16K-Byte Add-on RAM Card for the '89

NOTE

Use of this 16K RAM extension requires the use of either:
1) Magnolia Microsystems' CP/M Modification v2.2 with a memory
   mapping prom (U517) not marked "42A" or "42B"
2) A Z-89-FA, Z-89-GA, or Z-89-81 model, or
3) A '89 with the Z88-7 upgrade kit installed.

If you have Magnolia Microsystems' CP/M 2.2 with an earlier version PROM, contact
your dealer or Magnolia Microsystems for a replacement. Your CP/M Serial
Number will be required.

If you have Magnolia Microsystems' CP/M v1.42 or 1.44 you must update to CP/M
2.2 before using this board. Order the update (and new PROM if needed) directly
from Magnolia Microsystems. Again, you must be a registered CP/M 1.4 user and your
serial number must be furnished.

INSTALLATION INSTRUCTIONS

Tilt back the cabinet shell of your '89. (Instructions for cabinet removal can
be found on page 3-2 of your Heathkit Manual.)

Read the "caution" in your Heathkit (Zenith) Operations/Service Manual on page
4-2 in regards to handling RAM chips.

Use of the RAM board requires that the chip at U562 on your CPU card be a
74S132. If your CPU board uses an LS part, replace it with the enclosed 74S132.

Carefully remove RAM chip U549 from the CPU card (the upper left RAM chip) and
save it in the black conductive foam.

Plug the add-on RAM board onto P503 and P509 of the CPU board, then plug the
ribbon cable into the U549 IC socket.

Reconfigure your programming straps as follows:

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*The JJ503 strap is replaced with a jumper wire to P508-17 with the
89-7 upgrade kit, and is missing on -FA and -GA machines.

Installation is now complete. Turn the unit on and verify that it is working
properly by running the Memory Test on page 3-3 of the Operations/Service Manual.
The Result should be LWA=377377 (FFFF hex). HDOS should now sign on as "56K."

USE "MOVCPM 64 *" to generate a 64K CP/M system and "SYSGEN" disks to be used in
the 64K machine.