

4. Plug the LCA-1 main assembly into socket A5 (where the 24-pin chip was removed), being sure it is fully seated with all pins in the socket (no pins overhanging at either end).
5. Remove the 74LS194 chip at location B9 on the CPU board, and plug the LCA's 16-pin connector assembly into the socket at B9. The white dot MUST be toward the front of the computer (see drawing on back cover).
6. Plug the 74LS194 into the top of the LCA's 16-pin assembly. Be sure that it's oriented the same as when it was removed.
7. The case may now be replaced. (First check that the keyboard cable plug is still fully seated.) You may want to replace only a couple of screws before testing the LCA.
8. To see all 256 character codes displayed by your computer, run the following Applesoft<sup>®</sup> program:
  - 1 CALL -936 : DIM H\$(16) : H\$="0123456789ABCDEF"
  - 2 VTAB 4 : HTAB 13 : PRINT H\$ : PRINT
  - 3 FOR Y = 0 TO 15 : VTAB (Y+6) : HTAB 10
  - 4 PRINT MID\$(H\$,Y+1,1);
  - 5 FOR X = 0 TO 15 : COLOR =X : PLOT X+12,2\*Y+10
  - 6 COLOR = Y : PLOT X+12,2\*Y+11 : NEXT X,Y : END

The leftmost column of the display is the most significant hex digit, and the top row gives the least significant hex digit of each character code. This program is based on a contribution by David M. Sanders of Cupertino, California. For an explanation of how this program works, see "PRINT THE UNPRINTABLES" by Bert Kersey in the September, 1980, issue of *Call-A.P.P.L.E.*

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