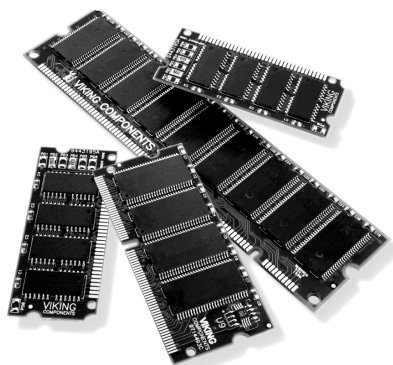


Viking Memory

INSTALLATION GUIDE

IBM®

ThinkPad 770, 770 220MHz, 770E, 770ED, 770X



Manual No. 1005233 • Release 12/98, Rev. B

SPEED POWER PERFORMANCE®

The **IBM ThinkPad 770** and **770 220MHz** come standard with 32MB of memory soldered. They can be expanded to a maximum of 256MB†† by installing the following Viking Components memory options into their two available expansion slots.

The **IBM ThinkPad 770E** and **770ED** come standard with 32MB of memory soldered or 64MB (32MB soldered + 32MB removable). They can be expanded to a maximum of 256MB† by installing the following Viking Components memory options into their two available expansion slots.

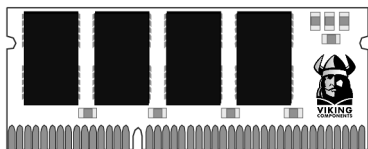
The **IBM ThinkPad 770X** comes standard with 128MB (64MB soldered + 64MB removable) of memory. It can be expanded to a maximum of 320MB† by installing the following Viking Components memory options into its two available expansion slots.

Description

	Viking P/N
16MB SDRAM Memory Module	I0293, RI0293
32MB SDRAM Memory Module	I0294, RI0294
64MB SDRAM Memory Module	I0295, RI0295
128MB SDRAM Memory Module††	I0296, RI0296

†Requires removal of the standard memory module.

††Installing the I0296, RI0296 for configurations above 160MB will require the ACP patch version 1.0 for ThinkPad 770 and 770E from IBM. The Pentium MMX machines are upgradeable to 256MB maximum, but the Pentium II machines are upgradeable to 288MB maximum.



Caution:

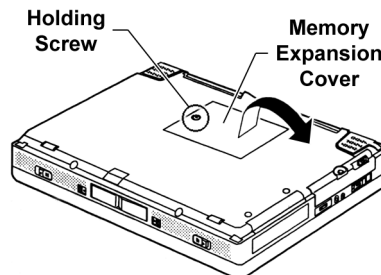
Electro Static Discharge (ESD) can damage electronic components. Before touching the memory module, ensure that you are discharged of static electricity by touching a grounded metal object.

INSTALLATION INSTRUCTIONS:

1. Turn the computer off and disconnect the AC power supply and any other cables from the unit.

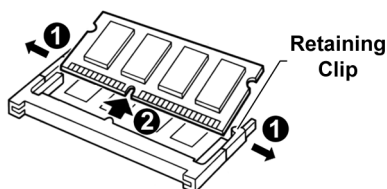
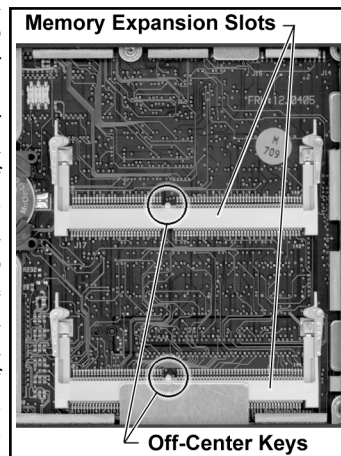
Note: If the unit appears to be powered down, ensure that it is not in Suspend mode.

2. Turn the computer upside-down and rotate it so that you are facing the front of the system. Remove the battery from the system. If you are not familiar with this procedure, please refer to your computer's "Owner's Manual."



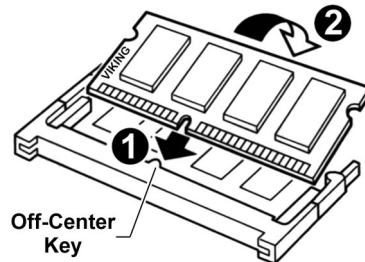
3. Locate the memory expansion cover on the right side of the bottom panel. Also locate its single holding screw. Use a small Phillips screwdriver to remove the holding screw. Then remove the cover by lifting it to the right.

4. Locate the two memory expansion slots in the open compartment. Also notice the location of the off-center key on each of the expansion slots. Depending on the model of your computer, there may be a standard memory module occupying one of the slots. If your system has a module occupying one of the slots and you wish to expand your system to its maximum amount of memory, the standard memory module will need to be removed and then replaced with a higher capacity module. If you do not need to remove a memory module at this time, please proceed to step 6.



5. To remove a memory module, locate the retaining clips on both sides of the memory module. Gently pull both clips away from the module, then lift the module out of its expansion slot.

6. To install a memory module, insert the module into the expansion slot at an angle and then push it down until it clicks into place. To be certain that the module is installed correctly, ensure that the off-center notch on the module is aligned with the off-center key of the expansion slot. The module can only be installed one way due to the position of the notch.



Note: For optimum performance, install the largest capacity memory module into the top expansion slot.

7. Replace the memory expansion cover and be sure to secure its holding screw.

8. Insert the battery back into its compartment and turn the system right-side up.

9. Replace the AC power supply and any other cables you may have disconnected.

10. Open the display screen and turn the system on. The computer will automatically reconfigure itself to recognize the additional memory. The new memory can be verified during the POST routine at start-up and at the SETUP utility.

The installation is now complete.