

Lab 11.2.2: Identifying POST Errors

Estimated Time: 20 Minutes

Objective

Upon completion of this lab, you will be able to identify common POST errors. The ability to identify POST errors is essential for troubleshooting computers.

Equipment

In order to complete this lab, the student will need:

- An operating computer
- A mouse
- A keyboard

Scenario

You are working as a technician for a small medical billing office. The office has just bought new computers. The newly purchased computers are the same make and model. You are familiarizing yourself with the computer and you want to document the POST error for the major components.

Procedures

To become familiar with POST errors, remove several key components from the computer system and then listen for the audible POST errors. POST errors are a series of beeps that indicate a failure during startup. If you hear a POST error, you will then document your findings.

Note: POST errors are dependent on the BIOS. POST errors are not the same universally.

Step 1

First, remove the keyboard connector from the back of the computer case and reboot the system. Listen for any abnormal beeps during startup.

Did you hear any POST error?

If you did hear a POST error, what was the pattern of the beep?

Note: If you hear one beep during startup this indicates normal operation.

Step 2

Plug the keyboard connector back into the back of the computer case. Next, unplug the computer and remove the computer case to expose the internal components. Identify the RAM on the motherboard and remove the RAM stick(s). Reboot the machine and listen for POST errors.

Did you hear any POST error?

If you did hear a POST error, what was the pattern of the beep?

Step 3

Reinstall the RAM and reboot the machine. One beep should be heard, which indicates normal operation, during the boot process. If any POST errors are heard, verify the RAM was properly replaced and try again.

Step 4

After the machine boots normally, power off and unplug the computer. Identify and then disconnect the floppy drive. Remove the connectors for both the ribbon cable and the power supply that connect to the floppy drive. Reboot the machine and listen for POST errors.

Did you hear any POST error?

If you did hear a POST error, what was the pattern of the beep?

Step 5

Unplug the computer and reattach the floppy drive connectors and reboot the machine. One beep, which indicates normal operation, during the boot process, should be heard. If any POST errors are heard, verify the floppy drive has been properly connected and try again.

Step 6

After the machine boots normally, power off and unplug the computer. Identify and then remove the video card from the motherboard. Reboot the machine and listen for POST errors.

Did you hear any POST error?

If you did hear a POST error, what was the pattern of the beep?

Step 7

Unplug the computer and replace the video card and reboot the machine. One beep should be heard, which indicates normal operation, during the boot process. If one beep is heard, replace the computer case. If a POST error is heard, verify the video card was properly replaced and try again.

Troubleshooting

Computer technicians need to be familiar with POST errors and their implications. Technicians need to be aware of any unusual sounds during the boot process because it could be an indication of a failure during initial diagnostic tests. In many cases, these atypical sounds are the first sign a failure has occurred.

Reflection

When will POST errors occur?

What sound is made during a normal boot process?

Are POST errors dependant on the BIOS installed?
