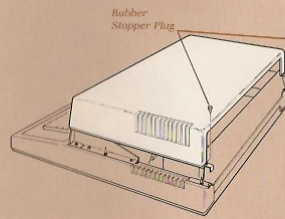# GEMINI
EMULATOR BOARD

Installation Instructions
Low Profile Models of
the Zenith Z100 Computer

Before You Begin…

- Before proceeding with the installation steps described in the following pages, make certain that your computer is disconnected from the AC outlet.

- Bear in mind at all times that you are dealing with delicate electronic equipment. Maintain your patience. Do not force connections.

- Please review the instructions which follow. If you feel uncomfortable about installing the Gemini Emulator Board yourself, seek dealer assistance.
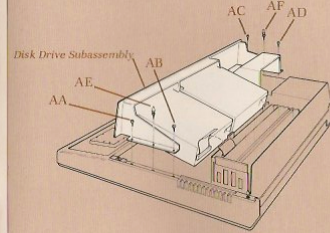
1 Removing the Computer Top Case

A   Make sure rubber stopper plugs are removed from locking slides.

B   Pull the metal locking slides at the back of the computer console all the way out, and then push them 1/4 inch forward to the unlocked position.

C   Carefully lift the top case straight up until it is clear of all interior parts of the machine and set it aside.

Rubber Stopper Plug

Note: To prevent possible damage to Winchester-equipped
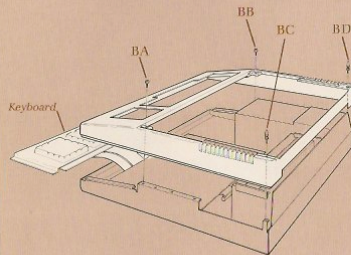
2 Removing the Disk Drive Subassembly

A   Remove the four screws at positions AA, AB, AC and AD as shown below.

B   Remove the two locking pins at positions AE and AF.

C   Carefully lift the disk drive subassembly up and gently place it about two inches closer to the front of the computer.

D   Carefully unplug the flat ribbon cable from each disk drive. Then unplug the power cable from each disk drive.

E   Gently remove the disk drive subassembly and set it aside.

Disk Drive Subassembly   AC   AF AD   AB   AE   AA

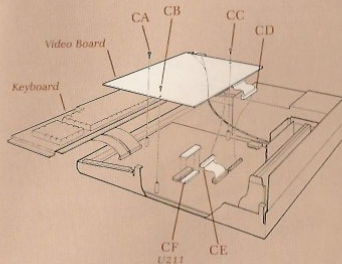Note: Winchester-equipped models will require

3 Removing the Base Cover and Keyboard

A   Remove the two screws at positions BA and BB as shown below.

B   Remove two locking pins at positions BC and BD.

C   Remove the base cover by lifting it up and back in order to clear the controls and connectors on the back panel. Set the cover aside.

D   Gently lift the keyboard up and forward. Place it to the front of the computer console.

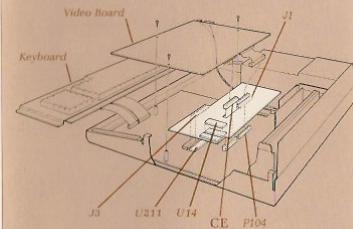BB   BC   BD   BA   Keyboard

4 Removing the Video Board

A   Remove the three screws at positions CA, CB and CC as shown below.

B   Gently lift video board to gain access to the points where the two flat ribbon cables are connected at the back of the board.

C   Disconnect cable CD from the mother board. Disconnect cable CE from the video board.

D   Lift video board out and set it aside.

E   Remove 8088 Processor from socket U211 at position CF.

CA   CB   CC   CD   Video Board   Keyboard   CF U211   CE

Note: A special tool (Heath Part No. 490-189) is available through Heath/Zenith Computer Stores for removing the 8088 processor. If that tool is not available, a short, flat-bladed screw driver can be used.
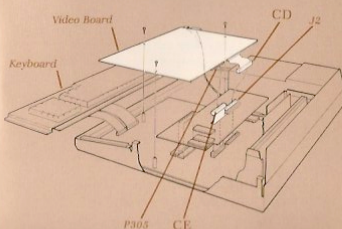
5 Installing the Gemini Emulator Board

A   Insert 8088 Processor into socket U14 on the Gemini Emulator Board.

B   Thread ribbon cable CE through slot in Gemini Emulator Board.

C   Align J1 connector on Gemini Board with connector P104 on mother board. Align connector J3 on Gemini Board with socket U211 on mother board.

D   Complete connections by pressing slowly together. Be careful not to bend connector pins.

Video Board   J1   Keyboard   J3   U211   U14   CE   P104

Note: Check all connector pins to be sure they are straight before plugging the Gemini Emulator Board into place.

6 Re-installing the Video Board

A   Reconnect cable CE to connector P305 on video board.

B   Connect cable CD to position J2 on the Gemini Emulator Board.

C   Reassemble computer by reversing steps 1 through 4. Leave no cables unconnected.

Video Board   CD   J2   Keyboard   P305   CE

Note: Run recommended diagnostics to verify that reassembly has been correctly accomplished.