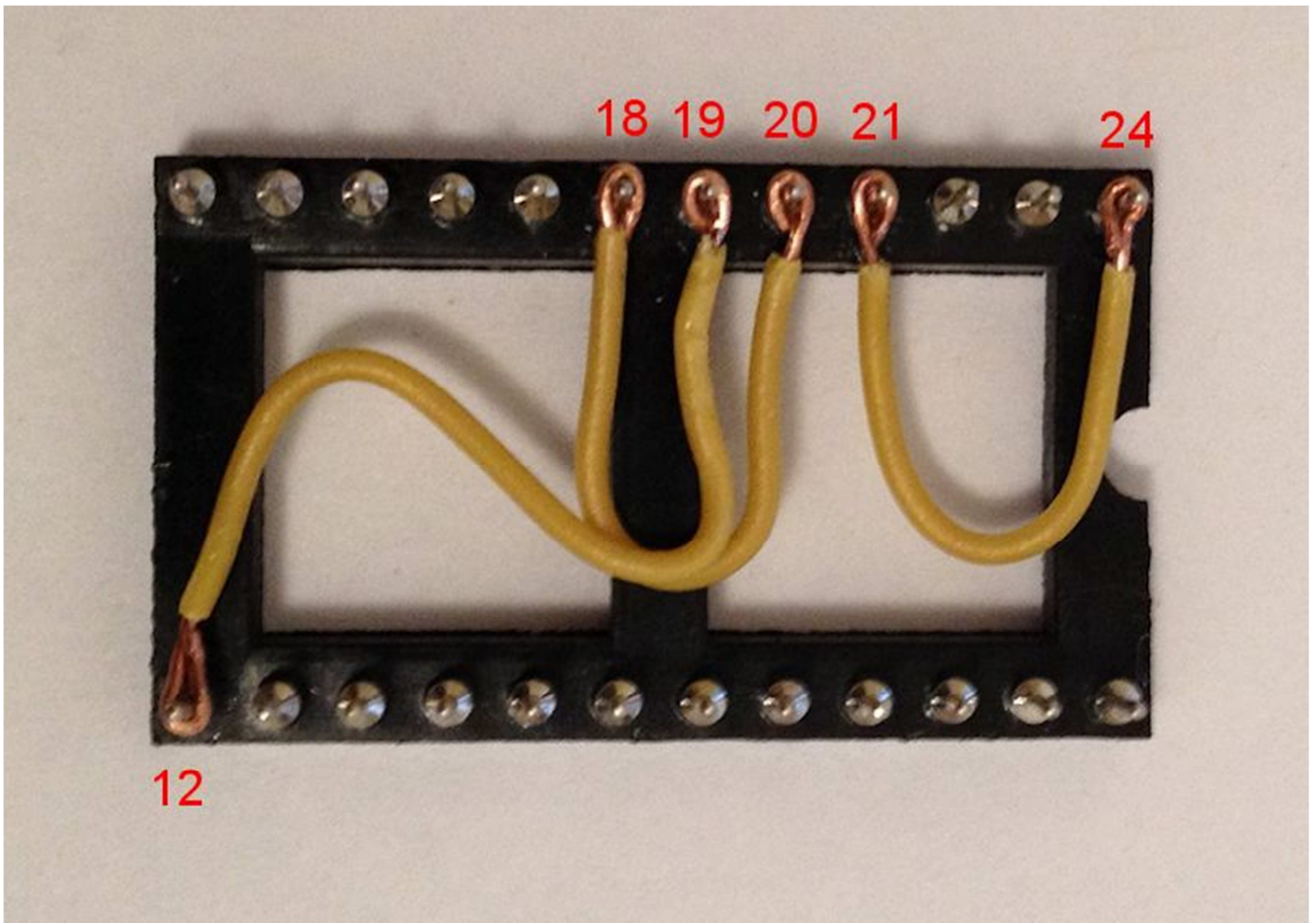
To avoid making changes to the original 2708 equipment and the 2716 chips, a 24 pin socket adapter can be made to fit between the original 2708 socket and the 2716 chip. This allows the 2716 to be programmed on a modern programmer and then placed into the adapter socket for use as a 2708. To create the adapter, I use two 24 pin sockets, the upper socket contains the wire connections and the lower socket has pins 18,19 and 21 removed. See pictures below.

