

SECRET CB KIT 146 UPDATE

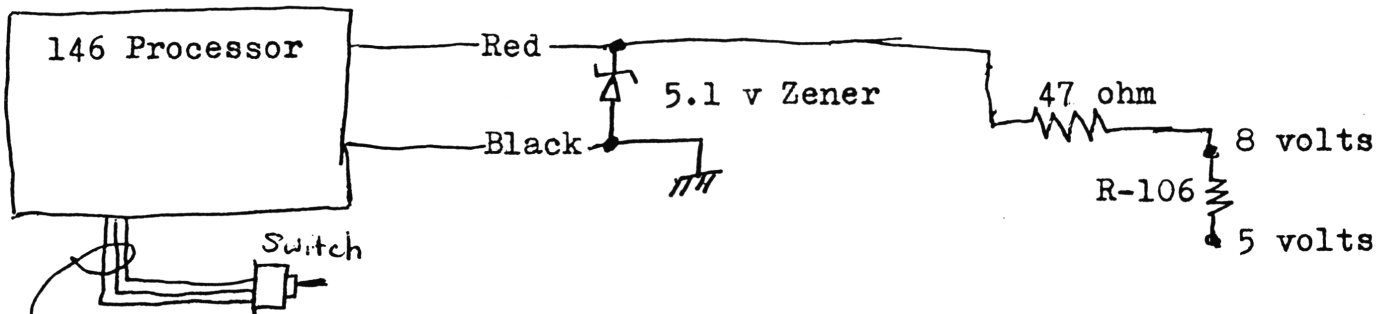
The purpose of this article is to explain why this kit does different things in the various radios. First, the kit is not at fault !!! I think after reviewing the problems encountered while installing this kit it will become apparent why these remedies are necessary.

The main reason this kit acts peculiar is the power connection. The instructions say to replace R-106 with the 47 ohm resistor supplied, this is a good start but not quite up to the task. Instead of replacing R-106, install the 47 ohm to the end of R-106 which has 8 volts on it and then connect the red wire of the processor to the other end of the resistor. The next is not on the instructions nor is the part supplied. Purchase a 5.1 volt zener diode and install across the power leads on the processor board. This gives a good 5.1 volt regulated voltage on the processor board and leaves the regulated voltage to the PLL at it's own regulated level. At the 5 volt level this circuit operates even .2 volts drop is enough to cause erratic behavior, that is the reason for the voltage regulation.

The next problem is one of good habits while installing the kit. The wire on the switch of the process should be kept as short as possible and away from the tripler coil. The 5.120Mhz signal generated by the PLL is more powerful than the signal coming out of the processor and will interfere unless proper routing is observed. To make a point, on another kit on the market the switch is soldered directly to the board with no wires.

The last problem is the adjustment of L-13, the tripler coil. Extreme care and patience is needed when adjusting. Very little movement and a lot of checking between the bands is necessary to achieve positive switching.

See the diagram below for new hookup.



Keep these wires short and route appropriately.