Tech Info Library

Apple II Language Card Changes

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Security:       Everyone
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Apple II Language Card Changes

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Effective immediately, Apple is substituting a different Apple II Language
Card for the original one. The new card is smaller and no longer includes
the connector that plugs into the RAM socket. It also does not contain the
Autostart ROM. Now, when Apple II Language Cards are exchanged, Apple will
include a 16K RAM chip with the replacement module.

- When you install a new Language Card into an Apple II or Apple II+ system,
  you need to install the 16K RAM chip into the vacant RAM socket on the
  main logic board.

- In the unlikely event that customers do not already have the Autostart
  ROM in their Apple II systems, they will need to purchase one for you to
  install in location F8 on the main logic board. The Autostart ROM (p/n
  342-0020) can be ordered from the price pages.

- Refer to the Apple II Family Technical Procedures for instructions on
  installing Autostart ROMs and the 16K RAM.

The new Apple II Language Card is available from the price pages under the
same part number as the old card. The new card is available as an Exchange
Module only. When you return a language card to Apple for exchange, a new
language card will be returned to you.

INSTALLATION

WARNING: Be sure the power is off before installing or removing any modules
or components, or before connecting or disconnecting any peripheral devices.
Failure to do so may result in damage to the computer, module, components,
and/or peripheral.

Remember to follow basic ESD precautions when installing, removing, or
troubleshooting modules.

1) Insert the Language Card into slot 0, component side facing away from
   power supply.

2) Insert a 16K RAM chip (p/n 334-0002) at location E3 on the motherboard.
   (Location E3 is in the left rear corner of the outlined memory area and
   was used for the cable header on the old Language Card.

Apple II Standard Computers without Autostart ROM on Motherboard:

1) Replace the Monitor ROM (p/n 342-0004) with an Autostart ROM
   (p/n 342-0020) at location F8-ROM on the motherboard.

TESTING

The new language card can be tested with your existing Apple II Product
Diagnostics Disk.

1) Install the new Language Card in slot 0. Ensure that you've inserted a
   RAM at location E3 and that the motherboard F8 ROM is p/n 342-0020.

2) Start up the Apple II Product Diagnostics Disk.

3) Press the <ESC> key to move the cursor to the CARD TESTS line on the
   main menu, then press <RETURN>.

4) Press the <ESC> key to move the cursor to the LANGUAGE CARD line on the
   CARD test menu, then press <RETURN>.

If any RAM is highlighted in inverse video, replace the Language Card. If
any of the status states are bad, then replace the Language Card. If the
message "NO ERRORS ENCOUNTERED" appears, then the ROM at Location F8 is good.
If the message "CAN NOT MATCH CODE" appears, then the ROM at F8 is bad and
must be replaced.

Motherboard RAM Test

Perform the Motherboard RAM test to ensure that the RAM at location E3 is
good.

5) Use the <ESC> key to move the cursor to the MOTHERBOARD RAM TEST line on
   the main test menu, then press <RETURN>.

6) Press <RETURN> to start the test.

7) The test will end and the display will show any bad RAM in inverse video.
   If the display shows that the LANG CARD RAM is bad then replace the RAM
   at E3.

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