To create the adapter, the following connections need to be made in the upper socket:

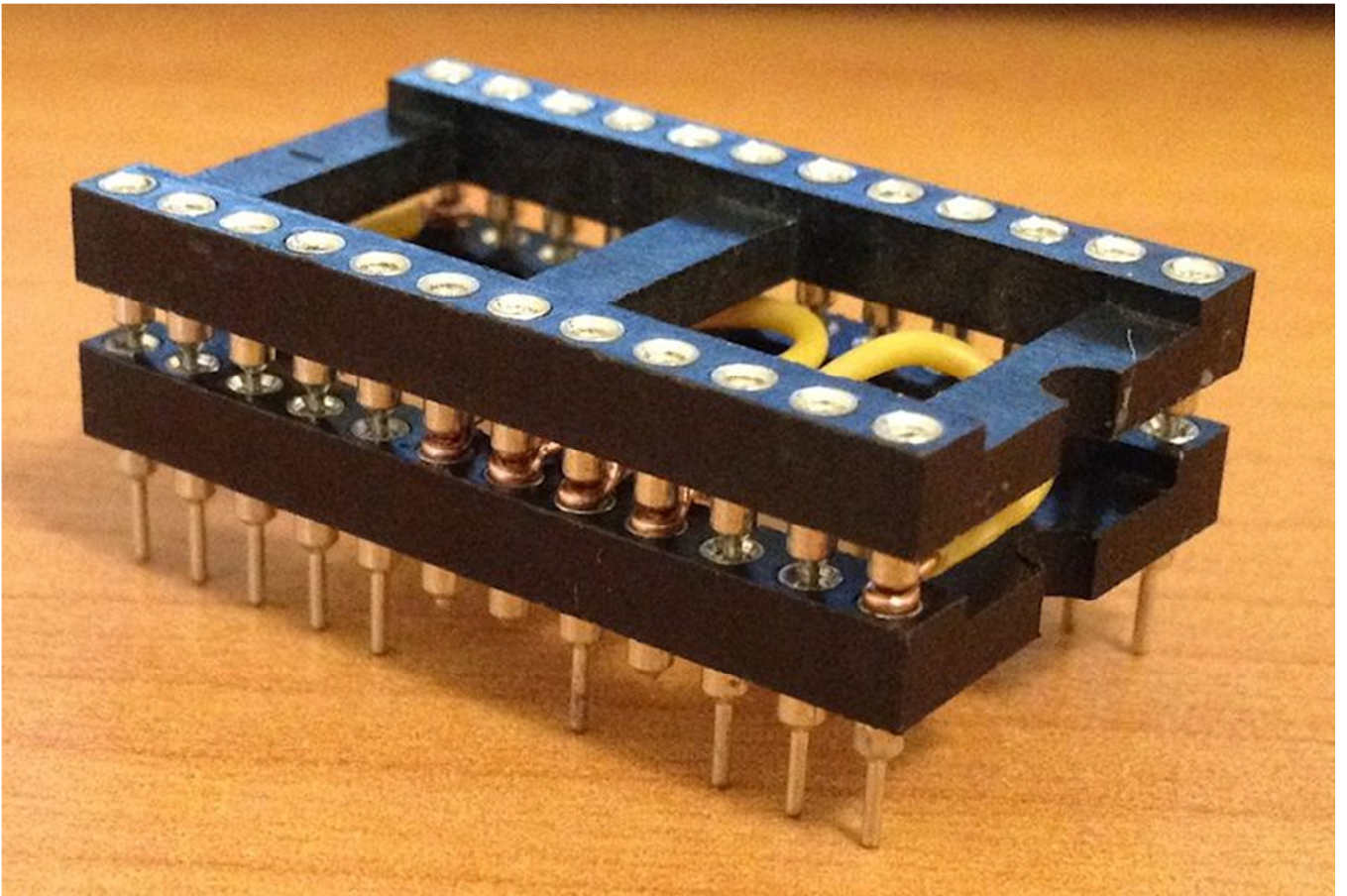
- Connect pin 21 to pin 24
- Connect pin 18 to pin 20
- Connect pin 19 to pin 12 *

* Pin 19 is connected to pin 12 which uses the first 1k in the 2716. Alternatively pin 19 can be connected to pin 24 to use the second 1k in the 2716.

