

ADJUSTING HP-97 PRINT DENSITY

Some members may be plagued with light printing density of their HP-97, especially frustrating when trying to copy listings or printouts. The print density of the 97 is controlled by a single resistor, and by changing this resistor the print density can be made so dark that the characters are blurred. The location of this resistor is shown in the drawing below. Remove the battery from the calculator, turn it on its back, and remove the six Phillips-head screws holding on the bottom cover. Remove the cover. The Printer Interface board is the small 1-1/2" x 3" board which sits piggy-back on the large U-shaped board, to the left when the keyboard is toward the viewer. It will appear as in the drawing below. The Printer Interface board can be carefully lifted off the contact pins which hold it to the main board. Use extreme care to avoid overstressing the mylar laminated flat cable connecting the board to the print head. This cable may be lifted out of its supporting posts to facilitate turning over the board. The cable can actually be removed from its connector by pulling it out, but this is not recommended as re-insertion is a little hairy. The resistor in question can be removed and replaced with another value to change the print intensity. The usual range of this resistor is from 33K to 190K, and the higher the resistance, the darker the printing. A resistance substitution box connected in place of the resistor is an elegant way to determine the optimum resistance for you. To be super-fancy, I suppose a pot could be mounted in the case somewhere to provide continuous adjustment of the density. After replacing the resistor, replace the interface board, making sure the contact pins are aligned before pushing the board down on top of them, make sure the head cable is properly threaded between its support posts, and replace the bottom cover.

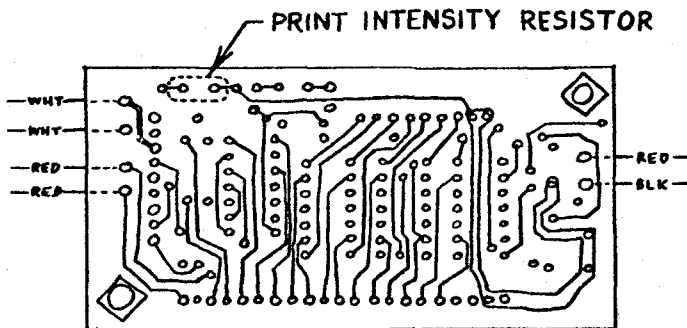


Fig. 1
Bottom View of Printer Interface Board

—Dave Kemper