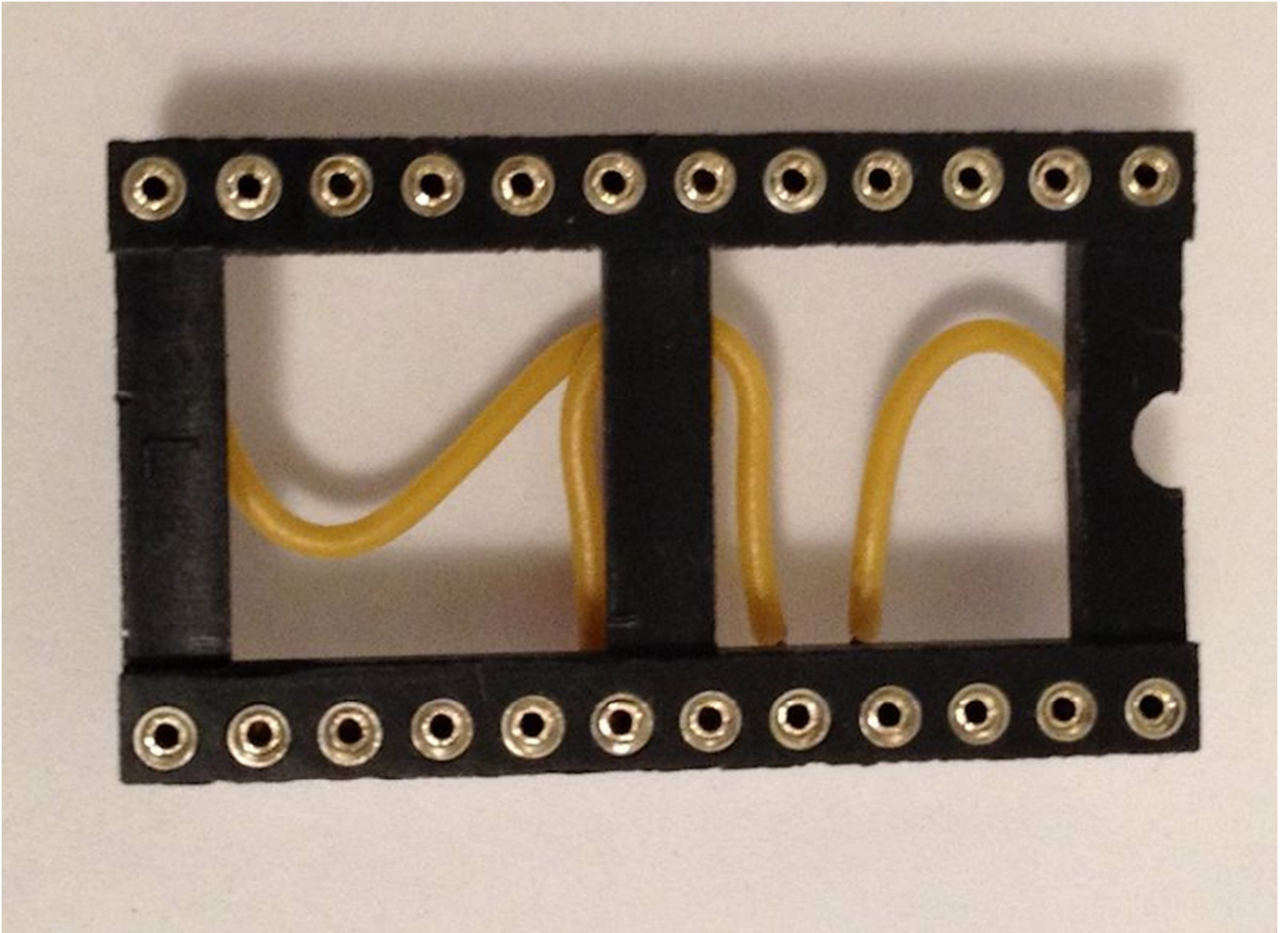
Then in the lower socket pins 18, 19 and 21 need to be removed. See pictures below.



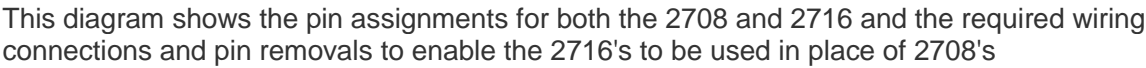
Bottom view of upper socket, bottom far left pin is pin 12, top far right pin is pin 24



Completed adapter showing bottom socket with pins 18, 19 and 21 (left to right), removed



Top view of socket adapter, top far right pin is pin 1, bottom far right pin is pin 24



This diagram shows the pin assignments for both the 2708 and 2716 and the required wiring connections and pin removals to enable the 2716's to be used in place of 2708's